

**ARIZONA STATE RETIREMENT SYSTEM (R19-0905)**

Title 2, Chapter 8, Article 3, Long-Term Disability and Article 8, Recovery of Overpayments



# GOVERNOR'S REGULATORY REVIEW COUNCIL

## ATTORNEY MEMORANDUM - REGULAR RULEMAKING

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**MEETING DATE:** September 4th, 2019

**TO:** Members of the Governor's Regulatory Review Council (Council)

**FROM:** Council Staff

**DATE:** July 25, 2019

**SUBJECT:** **ARIZONA STATE RETIREMENT SYSTEM (R19-0905)**  
Title 2, Administration, Chapter 8, State Retirement System Board

**Amend:** R2-8-301, R2-8-302, R2-8-303, R2-8-304, R2-8-807

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### Summary:

This rulemaking from the Arizona State Retirement System (ASRS) seeks to amend five rules within Title 2, Chapter 8, relating to the State Retirement System Board (Board). The rules include:

- **R2-8-301** (Definitions);
- **R2-8-302** (Application for Long-Term Disability Benefit);
- **R2-8-303** (Long-Term Disability Calculation);
- **R2-8-304** (Payment of Long-Term Disability Benefit); and
- **R2-8-807** (Collection of Overpayments from LTD Benefit).

ASRS proposes to amend these rules to clarify requirements for long term disability (LTD) benefits in compliance with Arizona statutes. Under A.R.S. § 38-797.07(A)(7)(b)(i), ASRS is required to stop paying LTD benefits to a member if the member "ceases to be under the direct care of a doctor." In this rulemaking, ASRS intends to clarify the meaning of the phrase "under the direct care of a doctor." ASRS also seeks to add a definition for "attending physician." Further, ASRS seeks to amend these rules and add new sections to clarify the

six-month waiting period and minimum benefit payments in cases of overpayment or no compensation on file.

1. **Are the rules legal, consistent with legislative intent, and within the agency's statutory authority?**

Yes. ASRS cites to both general and specific authority for these rules.

2. **Do the rules establish a new fee or contain a fee increase?**

No. The rulemaking does not establish a new fee or contain a fee increase.

3. **Does the preamble disclose a reference to any study relevant to the rules that the agency reviewed and either did or did not rely upon?**

No. ASRS did not review or rely on any study in conducting this rulemaking.

4. **Summary of the agency's economic impact analysis:**

In this rulemaking, the Board is clarifying aspects of the administration of the LTD program through the ASRS. ASRS currently pays approximately \$60 million in LTD benefits to 3,488 members each year. The Board notes that it receives numerous inquiries from beneficiaries about their reporting requirements.

5. **Has the agency analyzed the costs and benefits of the rulemaking and determined that the rules impose the least burden and costs to those who are regulated?**

The Board concludes that this rulemaking makes the rules and administration of the LTD program clearer and more understandable. There are no significant costs associated with this rulemaking. The benefits outweigh the costs.

6. **What are the economic impacts on stakeholders?**

Key stakeholders are the Board, ASRS LTD beneficiaries, and all ASRS members.

The Board incurred minimal costs in conducting this rulemaking. The Board will benefit from having rules that make the administration of LTD benefits clearer.

ASRS LTD beneficiaries will benefit from this rulemaking because they will have clearer instructions on their reporting requirements to maintain entitlement to LTD benefits. By definition, LTD beneficiaries have medical conditions that prevent them from working. Ensuring continuing entitlement to LTD benefits is a significant concern for LTD beneficiaries.

All ASRS members will benefit from the rulemaking because it increases the clarity of the rules.

7. **Are the final rules a substantial change, considered as a whole, from the proposed rules and any supplemental proposals?**

No. The final rules are not a substantial change from the proposed rules.

8. **Does the agency adequately address the comments on the proposed rules and any supplemental proposals?**

Not applicable. ASRS did not receive any written or oral comments.

9. **Do the rules require a permit or license and, if so, does the agency comply with A.R.S. § 41-1037?**

Not applicable. These rules do not require a permit.

10. **Are the rules more stringent than corresponding federal law and, if so, is there statutory authority to exceed the requirements of federal law?**

Not applicable. There is no corresponding federal law.

11. **Conclusion**

ASRS has demonstrated adequate justification for this rulemaking. Council staff finds that clarifying the meaning of “under the direct care of a doctor” and the other proposed changes will make the rules more clear, concise, understandable and effective. ASRS accepts the usual 60-day delayed effective date for these rules. Council staff recommends approval of this rulemaking.



# ARIZONA STATE RETIREMENT SYSTEM

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*Paul Matson*  
Director

July 18, 2019

Ms. Nicole Sornsin, Chair  
The Governor's Regulatory Review Council  
100 North 15th Avenue, Ste. 305  
Phoenix, AZ 85007

**Re: A.A.C. Title 2. Administration**  
**Chapter 8. State Retirement System Board**

Dear Ms. Sornsin:

The attached final rule package is submitted for review and approval by the Council. The following information is provided for Council's use in reviewing the rule package:

1. Close of record date: The rulemaking record was closed on June 26, 2019 following a period for public comment and an oral proceeding.
2. Relation of the rulemaking to a five-year-review report: This rulemaking does not relate to a Five-year Review Report.
3. New fee or fee increase: This rulemaking does not establish a new fee or increase an existing fee.
4. Immediate effective date: An immediate effective date is not requested.
5. Certification regarding studies: I certify that the Board did not rely on any studies for this rulemaking.
6. Certification that the preparer of the EIS notified the JLBC of the number of new full-time employees necessary to implement and enforce the rule: I certify that the rules in this rulemaking will not require a state agency to employ a new full-time employee. No notification was provided to JLBC.
7. List of documents enclosed:
  - a. Cover letter signed by the Board's Assistant Director;
  - b. Notice of Final Rulemaking including the preamble, table of contents for the rulemaking, and rule text; and
  - c. Economic, Small Business, and Consumer Impact Statement.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jeremiah Scott".

Jeremiah Scott  
Assistant Director

**NOTICE OF FINAL RULEMAKING**  
**TITLE 2. ADMINISTRATION**  
**CHAPTER 8. STATE RETIREMENT SYSTEM BOARD**

<b><u>1. Articles, Parts, and Sections Affected</u></b>	<b><u>Rulemaking Action</u></b>
R2-8-301	Amend
R2-8-302	Amend
R2-8-303	Amend
R2-8-304	Amend
R2-8-807	Amend

**2. Citations to the agency's statutory rulemaking authority to include both the authorizing statute (general) and the implementing statute (specific):**

Authorizing statute: A.R.S. § 38-714(E)(4)

Implementing statutes: A.R.S. §§ 38-797- et seq.

**3. The effective date for the rules:**

**a. If the agency selected a date earlier than the 60 day effective date as specified in A.R.S. § 41-1032(A), include the earlier date and state the reason or reasons the agency selected the earlier effective date as provided in A.R.S. § 41-1032(A)(1) through (5):**

Not applicable.

**b. If the agency selected a date later than the 60 day effective date as specified in A.R.S. § 41-1032(A), include the later date and state the reason or reasons the agency selected the later effective date as provided in A.R.S. § 41-1032(B):**

Not applicable.

**4. Citations to all related notices published in the Register as specified in R1-1-409(A) that pertain to the record of the final rulemaking package:**

Notice of Docket Opening: 25 A.A.R. 1270, May 17, 2019

Notice of Proposed Rulemaking: 25 A.A.R. 1217, May 17, 2019

**5. The agency's contact person who can answer questions about the rulemaking:**

Name: Jessica A.R. Thomas, Rules Writer  
Address: Arizona State Retirement System  
3300 N. Central Ave., Ste. 1400  
Phoenix, AZ 85012-0250  
Telephone: (602) 240-2039  
E-Mail: [JessicaT@azasrs.gov](mailto:JessicaT@azasrs.gov)

**6. An agency's justification and reason why a rule should be made, amended, repealed, or renumbered, to include an explanation about the rulemaking:**

A.R.S. § 38-797.07(A)(7) requires the ASRS to stop paying LTD benefits to a member if the member “ceases to be under the direct care of a doctor.” The ASRS needs to clarify what it means to be under the “direct care of a doctor” for purposes of LTD benefits. Similarly, the ASRS needs to clarify the six month waiting period and minimum benefit payments when there is an overpayment or no compensation on file.

**7. A reference to any study relevant to the rule that the agency reviewed and either relied on or did not rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**

No study was reviewed.

**8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:**

Not applicable.

**9. A summary of the economic, small business, and consumer impact:**

The ASRS promulgates rules that allow the agency to provide for the proper administration of the state retirement trust fund. ASRS rules affect ASRS members and ASRS employers regarding how they contribute to, and receive benefits from, the ASRS. The ASRS effectively administrates how public-sector employers and employees participate in the ASRS. As such, the ASRS does not issue permits or licenses, or charge fees, and its rules have little to no economic impact on private-sector businesses, with the exception of some employer partner charter schools, which have voluntarily contracted to join the ASRS. Thus, there is little to no economic, small business, or consumer impact, other than the minimal cost to the ASRS to prepare the rule package. The rule will have minimal economic impact,

if any, because it merely clarifies the long term disability program. Specifically, defining what a “Direct Care of a Doctor or an Attending Physician” means.

**10. A description of any changes between the proposed rulemaking, including supplemental notices, and the final rulemaking:**

None

**11. An agency's summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments:**

The ASRS received no written comments regarding the rulemaking. No one attended the oral proceeding on June 26, 2019.

**12. All agencies shall list any other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:**

None

**a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:**

The rules do not require a permit.

**b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:**

There are no federal laws applicable to these rules.

**c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:**

No analysis was submitted.

**13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rule:**

No materials are incorporated by reference.

**14. Whether the rule was previously made, amended, or repealed as an emergency rule. If so, cite the notice published in the *Register* as specified in R1-1-409(A). Also, the**

**agency shall state where the text was changed between the emergency and the final rulemaking packages:**

Not applicable.

**15. The full text of the rules follows:**

**TITLE 2. ADMINISTRATION**  
**CHAPTER 8. STATE RETIREMENT SYSTEM BOARD**  
**ARTICLE 3. LONG-TERM DISABILITY**

Section

- R2-8-301. Definitions
- R2-8-302. Application for Long-Term Disability Benefit
- R2-8-303. Long-Term Disability Calculation
- R2-8-304. Payment of Long-Term Disability Benefit

**ARTICLE 8. RECOVERY OF OVERPAYMENTS**

- R2-8-807. Collection of Overpayments from LTD Benefit

### ARTICLE 3. LONG-TERM DISABILITY

#### R2-8-301. Definitions

The following definitions apply to this Article unless otherwise specified:

1. “Attending Physician ” means a provider:
  - a. Who is a qualified medical provider or other legally qualified practitioner of a healing art that the claims administrator recognizes or is required by law to recognize;
  - b. Whose medical training and clinical experience are qualified to treat the member’s disabling condition;
  - c. Whose diagnosis and treatment is consistent with the diagnosis of the disabling condition, according to guidelines established by medical, research, and rehabilitative organizations;
  - d. Who is licensed to practice in the jurisdiction where care is being given;
  - e. Who is practicing within the scope of the license; and
  - f. Who is not related to the member by blood or marriage.
2. “Direct Care” means the member is actively receiving treatment from a provider for the member’s disability at least once per calendar year.
- ~~1.2.~~ “Estimated Social Security disability income amount” means the same as in R2-8-801(2).

~~2.3.~~ “Legal proceeding” means an appeal of an appealable agency decision at the Office of Administrative Hearings pursuant to A.R.S. § 41-1092 et seq. or an appeal of a Social Security determination at the Social Security Administration, or any other review by a formal body, which determines the rights and responsibilities of the member or survivor.

~~3.4.~~ “LTD” means the Long-Term Disability program described in A.R.S. § 38-797 et seq.

4. ~~“LTD contribution” means the amount of funds the member remits to the ASRS from the member’s compensation as payment for the LTD program.~~

5. “LTD benefit” means the amount of funds the member receives from the ASRS or the ASRS contracted LTD claims administrator, for the period of time a member has an eligible disability as described in A.R.S. § 38-797.07(A)(11).

6. “LTD contribution” means the amount of funds the member remits to the ASRS from the member’s compensation as payment for the LTD program.

### **R2-8-302. Application for Long-Term Disability Benefit**

**A.** In order to claim an LTD benefit, a disabled member shall submit to the disabled member’s Employer all the completed forms prescribed by the ASRS contracted LTD claims administrator within 12 months of the date the disabled member became disabled.

**B.** Pursuant to A.R.S. § 38-797.07(D), in order to continue receiving an LTD benefit, a disabled member shall submit documentation regarding the disabled member’s ongoing disability and occupation as required by the ASRS contracted LTD claims administrator to determine the disabled member’s continuing eligibility for an LTD benefit.

C. Pursuant to A.R.S. § 38-797.07(11), in order to submit an application for an LTD benefit, a member must provide objective medical evidence from an Attending Physician.

D. Pursuant to A.R.S. § 38-797.07(7)(b)(i), in order to continue receiving an LTD benefit, the disabled member must be under the Direct Care of a doctor.

**R2-8-303. Long-Term Disability Calculation**

A. The ASRS contracted LTD claims administrator shall calculate an LTD benefit for a member using the member's monthly compensation as described in A.R.S. § 38-797(11).

~~B. The ASRS shall reduce a member's LTD benefit in accordance with A.R.S. § 38-797.07(A).~~  
For a member whose monthly compensation is \$0 as of the date of disability, the ASRS shall pay a monthly benefit of \$50 unless the benefit is reduced pursuant to R2-8-807 or required to be reduced pursuant to A.R.S. § 38-797.07(A)(2).

C. The ASRS shall reduce a member's LTD benefit in accordance with A.R.S. § 38-797.07(A).

**R2-8-304. Payment of Long-Term Disability Benefit**

A. The ASRS contracted LTD claims administrator shall begin providing an LTD benefit to an eligible disabled member no sooner than six months after the date the disabled member became disabled.

B. Notwithstanding subsection (A), the ASRS contracted LTD claims administrator may begin providing an LTD benefit to an eligible disabled member sooner than six months if the disability is related to the member's disability that occurred within six months immediately preceding the disability.

**B.C.** The ASRS contracted LTD claims administrator may provide an eligible disabled member's LTD benefit to a third party pursuant to A.R.S. § 38-797.09.

## **ARTICLE 8. RECOVERY OF OVERPAYMENTS**

### **R2-8-807. Collection of Overpayments from LTD Benefit**

Upon disability of the member, the ASRS shall reduce the amount of the disabled member's LTD benefit by the amount of any overpayment the member received from the ASRS and has not reimbursed pursuant to this section ~~to not less than \$50.00.~~

**ECONOMIC, SMALL BUSINESS, AND CONSUMER IMPACT STATEMENT<sup>1</sup>**

**TITLE 2. ADMINISTRATION**

**CHAPTER 8. STATE RETIREMENT SYSTEM BOARD**

1. Identification of the rulemaking:

The ASRS needs to clarify what it means to be under the “direct care of a doctor” for purposes of LTD benefits. Similarly, the ASRS needs to clarify the six month waiting period and minimum benefit payments when there is an overpayment or no compensation on file.

a. The conduct and its frequency of occurrence that the rule is designed to change:

Currently, the ASRS provides approximately \$60 million in LTD benefits to approximately 3,488 members each year. The average LTD benefit is approximately \$1,422.00 per month. However, members seem to misunderstand how the LTD program operates and the ASRS receives inquiries regarding what documentation is required in order to maintain a member’s benefit. With the changes completed in this rulemaking, the process for submitting accurate medical documentation will be clearer and more effective. Ultimately, the rules will clarify how ASRS administers the LTD program, thereby providing clear notice to the public.

b. The harm resulting from the conduct the rule is designed to change and the likelihood it will continue to occur if the rule is not changed:

Currently, the ASRS does not foresee significant changes or harm resulting from the conduct the rule is designed to change. However, without this rulemaking, members and Employers will not be aware of the processes for requesting and completing necessary medical documentation, minimum LTD benefits, and requisite waiting periods. Implementing clear and concise language will ensure members and Employers understand how the ASRS administers the LTD program. This rulemaking will ensure the ASRS is consistent with Arizona statutes.

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<sup>1</sup> If adequate data are not reasonably available, the agency shall explain the limitations of the data, the methods used in an attempt to obtain the data, and characterize the probable impacts in qualitative terms. (A.R.S. § 41-1055(C)).

c. The estimated change in frequency of the targeted conduct expected from the rule change:

This rulemaking will clarify how the ASRS administers the LTD program, thereby increasing understandability of the program and increasing the efficiency of the administration. Clarifying how members submit LTD information and how members receive LTD benefits will increase understanding of how LTD benefit eligibility is determined, thereby reducing appeals that arise out of misconceptions regarding LTD benefit eligibility. Such clarification will ensure that LTD benefit payments and appeals are processed more efficiently. As discussed above and below, these rules will increase the clarity and effectiveness of the LTD program, which should result in reducing confusion, as well as any potential administrative delay caused by a misunderstanding of the program and its requirements.

2. A brief summary of the information included in the economic, small business, and consumer impact statement:

There is little to no economic, small business, or consumer impact, other than the minimal cost to the ASRS to prepare the rule package. The rules will have minimal economic impact, if any, because the rulemaking simply clarifies statutory requirements that already exist. There may be some economic impact to provide the documentation necessary for the ASRS contracted LTD claims administrator to determine a member's eligibility for LTD benefits. Clarifying what documentation must be submitted will increase understandability of the LTD program, thereby reducing the regulatory burden imposed on the public. This clarification will ensure that ASRS members have notice about how the ASRS LTD program is administered. Thus, the economic impact is minimized.

3. The person to contact to submit or request additional data on the information included in the economic, small business, and consumer impact statement:

Name: Jessica A.R. Thomas, Rules Writer  
Address: Arizona State Retirement System  
3300 N. Central Ave., Suite 1400  
Phoenix, AZ 85012-0250

Telephone: (602) 240-2039  
E-mail: [JessicaT@azasrs.gov](mailto:JessicaT@azasrs.gov)

4. Persons who will be directly affected by, bear the costs of, or directly benefit from the rulemaking:

In general, all members and Employers of the ASRS will be directly affected by, bear the costs of, and directly benefit from this rulemaking. The ASRS incurred the cost of the rulemaking. The ASRS currently has a total membership of approximately 586,306.

Specifically, members who receive a LTD benefit will be directly affected by this rulemaking. These rules will clarify how the ASRS administers the LTD program. Such clarification will benefit members by increasing the understandability of the LTD program.

5. Cost-benefit analysis:

- a. Costs and benefits to state agencies directly affected by the rulemaking including the number of new full-time employees at the implementing agency required to implement and enforce the proposed rule:

All ASRS members are directly affected by this rulemaking because it will clarify how the LTD program is administered. However, the ASRS has determined that no new full-time employees will be required to implement and enforce the rules.

- b. Costs and benefits to political subdivisions directly affected by the rulemaking:

This rulemaking does not provide any benefits or impose any costs on political subdivisions.

- c. Costs and benefits to businesses directly affected by the rulemaking:

No businesses are directly affected by the rulemaking.

6. Impact on private and public employment:

The rulemaking will have no impact on private or public employment.

7. Impact on small businesses<sup>2</sup>:

- a. Identification of the small business subject to the rulemaking:  
No businesses, regardless of size, are subject to the rulemaking.
  - b. Administrative and other costs required for compliance with the rulemaking:  
Not applicable.
  - c. Description of methods that may be used to reduce the impact on small businesses:  
Not applicable.
8. Cost and benefit to private persons and consumers who are directly affected by the rulemaking:  
All ASRS members and Employers are directly affected by the rulemaking. The effect has been previously described above.
  9. Probable effects on state revenues:  
There will be no effect on state revenues.
  10. Less intrusive or less costly alternative methods considered:  
The ASRS believes this is the least costly and least intrusive method because it will clarify the new electronic processes without imposing any additional requirements on the public.

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<sup>2</sup> Small business has the meaning specified in A.R.S. § 41-1001(20).

## ARTICLE 3. LONG-TERM DISABILITY

### **R2-8-301. Definitions**

The following definitions apply to this Article unless otherwise specified:

1. "Estimated Social Security disability income amount" means the same as in R2-8-801(2).
2. "Legal proceeding" means an appeal of an appealable agency decision at the Office of Administrative Hearings pursuant to A.R.S. § 41-1092 et seq. or an appeal of a Social Security determination at the Social Security Administration, or any other review by a formal body, which determines the rights and responsibilities of the member or survivor.
3. "LTD" means the Long-Term Disability program described in A.R.S. § 38-797 et seq.
4. "LTD contribution" means the amount of funds the member remits to the ASRS from the member's compensation as payment for the LTD program.
5. "LTD benefit" means the amount of funds the member receives from the ASRS or the ASRS contracted LTD claims administrator, for the period of time a member has an eligible disability as described in A.R.S. § 38-797.07(A)(11).

#### **Historical Note**

New Section made by final rulemaking at 23 A.A.R. 2746, effective November 13, 2017 (Supp. 17-3).

### **R2-8-302. Application for Long-Term Disability Benefit**

- A. In order to claim an LTD benefit, a disabled member shall submit to the disabled member's Employer all the completed forms prescribed by the ASRS contracted LTD claims administrator within 12 months of the date the disabled member became disabled.
- B. Pursuant to A.R.S. § 38-797.07(D), in order to continue receiving an LTD benefit, a disabled member shall submit documentation regarding the disabled member's ongoing disability and occupation as required by the ASRS contracted LTD claims administrator to determine the disabled member's continuing eligibility for an LTD benefit.

#### **Historical Note**

New Section made by final rulemaking at 23 A.A.R. 2746, effective November 13, 2017 (Supp. 17-3).

### **R2-8-303. Long-Term Disability Calculation**

- A. The ASRS contracted LTD claims administrator shall calculate an LTD benefit for a member using the member's monthly compensation as described in A.R.S. § 38-797(11).
- B. The ASRS shall reduce a member's LTD benefit in accordance with A.R.S. § 38-797.07(A).

#### **Historical Note**

New Section made by final rulemaking at 23 A.A.R. 2746, effective November 13, 2017 (Supp. 17-3).

### **R2-8-304. Payment of Long-Term Disability Benefit**

- A. The ASRS contracted LTD claims administrator shall begin providing an LTD benefit to an eligible disabled member no sooner than six months after the date the disabled member became disabled.
- B. The ASRS contracted LTD claims administrator may provide an eligible disabled member's LTD benefit to a third party pursuant to A.R.S. § 38-797.09.

#### **Historical Note**

New Section made by final rulemaking at 23 A.A.R. 2746, effective November 13, 2017 (Supp. 17-3).

### **R2-8-305. Social Security Disability Appeal**

- A. Upon request by the ASRS contracted LTD claims administrator, a member who claims an LTD benefit pursuant to R2-8-302(A) shall submit a Social Security disability income application as prescribed by the ASRS contracted LTD claims administrator.
- B. In order to continue receiving an LTD benefit, a member whose application for Social Security disability income has been denied or terminated must appeal the most recent determination of denial or termination through a hearing before an administrative law judge pursuant to A.R.S. § 38-797.07(A)(10)(a) until the ASRS contracted LTD claims administrator or the Social Security Claims Administrator determines the member is not eligible for a Social Security benefit.
- C. Within 10 days after a member receives notice of the status of the member's Social Security disability income application, the member shall notify:
  1. The ASRS of the member's application status by submitting a copy of the notice identifying the status of the member's Social Security disability income application to the ASRS, if the member is not receiving an LTD benefit; or
  2. The ASRS contracted LTD claims administrator of the member's application status by submitting a copy of the notice identifying the status of the member's Social Security disability income application to the ASRS contracted LTD claims administrator, if the member is not receiving an LTD benefit.
- D. A member who disagrees with an LTD determination by the ASRS contracted LTD claims administrator may submit an appeal pursuant to 2 A.A.C. 8, Article 4.

#### **Historical Note**

New Section made by final rulemaking at 23 A.A.R. 2746, effective November 13, 2017 (Supp. 17-3).

**R2-8-306. Approval of Social Security Disability**

Upon receipt of a Social Security disability income benefit, a member shall immediately remit to:

1. The ASRS the amount of the Social Security disability income benefit necessary to offset the LTD benefit; or
2. The ASRS contracted LTD claims administrator the amount of the Social Security disability income benefit necessary to offset the LTD benefit.

**Historical Note**

New Section made by final rulemaking at 23 A.A.R. 2746, effective November 13, 2017 (Supp. 17-3).

38-714. Powers and duties of ASRS and board

A. ASRS shall have the powers and privileges of a corporation, shall have an official seal and shall transact all business in the name "Arizona state retirement system", and in that name may sue and be sued.

B. The board is responsible for supervising the administration of this article by the director of ASRS.

C. The board is responsible for the performance of fiduciary duties and other responsibilities required to preserve and protect the retirement trust fund established by section 38-712.

D. The board shall not advocate for or against legislation providing for benefit modifications, except that the board shall provide technical and administrative information regarding the impact of benefit modification legislation.

E. The board may:

1. Determine the rights, benefits or obligations of any person under this article and afford any person dissatisfied with a determination a hearing on the determination. The board may delegate the duty and authority to act on the board's behalf to a committee of the board for the purposes of this paragraph and title 41, chapter 6, article 10 relating to any decision made under this paragraph by that committee of the board.

2. Determine the amount, manner and time of payment of any benefits under this article.

3. Recommend amendments to this article and articles 2.1 and 7 of this chapter that are required for efficient and effective administration.

4. Adopt, amend or repeal rules for the administration of the plan, this article and articles 2.1 and 7 of this chapter.

F. Beginning June 30, 2016, the board shall determine which of the generally accepted actuarial cost methods shall be used in the annual actuarial valuation of the plan.

G. The board and ASRS are not subject to title 41, chapter 6, except title 41, chapter 6, article 10, for actuarial assumptions and calculations, investment strategy and decisions and accounting methodology.

H. The board shall submit to the governor and legislature for each fiscal year no later than eight months after the close of the fiscal year a report of its operations and the operations of ASRS. The report shall follow generally accepted accounting principles and generally accepted financial reporting standards and shall include:

1. A report on an actuarial valuation of ASRS assets and liabilities.

2. Any other statistical and financial data that may be necessary for the proper understanding of the financial condition of ASRS and the results of board operations.

3. On request of the governor or the legislature, a list of investments owned. This list shall be provided in an electronic format.

4. An estimate of the aggregate fees paid for private equity investments, including management fees and performance fees.

I. The board shall:

1. Prepare and publish a synopsis of the annual report for the information of ASRS members.

2. Contract for a study of the mortality, disability, service and other experiences of the members and employers participating in ASRS. The study shall be conducted for fiscal year 1990-1991 and for at least every fifth fiscal year thereafter. A report of the study shall be completed within eight months after the close of the applicable fiscal year and shall be submitted to the governor and the legislature.

3. Conduct an annual actuarial valuation of ASRS assets and liabilities.

J. The auditor general may make an annual audit of ASRS and transmit the results to the governor and the legislature.

### 38-797. Definitions

(L14, Ch. 44, sec. 5 & Ch. 69, sec. 1)

In this article, unless the context otherwise requires:

1. "ASRS" means the Arizona state retirement system established by article 2 of this chapter.

2. "Assets" means the accumulated resources of the LTD program.

3. "Board" means the ASRS board established pursuant to section 38-713.

4. "Compensation" has the same meaning prescribed in section 38-711.

5. "Depository" means a bank in which the monies of the LTD program are deposited and collateralized as provided by law.

6. "Employer" has the same meaning prescribed in section 38-711.

7. "Employer contributions" means all amounts paid into the LTD program by an employer.

8. "Fiscal year" has the same meaning prescribed in section 38-711.

9. "LTD program" means the long-term disability program established by this article.

10. "Member" has the same meaning prescribed in section 38-711.

11. "Monthly compensation" means the amount determined by taking the six pay periods immediately before the date of the member's disability in the fiscal year in which the member becomes disabled, disregarding the highest two and lowest two compensation amount pay periods and deriving the

median of the two remaining pay periods. If the member was employed for fewer than six pay periods, monthly compensation is determined by deriving the median of the number of pay periods the member worked in the fiscal year in which the member becomes disabled.

12. "Normal retirement date" has the same meaning prescribed in section 38-711.

13. "Political subdivision" has the same meaning prescribed in section 38-711.

14. "State" has the same meaning prescribed in section 38-711.

#### 38-797.01. LTD program

A. A long-term disability program is established.

B. The program is known as the LTD program.

#### 38-797.02. LTD trust fund

A. The LTD trust fund is established for the purpose of paying benefits under and costs of administering the LTD program.

B. The LTD trust fund consists of all monies paid into it in accordance with this article, whether in the form of cash, securities or other assets, and all monies received from any other source. The LTD trust fund is exempt from title 44, chapter 3. Abandoned monies shall be disposed of pursuant to section 38-722.

C. Custody, management and investment of the LTD trust fund are as prescribed by this article and article 2 of this chapter.

#### 38-797.03. ASRS board; personnel; duties; hearing or review; executive session

A. The board shall administer the LTD program. ASRS officers, contractors and personnel shall perform the duties prescribed by this article.

B. The board may determine the rights, benefits or obligations of any person under this article and afford any person dissatisfied with a determination of their rights, benefits or obligations under this article with a hearing on the determination. Notwithstanding section 38-431.03, the board shall hold a hearing or review of an administrative law judge's written decision in an executive session if the aggrieved person makes such a request. If the board holds a hearing or review in executive session pursuant to this subsection, the board shall use the procedures for an executive session as provided in section 38-431.03. Minutes of and discussions held at an executive session are confidential except from the aggrieved person for the purposes of an appeal of the board's decision to the superior court on the matter that is determined by the board. The aggrieved person must request an executive session hearing at least forty-eight hours before the hearing.

C. The board may enter into a contract with an insurance company or another entity to administer all or part of the LTD program and to determine eligibility for benefits under the LTD program.

D. The board shall pay from the LTD trust fund the amounts necessary to pay benefits under and costs of administering the LTD program.

#### 38-797.04. Eligibility

All members are subject to this article and shall participate in the LTD program.

#### 38-797.05. Employer and member contributions

A. Beginning July 1, 2011, employers shall contribute the percentage of the compensation of all of the members under their employment so that the total employer contributions equals the amount that the board determines is necessary to pay one-half of all benefits under and costs of administering the LTD program.

B. Beginning July 1, 2011, a member shall contribute a percentage of the member's compensation equal to the employer contribution for the member required pursuant to subsection A of this section.

C. The employer shall pay the member contributions required of members on account of compensation earned. All employer and member contributions shall be paid to the board. The board shall allocate the contributions to the LTD trust fund and shall place the contributions in the LTD program's depository.

D. Each employer shall certify on each payroll the amount to be contributed to the LTD program and shall remit that amount to the board. The contributions are irrevocable.

E. Payments due pursuant to this article by employers become delinquent after the due date prescribed in the board's rules and thereafter shall be increased by interest from and after that date until payment is received by the board. The board shall charge interest on the delinquent payments at an annual rate equal to the interest rate assumption approved by the board for actuarial equivalency pursuant to article 2 of this chapter. Delinquent payments due under this subsection, together with interest charges as provided in this subsection, may be recovered by an action in a court of competent jurisdiction against an employer liable for payments or, at the request of the director, may be deducted from any monies, including excise revenue taxes, payable to the employer by any department or agency of this state.

F. If more than the correct amount of contributions required is paid by an employer, proper adjustment shall be made in connection with subsequent payments. The board shall return excess contributions to the employer if the employer requests return of the contributions within one year after the date of overpayment.

G. Member contributions are not refundable and are not included in the calculation of survivor benefits pursuant to section 38-762.

#### 38-797.06. Contribution rate; annual report

A. The board shall select an actuary to determine required employer contributions on an annual basis. The actuary shall be a fellow of the society of actuaries.

B. Employer contributions shall be a percentage of compensation of all employees of the employers, as the ASRS actuary determines pursuant to this section. The actuary shall make this determination in an annual valuation performed as of June 30. The valuation as of June 30 of a calendar year shall determine the percentage to be applied to compensation for the fiscal year beginning July 1 of the following calendar year. The actuary shall determine the total employer contribution using an actuarial cost method consistent with generally accepted actuarial standards. The total employer contributions shall be equal to the employer normal cost plus the amount required to amortize the past service funding requirement over a period consistent with generally accepted actuarial standards.

C. All contributions made by the employer and allocated to the LTD trust fund established by section 38-797.02 are irrevocable and shall be used as benefits under this article or to pay expenses of the LTD program.

D. ASRS shall provide a preliminary report on or before November 30 of the valuation year and a final report on or before January 15 of the following year to the governor, the speaker of the house of representatives and the president of the senate on the contribution rate for the ensuing fiscal year.

#### 38-797.07. LTD program benefits; limitations; definitions

A. The LTD program is subject to the following limitations:

1. Except as provided in paragraph 9 of this subsection, monthly LTD program benefits shall not exceed two-thirds of a member's monthly compensation, reduced by:

(a) For a member whose disability commences before July 1, 2008, sixty-four percent of social security disability benefits that the member and the member's dependents are eligible to receive.

(b) For a member whose disability commences on or after July 1, 2008, eighty-five percent of social security disability benefits that the member and the member's dependents are eligible to receive, but not including:

(i) The amount of attorney fees approved pursuant to social security administration rules and reasonable documented costs paid to an attorney to secure that disability benefit.

(ii) Any cost-of-living adjustments that are granted after the member commences benefits under this section.

(c) For a member whose disability commences before July 1, 2008, eighty-three percent of social security retirement benefits that the member is eligible to receive.

(d) For a member whose disability commences on or after July 1, 2008, eighty-five percent of social security retirement benefits that the member is eligible to receive, but not including any cost-of-living adjustments that are granted after the member commences benefits under this section.

(e) All of any workers' compensation benefits.

(f) All of any payments for a veteran's disability if both of the following apply:

(i) The veteran's disability payment is for the same condition or a condition related to the condition currently causing the member's disability.

(ii) The veteran's disability is due to, or a result of, service in the armed forces of the United States.

(g) All of any other benefits by reason of employment that are financed partly or wholly by an employer, including payments for sick leave. This subdivision does not include any retirement benefit that is received by the member pursuant to a state retirement system or plan other than ASRS.

(h) Fifty percent of any salary, wages, commissions or other employment related pay that the member receives or is entitled to receive from any gainful employment in which the member actually engages.

2. For a member whose disability commences on or after August 2, 2012, a member's monthly income from the monthly LTD program benefits and sources listed in paragraph 1 of this subsection shall not exceed one hundred percent of the member's monthly compensation at the time disability commences. ASRS shall offset the member's monthly LTD program benefits by the amount necessary to reduce the member's total monthly income to meet the limit prescribed in this paragraph.

3. Monthly LTD program benefits are not payable until a member has had a disability for a period of six consecutive months.

4. Monthly LTD program benefits are not payable to a member who files an initial claim for disability more than twelve months after the date of the member's date of disability unless the member demonstrates to ASRS good cause for not filing the initial claim within twelve months after the date of disability.

5. Monthly LTD program benefits are not payable to a member who is receiving retirement benefits from ASRS.

6. Monthly LTD program benefits are not payable to a member whose disability is due to, or a result of, any of the following:

(a) An intentionally self-inflicted injury.

(b) War, whether declared or not.

(c) An injury incurred while engaged in a felonious criminal act or enterprise.

(d) For a member whose most recent membership in the LTD program commences before July 1, 2008, an injury or sickness for which the member received medical treatment within three months before the date of the member's coverage under the LTD program. This subdivision does not apply to a member who either:

(i) Has been an active member of an employer for twelve continuous months.

(ii) Is employed by an employer before July 1, 1988.

(e) For a member whose most recent membership in the LTD program commences on or after July 1, 2008, an injury or sickness for which the member received medical treatment within six months before the date of the member's coverage under the LTD program. This subdivision does not apply to a member who has been an active member of an employer for twelve continuous months.

7. Monthly LTD program benefits cease to be payable to a member at the earliest of the following:

(a) The date the member ceases to have a disability.

(b) The date the member:

(i) Ceases to be under the direct care of a doctor.

(ii) Refuses to undergo any medical examination or refuses to participate in any work rehabilitation program for which the member is reasonably qualified by education, training or experience and that is requested by the insurance company or claims administrator that is selected by the board to administer the LTD program.

(c) The date the member withdraws employee contributions with interest and ceases to be a member.

(d) The later of the following:

(i) The member's normal retirement date.

(ii) The month following sixty months of payments if disability occurs before sixty-five years of age.

(iii) The month following attainment of seventy years of age if disability occurs at sixty-five years of age or after but before sixty-nine years of age.

(iv) The month following twelve months of payments if disability occurs at or after sixty-nine years of age.

(e) If the member is convicted of a criminal offense and sentenced to more than six months in a jail, prison or other penal institution, the first day of the month following the first thirty continuous days of the member's confinement for the remainder of the confinement.

8. Monthly LTD program benefits are payable only for disabilities that commence on or after July 1, 1988.

9. The minimum benefit for a member who is entitled to receive monthly LTD program benefits is fifty dollars per month.

10. Members are eligible to receive the LTD program benefits and payments described in paragraph 1 of this subsection, and the reductions provided by paragraph 1 of this subsection apply even though the social security benefits are not actually paid as follows:

(a) For primary and dependent social security benefits, the members are eligible for the social security benefits until the social security benefits are actually awarded, or if the social security benefits are

denied, until the member pursues the social security appeal process through a hearing before a social security administrative law judge or until the insurance company or claims administrator determines that the member is not eligible for social security benefits.

(b) For benefits and payments from any other source provided in paragraph 1 of this subsection, the members are eligible for the benefits if it is reasonable to believe that those benefits will be paid on proper completion of the claim or would have been paid except for the failure of the member to pursue the claim in time.

11. A member shall be considered to have a disability if based on objective medical evidence:

(a) During the first thirty months of a period of disability, the member is unable to perform all duties of the position held by the member when the member developed a disability.

(b) For a member who has received monthly LTD program benefits for twenty-four months within a five-year period, the member is unable to perform any work for compensation or gain for which the member is reasonably qualified by education, training or experience in an amount at least equal to the scheduled LTD program benefits prescribed in paragraph 1 of this subsection.

B. A member who is eligible pursuant to article 2 of this chapter and who receives monthly LTD program benefits is entitled to receive service credit pursuant to article 2 of this chapter from the time disability commences until LTD program benefits cease to be payable, except that for a member who receives monthly LTD program benefits on or after June 30, 1999 the number of years of service credited to the member's retirement account during the period the member receives LTD program benefit payments shall not cause the member's total credited service for retirement benefits to exceed the greater of thirty years or the total years of service credited to the member's retirement account on the commencement of disability.

C. This section does not prohibit a member whose disability has been established to the satisfaction of the board from relying on treatment by prayer through spiritual means in accordance with the tenets and practice of a recognized church, religious denomination or Native American traditional medicine by a duly accredited practitioner of the church, denomination or Native American traditional medicine without suffering reduction or suspension of the member's monthly LTD program benefits.

D. ASRS may suspend or terminate benefits under this article if a member fails to provide information, data, paperwork or other materials that are requested by ASRS or the insurance company or claims administrator that is selected by the board to administer the LTD program. If the member provides the information requested, ASRS shall retroactively reinstate the benefits or claim for which the member qualifies under this article.

E. For the purposes of this section:

1. "Objective medical evidence" means evidence that established facts and conditions, as perceived without distortion by personal feelings, prejudices or interpretations, and includes x-rays, quantitative tests, laboratory findings, data, records, reports from the attending physician and reports from a consulting physician, as applicable.

2. "Received medical treatment" means that the member consulted with or received the advice of a licensed medical or dental practitioner, including advice given during a routine examination, and it

includes situations in which the member received medical or dental care, treatment or services, including the taking of drugs, medication, insulin or similar substances.

3. "Social security" and "social security disability" includes the railroad retirement act of 1974 (P.L. 93-445; 88 Stat. 1305; 45 United States Code sections 231 through 231v).

#### 38-797.08. Errors; benefit recomputation

If any change or error in the records results in any member receiving from the LTD program more or less than the member would have been entitled to receive if the records had been correct, the board shall correct the error and shall adjust the payments in a manner so that the equivalent of the benefit to which the member was correctly entitled is paid. The board shall correct any change or error and shall pay the appropriate monies to a member or shall recover monies from the member if the member is overpaid. The board shall recover monies by reducing any benefit that is otherwise payable by ASRS or the LTD program to an active, inactive, member with a disability or retired member, survivor, contingent annuitant, beneficiary or alternate payee.

#### 38-797.09. Facility of payment

In the case of incapacity of a member receiving LTD program benefits, or in the case of any other emergency as determined by the board, the board may make LTD program benefit payments on behalf of the member to another person or persons the board determines to be lawfully entitled to receive payment. The payment is payment for the account of the member and all persons entitled to payment and, to the extent of the payment, is a full and complete discharge of all liability of the board or the LTD program, or both, under or in connection with the LTD program.

#### 38-797.10. Assurances and liabilities

A. Nothing contained in this article shall be construed as:

1. A contract of employment between an employer and any employee.
2. A right of any member to continue in the employment of an employer.
3. A limitation of the rights of an employer to discharge any of its employees, with or without cause.

B. A member does not have any right to, or interest in, any LTD program assets on termination of the member's employment or otherwise, except as provided from time to time in the LTD program, and then only to the extent of the benefits payable to the member out of LTD program assets. All payments of benefits shall be made solely out of LTD program assets and neither the employers, the board nor any member of the board is liable for payment of benefits in any manner.

C. Benefits, employer and member contributions, earnings and all other credits payable under this article are not subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, charge, garnishment, execution or levy of any kind, either voluntary or involuntary, before actually being received by a person entitled to the benefit, earning or credit, and any attempt to anticipate, alienate, sell, transfer, assign, pledge, encumber, charge, garnish, execute or levy or otherwise dispose of any benefit, earning or credit under this article is void. The LTD program is not in

any manner liable for, or subject to, the debts, contracts, liabilities, engagements or torts of any person entitled to any benefit, earning or credit under this article.

D. Neither the employers, the board nor any member of the board guarantees the LTD trust fund established by section 38-797.02 in any manner against loss or depreciation, and they are not liable for any act or failure to act that is made in good faith pursuant to this article. The employers are not responsible for any act or failure to act of the board or any member of the board. Neither the board nor any member of the board is responsible for any act or failure to act of any employer.

E. This section does not exempt benefits of any kind from a writ of attachment, a writ of execution, a writ of garnishment and orders of assignment issued by a court of record as the result of a judgment for arrearages of child support or for child support debt.

**38-797.11. Exemptions from execution, attachment and taxation; exception**

A. The benefits, the employer and member contributions and the securities in the LTD trust fund established by section 38-797.02 are not subject to execution or attachment and are nonassignable except as specifically provided in this article or article 2 of this chapter. The employer and member contributions and the securities in the LTD trust fund established by section 38-797.02 are exempt from state, county and municipal income taxes. Benefits received by a member from the LTD program are subject to tax pursuant to title 43.

B. Interest, earnings and all other credits pertaining to benefits are not subject to execution or attachment and are nonassignable.

**38-797.11. Exemptions from execution, attachment and taxation; exception**

A. The benefits, the employer and member contributions and the securities in the LTD trust fund established by section 38-797.02 are not subject to execution or attachment and are nonassignable except as specifically provided in this article or article 2 of this chapter. The employer and member contributions and the securities in the LTD trust fund established by section 38-797.02 are exempt from state, county and municipal income taxes. Benefits received by a member from the LTD program are subject to tax pursuant to title 43.

B. Interest, earnings and all other credits pertaining to benefits are not subject to execution or attachment and are nonassignable.

**38-797.12. Violation; classification**

A person who knowingly makes any false statement or who falsifies or permits to be falsified any record of the LTD program with an intent to defraud the LTD program is guilty of a class 6 felony.

**38-797.13. Reservation to legislature**

The right to modify, amend or repeal this article, or any provisions of this article, is reserved to the legislature.

**38-797.14. Liquidation of LTD program**

If the legislature determines that the LTD program is no longer to be operated for the purposes set forth in this article, any monies remaining in the LTD trust after paying all liabilities of the trust or after making adequate provision for paying those liabilities revert to the general funds of the employers that were making contributions to the LTD program at the time the legislature terminates the LTD program. The reverted monies shall be prorated according to the gross amount of contributions made by the employers to the LTD program.

**DEPARTMENT OF ENVIRONMENTAL QUALITY (R19-0906)**

Title 18, Chapter 11, Article 1, Water Quality Standards for Surface Waters



# GOVERNOR'S REGULATORY REVIEW COUNCIL

## ATTORNEY MEMORANDUM - REGULAR RULEMAKING

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**MEETING DATE:** September 4th, 2019

**TO:** Members of the Governor's Regulatory Review Council (Council)

**FROM:** Council Staff

**DATE:** August 5th, 2019

**SUBJECT:** **ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (R19-0906)**  
Title 18, Environmental Quality, Chapter 11, Article 1, Water Quality Standards for Surface Waters.

**Amend:** R18-11-101, R18-11-107.01, R18-11-109, R18-11-114,  
R18-11-115, R18-11-120, R18-11-122, Appendix A, Table 1, Table  
2, Table 3, Table 5, Table 6, Appendix B, Appendix C

**Repeal:** Table 11, Table 12

**New Table:** Table 11, Table 12, Table 13, Table 14, Table 15, Table 16, Table  
17

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### **Summary:**

This rulemaking from the Arizona Department of Environmental Quality (Department) seeks to amend, repeal, and create rules, tables, and appendices within Title 18, Chapter 11, Article 1 relating to Water Quality Standards For Surface Waters.

The Department proposes to amend, repeal, and create these rules within Title 18, Chapter 11, Article 1 in order to adopt and revise water quality standards within the state of Arizona. The Department proposes to adopt numeric surface water standards that establish limits on each of 126 toxic pollutants pursuant to Environmental Protection Act (EPA) requirements in

40 CFR Part 423, Appendix A under § 307 of the Clean Water Act (CWA). Specifically, the Department is required to adopt and revise water quality standards for the state of Arizona under Section 303(c) of the CWA. The Department has not comprehensively revised the current Arizona water quality standards since January 2009, although the Department adopted minor revisions to these rules in August 2016.

The Department is amending these rules and complying with the CWA by replacing previously repealed tables and rules, re-wording the titles of tables, adding new definitions for clarity, renumbering sections, and removing outdated information and standards. The Department anticipates that this rulemaking will enhance the quality of water in Arizona and protect the public health and welfare.

1. **Are the rules legal, consistent with legislative intent, and within the agency's statutory authority?**

Yes. The Department cites to both general and specific authority for the rules.

2. **Do the rules establish a new fee or contain a fee increase?**

No. The rulemaking does not establish a new fee or contain a fee increase.

3. **Does the preamble disclose a reference to any study relevant to the rules that the agency reviewed and either did or did not rely upon?**

Yes. The Department relied on several studies relevant to the rules which are disclosed in Section 7 of the preamble. Specifically, the Department reviewed the § 304(a) criteria for each pollutant, and studies from the Central Arizona Salinity Study, Environmental Protection Agency, and Tetra Tech Incorporated.

4. **Summary of the agency's economic impact analysis:**

In this rulemaking, the Department is adopting rules that will revise the Surface Water Quality Standards (SWQS) as required by the Clean Water Act (CWA). The new SWQS will be more stringent than the current SWQS; however, the Department indicates that failure to adopt the new SWQS would result in the Environmental Protection Agency (EPA) promulgating its own standards. The Department notes that some of the new SWQS will be less stringent than the current SWQS.

The Department administers the SWQS through the Arizona Pollutant Discharge Elimination Systems permitting program (AZPDES). The Department issues AZPDES general permits to entities that pose little environmental risk, and the Department issues AZPDES individual permits to facilities that could pose a significant environmental risk. 4,391 active AZPDES general permits are distributed as follows:

- 791 Multi-Sector General Permits (MSGP)

- 3,416 Construction General Permits (CGP)
- 8 Municipal Separate Storm Sewer System Phase I Permits (MS4)
- 48 Municipal Separate Storm Sewer System Phase II Permits (MS4)
- 128 De Minimis General Permits

141 active AZPDES individual permits are distributed as follows:

- 7 Drinking Water Treatment Plants and Well Discharges Permits
- 7 Power Generation Permits
- 6 Mining Permits
- 4 Water Quality Assurance Revolving Fund (WQARF)/Remediation Project Permits
- 4 Fish Hatchery Permits
- 2 Truck Stop Permits
- 1 Marina Permit
- 5 Other Industrial Permits
- 105 Waste Water Treatment Plant (WWTP) Permits

**5. Has the agency analyzed the costs and benefits of the rulemaking and determined that the rules impose the least burden and costs to those who are regulated?**

The Department concludes that the CWA and EPA require this rulemaking. Stakeholders will bear some minor costs in the form of increased monitoring costs associated with more stringent standards for surface water. These same stakeholders will benefit from certain standards that will be relaxed. The Department also indicates that the new standards will promote clean water for all stakeholders in Arizona. The benefits outweigh the costs.

**6. What are the economic impacts on stakeholders?**

Key stakeholders are the Department, public Waste Water Treatment Plants (WWTPs), Publicly Owned Treatment Works (POTWs), private WWTPs, non-WWTP government entities with individual permits, non-WWTP private entities with individual permits, non-WWTP government entities with general permits, private entities with general permits, public laboratories, private laboratories, political subdivisions, and the general public.

The Department incurred the costs associated with conducting this rulemaking. The Department will benefit from rules that comply with the CWA and prevent EPA-promulgated SWQS.

Public WWTPs and POTWs will incur significantly increased monitoring costs due to stricter SWQS. The Department indicates that some of the new SWQS are less strict than the current SWQS, so WWTPs and POTWs will benefit from these relaxed standards.

Private WWTPs will be affected in a similar manner as public WWTPs listed above.

Non-WWTP government entities with AZPDES individual permits will benefit significantly from this rulemaking because it corrects errors, reduces some standards, and increases flexibility in mixing zones. Some individual permit holders may need to discharge certain pollutants at concentrations that exceed the SWQS. The new SWQS allow more flexibility in the design of mixing zones. Non-WWTP government entities with AZDPES individual permits will incur minimal costs in the form of higher compliance costs and some more stringent standards.

Non-WWTP private entities with AZPDES individual permits will be affected in a similar manner as government entities with AZPDES individual permits listed above.

Non-WWTP government entities with AZPDES general permits will not be significantly affected by these rules. The Department indicates that they will benefit from the correction of errors and some less stringent standards. These stakeholders will bear minimal costs associated with some more stringent SWQS.

Private entities with AZPDES general permits will be affected in a similar manner as non-WWTP government entities with AZPDES general permits listed above.

Public laboratories may bear the costs associated with updating equipment or procedures for the new SWQS. Public laboratories will significantly benefit from the correction of errors in the new SWQS.

Private laboratories will be affected in a similar manner as public laboratories listed above.

Political subdivisions sometimes operate one of the government entities listed above, and these impacts will affect them. The Department indicates that political subdivisions will benefit from cleaner water.

The general public will benefit from cleaner water.

7. **Are the final rules a substantial change, considered as a whole, from the proposed rules and any supplemental proposals?**

The Department made minor changes to the rules after receiving comments on the rules and identifying inadvertent typographical and wording errors. In the rules, the Department removed an ambiguity in a definition, corrected minor typographical errors, and corrected an inadvertent omission in the Notice of Proposed Rulemaking. In the tables in Appendix A, the Department corrected minor typographical errors, made minor changes to increase clarity, corrected wording in order to be consistent with EPA wording, and inserted minor language to address the concerns of public commenters. In

Appendix B, the Department corrected the names of various state ponds, creeks, and washes to conform with USGS topographic maps, and in response to a public commenter.

The final rules are not “substantially different” from the proposed rules under A.R.S. § 41-1025.

**8. Does the agency adequately address the comments on the proposed rules and any supplemental proposals?**

Yes. The Department received 89 comments on this rulemaking, all of which are attached. The Department adequately responded to each public comment.

**9. Do the rules require a permit or license and, if so, does the agency comply with A.R.S. § 41-1037?**

Not applicable. These rules do not require a permit or license.

**10. Are the rules more stringent than corresponding federal law and, if so, is there statutory authority to exceed the requirements of federal law?**

No. The Department initiated this rulemaking to comply with regulations set forth by the EPA and these rules are not more stringent than regulations required by federal law and the EPA.

However, pursuant to A.R.S. § 49-221(B), the Department has the authority to establish water quality standards beyond those required to be regulated under the CWA and the EPA.

**11. Conclusion**

Council staff finds that the justification for this rulemaking is thorough and finds that it will result in a rule that is more clear, effective, and compliant with federal CWA and EPA regulations. Additionally, the rule promotes public safety and welfare by regulating Arizona’s water supply and limiting toxic pollutants. The Department accepts the usual 60-day delayed effective date for this rulemaking. Council staff recommends approval of this rulemaking.



Douglas A. Ducey  
Governor

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Misael Cabrera  
Director

July 9, 2019

Governor's Regulatory Review Council  
100 N. 15<sup>th</sup> Avenue, Suite 305  
Phoenix, AZ 85007

Re: Rulemaking for A.A.C. Title 18, Chapter 11, Article 1, Water Quality Standards for Surface Waters

To the Council:

The Arizona Department of Environmental Quality (ADEQ) has approved amendments to Title 18, Chapter 11, Article 1, Water Quality Standards for Surface Waters, and submits the attached rule package for your consideration.

ADEQ is providing the following information as required in A.A.C. R1-6-201:

- a. The rulemaking record closed on March 28, 2019, at 5:00 p.m.
- b. The rulemaking does not relate to a five-year review report.
- c. The rule does not establish a new fee.
- d. The rule does not contain a fee increase.
- e. An immediate effective date is not requested for the rule.
- f. Additional full-time employees are not necessary to implement and enforce the rule.
- g. Documents enclosed
  - Notice of Final Rulemaking, including the preamble, table of contents for the rulemaking, and text of each rule;
  - An Economic, Small Business, and Consumer Impact Statement that contains the information required by A.R.S. § 41-1055, which is incorporated in the preamble of the NFRM.

- The written comments received by ADEQ concerning the proposed rule.
- The general and specific statutes authorizing the rules, including relevant definitions.

General: A.R.S. § 49-202(A).

Specific: A.R.S. §§ 49-203(A)(1); 49-221; 49-222.

Relevant definitions: A.R.S. § 49-201.

- h. ADEQ did not receive an analysis regarding the rules' impact on the competitiveness of business in this state as compared to the competitiveness of business in other states.
- i. ADEQ did not receive any testimony regarding the proposed rules.
- j. The rules contain no materials incorporated by reference.

I certify that the information contained in Section 7 of the Preamble is correct and respectfully request that the Council consider and approve this rulemaking.

Sincerely,



Misaël Cabrera, Director  
Arizona Department of Environmental Quality

**NOTICE OF FINAL RULEMAKING**  
**TITLE 18. ENVIRONMENTAL QUALITY**  
**CHAPTER 11. DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**WATER QUALITY STANDARDS**

**PREAMBLE**

<b><u>1. Articles, Parts, and Sections Affected</u></b>	<b><u>Rulemaking Action</u></b>
R18-11-101	Amend
R18-11-107.01	Amend
R18-11-109	Amend
R18-11-114	Amend
R18-11-115	Amend
R18-11-120	Amend
R18-11-122	Amend
Appendix A	Amend
Table 1	Amend
Table 2	Amend
Table 3	Amend
Table 5	Amend
Table 6	Amend
Table 11	Repeal
Table 11	New Table
Table 12	Repeal
Table 12	New Table
Table 13	New Table
Table 14	New Table
Table 15	New Table
Table 16	New Table
Table 17	New Table
Appendix B	Amend
Appendix C	Amend

**2. Citations to the agency’s statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific):**

Authorizing statute: A.R.S. §§ 49-202(A), 49-203(A)(1)

Implementing statute: A.R.S. §§ 49-221, 49-222

**3. The effective date of the rules:**

This rule will become effective sixty days after a certified **original and two copies of the rule** and preamble are filed in the office of the secretary of state and the time and date are affixed as provided in A.R.S. § 41-1031.

**4. Citations to all related notices published in the Register as specified in R1-1-409(A) that pertain to the record of the proposed rule:**

Notice of Rulemaking Docket Opening: 25 A.A.R. 273, February 1, 2019

Notice Proposed Rulemaking: 25 A.A.R. 177, February 1, 2019

**5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:**

Name: Heidi M. Haggerty Welborn

Address: 1110 W. Washington St.

Phoenix, AZ 85007

Telephone: (602) 771-4815

E-mail: WaterQualityStandards@azdeq.gov

Website: <http://www.azdeq.gov/draft-and-proposed-rule-water-quality-division>

<http://www.azdeq.gov/node/3934>

**6. An agency’s justification and reason why a rule should be made, amended, repealed or renumbered, to include an explanation about the rulemaking: General Explanation of this Rulemaking:**

The Arizona Department of Environmental Quality (ADEQ) proposes to amend 18 A.A.C. 11, Article 1 in order to adopt and revise water quality standards within the State of Arizona as required under Section 303(c) of the Clean Water Act (CWA). ADEQ last adopted a comprehensive revision to water

quality standards in January, 2009. Minor revisions were adopted in August 2016.

### ***Water Quality Standards Background***

A.R.S. § 49-222 authorizes ADEQ to adopt surface water quality standards that: assure attainable water quality; provide for protecting the public health and welfare; enhance the quality of water in Arizona; and take into consideration the use and value of water for public water supplies, the propagation of fish and wildlife, and recreational, agricultural, industrial, and other purposes, including navigation. ADEQ is required to adopt numeric surface water standards that establish numeric limits on the concentrations of each of the 126 toxic pollutants listed by EPA in 40 CFR Part 423, Appendix A under § 307 of the CWA. In adopting numeric water quality standards, ADEQ may consider:

- The effect of local water quality characteristics on the toxicity of pollutants;
- The varying sensitivities of local affected aquatic populations to these pollutants; and
- The extent to which the natural flow of the stream is perennial, intermittent, effluent-dependent, or ephemeral.

While ADEQ may consider site-specific factors in establishing water quality standards for ephemeral waters and effluent-dependent waters, any water quality standard adopted must be consistent with the requirements of the CWA. A.R.S. § 49-221 also prescribes what ADEQ must and may consider to adopt water quality standards. For example, A.R.S. § 49-221(C)(6) directs the Director to consider “[a]ny unique physical, biological, or chemical properties of the waters” when establishing numeric or narrative surface water quality standards.

Section 303(c) of the CWA requires states to, where appropriate, adopt and revise water quality standards at least once every three years. The key elements of the water quality standards program are:

- A water quality standard is defined as consisting of the designated beneficial uses of a water body and the water quality criteria necessary to support the designated uses;
- The criteria shall be specific numeric criteria or narrative criteria based on biological monitoring or assessment methods consistent with the CWA;
- The following minimum beneficial uses must be considered when establishing surface water quality standards under the CWA: 1) public water supply; 2) the propagation of fish, shellfish, and wildlife; 3) recreation; 4) agricultural uses; 5) industrial uses; and 6) other purposes, including navigation;

- The water quality standards must protect public health and welfare, enhance the quality of water, and serve the purposes of the CWA;
- The surface water quality standards rules must be reviewed at least once every three years using a process that includes public participation; and
- EPA must review and approve or disapprove the surface water quality standards adopted by ADEQ.

EPA requires ADEQ to specify appropriate uses to be achieved and protected in Arizona’s surface waters. These ADEQ-specified designated uses include:

- domestic water source (DWS),
- fish consumption (FC),
- full body contact recreation (FBC),
- partial body contact recreation (PBC),
- aquatic and wildlife (cold water) (A&Wc) (acute and chronic),
- aquatic and wildlife (warm water) (A&Ww) (acute and chronic),
- aquatic and wildlife (effluent-dependent water) (A&Wedw) (acute and chronic),
- aquatic and wildlife (ephemeral water) (A&We) (acute only),
- agricultural irrigation (AgI), and
- agricultural livestock watering (AgL).

Individual surface waters in Arizona and their respective designated uses are listed in Appendix B of this rulemaking. Other “surface waters” in Arizona are regulated under the tributary rule, which assigns designated uses to unlisted tributaries of surface waters listed in Appendix B.

The surface water quality standards for downstream surface waters must be considered when establishing designated uses for upstream waters. ADEQ must ensure that the water quality standards that are adopted for upstream water bodies also provide for the attainment and maintenance of the water quality standards for downstream waters. *See* 40 C.F.R. § 131.10(b). This concept is also stated in A.A.C. R18-11-104(F).

ADEQ must adopt water quality criteria that are sufficient to protect water quality for the designated uses of Arizona’s surface waters and include an antidegradation policy consistent with EPA

requirements in 40 C.F.R. § 131.12. *See* 40 C.F.R. § 131.6. Water quality criteria, numeric criteria, and narrative criteria must be based on a sound scientific rationale and must contain sufficient parameters for constituents to protect each designated use. *See* 40 C.F.R. 131.11(a)

ADEQ has discretionary authority under 40 C.F.R. § 131.13 to include general policies that affect the application and implementation of the surface water quality standards in the rules. ADEQ has used this authority to adopt a mixing zone rule at R18-11-114, a variance rule at R18-11-122, and site specific standards in R18-11-115.

### ***How Surface Water Quality Standards Impact Pollution Control in Arizona***

Surface water quality standards are essential elements of several important surface water quality management programs including: Arizona Pollutant Discharge Elimination System (AZPDES) permitting; the § 305(b) water quality assessment and § 303(d) impaired water listing; and total maximum daily load (TMDL) programs.

### ***AZPDES Permit Program***

Surface water quality standards are used to regulate point source discharges of pollutants under the AZPDES permit program authorized under § 402 of the Clean Water Act. When technology-based permit limits required by the Clean Water Act are not sufficiently stringent to meet the applicable water quality standards, the Clean Water Act requires the development of more stringent, water quality-based effluent limits (WQBELs) in the AZPDES permit that are designed to ensure that the applicable surface water quality standards are met. *See* C.W.A. § 301(b)(1)(C); *see also* 40 C.F.R. § 125.3(a). The surface water quality standards rules play a critical role in the development of every AZPDES permit and provide the regulatory basis for the development of WQBELs which affect the levels of treatment that a discharger may be required to provide to control the discharge of pollutants to surface waters in Arizona.

### ***Section 305(b) Water Quality Assessment and § 303(d) Impaired Water Listing***

Section 305(b) of the CWA establishes an “assessment” process to develop and report information on the quality of Arizona’s surface waters. ADEQ developed a program to monitor surface waters within its boundaries, and a biennial report describing the status of water quality in Arizona rivers, streams, lakes, and reservoirs is prepared and submitted to EPA. The § 305(b) water quality assessment process is the primary means by which ADEQ evaluates whether water bodies in Arizona are meeting surface water quality standards, that progress has been made in maintaining and restoring surface water quality, and the extent of remaining water quality problems. The surface water quality standards play a central

role in the § 305(b) water quality assessment process by providing the benchmarks used to assess water quality status. The surface water quality standards also provide the basis for the identification of water quality-limited or impaired waters in Arizona. Under § 303(d) of the CWA, ADEQ identifies and lists impaired waters that do not meet one or more of the surface water quality standards. The CWA requires ADEQ to develop total maximum daily load analyses (TMDLs) to restore water quality in those impaired waters. ADEQ submits the assessment report and impairment water listing in a biennial integrated § 305(b) Assessment and § 303(d) Listing Report. ADEQ's most recent EPA-approved report is the 2016 Clean Water Act Assessment, located here:

<https://www.azdeq.gov/sites/default/files/2016%20Clean%20Water%20Act%20Assessment.pdf>

### ***Total Maximum Daily Load (TMDL) Program***

Under § 303(d) of the CWA, ADEQ is required to develop TMDL analyses for impaired water bodies that do not meet one or more surface water quality standards. A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet surface water quality standards. The TMDL allocates that amount among the point and non-point sources in the watershed that discharge the pollutant of concern. A TMDL analysis starts with the identification of the pollutant(s) of concern and the surface water quality standards that must be attained to protect designated uses. A TMDL establishes a pollutant “budget” which is implemented through other Department water quality management programs such as the AZPDES permit program and the § 319 Non-Point Source Program. The ultimate goal of a TMDL is the restoration of water quality so that an impaired water attains applicable surface water quality standards.

### ***Other Department Water Quality Management Programs That Depend on Surface Water Quality Standards***

Section 319 of the CWA requires ADEQ to identify surface waters in Arizona that, without additional controls to control non-point sources of pollution, cannot be reasonably expected to attain or maintain applicable water quality standards or the goals and requirements of the CWA. Management measures and best management practices (BMPs) are the primary mechanisms in § 319 of the Act to enable achievement of surface water quality standards. ADEQ administers the Water Quality Improvement Grant program that provides financial assistance to projects that control the discharge of pollutants to surface waters from non-point sources with a goal of achieving applicable water quality standards.

Under § 401 of the CWA, ADEQ may grant, condition, or deny water quality certification for a federally permitted or licensed activity that may result in a discharge to a surface water in Arizona. Congress intended that states use the § 401 water quality certification process to ensure that no federal

license or permit is issued that would violate state-adopted water quality standards. The surface water quality standards that are the subject of this rulemaking are the basis for the § 401 water quality certification process. If ADEQ grants water quality certification for a federal license or permit, it is in effect saying that the regulated activity will not result in a violation of a surface water quality standard. ADEQ also may place conditions on § 401 certification to ensure compliance with the surface water quality standards. ADEQ may deny certification if an applicant for a federal permit or license has not demonstrated that the regulated activity will be protective of applicable water quality standards. If ADEQ denies water quality certification, the federal permitting or licensing agency is prohibited from issuing the permit or license. ADEQ conducts § 401 water quality certifications for a variety of federal programs including the § 404 dredge-and-fill permit program currently administered by the U.S. Army Corps of Engineers, permits for construction of new or expanded airport facilities regulated by the Federal Aviation Administration, and some power plants regulated by the Federal Energy Regulatory Commission (e.g., hydroelectric power plants).

***Public Participation***

An important element of the surface water quality standards review process is the involvement of those who may be affected by water quality standards decisions. Section 303(c) of the CWA requires that ADEQ hold at least one public hearing during the rulemaking process to consider changes to the standards. A.R.S. § 49-208 requires that ADEQ ensure adequate public participation in the development of new or revised surface water quality standards. Federal requirements also mandate a 45-day notice period and hearing for the review and revision of standards. *See* 40 CFR § 131.20 (referring the reader to 40 C.F.R. §§ 25.5).

ADEQ invites the active involvement of citizens with an interest in surface water quality issues; the regulated community who may be affected by the state’s water quality standards decisions; and federal, state, and local agencies and governments, including Indian tribes, who may have a stake in the outcome of the rulemaking process. ADEQ has engaged in a robust public participation process during this rulemaking, holding numerous workshops and stakeholder meetings to discuss water quality standards issues, including the following:

<i>Date</i>	<i>Event</i>
June 21, 2017	Stakeholder Meeting: Kick off Meeting for the Triennial Review of Surface Water Quality Standards rulemaking process
November 17, 2017	Outstanding Arizona Waters Workgroup Meeting #1
December 12, 2017	Outstanding Arizona Waters Workgroup Meeting #2
December 21, 2017	Outstanding Arizona Waters Workgroup Meeting #3
January 18, 2018	Outstanding Arizona Waters Workgroup

<i>Date</i>	<i>Event</i>
	Meeting #4
January 30, 2018	Outstanding Arizona Waters Workgroup Meeting #5
February 14, 2018	Outstanding Arizona Waters Workgroup Meeting #6
November 17, 2017	Appendix B Workgroup Meeting #1
December 06, 2017	Appendix B Workgroup Meeting #2
December 18, 2017	Appendix B Workgroup Meeting #3
January 10, 2018	Appendix B Workgroup Meeting #4
January 23, 2018	Appendix B Workgroup Meeting #5
November 17, 2017	Antidegradation and Effluent Dependent Waters Workgroup 2017 Triennial Review Kick-off Meeting #1
December 13, 2017	Antidegradation and Effluent Dependent Waters Workgroup 2017 Triennial Review Kick-off Meeting #2
December 21, 2017	Antidegradation and Effluent Dependent Waters Workgroup 2017 Triennial Review Kick-off Meeting #3
January 22, 2018	Antidegradation and Effluent Dependent Waters Workgroup 2017 Triennial Review Kick-off Meeting #4
April 30, 2018	2018 TR Stakeholder meeting in Phoenix: Appendix B; Enforcement; Mixing Zone; Site Specific Standards; Variances
May 1, 2018	2018 TR Stakeholder meeting in Phoenix: Appendix A; Nutrients
May 7, 2018	2018 TR Stakeholder meeting in Phoenix: Outstanding Arizona Waters; Effluent Dependent Waters; Antidegradation
May 10, 2018	2018 TR Stakeholder meeting in Tucson: Appendix B; Enforcement; Mixing Zone; Site Specific Standards; Variances; Appendix A; Nutrients; Outstanding Arizona Waters; Effluent Dependent Waters; Antidegradation
September 12, 2018	Stakeholder Meeting on Draft Notice & Rule in Tucson
September 14, 2018	Stakeholder Meeting on Draft Notice & Rule in Phoenix

***EPA Review of Arizona’s Surface Water Quality Standards***

ADEQ is required to submit new and revised water quality standards to the Region 9 Administrator of the EPA for review. ADEQ must submit final surface water quality standards rules to the Regional Administrator within 30 days of the date of the filing of the final rules with the Office of the Secretary of State. At that time, EPA Region 9 will review the rules to determine whether they are consistent with the requirements of the Clean Water Act and EPA’s Water Quality Standards Regulation at 40 C.F.R. Part 131.

Pursuant to 40 C.F.R. §§ 131.5 & 131.6, EPA review of the surface water quality standards rules generally consists of the following determinations:

1. Whether the designated uses are consistent with the requirements of the CWA;
2. Whether Arizona’s surface water quality standards that protect the designated uses are based on sound scientific rationale consistent with 40 C.F.R. § 131.11;

3. Whether Arizona's standards that do not include designated uses specified in § 101(a)(2) of the CWA are based upon appropriate technical and scientific data and analyses;
4. Whether the water quality criterion adequately maintains and protects water quality for the designated uses and whether the state has adopted antidegradation requirements consistent with 40 C.F.R. § 131.12;
5. Whether the state adopted any water quality variances and if so, whether it is consistent with 40 C.F.R. § 131.14;
6. Whether the state adopted provision authorizing the use of schedules of compliance for water quality-based effluent limits in NPDES permits is consistent with 40 C.F.R. § 131.15;
7. Whether the state followed the legal procedures necessary for adopting the surface water quality standards rules; and
8. Whether the surface water quality standards rules submission meets EPA minimum requirements specified in 40 C.F.R. § 131.6.

The EPA Regional Administrator must either approve or disapprove ADEQ's standards within a set amount of time established in the CWA and implementing rules. *See* CWA § 303(c)(3) and 40 C.F.R. §131.21(a). If EPA approves (in whole or in part) ADEQ's submitted standards, the agency must do so by notifying the state within 60 days of receiving a complete submittal of the standards, rules, and supporting documentation. If EPA disapproves (in whole or in part) Arizona's surface water quality standards, it must do so within 90 days of receiving the complete submittal of the surface water quality standards rules.

If the Regional Administrator disapproves a water quality standard, EPA must notify ADEQ specifying (1) why the state standards are not in compliance with the CWA, and (2) the revisions ADEQ must make to its standards to assure compliance with the CWA before EPA could fully approve the standards. *See* 40 C.F.R. § 131.21. Under § 303(c)(4) of the CWA, EPA must federally promulgate water quality standards no later than 90 days after the date of notice of the disapproval described above, if ADEQ does not adopt the necessary revisions as specified by EPA within that time. A state-adopted standard that EPA disapproves remains in effect until either: (1) ADEQ adopts the necessary revisions through the rulemaking process, or (2) EPA promulgates a federal water quality standard to supersede the disapproved water quality standard.

**Section by Section Explanation of Changes in this Rulemaking**

***New or Modified Definitions [R18-11-101]***

The following terms are new or modified in A.A.C. R18-11-101, and are described more fully in their most relevant section in the preamble, if applicable, as indicated in the “Rule Number” column below:

<b>New/Modified Term</b>	<b>Action</b>	<b>Rule Subject</b>	<b>Rule Number</b>
Complete Mixing	New Definition	Mixing Zones	R18-11-114
Critical Flow Conditions of the Discharge	New Definition	Mixing Zones	R18-11-114
Critical Flow Conditions of the Receiving Water	New Definition	Mixing Zones	R18-11-114
Pollutant Minimization Program	New Definition	Variations	R18-11-122
Reference Condition	Modify	Biocriteria	See explanation below
Surface Water	Modify	All	See explanation below
Variance	New Definition	Variations	R18-11-122
Zone of Initial Dilution	New Definition	Mixing Zones	R18-11-114
Zone of Passage	Repeal	Mixing Zones	R18-11-114

Clarify “Reference Condition”

ADEQ also proposes to modify the term “reference condition,” which is used in A.A.C. R18-11-108.01 (Narrative Biological Criteria for Wadeable, Perennial Streams), to clarify what the Department means by “a set of ecological measurements.” The reference condition is a set of physical, chemical, and other site criteria that define least disturbed stream reaches in a statewide monitoring network from which biological assemblages are collected and from which ADEQ’s biocriteria standards thresholds are derived. ADEQ, *Implementation Procedures for the Narrative*

*Biocriteria Standard 6-7 (April 2015), available at*  
[http://legacy.azdeq.gov/environ/water/standards/download/draft\\_bio.pdf](http://legacy.azdeq.gov/environ/water/standards/download/draft_bio.pdf).

#### Modify “Surface Water” Definition to Mean “Navigable Waters” as Defined in Statute

While ADEQ may establish standards for all waters of the state, including surface waters other than navigable waters, based on the rulemaking record over the years, it is clear that Title 18, Chapter 11, Article 1 has historically been designed to align with federal requirements. Further, the surface water quality standards used in that article are used as the foundation of ADEQ’s other federal programs. Therefore, ADEQ intends to modify the definition for “surface water” to mean “navigable waters” as defined in A.R.S § 49-201(22), in order to accord with the intent of the surface water regulation applicability. “Navigable Waters” means “the waters of the United States as defined by section 502(7) of the Clean Water Act (33 U.S.C. 1362(7)).” A.R.S § 49-201(22). ADEQ will apply the current federal definition of waters of the U.S. exactly as it would have done before this change. In the event that the federal definition of waters of the U.S. changes, application of the standards in Chapter 11, Article 1 will construe the definition of surface water to align with federal law, as ADEQ must do in order to maintain its primacy programs, and to be consistent with parallel federal law and various state authorities rooted in federal requirements (e.g. AZPDES program, TMDL, impaired waters identification). *See* A.R.S. § 49-104(A)(16).

#### ***Antidegradation Criteria Rule Modifications [R18-11-107.01]***

Federal water quality standards regulations require ADEQ to adopt a statewide antidegradation policy and to identify the methods for implementing the policy. *See* 40 C.F.R. § 131.12. Section R18-11-107.01 satisfies the federal mandate to identify methods for implementing antidegradation.

This rulemaking proposes two minor clarifying adjustments to the antidegradation rule and additional modifications to avoid any legal gaps should the agency issue CWA § 404 permits in the near future.

#### Clarifying Adjustments

First, ADEQ proposes to adjust the order of required documentation for any person proposing new or expanded regulated discharges that may cause significant degradation under A.A.C. R18-11-107.01(B)(3). Under the current rule the last document required is the baseline data of the water quality upstream of the proposed discharge location. None of the other required analyses can be conducted, however, without first collecting and characterizing the baseline data. Therefore ADEQ proposes to move the baseline data collection and characterization requirement from (B)(3)(c) to (B)(3)(a) and move the other two requirements downward in order as (b) and (c) respectively so that the baseline data is collected and characterized prior to the other required analyses being conducted.

Second, ADEQ proposes to clarify temporary impacts referred to in R18-11-107.01(C)(4) by adding the phrase “and are not regularly occurring.” This addition was included in the Antidegradation and Effluent Dependent Waters Workgroup Final Recommendations, located on the ADEQ website at: [http://static.azdeq.gov/wqd/tri\\_rev\\_antideg\\_final\\_recs.pdf](http://static.azdeq.gov/wqd/tri_rev_antideg_final_recs.pdf). ADEQ believes this phrase provides an additional level of clarity and assurance that impacts will not be recurring.

### Legal Gap Modifications

In 2018, the Arizona legislature granted ADEQ the authority to pursue primacy for the CWA § 404 program, which regulates the placement of dredged or fill material into the “waters of the United States,” and which is currently administered by the U.S. Army Corps of Engineers. See S.B. 1493 (2nd Reg. Sess. 2018). ADEQ asked several technical stakeholder workgroups to convene and provide ADEQ input regarding the best path forward to assume the CWA § 404 program. In response to an issue already identified by workgroup members, ADEQ is proposing modifications to the antidegradation criteria rule to ensure that, should the agency be granted primacy over the CWA § 404 dredge and fill program, there will be a legal mechanism in place to account for antidegradation review of state-issued, individual § 404 permits. The modifications are not intended to, and do not in any way, impact present day antidegradation standards of review, but clarify how the form of the state’s antidegradation review differs depending on whether an individual § 404 permit is issued by the Corps or the state. For state-issued, individual permits, which are not federal actions, CWA § 401 does not apply and CWA § 401 water quality certifications therefore are not required. Under ADEQ’s current antidegradation criteria rule, for purposes of individual § 404 permits, antidegradation review is satisfied by conducting a “significant degradation” review of a proposed discharge under the CWA § 404(b)(1) Guidelines, except in cases where a discharge may degrade existing water quality in an OAW or a water listed on the 303(d) List of impaired waters. AAC R18-11-107.01(D); See also, e.g. EPA’s Water Quality Standards Handbook Chapter 4, page 7 available at <https://www.epa.gov/wqs-tech/water-quality-standards-handbook> (Chapter 4 last updated in 2012). In cases where a discharge may degrade existing water quality in an OAW or impaired water, the current standard requires ADEQ to conduct an antidegradation review. ADEQ is not proposing to modify this standard of review at this time, as this standard was approved by EPA under CWA § 303(c), and the consensus of the Antidegradation and Effluent Dependent Waters Workgroup in this most recent triennial review was that the antidegradation standard is consistent with the CWA, and that no changes are necessary. Letter from Alexis Strauss, Director, Water Division, USEPA, to Joan Card, Director, Water Quality Division, ADEQ (Jan. 21, 2009) (on file with ADEQ); Antidegradation and Effluent Dependent Waters Workgroup Final Recommendations, found at:

[http://static.azdeq.gov/wqd/tri\\_rev\\_antideg\\_final\\_recs.pdf](http://static.azdeq.gov/wqd/tri_rev_antideg_final_recs.pdf). The rule has been changed such that, in the event that ADEQ issues individual § 404 permits, antidegradation review will be satisfied by conducting review of the proposed discharge under CWA § 404(b)(1) Guidelines, as the Corps does currently, unless the discharge will degrade an OAW or impaired water. In those cases, ADEQ will conduct an antidegradation review.

#### ***E. Coli Numeric Water Quality Standards Modifications [R18-11-109(A)]***

This Section prescribes numeric water quality standards for bacteria, pH, temperature, suspended sediment concentration, dissolved oxygen, and nutrients.

In November 2012, EPA issued revised recreational water quality criteria for *Escherichia coliform (E. coli)* See generally EPA Office of Water, *Recreational Water Quality Criteria [EPA 820-F-12-058]* (2012), available at <https://www.epa.gov/wqc/2012-recreational-water-quality-criteria-documents>.

The criteria protect primary contact recreation by using two bacterial indicators of fecal contamination. ADEQ will continue to use *E. coli* as the primary indicator upon which Arizona surface water quality standards are based. ADEQ proposes to revise the current single sample maximum (SSM) values for Full Body and Partial Body Contact surface water quality standards listed in A.A.C. R18-11-109(A) to the statistical threshold values (STV) of 410 cfu/100ml and 576 cfu/100ml, respectively.

ADEQ proposes to modify the term “single sample maximum” (SSM) to “statistical threshold value” (STV). The term “statistical threshold value” (STV) means single sample maximum (SSM), and the STV language is consistent with EPA’s 2012 Criteria Document. The SSM term was often thought of as a “never to exceed value” which lead to confusion as exceedances were allowed prior to a water being considered impaired based on the states’ § 305(b) Assessment criteria. The STV term more accurately reflects that the associated value, 410 cfu/100 ml in Arizona’s case, is a statistically derived number.

The 410 cfu/100 ml proposed value for Full Body Contact corresponds to the 90th percentile of the water quality distribution used to derive the 2012 EPA criteria. The estimated 90th percentile of the water quality distribution was selected to take into account the expected variability in water quality measurements, while limiting the number of samples allowed to exceed the surface water quality standards, before deciding water quality is impaired.

ADEQ proposes to retain the partial body contact value, 576 cfu/100ml, as it corresponds to the 95th percentile value recommended in the 1986 Beach Act guidance. See EPA Office of Water, *Ambient Water Quality Criteria for Bacteria – 1986 [EPA440/5-84-002]* (Jan. 1986), available at

<https://www.regulations.gov/document?D=EPA-HQ-OW-2007-0808-0001>.

The revised criteria still serve as points of reference for entities against which to compare their monitoring results. There are no new sampling or reporting requirements based solely on the proposed change in the standard. Since the STV (previously referred to as SSM) standard is increasing from the 235 to 410 cfu/100ml, the threshold for water quality exceedances will increase as well. Any changes to permit requirements will be made on a case-by-case basis as AZPDES permits are renewed or modified. The number of exceedances required to make CWA § 305(b) assessment determinations will remain the same until an impaired water rule rulemaking addresses any potential changes to the frequency and duration of *E. coli* exceedances for § 305(b) water quality assessment purposes.

#### ***Nutrient Criteria Numeric Water Quality Standards Modifications [R18-11-109(F)]***

During the 2009 Triennial Review of Surface Water Quality Standards ADEQ revised the automatic applicability of nutrient standards to only apply to those waters listed in -109(F)(1), (2), (3), and (5) and their tributaries (only “perennial” tributaries are specifically listed). Although limiting the automatic applicability of the nutrients standards to listed “perennial” tributaries was the intent of the 2009 revision, the current introductory narrative found in A.A.C. R18-11-109(F) conflicts with -109(F)(1), (2), (3), or (5) in that it still appears to automatically require ADEQ to apply the standards to all tributaries rather than just those listed. However, ADEQ only applies nutrient standards to other tributaries if necessary to protect the water quality of the listed surface water. ADEQ intends to modify the language to reflect that flexibility and to ensure that downstream uses will also be protected, as necessary.

#### ***Mixing Zones Rule Modifications [R18-11-114]***

A mixing zone is a limited area or volume of water where dilution of a discharge takes place and where numeric water quality criteria may be exceeded in a receiving surface water. The boundary of a mixing zone is the point where the discharged pollutant is completely mixed. The goal of a mixing zone is to ensure that pollutant discharges are mixed so as to prevent acute toxicity and lethality to organisms passing through the mixing zone, and to protect the biological, chemical, and physical integrity of a surface water as a whole (e.g. protection of all designated uses, including DWS). Mixing zones are allowed by Clean Water Act implementing regulations. *See* 40 C.F.R. § 131.13.

To ensure prevention of acute toxicity, the requester of a mixing zone will generally propose a mixing zone boundary based on the following recommended steps according to EPA technical guidance:

1. Identify the critical flow conditions of the receiving water and discharge, in order to predict the worst case mixing scenario of the pollutants within the mixing zone.
2. Identify conservative pollutant concentration inputs (for discharge and receiving water).
3. The requester will then model the mixing of the discharged pollutants based on the critical flow conditions and concentration assumptions.
4. The model run will produce an acceptable mixing zone size (i.e. no part of the mixing zone is acutely toxic). The model will account for whether a mixing zone should or should not be allowed. For example, a model run may show that under critical conditions (worst case scenario) the receiving water will not dilute the discharge far and fast enough to avoid acute toxicity at some point in the mixing zone. In that instance, a mixing zone may not be allowed, or the facility may need to propose installation of diffusers or other methods to ensure rapid and complete mixing. *See generally* EPA, *Technical Support Document for Water Quality-based Toxics Control*, several sections, including Section 4 (1991), *available at* <https://www3.epa.gov/npdes/pubs/owm0264.pdf>.

Modeling for mixing zone size may be performed, as appropriate, by simple calculation. For example, see the following excerpt from the EPA NPDES permit writers manual:

“For many pollutants such as most toxic (priority) pollutants, conservative pollutants, and pollutants that can be treated as conservative pollutants when near-field effects are of concern, if there is rapid and complete mixing in a river or stream, the permit writer could use a simple mass-balance equation to model the effluent and receiving water.” U.S. EPA, *NPDES Permit Writers’ Manual* 6-24 (Sept. 2010).

Ultimately, the factors in determining whether acute toxicity is prevented are (1) duration of exposure, and (2) pollutant concentration. While it is a goal to ensure that mixing zones are not larger than necessary, the size of the mixing zone is not as important as toxicity. *See generally* EPA, *Technical Support Document for Water Quality-based Toxics Control*, several sections, including Section 4 (1991), *available at* <https://www3.epa.gov/npdes/pubs/owm0264.pdf>.

Mixing zone standards and requirements should ensure protection of all water quality standards and should also be flexible enough for practicable and scientifically defensible implementation. Currently, ADEQ mixing zone requirements have limited flexibility and practicability. ADEQ contracted PG Environmental to provide ADEQ technical expertise and advice regarding ADEQ’s current mixing

zone rule. PG Environmental provided ADEQ with a technical memorandum in which it identified and recommended two main areas of change to current mixing zone standards:

- Redefine critical flow conditions for discharges and receiving waters for purposes of authorizing mixing zones
- Modify the mixing zone size requirements from fixed numeric requirements to narrative functional performance standards

ADEQ proposes to establish definitions for critical flow conditions for discharges and receiving waters and modify its mixing zone requirements based on recommendations from PG Environmental's memorandum, *Arizona Mixing Zone Water Quality Standards* (Jun. 2018) (on file with ADEQ and available at: [http://static.azdeq.gov/wqd/tri\\_rev\\_mixing\\_memo.pdf](http://static.azdeq.gov/wqd/tri_rev_mixing_memo.pdf)), conversations with PG Environmental staff, *EPA's Water Quality Standards Handbook*, Chapter 5 (Sept. 2014), *EPA's Technical Support Document for Water Quality-based Toxics Control* (1991), *EPA's Water Quality Standards Handbook, Chapter 5* (Sept. 2014), *EPA's NPDES Permit Writers' Manual* (Sept. 2010), *Mixing Zone Guidance for Chronic Toxicity and Zones of Initial Dilution* (2<sup>nd</sup> Rev., May 1992), as well as ADEQ's expertise and training.

#### Redefine Critical Flow Conditions

ADEQ defined critical flow conditions of the discharge and the receiving water based on review of the above cited documentation and experience.

Mixing zone size and boundaries are based on calculations and modeling to account for critical flow conditions. Assigning critical conditions for discharge and receiving water flows will allow for sizing of mixing zones based on exposure risk and exceedance frequencies and the particular designated use and criteria.

Typically, critical flow conditions allow the mixing zone to be established based on the maximum average potential of pollution concentration in a mixing zone. This is estimated by taking into account discharge flow conditions, receiving water flow conditions, the pollutant at issue, and the designated use that the mixing zone is intended to protect. Hence, for acute and chronic aquatic health standard protection at critical flow conditions, discharge flows are inputted into the model calculation at their maximum average representative flow levels, and receiving waters are inputted at their lowest average representative flow conditions. The resultant calculation of mixing zone requirements approximates the lowest representative dilution rate that will allow the water body to meet water quality standards downstream and protect aquatic wildlife in the mixing zone itself. Aquatic and wildlife standards are typically much lower than human health standards to account for aquatic life's

greater sensitivity to pollutants in waterbodies. Therefore, human health standards are generally calculated using operation-representative averages over a long periods of time to approximate a longer exposure rate.

#### Modify Mixing Zone Size from Fixed Numeric Size to Functional Narrative Standards

Currently, ADEQ has fixed numeric size limits in its mixing zone standards:

- “The length of the mixing zone shall not exceed 500 meters in a stream.” A.A.C. R18-11-114(H)(1)
- “A mixing zone shall provide for a zone of passage of not less than 50% of the cross-sectional area of a river or stream.” A.A.C. R18-11-114(H)(4)

In some cases, these numeric standards may limit the practicability of the mixing zone rule. For example, a mixing zone may need to be 550 meters to reach allowable and appropriate dilution levels. This distance is only 10% greater than the now required 500 meters, but the rule as currently written does not allow for such flexibility. Also, the 50% cross-sectional zone of passage requirement may not be adequate to prevent acute toxicity to aquatic life. This is because while 50% of the channel, split lengthwise, may be nontoxic, the other 50% of the length of the channel may be acutely toxic. A visual analogy of this phenomenon may be a confluence of two rivers coming together to flow side by side for a river segment, where one side is relatively clear and the other side muddy with sediment.

An approach, which ADEQ intends to implement, that furthers the practicability of a mixing zone and ensures that there are no acutely toxic areas of a mixing zone is to remove the fixed numeric mixing zone size requirements and instead:

- Ensure that the mixing zone must still prevent acute toxicity and lethality to organisms passing through it.
- Clarify that the mixing zone ends at the point that complete mixing occurs.
- Require the mixing zone to be as small as practicable, ensuring the mixing zone is no larger than necessary.
- Disallow a mixing zone size to exceed the zone of initial dilution under critical conditions, nor extend beyond the point in a waterbody wherein complete mixing occurs, clarifying that mixing zones may only be applied in portions of a waterbody where mixing occurs at appreciable levels.
- Limit mixing zones to be issued on a pollutant-by-pollutant basis, as not all pollutants will

mix and dilute in the same manner. Also, some pollutants may be more toxic in lower concentrations than others, so that appropriate mixing is ultimately important to analyze on a pollutant basis to protect designated uses.

In making these modifications, ADEQ will remove the definition for “zone of passage” as this term is no longer used and will instead add a definition for “zone of initial dilution.” ADEQ is also adding definitions for “critical flow condition of the discharge” and “critical flow of the receiving water” to ensure that the regulated public understands what data is required in their analyses. ADEQ will also add a definition for “complete mixing” to ensure that it is clear where the boundary of the mixing zone is required to be.

#### Other Changes to Mixing Zone Rule

ADEQ intends to repeal two statements in subsections (C) and (D), which are already required in accordance with licensing timeframe statutes and rules. If someone is applying for a mixing zone, it is a part of a permit application, revision, or renewal. If a submittal is incomplete, the Department must gather missing information from the applicant. Also, the Director’s determination regarding the mixing zone is a part of the permit decision. As a part of an issuance or denial of a permit, anything regarding that issuance or denial is an appealable agency action. For example, if a permit is issued without a requested mixing zone, the permit is appealable on the basis that the Director did not include a mixing zone.

#### ***Site Specific Standards Rule Modifications [R18-11-115(B)(5)]***

State and federal laws authorize the adoption of site-specific standards that reflect local environmental conditions. The federal water quality standards at 40 C.F.R. § 131.11(b)(1)(ii) allow ADEQ to adopt water quality criteria that are “modified to reflect site-specific conditions.” Similarly, A.R.S. § 49-221(C)(6) directs the Director to consider “[a]ny unique physical, biological, or chemical properties of the waters” when establishing surface water quality standards. Under A.R.S. § 49-222(C), ADEQ may consider the effect of local water quality characteristics on the toxicity of specific pollutants and the varying sensitivities of local, affected aquatic populations to pollutants when setting numeric water quality standards. This rule section prescribes specific and technically defensible methods acceptable to both ADEQ and EPA for developing site specific standards. Site specific standards, like all surface water quality standards, must be based on a sound scientific rationale to protect the designated use.

In 2016, ADEQ proposed and finalized “natural adaptive” language in its site specific standards rule at R18-11-115(B)(5). ADEQ then submitted this language to EPA for approval as a part of its Water

Quality Standards Triennial Review. This “natural adaptive” language essentially allows for a site specific standards if it is shown that some number of species at a site have adapted to higher levels of pollutants in an area.

In its action letter, however, EPA disapproved this “natural adaptive” language, stating that the language “is not scientifically defensible nor consistent with 40 C.F.R. § 131 and the CWA.” Torres, Tomás, EPA Director, Water Division, Letter to Trevor Baggione, ADEQ Director, *Water Quality Division Letter of Approval and Disapproval of ADEQ’s 2016 Water Quality Standards* (Dec. 23, 2016). As such, ADEQ has not implemented the subsection and now proposes to repeal it.

### ***Enforcement Rule Modifications [R18-11-120]***

As far back as 1984, ADEQ has consistently had this enforcement rule in place as a tool to compel the regulated community to comply with the law by prescribing measures to address violations of surface water quality standards.

Currently, this rule compels compliance with A.R.S. § 49-263(a), which states:

“A. It is unlawful to:

1. *Discharge without a permit or appropriate authority under this chapter.*
2. Fail to monitor, sample or report discharges as required by a permit issued under this chapter.
3. Violate a discharge limitation specified in a permit issued under this chapter.
4. *Violate a water quality standard....”* (emphasis added)

### **Enforcement Rule Should Only Apply to Non-permitted Discharges**

The rule prescribes the minimum data collection requirements for identifying a violation of a standard for enforcement purposes. This requirement is likely confusing to permittees because water quality standard violations for permitted discharges are identified using the permit conditions as established in accordance with federal law. The current rule does not appear to contemplate AZPDES regulation at all, as it was adopted long before ADEQ obtained primacy over the National Pollutant Discharge Program (NPDES/AZPDES). The last time this rule was amended was in 2002, in ADEQ’s triennial review rulemaking, just before ADEQ adopted AZPDES rules and obtained federal approval for its AZPDES program.

The fact that the rule does not contemplate a permitting program is evident in ADEQ’s responses to comments in the 2002 triennial review rulemaking. EPA commented that it assumed that the rule indicated how to comply with criteria in terms of state law alone and asked for assurances that the rule would not be misinterpreted as “describing how compliance with the criteria will be determined

in the Clean Water Act context.” *NFRM*, 8 A.A.R. 1264, 1392 (Mar. 29, 2002). ADEQ responded in part:

“The rule does not regulate how EPA establishes water quality-based discharge limitations in NPDES permits or how EPA enforces those permit conditions. Presumably, EPA’s establishment of permit conditions and their enforcement are addressed in the federal NPDES permit program regulations.” *Id.* at 1393.

AZPDES permits are conditioned according to federal law, which typically means that the permit identifies a daily maximum pollutant discharge limit and a monthly average pollutant discharge limitation. Each of these limits are calculated to ensure that the permittee does not cause or contribute to water quality violations in any water body. *See* 40 C.F.R. § 122.44(d)(1). Hence, ADEQ may take an enforcement action for violations of permit conditions and limits, because exceedance of those limits and noncompliance with conditions may indicate that a facility could be causing a violation of a water quality standard. Additionally, in order to clarify that the enforcement rule does not apply to exceedances of a permit, ADEQ added the following language to the rule:

For the purposes of this section, a “non-permitted discharge violation” does not include a discharge regulated under an AZPDES permit.

Therefore, this enforcement rule should not be applied to permitted discharges.

However, this rule does provide a mechanism to determine the need for enforcement of suspected unpermitted discharges and ensuing violations of water quality standards. ADEQ proposes adjustments to this rule so that it only applies to non-permitted discharge violations.

ADEQ proposes to modify subsection (B) (previously subsection (C)) to clarify that enforcement for all numeric standards, except for A&W chronic standards, would be determined by analysis of a single sample, unless additional samples are required under Title 18, Chapter 11, Article 1. The current version of the rule only discusses how the agency would determine compliance with A&W acute and chronic uses, but does not address any of the other designated uses. ADEQ further proposes to clarify the sampling terminology in subsection (B) by modifying the term “grab sample” to “single sample.” “Grab sample” refers to a descriptive sample type (grab, composite, EWI, first flush, etc.), not the number of samples. “Single sample” is a more accurate term because it references the number of samples needed to utilize acute and chronic criteria for compliance determinations. Additionally, to resolve an oversight in the language of the NPRM, ADEQ has clarified the rule to allow for additional sampling where it is required under Title 18, Chapter 11, Article 1 (e.g. AAC R18-11-109(D); R18-11-109(F)).

ADEQ intends to strike subsection (A) of this rule because it consists of ADEQ authority that is inherent in statute and is unnecessary to be repeated here. The statutes in A.R.S. Title 49, Chapter 2, Article 4 apply more directly and cleanly without repeating them in rule.

ADEQ further intends to strike subsection (D) because it is not applicable in practice. There is no instance in which a non-permitted discharger will have an assigned compliance schedule without the schedule being included in a permit. If a non-permitted discharger violates a standard and intends to or continues to discharge, part of ADEQ's enforcement action would be to require the discharger to obtain an AZPDES permit.

#### Enforcement Rule is Not Intended for CWA Assessment Purposes

Although the rule does prescribe the minimum data collection requirements, these requirements are for enforcement purposes only. However, because this rule is located in the standards rules, it may be unclear that this rule is not intended to be used for "assessment" purposes. An "assessment" is a CWA required action whereby, every two years, ADEQ assesses whether each water or segment of a water of the United States in Arizona is attaining designated uses or not. *See* C.W.A. § 305(b).

Typically combined with and integrated into that assessment report is the impaired waters list. The impaired waters list consists of the waters that ADEQ has identified where effluent limitations are not stringent enough to implement any water quality standard applicable to such waters. The list prioritizes these waters for calculation of total maximum daily load for each pollutant impairing the nonattaining water segment. *See* C.W.A. § 303(d).

For assessment and impaired water identification purposes, ADEQ must use the relevant standard rule and associated calculation method pursuant to A.A.C. Chapter 11, Article 1 for each pollutant/use, and use the credible data and data interpretation requirements and methodologies in the Impaired Waters Identification rules in A.A.C. Chapter 11, Article 6 to determine whether each water is attaining applicable standards or not. The impaired water identification rules applicable to identifying aquatic and wildlife acute and chronic impaired waters align with EPA guidance. This guidance differs from the data gathering required for non-permitted dischargers under this standards enforcement rule. Rather, under the impaired waters identification rules, if a minimum of two water samples collected show that there were "two or more exceedances" of the water quality standards for aquatic and wildlife acute or chronic, then the agency must list the stream as impaired. *See* A.A.C. R18-11-605(D)(2)(b); *see also Prepared Statement by Joan Card, Deputy Administrative Council at ADEQ, 2004 Meeting of the Governor's Regulatory Review Council Minutes* (Dec. 7, 2004). As ADEQ stated in 2002, the "impaired water rule prescribes requirements for § 303(d) listing and the minimum requirements for data that is used for water quality assessment purposes" and "ADEQ may

adopt different criteria for purposes of determining compliance with water quality standards.” *NFRM*, 8 A.A.R. 1264, 1391 (Mar. 29, 2002). The agency has repeatedly stated and maintains that the impaired waters identification rules are separate and distinct from this enforcement rule. Therefore, this enforcement rule does not relate to whether a water is attaining or not for purposes of assessment or the impaired waters list.

### ***Variances Rule Modifications [R18-11-122]***

A water quality variance is temporary water quality criteria that diverges from the designated use criteria of the receiving water, but which still maintains the highest attainable condition of that water. The highest attainable condition of the water essentially means that the receiving water quality aligns as much as possible with a designated use and is the best quality that can be achieved during the term of a variance.

A variance is time-limited, discharger or water body-specific, and pollutant-specific. A variance does not result in any change to the underlying designated use and criteria of the receiving water. This means that any discharger to which a variance does not apply must still comply with the applicable designated use and criteria of the water.

For years, EPA has allowed states to adopt water quality standard variances under 40 CFR § 131.13. Because variances are a vital tool to improving water quality in partnership with facilities, ADEQ has had some form of a rule allowing for variances since 1996. ADEQ’s current variances rule is based on EPA guidance as no EPA rule previously existed to prescribe and define variance requirements. However, in 2015, ADEQ’s current rule became unimplementable when EPA promulgated new and revised rules, including a new variance rule at 40 CFR § 131.14. The new federal rule specifically prescribes what variances are and how they may be implemented. State variances are now subject to the provisions of 40 CFR §131.14, the public participation requirements at 40 CFR §131.20(b), and EPA review for approval or disapproval. ADEQ’s current rule does not align with EPA’s current requirements and allowances for variances. Therefore, this rule revision of A.A.C. R18-11-122 seeks to align with federal law.

### **Variances Rule Differences from Current Version**

Some of the main differences between the current rule and the proposed version, which aligns with current law, include the following:

- Pursuant to federal law, variances are now a water quality standard. *See* 40 C.F.R. § 131.14. In Arizona, water quality standards must be established by rule. *See* A.R.S. § 49-221(A).

Therefore, variances must be established in rule as a water quality standard, and shall be implemented as such.

Previously, variances were granted or denied *pursuant to rule*, but did not have to be established specifically in rule. Rather they were approved or disapproved in a permit. However, under the proposed rule, variances shall no longer be tied to a specific permit, only to a specific discharger/facility or water body segment. For example, if a discharger is granted a variance, the variance will be adopted as a rule, and that rule will be referred to as a basis for a permit condition in that discharger's permit in the next permit renewal or modification. Note that if a variance is repealed, which may occur for some reason that necessitates immediate action, ADEQ would have the authority under the standard reopener clause to modify the permit condition. *See* 40 C.F.R. §§ 123.25(c) and 123.25.

- Variances may now be discharger-specific or water body or waterbody segment-specific. *See* 40 C.F.R § 131.14(a)(1). This differs from ADEQ's current rule, which has only allowed for discharger-specific variances. While water body or waterbody segment-specific variances may be allowed, the amount of data required for such a showing will likely be significant. Water body/segment specific variances would require an evaluation of all pollutant sources on the waterbody/segment. Therefore, each time a discharger applied for an already issued waterbody/segment-specific variance, a showing would have to be made, considering all pollutant sources to the water, that the water body would still meet the highest attainable condition. *See, Final Rule, Water Quality Standards Regulatory Revisions*, 80 Fed. Reg. 51020, 51037 (Aug. 21, 2015). Alternatively, a variance may need to be amended to account for the additional discharger because all pollutant sources must be considered.
- Under EPA's new rule, each variance and its requirements must represent the "highest attainable condition" of the water body to which a variance applies. *See* 40 CFR § 131.14(a)(1)(ii). "Highest attainable condition" is a new term that is not specifically defined in federal law, but represents a number of factors that have been generally considered in previous EPA guidance and the current variance rule. Pursuant to EPA guidance in its 2015 rulemaking, "highest attainable condition" differs from EPA's term "highest attainable use" in that:
  - The condition does not have to be expressed as a use, but rather as a quantifiable expression of the condition;
  - The condition applies to variances from either CWA § 101(a)(2) uses or non-CWA § 101(a)(2) uses;

- The condition cannot lower currently attaining water quality in that the condition does not change the use underlying a variance. *See Final Rule*, 80 Fed. Reg. at 51035-38.

Thus, the highest attainable use is a modified aquatic life, wildlife, or recreational use, while the highest attainable condition is an expression of pollutant reduction. For example, the preamble to the EPA final rule explained that the “rule provides states and authorized tribes the flexibility to express the highest attainable condition as numeric pollutant concentrations in ambient water, numeric effluent conditions, or other quantitative expressions of pollutant reduction, such as the maximum number of combined sewer overflows that is achievable after implementation of a long-term control plan or a percent reduction in pollutant loads.” *Final Rule*, 80 Fed. Reg. at 51037.

- Because the “highest attainable condition” must be met at any time throughout a variance term, variance requirements may need to be expressed as a range, and dependent on particular parameters, to account for change over time, or multiple variances may be adopted to allow for incremental change. *See* 80 Fed. Reg. at 51035, 51037. According to the new federal requirements, the variance requirements applicable at initial adoption must be the least stringent applicable requirements during the term of the variance (i.e. variance requirements can only be more stringent as time goes on). *See* 40 CFR § 131.14(b)(1)(iii). This allows variances to be a mechanism for incremental progress toward improving water quality. *See* *Final Rule*, 80 Fed. Reg. at 51035.
- Under ADEQ’s current rule, all variances could be issued for only up to five years. Under EPA’s new rule, variances may be issued for longer than five years, but for no longer than is necessary to achieve the highest attainable condition. *See* 40 CFR § 131.14(b)(1)(iv). However, variances issued for longer than five years must be periodically reviewed with notice and comment. *Id.* Although EPA will not review the reevaluation for approval or disapproval, EPA has stated that the reevaluation may inform the EPA regarding whether new or revised water quality standards are necessary. *See* *Final Rule*, 80 Fed. Reg. at 51038 (Aug. 21, 2015). EPA also states the variances are water quality standards. Since water quality standards are required to be reviewed in Triennial Reviews, ADEQ intends, at a minimum, to establish and reevaluate variances during its Triennial Review. ADEQ also notes that it may establish variances, or any water quality standard, outside of the regular Triennial Review.

- EPA’s 2015 rule requires additional documentation beyond that in ADEQ’s current rule to approve a variance, and ADEQ’s proposed rule requires this additional documentation.

#### Definitions to Implement the New Variance Rule

ADEQ also plans to add definitions for:

- “Pollutant Minimization Program,” and
- “Variance.”

These are new EPA defined terms used in EPA’s standards rules, terms which ADEQ proposes to define for clarity in alignment with EPA-defined terms in 40 C.F.R. § 131.3.

#### ***Modifications to Numeric Water Quality Standards [Appendix A]***

Appendix A lists most of the numeric water quality standards applicable to surface waters, as discussed in the introductory section of this rulemaking, “Water Quality Standards Background.” The numeric water quality criteria have been revised to reflect changes in criteria derivation methodologies, revised exposure assumptions, new information, and data on human health effects or new toxicity data that support a revision of aquatic life criteria. Generally, these standards will be implemented upon a permit renewal, but if needed ADEQ would have the authority under the reopener clause to modify the permit conditions. *See* 40 C.F.R. §§ 122.44(c) and 123.25(a)(15).

In this rulemaking, ADEQ proposes the following amendments to Appendix A: Table 1 is being amended for designated uses; Tables 2-6 are being amended for hardness dependent metals; No amendments are being made to Tables 7-10; New Tables 11 through 17 are being created to address new aquatic and wildlife criteria for ammonia.

Specific revisions and the reasons for making the changes are included in the subsequent explanations and tables. Each table is organized by designated use, existing criteria, and adopted criteria for each parameter.

ADEQ notes that it considered but did not take action on new selenium (Se) criteria. As recently as 2016, EPA updated its selenium standards from a water column concentration number to a three-pronged hierarchical standard where three standards apply at once for the same pollutant (the new water column is superseded by fish tissue sample concentrations which is superseded by fish egg and ovary sample concentrations). *See generally* EPA Office of Water, *Aquatic Life Ambient Water Quality Criterion for Selenium – Freshwater*, [EPA 822-R-16-006] (2016). The new standard is extremely complex and its implementation is not yet settled. In fact, EPA’s implementation guidance is in draft form and in the process of finalization. ADEQ will need to understand the impact of the standard before it may be implemented. In the interim, ADEQ’s water column standards are still

protective of the aquatic and wildlife uses. (The current standard A&W is 2 µg/L; the new standard for streams would be 3.5 µg/L and for lakes would be 1.5 µg/L.)

#### Specific Designated Uses and Modification to Table 1

##### *Human Health-Based Designated Uses Generally*

When calculating water quality standards for human health, the State uses base equation factors found in EPA human health criteria methodology documentation, and then arranges the formulas to reflect the different uses assigned to Arizona waters. See generally *EPA Human Health Criteria* (2000), available at [https://www.nj.gov/drbc/library/documents/EPA\\_human-health-criteria2000.pdf](https://www.nj.gov/drbc/library/documents/EPA_human-health-criteria2000.pdf).

Arizona's human health standards are broken down into domestic water source (DWS), fish consumption (FC), full body contact (FBC) and partial body contact (PBC). The first three standards (DWS, FC, FBC) are further divided and calculated using carcinogenic and non-carcinogenic endpoints. Where the FBC use assumes acute exposure to carcinogens through water consumption, the PBC standard, due to the infrequent, short, and episodic nature of the exposure, assumes an acute dose and uses only the non-carcinogenic endpoint.

Aquatic and wildlife standards are derived using empirical toxicity data, so acute and chronic endpoints can be directly measured. For human health standards, data are mainly gathered from accidental exposures or extrapolated from animal studies. Because of this, the reference dose (RfD) used to calculate a standard incorporates safety factors addressing aspects such as extrapolation of animal data and human weight, age, and sex differences. Also, because humans don't have constant and direct exposure to waterborne toxins, for non-carcinogenic pollutants, ADEQ uses relative source contribution factors (RSC) to account for exposures from other sources, such as food and occupational exposures. For fish consumption, ADEQ also considers the average bioaccumulation potential of a chemical in edible tissues of aquatic organisms that are commonly consumed by humans. *EPA Human Health Criteria* 5-3 (2000).

Carcinogenic standards are functionally statistical risk equations that take the potency of a carcinogen and calculate the concentration that would cause one additional cancer case per 1,000,000 people. One in a million is considered an "acceptable" risk when calculating standards. *EPA Human Health Criteria* 1-8 (2000). Every exposure carries exactly the same risk for developing cancer.

Unlike aquatic and wildlife standards, human health standards are not broken down into chronic and acute concentrations. A more conservative approach is employed, which assumes acute but incremental lifetime exposure due to: a) the unknowns due to lack of empirical data, b) other uncontrolled exposures to toxins, c) the statistical nature of carcinogenic standards and d) the fact that

standards are set for the human population as a whole. *EPA Human Health Criteria 4-3 to 4-5 (2000).*

*Aquatic and Wildlife Uses Generally*

For all of the aquatic and wildlife uses (A&W) the State uses data contained in the US EPA CWA § 304(a) Aquatic Life criteria document for the individual toxicant in question. To tailor the standard to the individual A&W use, the State uses the EPA site-specific recalculation procedure where species that do not occur in that in a particular use type are deleted from the data pool. *See generally* EPA, *Revised Deletion Process for the Site-Specific Recalculation Procedure for Aquatic Life Criteria (2013)*, available at [https://www.epa.gov/sites/production/files/2015-](https://www.epa.gov/sites/production/files/2015-08/documents/revised_deletion_process_for_the_site-specific_recalculation_procedure_for_aquatic_life_criteria.pdf)

[08/documents/revised\\_deletion\\_process\\_for\\_the\\_site-specific\\_recalculation\\_procedure\\_for\\_aquatic\\_life\\_criteria.pdf](https://www.epa.gov/sites/production/files/2015-08/documents/revised_deletion_process_for_the_site-specific_recalculation_procedure_for_aquatic_life_criteria.pdf). For standards for the Aquatic and Wildlife Coldwater use, ADEQ uses salmonids and other coldwater species. For Aquatic and Wildlife Warmwater, data from coldwater species are usually not considered. For Aquatic and Wildlife Effluent Dependent, ADEQ uses warmwater species that generally occur in nutrient rich, lower oxygen environments. For Aquatic and Wildlife Ephemeral, ADEQ uses data from organisms with short lifecycles such as insects, which can take advantage of short pulses of water from flash floods.

*Methodologies for Deriving Criteria for the Domestic Water Source Designated Use*

Numeric criteria to maintain and protect water quality for the Domestic Water Source (DWS) designated use are either Maximum Contaminant Levels (MCLs) established by EPA under the National Primary Drinking Water Regulations or values derived using EPA methods to protect human health. Where an MCL has been established for a pollutant, the MCL has been adopted as a criterion to protect water quality for the DWS designated use. Where MCLs were not available, the criteria were derived for the DWS designated use using the following equations:

For carcinogens:

$$\frac{70 \text{ kg} * 10^{-6}}{\text{OCSF} * 2 \text{ L/day}}$$

For non-carcinogens:

$$\frac{\text{RfD} * \text{RSC} * 70 \text{ kg}}{2 \text{ L/day}}$$

In the carcinogen equation, 70 kg is the average weight of a human male in kilograms;  $10^{-6}$  is the excess cancer risk level; OCSF is the oral cancer slope factor; and 2 L/day is the national average water consumption rate in liters per day.

In the non-carcinogen equation, RfD is the reference dose; RSC is the relative source contribution

factor, 70 kg is the average weight of a human male in kilograms and 2 L/day is the national average water consumption rate in liters per day. The relative source contribution factor is a way to account for other exposure pathways to a pollutant (e.g., food, inhalation, work exposure, etc.). There is little reliable information to assess the amount of exposure to a pollutant attributable to multiple exposure pathways. EPA uses a default RSC factor of 20 percent when developing MCLs. This assumes that 20 percent of a person's exposure to a pollutant is estimated to be through the ingestion of water. The Department used the same default RSC factor in deriving criteria for the DWS designated use.

Numeric criteria for the DWS designated use has been adopted using the following decision criteria:

1. MCLs, where available;
2. Where MCLs were not available, the DWS criterion was calculated using the appropriate procedure for carcinogens or non-carcinogens;
3. For carcinogens where an OCSF was not available but an RfD was available, the non-carcinogen procedure and the RfD were used to calculate a criterion;
4. For non-carcinogens, a criterion using available RfDs was used. If an RfD was not available in the Integrated Risk Information System (IRIS) but a surrogate RfD was available, such as a Minimum Risk Level (MRL) from the Agency for Toxic Substances Disease Registry (ATSDR), a criterion using the MRL as an RfD was calculated;
5. Where an MCL, OCSF, RfD or MRL was not available, a criterion for the DWS designated use was not derived.

The following table summarizes those pollutants where a change or repeal has been made to the numeric criteria for the DWS designated use.

**Domestic Water Source (DWS) Modifications**

Parameter	CAS NUM	Current DWS standard (µg/L)	Proposed DWS standard (µg/L)	Higher/Lower/New	Modified Data to Calculate Standard	Data Source
Acenaphthylene	208968	NA	420	New	RfD = 0.06	<u>ADEQ used the surrogate PAH RfD for acenaphthene:</u> <a href="https://rais.ornl.gov/tox/profiles/acenaphthene_f_V1.html">https://rais.ornl.gov/tox/profiles/acenaphthene_f_V1.html</a>
Acrylonitrile	107131	0.06	0.006	Lower	MRL = 0.04 mg/Kg/day	ATSDR MRL <a href="https://www.atsdr.cdc.gov/toxprofiles/tp125.pdf">https://www.atsdr.cdc.gov/toxprofiles/tp125.pdf</a>

Parameter	CAS NUM	Current DWS standard (µg/L)	Proposed DWS standard (µg/L)	Higher/Lower/New	Modified Data to Calculate Standard	Data Source
Bis(2-chloroethoxy) methane	111911	NA	21	New	RfD = 0.003mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/Bis2chloroethoxy_methane.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/Bis2chloroethoxy_methane.pdf</a>
Bis(chloromethyl) ether	542881	NA	0.00015	New	OCSF = 220 (mg/Kg-d) <sup>-1</sup>	<a href="https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0375_summary.pdf">https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0375_summary.pdf</a>
Chloroethane	75003	NA	280	New	Based on the State of Michigan's interpretation of subchronic RfD of 0.1 mg/kg-day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/Chloroethane.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/Chloroethane.pdf</a>
beta-Chloronaphthalene	91587	560	2,240	Higher	RfD = 0.08 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=463">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=463</a>
Chromium III	16065831	NA	10,500	New	RfD = 1.5 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0028_summary.pdf">https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0028_summary.pdf</a>
Dibenz (ah) anthracene	53703	0.005	0.350	Higher	Used PAH RfD surrogate (pyrene)	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate See: <a href="https://www.michigan.gov/documents/deq/deq-rrd-chem-DibenzoAHAnthraceneDatashet_527910_7.pdf">https://www.michigan.gov/documents/deq/deq-rrd-chem-DibenzoAHAnthraceneDatashet_527910_7.pdf</a>
1, 2-Dibromoethane	106934	0.05	0.02	Lower	OCSF = 2 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=361">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=361</a>
4,6- Dinitro-ocresol,	534521	28.0	0.6	Lower	RfD = 0.00008 mg/kg-day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/Dinitroocresol46.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/Dinitroocresol46.pdf</a>
Di-n-octyl phthalate	117840	2,800	70	Lower	RfD = 0.01 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/OctylPhthalatediN.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/OctylPhthalatediN.pdf</a>

Parameter	CAS NUM	Current DWS standard (µg/L)	Proposed DWS standard (µg/L)	Higher/Lower/New	Modified Data to Calculate Standard	Data Source
Endrin Aldehyde	7421933	NA	2	New	Used Endrin MRL = 0.0003 mg/Kg/day	Used MRL for Endrin as surrogate <a href="https://www.atsdr.cdc.gov/toxprofiles/tp89.pdf">https://www.atsdr.cdc.gov/toxprofiles/tp89.pdf</a>
Guthion	86500	NA	21	New	MRL = 0.003 mg/Kg/day	MRL 0.003 ATSDR <a href="https://www.atsdr.cdc.gov/toxprofiles/tp188.pdf">https://www.atsdr.cdc.gov/toxprofiles/tp188.pdf</a>
Hexachloroethane	67721	2.5	0.9	Lower	OCSF = 0.04 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=167">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=167</a>
Indeno (1,2,3 cd) pyrene	193395	0.05	0.4	Higher	OCSF 0.1 mg/Kg/day	Used older IRIS OCSF
Nickel	7440020	140 T	210 T	Higher	RfD = 0.02 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0271_summary.pdf">https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0271_summary.pdf</a>
Nitrobenzene	98953	3.5	14	Higher	RfD = 0.002 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=79">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=79</a>
Nitrosodibutylamine	924163	NA	0.006	New	OCSF = 5.4 mg/kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=37">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=37</a>
Nitrosodiethylamine	55185	NA	0.0002	New	OCSF = 150 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=42">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=42</a>
N-nitrosopyrrolidine	930552	NA	0.02	New	OCSF = 2.13 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=81">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=81</a>
Parathion	56382	NA	42	New	RfD = 0.006 mg/Kg/day	<a href="https://www.epa.gov/sites/production/files/2016-09/documents/parathion.pdf">https://www.epa.gov/sites/production/files/2016-09/documents/parathion.pdf</a>
Pentachlorobenzene	608935	NA	6	New	RfD = 0.0008 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=85">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=85</a>
1,2,4,5-Tetrachlorobenzene	95943	NA	2.1	New	RfD = 0.0003 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=107">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=107</a>

Parameter	CAS NUM	Current DWS standard (µg/L)	Proposed DWS standard (µg/L)	Higher/Lower/New	Modified Data to Calculate Standard	Data Source
2,4,5-Trichlorophenol	95954	NA	700	New	RfD = 0.1 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=121">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=121</a>

RfD = Reference Dose - An estimate (with uncertainty spanning perhaps an order of magnitude) of a daily oral exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime.

MRL = Minimal Risk Level - An Agency for Toxic Substances and Disease Registry (ATSDR) estimate of daily human exposure to a hazardous substance at or below which that substance is unlikely to pose a measurable risk of adverse, noncancerous effects.

304 (a) criteria - U.S. EPA - Human health ambient water quality criteria represent specific levels of chemicals or conditions in a water body that are not expected to cause adverse effects to human health.

PAH = Polycyclic Aromatic Hydrocarbon - Organic compounds containing only carbon and hydrogen—that are composed of multiple aromatic rings.

OCSF = Oral Cancer Slope Factor - An estimate of the risk of cancer associated with exposure to a carcinogenic or potentially carcinogenic substance. A slope factor is an upper bound, approximating a 95% confidence limit, on the increased cancer risk from a lifetime exposure to an agent by ingestion or inhalation.

*Methodologies for Deriving Criteria for the Fish Consumption (FC) Designated Use*

Numeric water quality criteria for the fish consumption (FC) designated use were derived using the following equations:

For carcinogens:

$$\frac{70 \text{ kg} * 10^{-6}}{\text{OCSF} * 17.5 \text{ grams/day} * \text{BCF}}$$

For non-carcinogens:

$$\frac{\text{RfD} * \text{RSC} * 70 \text{ kg}}{17.5 \text{ grams/day} * \text{BCF}}$$

In the carcinogen equation, 70 kg is the average weight of a human male in kilograms;  $10^{-6}$  is the excess cancer risk level; OCSF is the oral cancer slope factor, 17.5 grams /day is the national average fish consumption rate, and BCF is a bioconcentration factor.

In the non-carcinogen equation, RfD is the reference dose, RSC is the relative source contribution factor, 70 kg is the average weight of a human male in kilograms, 17.5 grams/day is the national average fish consumption

rate, and BCF is the bioconcentration factor.

The following decision criterion is used to determine the numeric criteria for fish consumption designated use:

1. For carcinogens where an OCSF was available, a criterion was calculated using the procedure for carcinogens;
2. For carcinogens where an OCSF was not available but an RfD was available, the non-carcinogen procedure was used and a criterion was calculated for the carcinogen using the RfD or an RfD surrogate;
3. For non-carcinogens, a criterion was calculated using available RfD. If an RfD was not available in the Integrated Risk Information System (IRIS) but a surrogate RfD was available, such as a Minimum Risk Level (MRL) from the Agency for Toxic Substances Disease Registry (ATSDR), a criterion was calculated for the non-carcinogen using the MRL;
4. Where an OCSF, RfD, or MRL was not available, a criterion was not derived for the fish consumption designated use. If the Department did not have a bioconcentration factor for a pollutant, a FC criterion was not calculated.
5. Because ADEQ separates the fish and water consumption uses in the Surface Water Quality Standards, water quality standards for our Fish Consumption use are calculated using bioconcentration factors (BCF) from USEPA documents or from the technical literature. BCFs are a measure of how much a pollutant in the water column will concentrate in the tissue over time. It is important to address bioconcentration for the fish consumption use because the standard, as calculated, is functionally a translator that guards against the buildup of the pollutant in question to concentrations that may pose a threat to those that may consume wild caught fish. Arizona has more than 27 different species of sport fish that can be taken and consumed by Arizona anglers. Each of those species occupies a different locus in the aquatic food web, depending on the community composition of each individual waterbody. Because of this variability in species, community composition and food web structure, the BCF value is, by necessity, a broad estimate. If USEPA data are not available, data is gathered from peer-reviewed journals, the Extension Toxicology Network (EXTOXNET) and the U.S. National Library of Medicine among other sources. If multiple studies are available or a range given, a rounded mean is calculated for use in deriving standards.

### Fish Consumption (FC) Modifications

Parameter	CAS Num	Current FC standard (µg/L)	Proposed FC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Change data
Benzene	71432	140	114	Lower	OCSF = 0.035 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0276_summary.pdf">https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0276_summary.pdf</a>
Benzo (a) pyrene	50328	0.02	0.1	Higher	OCSF = 7.3 mg/Kg/day	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate
Cadmium	7440439	84 T	6 T	Lower	RfD = 0.0005 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=141">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=141</a>
Carbon tetrachloride	56235	2	3	Higher	OCSF = 0.07 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=20">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=20</a>
Chloroform	67663	470	2,133	Higher	RfD/OCSF = 0.01 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=25">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=25</a>
beta-Chloronaphthalene	91587	317	1,267	Higher	RfD = 0.08 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=463">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=463</a>
Chlorpyrifos	2921882	NA	1.0	New	BCF = 2500	<a href="http://pmep.cce.cornell.edu/profiles/extoxnet/carbaryl-dicrotophos/chlorpyrifos-ext.html">http://pmep.cce.cornell.edu/profiles/extoxnet/carbaryl-dicrotophos/chlorpyrifos-ext.html</a>
Cyanide (as free cyanide)	57125	16,000 T	504 T	Lower	RfD = 0.00063 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=31">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=31</a>
DDT and break down products	50293	0.0002	0.0003	Higher	OCSF = 0.34 mg/Kg/day	OCSF/RfD from DDT
Dichloromethane	75092	593	2,222	Higher	OCSF = 0.002 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=70">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=70</a>
4,6 Dinitro-o-cresol	534521	582	12	Lower	RfD = 0.00008 mg/kg-day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/Dinitroocresol46.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/Dinitroocresol46.pdf</a>
Dinoseb	88857	NA	12	New	BCF = 68	<a href="https://books.google.com/books?id=0yPaA9yiKYwC&amp;pg=PA299&amp;lpg=PA299&amp;dq=Dinoseb+BCF&amp;source=bl&amp;ots=b7VQM1gHrU&amp;sig=bfdC4RXvAF7m9G0NEy9I_KsVuBs&amp;hl=en&amp;sa=X&amp;ved=0ahUKEwjP76jQrezZAhVozFQKHYN5CekQ6AEIRjAC#v=onepage&amp;q=Dinoseb%20BCF&amp;f=false">https://books.google.com/books?id=0yPaA9yiKYwC&amp;pg=PA299&amp;lpg=PA299&amp;dq=Dinoseb+BCF&amp;source=bl&amp;ots=b7VQM1gHrU&amp;sig=bfdC4RXvAF7m9G0NEy9I_KsVuBs&amp;hl=en&amp;sa=X&amp;ved=0ahUKEwjP76jQrezZAhVozFQKHYN5CekQ6AEIRjAC#v=onepage&amp;q=Dinoseb%20BCF&amp;f=false</a>

Parameter	CAS Num	Current FC standard (µg/L)	Proposed FC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Change data
Diquat	85007	NA	176	New	BCF = 10	<a href="https://pubchem.ncbi.nlm.nih.gov/compound/diquat#section=Top">https://pubchem.ncbi.nlm.nih.gov/compound/diquat#section=Top</a>
Endothall	145733	NA	16,000	New	BCF = 10	<a href="https://pubchem.ncbi.nlm.nih.gov/compound/endothall">https://pubchem.ncbi.nlm.nih.gov/compound/endothall</a>
Endrin Aldehyde	7421933	NA	0.06	New	Used Endrin MRL = 0.0003 mg/Kg/day	Used values for Endrin
Guthion	86500	NA	92	New	MRL = 0.003 mg/Kg/day	MRL 0.003 ATSDR <a href="https://www.atsdr.cdc.gov/toxprofiles/tp188.pdf">https://www.atsdr.cdc.gov/toxprofiles/tp188.pdf</a>
Hexachlorocyclohexane gamma	58899	1.8	5	Higher	RfD = 0.0003 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=65">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=65</a>
Hexachlorocyclopentadiene	77474	580	74	Lower	RfD = 0.006 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=59">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=59</a>
Hexachloroethane	67721	3.3	1	Lower	OCSF = 0.04 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=167">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=167</a>
Indeno (1,2,3cd) pyrene	193395	0.49	1	Higher	OCSF 0.1 mg/Kg/day	Used older IRIS OCSF
Malathion	121755	NA	1,455	New	BCF = 11	<a href="https://www.aphis.usda.gov/plant_health/ea/downloads/2018/fruit-fly-draft-malathion-hhera.pdf">https://www.aphis.usda.gov/plant_health/ea/downloads/2018/fruit-fly-draft-malathion-hhera.pdf</a>
Mirex	2385855	NA	0.0002	New	BCF = 1200, OCSF = 18 mg/Kg/day	<a href="https://oehha.ca.gov/chemicals/mirex">https://oehha.ca.gov/chemicals/mirex</a> Changed OCSF and BCF <a href="https://books.google.com/books?id=ibJKf8Gqi5gC&amp;pg=PA208&amp;lpg=PA208&amp;dq=Mirex+bcf&amp;source=bl&amp;ots=j-SHf82Xs3&amp;sig=JCFi4W60MBV03KeQgiMdxWvFig&amp;hl=en&amp;sa=X&amp;ved=0ahUKEwjSrKe8tOzZAhUEzWMKHXPWC2EQ6AEIPzAC#v=onepage&amp;q=Mirex%20bcf&amp;f=false">https://books.google.com/books?id=ibJKf8Gqi5gC&amp;pg=PA208&amp;lpg=PA208&amp;dq=Mirex+bcf&amp;source=bl&amp;ots=j-SHf82Xs3&amp;sig=JCFi4W60MBV03KeQgiMdxWvFig&amp;hl=en&amp;sa=X&amp;ved=0ahUKEwjSrKe8tOzZAhUEzWMKHXPWC2EQ6AEIPzAC#v=onepage&amp;q=Mirex%20bcf&amp;f=false</a>

Parameter	CAS Num	Current FC standard (µg/L)	Proposed FC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Change data
Nickel	7440020	4,600 T	511 T	Lower	RfD = 0.02 mg/Kg/day	Kept Older RfD
Nitrobenzene	98953	138	554	Higher	RfD = 0.002 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=79">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=79</a>
Nitrosodibutylamine	924163	NA	0.2	New	OCSF = 5.4 mg/kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=37">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=37</a>
Nitrosodiethylamine	55185	NA	0.1	New	OCSF = 150 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=42">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=42</a>
Nitrosopyrrolidine	930552	NA	34	New	OCSF = 2.13 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=81">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=81</a>
Oxamyl	23135220	NA	6452	New	BCF = 3.1	<a href="https://pubchem.ncbi.nlm.nih.gov/compound/oxamyl">https://pubchem.ncbi.nlm.nih.gov/compound/oxamyl</a>
Paraquat	1910425	NA	12,000	New	BCF = 0.3	<a href="http://pmep.cce.cornell.edu/profiles/extoxnet/metiram-propoxur/paraquat-ext.html">http://pmep.cce.cornell.edu/profiles/extoxnet/metiram-propoxur/paraquat-ext.html</a>
Parathion	56382	NA	16	New	RfD = 0.006 mg/Kg/day	<a href="https://www.epa.gov/sites/production/files/2016-09/documents/parathion.pdf">https://www.epa.gov/sites/production/files/2016-09/documents/parathion.pdf</a>
Pentachlorophenol	87865	1,000	111	Lower	OCSF = 0.4 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=86">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=86</a>
Permethrin	52645531	NA	77	New	BCF = 520	New BCF <a href="https://pubchem.ncbi.nlm.nih.gov/compound/Permethrin#section=Environmental-Fate">https://pubchem.ncbi.nlm.nih.gov/compound/Permethrin#section=Environmental-Fate</a>
Picloram	1918021	2,710	1806	Lower	RfD = 0.07	<a href="https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0256_summary.pdf">https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0256_summary.pdf</a>
2,3,7,8 Tetrachlorodibenzodioxin	1746016	5.00E-09	0.0000001	Higher	RfD = 0.000000007 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1024">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1024</a>
1,1,2,2 Tetrachloroethane	79345	4	32,000	Higher	OCSF = 0.2 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=193">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=193</a>
Tetrachloroethylene	127184	261	62	Lower	OCSF = 0.0021 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=106">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=106</a>

Parameter	CAS Num	Current FC standard (µg/L)	Proposed FC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Change data
Thallium	7440280	7.2 T	0.07 T	Lower	RfD = 0.00001 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/ThalliumCarbonate.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/ThalliumCarbonate.pdf</a>
Toluene	108883	201,000	11,963	Lower	RfD = 0.08 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=118">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=118</a>
Tributyltin	688733	NA	0.08	New	RfD = 0.0003 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=349">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=349</a>
1,1,1 Trichloroethane	71556	428,571	285,714	Lower	RfD = 2	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=197">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=197</a>
Trichloroethylene	79016	29	8	Lower	OCSF = 0.046 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=199">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=199</a>

RfD = Reference Dose - An estimate (with uncertainty spanning perhaps an order of magnitude) of a daily oral exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime.

MRL = Minimal Risk Level - An Agency for Toxic Substances and Disease Registry (ATSDR) estimate of daily human exposure to a hazardous substance at or below which that substance is unlikely to pose a measurable risk of adverse, noncancerous effects.

§ 304 (a) criteria - U.S. EPA - Human health ambient water quality criteria represent specific levels of chemicals or conditions in a water body that are not expected to cause adverse effects to human health.

PAH = Polycyclic Aromatic Hydrocarbon - Organic compounds containing only carbon and hydrogen—that are composed of multiple aromatic rings.

OCSF = Oral Cancer Slope Factor - An estimate of the risk of cancer associated with exposure to a carcinogenic or potentially carcinogenic substance. A slope factor is an upper bound, approximating a 95% confidence limit, on the increased cancer risk from a lifetime exposure to an agent by ingestion or inhalation.

Cancelled/banned pesticide - Registration cancelled by EPA. Essentially banned.

Limited/controlled use chemical. Low reasonable potential for discharge - Chemicals of limited use that are usually employed in restricted to controlled industrial settings and are not likely to enter the waste stream.

*Methodologies for Deriving Criteria for the Full Body Contact Designated Use*

The numeric water quality criteria for the full body contact (FBC) designated use was derived using the

following equations:

For carcinogens:

$$\frac{70 \text{ kg} * 10^{-6}}{\text{OCSF} * 15 \text{ ml/day}}$$

For non-carcinogens:

$$\frac{\text{RfD} * \text{RSC} * 70 \text{ kg}}{15 \text{ ml/day}}$$

In the carcinogen equation, 70 kg is the average weight of a human male in kilograms;  $10^{-6}$  is the excess cancer risk level; OCSF is the oral cancer slope factor, and 15 ml/day is the incidental water ingestion rate in milliliters per day.

In the non-carcinogen equation, RfD is the reference dose, RSC is the relative source contribution factor, 70 kg is the average weight of a human male in kilograms, and 15 ml/day is the incidental water ingestion rate in milliliters per day.

This rulemaking adopts numeric criteria for the full body contact designated use using the following decision criteria:

1. A criterion was calculated using the appropriate procedure for carcinogens or non-carcinogens;
2. For carcinogens where an OCSF was not available but an RfD was available, the non-carcinogen procedure was used and a criterion was calculated for the carcinogen using the RfD or a surrogate RfD;
3. For non-carcinogens, a criterion was calculated using available RfDs. If an RfD was not available in the Integrated Risk Information System (IRIS) but a surrogate RfD was available, such as a Minimum Risk Level (MRL) from the Agency for Toxic Substances Disease Registry (ATSDR), a criterion for the non-carcinogen was calculated using the MRL;
4. Where an OCSF, RfD or MRL was unavailable, a criterion was not derived for the full body contact designated use.
5. Where the calculated full body contact standard was more stringent than the Domestic Water Source standard for the same pollutant, the DWS value was used in place of the calculated PBC value. It is unlikely that an individual will be more at risk from incidental ingestion during recreational activities than through direct consumption.

### **Full Body Contact (FBC) Modifications**

Parameter	CAS NUM	Current FBC standard (µg/L)	Proposed FBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Data Source
Acenaphthylene	208968	NA	56,000	New	RfD = 0.06 mg/Kg/day	<a href="https://rais.ornl.gov/tox/profiles/acenaphthene_f_V1.html">https://rais.ornl.gov/tox/profiles/acenaphthene_f_V1.html</a>
Acrylonitrile	107131	3	9	Higher	MRL = 0.04 mg/Kg/day	ATSDR MRL <a href="https://www.atsdr.cdc.gov/toxprofiles/tp125.pdf">https://www.atsdr.cdc.gov/toxprofiles/tp125.pdf</a>
Aldrin	309002	0.08	0.27	Higher	OCSF = 17 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=130">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=130</a>
Barium	7440393	98,000 T	186,667 T	Higher	RSC changed to 20%	RSC = .2
Benz (a) anthracene	56553	0.2	47.0	Higher	OCSF = 7.3 mg/Kg/day	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate
Benzene	71432	93	133	Higher	OCSF = 0.035 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris/iris_documents/documents/su bst/0276_summary.pdf">https://cfpub.epa.gov/ncea/iris/iris_documents/documents/su bst/0276_summary.pdf</a>
Benzo[b]fluoranthene	205992	1.9	47.0	Higher	OCSF = 7.3 mg/Kg/day	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate
Benzidine	92875	0.01	0.02	Higher	OCSF = 230 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=135">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=135</a>
Benzo (a) pyrene	50328	0.2	47.0	Higher	OCSF = 7.3 mg/Kg/day	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate
Benzo (k) fluoranthene	207089	1.9	47.0	Higher	OCSF = 7.3 mg/Kg/day	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate
Bis(2-chloroethoxy) methane	111911	NA	2,800	New	RfD = 0.003mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/Bis2chloroethoxymethane.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/Bis2chloroethoxymethane.pdf</a>
Bis(chloroethyl) ether	111444	1	4.0	Higher	OCSF = 1.1 mg/Kg/Day	<a href="https://www.epa.gov/sites/production/files/2016-09/documents/dichloroethyl-ether.pdf">https://www.epa.gov/sites/production/files/2016-09/documents/dichloroethyl-ether.pdf</a>

Parameter	CAS NUM	Current FBC standard (µg/L)	Proposed FBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Data Source
Bis(Chloromethyl) ether	542881	NA	0.02	New	OCSF = 220 (mg/Kg-d) <sup>-1</sup>	<a href="https://cfpub.epa.gov/ncea/iris/iris_documents/documents/su bst/0375_summary.pdf">https://cfpub.epa.gov/ncea/iris/iris_documents/documents/su bst/0375_summary.pdf</a>
Bromoform	75252	180	591	Higher	OCSF = 0.0079 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=214">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=214</a>
Cadmium	7440439	700 T	467 T	L	RfD = 0.0005 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=141">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=141</a>
Carbon tetrachloride	56235	11	67	Higher	OCSF = 0.07 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=20">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=20</a>
Chlordane	57749	4	13	Higher	OCSF = 0.35 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=142">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=142</a>
Chlorine (total residual)	7782505	4,000	93,333	Higher	RfD = 0.1 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=405">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=405</a>
Chloroethane	75003	NA	93,333	New	Based on the State of Michigan's interpretation of subchronic RfD of 0.1 mg/kg-day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/Chloroethane.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/Chloroethane.p df</a>
Chloroform	67663	230	9,333	Higher	RfD/OCSF = 0.01 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=25">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=25</a>
beta-Chloronaphthalene	91587	74,667	298,667	Higher	RfD = 0.08 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=463">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?subst ance_nmbr=463</a>
Chromium (Total)	7440473	NA	100 T	New	Reverted to old standards despite lack of EPA data	Added FBC/PBC

Parameter	CAS NUM	Current FBC standard (µg/L)	Proposed FBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Data Source
Chrysene	218019	19	0.6	Lower	OCSF = 7.3 mg/Kg/day	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate
Cyanide (as free cyanide)	57125	18,667 T	588 T	Lower	RfD = 0.00063 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=31">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=31</a>
DDT and breakdown products	50293	4	14	Higher	OCSF = 0.34 mg/Kg/day	OCSF/RfD from DDT
Di (2-ethylhexyl) adipate	103231	560,000	3,889	Lower	OCSF = 0.0012 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=420">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=420</a>
Di(2ethylhexyl) phthalate	117817	100	333	Higher	RfD = 0.01 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=14">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=14</a>
Dibenz (ah) anthracene	53703	1.9	47.0	Higher	Used PAH RfD surrogate (pyrene)	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate See: <a href="https://www.michigan.gov/documents/deq/deq-rrd-chem-DibenzoAHAnthraceneDatash eet_527910_7.pdf">https://www.michigan.gov/documents/deq/deq-rrd-chem-DibenzoAHAnthraceneDatash eet_527910_7.pdf</a>
1,2 Dibromoethane	106934	8,400	2	Lower	OCSF = 2 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=361">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=361</a>
3,3' Dichlorobenzidine	91941	3	10	Higher	OCSF = 0.45 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=504">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=504</a>
1,2 Dichloroethylene cis	156592	70	1,867	Higher	RfD = 0.002 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=418">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=418</a>
Dichloromethane	75092	190	2,333	Higher	OCSF = 0.002 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=70">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=70</a>

Parameter	CAS NUM	Current FBC standard (µg/L)	Proposed FBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Data Source
1,3 Dichloropropene	542756	420	93	Lower	OCSF = 0.05 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=224">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=224</a>
Dieldrin	60571	0.09	0.3	Higher	OCSF = 16 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=225">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=225</a>
4,6 Dinitro o cresol	534521	3,733	75	Lower	RfD = 0.00008 mg/kg-day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/Dinitroocresol46.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/Dinitroocresol46.pdf</a>
2,6-Dinitrotoluene	606202	2	7	Higher	OCSF = 0.68 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/Dinitrotoluene26.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/Dinitrotoluene26.pdf</a>
Di-n-octyl phthalate	117840	373,333	9,333	Lower	RfD = 0.01 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/OctylPhthalatediN.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/OctylPhthalatediN.pdf</a>
1,2 Diphenylhydrazine	122667	1.8	6	Higher	OCSF = 0.8 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=49">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=49</a>
Endrin	72208	280	1,120	Higher	Used EPA RSC of 80%	<a href="https://www.epa.gov/sites/production/files/2016-03/documents/summary_of_inputs_final_revised_3.24.16.pdf">https://www.epa.gov/sites/production/files/2016-03/documents/summary_of_inputs_final_revised_3.24.16.pdf</a>
Endrin Aldehyde	7421933	NA	1,120	New	Used Endrin MRL = 0.0003 mg/Kg/day	Used values for Endrin
Guthion	86500	NA	2,800	New	MRL = 0.003 mg/Kg/day	MRL 0.003 ATSDR <a href="https://www.atsdr.cdc.gov/toxprofiles/tp188.pdf">https://www.atsdr.cdc.gov/toxprofiles/tp188.pdf</a>
Heptachlor	76448	0.4	1	Higher	OCSF = 4.5 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=243">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=243</a>
Heptachlor epoxide	1024573	0.2	0.5	Higher	OCSF = 9.1 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=160">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=160</a>

Parameter	CAS NUM	Current FBC standard (µg/L)	Proposed FBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Data Source
Hexachlorobenzene	118741	1	3	Higher	OCSF = 1.6 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=374">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=374</a>
Hexachlorobutadiene	87683	18	60	Higher	OCSF = 0.078 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=58">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=58</a>
Hexachlorocyclohexane alpha	319846	0.22	0.7	Higher	OCSF = 6.3 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=162">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=162</a>
Hexachlorocyclohexane beta	319857	0.78	3	Higher	OCSF = 1.8 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=244">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=244</a>
Hexachlorocyclopentadiene	77474	9,800	11,200	Higher	RfD = 0.006 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=59">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=59</a>
Hexachloroethane	67721	100	117	Higher	OCSF = 0.04 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=167">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=167</a>
Hexachlorocyclohexane gamma	58999	280	700	Higher	RfD = 0.0003 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=65">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=65</a>
Indeno (1,2,3cd) pyrene	193395	1.9	47	Higher	OCSF 0.1 mg/Kg/day	Used older IRIS OCSF
Isophorone	78591	1500.0	4,912	Higher	OCSF = 0.00095 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=63">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=63</a>
Methoxychlor	72435	4,667	18,667	Higher	Used EPA RSC of 80%	<a href="https://www.epa.gov/sites/production/files/2016-03/documents/summary_of_inputs_final_revised_3.24.16.pdf">https://www.epa.gov/sites/production/files/2016-03/documents/summary_of_inputs_final_revised_3.24.16.pdf</a>
Mirex	2385855	187	0.26	Lower	OCSF = 18 mg/Kg/day	<a href="https://oehha.ca.gov/chemicals/mirex">https://oehha.ca.gov/chemicals/mirex</a>

Parameter	CAS NUM	Current FBC standard (µg/L)	Proposed FBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Data Source
N nitrosodi n propylamine	621647	0.2	0.7	Lower	OCSF = 7.0 mg/kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=177">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=177</a>
Nitrobenzene	98953	467	1,867	Higher	RfD = 0.002 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=79">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=79</a>
Nitrosodibutylamine	924163	NA	0.9	New	OCSF = 5.4 mg/kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=37">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=37</a>
Nitrosodiethylamine	55185	NA	0.03	New	OCSF = 150 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=42">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=42</a>
Nitrosopyrrolidine	930552	NA	2	New	OCSF = 2.13 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=81">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=81</a>
Nnitrosodimethylamine	62759	0.03	0.09	Higher	OCSF = 51 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=45">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=45</a>
N-Nitrosodiphenylamine	86306	290	952	Higher	OCSF = 0.0049 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=178">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=178</a>
Parathion	56382	NA	5,600	New	RfD = 0.006 mg/Kg/day	<a href="https://www.epa.gov/sites/production/files/2016-09/documents/parathion.pdf">https://www.epa.gov/sites/production/files/2016-09/documents/parathion.pdf</a>
Pentachlorobenzene	608935	NA	747	New	RfD = 0.0008 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=85">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=85</a>
Polychlorinatedbiphenyls	1336363	19	2	Lower	OCSF = 2 mg/Kg/day	<a href="https://www.atsdr.cdc.gov/toxprofiles/tp17.pdf">https://www.atsdr.cdc.gov/toxprofiles/tp17.pdf</a>
1,2,4,5-Tetrachlorobenzene,	95943	NA	280	New	RfD = 0.0003 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=107">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=107</a>
2,3,7,8 Tetrachlorodibenzodioxin	1746016	0.00003	0.0007	Higher	RfD = 0.000000007 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=1024">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nubr=1024</a>

Parameter	CAS NUM	Current FBC standard (µg/L)	Proposed FBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Data Source
1,1,2,2 Tetrachloroethane	79345	7	23	Higher	OCSF = 0.2 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=193">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=193</a>
Tetrachloroethylene	127184	9,333	2,222	Lower	OCSF = 0.0021 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=106">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=106</a>
Thallium	7440280	75 T	9 T	Lower	RfD = 0.00001 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/pprtv/documents/ThalliumCarbonate.pdf">https://cfpub.epa.gov/ncea/pprtv/documents/ThalliumCarbonate.pdf</a>
Toluene	108883	280,000	149,333	Lower	RfD = 0.08 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=118">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=118</a>
Toxaphene	8001352	1.3	4	Higher	OCSF = 1.1 mg/Kg/Day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=346">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=346</a> <a href="https://www.atsdr.cdc.gov/toxprofiles/tp94.pdf">https://www.atsdr.cdc.gov/toxprofiles/tp94.pdf</a>
Tributyltin	688733	NA	280	New	RfD = 0.0003 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=349">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=349</a>
1,1,2-Trichloroethane	79005	25	82	Higher	OCSF = 0.057 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=198">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=198</a>
Trichloroethylene	79016	280,000	101	Lower	OCSF = 0.046 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=199">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=199</a>
2,4,6-Trichlorophenol	88062	130	424	Higher	OCSF = 0.011 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=122">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=122</a>
2,4,5-Trichlorophenol	95954	NA	93,333	Higher	RfD = 0.1 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=121">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=121</a>

Parameter	CAS NUM	Current FBC standard (µg/L)	Proposed FBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Data Source
Trichlorophenoxy propionic acid (2,4,5-TP)	93721	7,467	29,867	Higher	OCSF = 0.008 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris/2/chemicalLanding.cfm?substance_nmbr=323">https://cfpub.epa.gov/ncea/iris/2/chemicalLanding.cfm?substance_nmbr=323</a> <a href="https://oehha.ca.gov/media/downloads/water/public-health-goal/silvexposting53002.pdf">https://oehha.ca.gov/media/downloads/water/public-health-goal/silvexposting53002.pdf</a>
Vinyl chloride	75014	2	6	Higher	OCSF = 0.72 mg/Kg/day	Calculated FBC higher than MCL <a href="https://cfpub.epa.gov/ncea/iris/2/chemicalLanding.cfm?substance_nmbr=1001">https://cfpub.epa.gov/ncea/iris/2/chemicalLanding.cfm?substance_nmbr=1001</a>

*Methodologies for Deriving Criteria for the Partial Body Contact (PBC) Designated Use*

The Department derived numeric water quality criteria for the partial body contact (PBC) designated use using the following equation:

$$\frac{\text{RfD} * \text{RSC} * 70 \text{ kg}}{15 \text{ ml/day}}$$

In this equation, RfD is the reference dose, RSC is the relative source contribution factor, 70 kg is the average weight of a human male in kilograms, and 15 ml/day is the incidental water ingestion rate in milliliters per day. The equation is the same equation used to derive numeric criteria for non-carcinogens for the full body contact designated use.

The rulemaking adopts numeric criteria for the partial body contact designated use using the following decision criteria:

1. Calculate a criterion using the PBC equation using available RfDs. If an RfD is not available in the Integrated Risk Information System (IRIS) but a surrogate RfD is available, such as a Minimum Risk Level (MRL) from the Agency for Toxic Substances and Disease Registry (ATSDR), a PBC criterion is calculated using the MRL; and
2. A criterion for the partial body contact designated use was not derived if there was no RfD or MRL.
3. In cases where the carcinogenicity of a toxicant is classified as a B2 or higher, the State may use the OCSF to calculate a PBC standard where no RfD or MRL is available rather than publish no standard for the PBC use.

**Partial Body Contact (PBC) Modifications**

Parameters	CAS NUM	Current PBC standard (µg/L)	Proposed PBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Change data
Acenaphthylene	208968	NA	56,000	New	RfD = 0.06 mg/Kg/day	<a href="https://rais.ornl.gov/tox/profiles/acenaphthene_f_V1.html">https://rais.ornl.gov/tox/profiles/acenaphthene_f_V1.html</a>
Barium	7440393	98,000 T	186,667 T	Higher	RSC changed to 20%	RSC = .2
Benzo (a) anthracene	56553	0.2	280	Higher	RfD = 0.0003 mg/Kg/day	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate
Benzo[b]fluoranthene	205992	1.9	280	Higher	RfD = 0.0003 mg/Kg/day	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate
Benzo (a) pyrene	50328	0.2	280	Higher	RfD = 0.0003 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=136">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=136</a>
Benzo (k) fluoranthene	207089	1.9	280	Higher	RfD = 0.0003 mg/Kg/day	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate
Bis(2-chloroethoxy) methane	111911	NA	2,800	New	RfD = 0.003mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/pprtvtv/documents/Bis2chloroethoxymethane.pdf">https://cfpub.epa.gov/ncea/pprtvtv/documents/Bis2chloroethoxymethane.pdf</a>
Bis(chloroethyl) ether	111444	1	4	Higher	OCSF = 1.1 mg/Kg/Day	<a href="https://www.epa.gov/sites/production/files/2016-09/documents/dichloroethyl-ether.pdf">https://www.epa.gov/sites/production/files/2016-09/documents/dichloroethyl-ether.pdf</a>
Cadmium	7440439	700 T	467 T	Lower	RfD = 0.0005 mg/Kg/day	IRIS RfD, 304 criteria
Carbon tetrachloride	56235	980	3,733	Higher	RfD = 0.004 mg/Kg/day	IRIS OCSF/RfD
Chlorine (total residual)	7782505	4,000	93,333	Higher	RfD = 0.1 mg/Kg/day	RfD less stringent than MCL
Chloroethane	75003	NA	93,333	New	Based on the State of Michigan's interpretation of subchronic RfD of 0.1 mg/kg-day	<a href="https://cfpub.epa.gov/ncea/pprtvtv/documents/Chloroethane.pdf">https://cfpub.epa.gov/ncea/pprtvtv/documents/Chloroethane.pdf</a>

Parameters	CAS NUM	Current PBC standard (µg/L)	Proposed PBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Change data
beta-Chloronaphthalene	91587	74,667	298,667	Higher	RfD = 0.08 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=463">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=463</a>
Chromium (Total)	7440473	NA	100 T	New	Reverted to old standards despite lack of EPA data	Added FBC/PBC
Chrysene	218019	19	0.6	Higher	RfD = 0.0003 mg/Kg/day	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate
Cyanide	57125	18,667 T	588 T	Higher	RfD = 0.00063 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=31">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=31</a>
Dibenz (ah) anthracene	53703	1.9	280	Higher	Used PAH RfD surrogate (pyrene)	IRIS OCSF/RfD : benzo(a)pyrene PAH surrogate See: <a href="https://www.michigan.gov/documents/deq/deq-rrd-chem-DibenzoAHAnthraceneDataSheet_527910_7.pdf">https://www.michigan.gov/documents/deq/deq-rrd-chem-DibenzoAHAnthraceneDataSheet_527910_7.pdf</a>
1,4-Dichlorobenzene	106467	373.333	373,333	Higher	Corrected mistake	Mistake in previous standards
3,3'-Dichlorobenzidine	91941	3	10	Higher	OCSF = 0.45 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=504">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=504</a>
1,2-Dichloroethylene cis	156592	70	1,867	Higher	RfD = 0.002 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=418">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=418</a>
Dichloromethane	75092	56,000	5,600	Lower	RfD = 0.006 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=70">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=70</a>
4,6 Dinitro o cresol	534521	3.733	75	Higher	RfD = 0.00008 mg/kg-day	<a href="https://cfpub.epa.gov/ncea/pprtvtv/documents/Dinitroocresol46.pdf">https://cfpub.epa.gov/ncea/pprtvtv/documents/Dinitroocresol46.pdf</a>

Parameters	CAS NUM	Current PBC standard (µg/L)	Proposed PBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Change data
2,6-Dinitrotoluene	606202	3733	280	Lower	RfD = 0.0003 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/prtv/documents/Dinitrotoluene26.pdf">https://cfpub.epa.gov/ncea/prtv/documents/Dinitrotoluene26.pdf</a>
Di-n-octyl phthalate	117840	373,333	9,333	Lower	RfD = 0.01 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/prtv/documents/OctylPhthalatediN.pdf">https://cfpub.epa.gov/ncea/prtv/documents/OctylPhthalatediN.pdf</a>
1,2-Diphenylhydrazine	122667	1.8	6	Higher	OCSF = 0.8 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=49">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=49</a>
Endrin	72208	280	1,120	Higher	Used EPA RSC of 80%	<a href="https://www.epa.gov/sites/production/files/2016-03/documents/summary_of_inputs_final_revised_3.24.16.pdf">https://www.epa.gov/sites/production/files/2016-03/documents/summary_of_inputs_final_revised_3.24.16.pdf</a>
Endrin Aldehyde	7421933	NA	1,120	New	Used Endrin MRL = 0.0003 mg/Kg/day	Used values for Endrin
Guthion	86500	NA	2,800	New	MRL = 0.003 mg/Kg/day	MRL 0.003 ATSDR <a href="https://www.atsdr.cdc.gov/toxprofiles/tp188.pdf">https://www.atsdr.cdc.gov/toxprofiles/tp188.pdf</a>
Hexachlorocyclohexane gamma	58999	280	700	Higher	RfD = 0.0003 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=65">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=65</a>
Hexachlorocyclopentadiene	77474	9,800	11,200	Higher	RfD = 0.006 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=59">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=59</a>
Hexachloroethane	67721	933	653	Lower	RfD = 0.0007 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=167">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=167</a>
Indeno (1,2,3cd) pyrene	193395	1.9	47	Higher	OCSF 0.1 mg/Kg/day	Used older IRIS OCSF
Methoxychlor	72435	4,667	18,667	Higher	Used EPA RSC of 80%	<a href="https://www.epa.gov/sites/production/files/2016-03/documents/summary_of_inputs_final_revised_3.24.16.pdf">https://www.epa.gov/sites/production/files/2016-03/documents/summary_of_inputs_final_revised_3.24.16.pdf</a>

Parameters	CAS NUM	Current PBC standard (µg/L)	Proposed PBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Change data
Mirex	2385855	187	0.26	Lower	RfD = 0.0002 mg/Kg/day	<a href="https://oehha.ca.gov/chemicals/mirex">https://oehha.ca.gov/chemicals/mirex</a>
Nitrobenzene	98953	467	1,867	Higher	RfD = 0.002 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=79">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=79</a>
Nnitrosodimethylamine	62759	0.03	0.09	Higher	OCSF = 51 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=45">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=45</a>
N-nitrosodi-n-propylamine	621647	88,667	0.7	Lower	OCSF = 7.0 mg/kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=177">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=177</a>
Nnitrosodiphenylamine	86306	88,667	952	Lower	OCSF = 0.0049 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=178">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=178</a>
Parathion	56382	NA	5,600	New	RfD = 0.006 mg/Kg/day	<a href="https://www.epa.gov/sites/production/files/2016-09/documents/parathion.pdf">https://www.epa.gov/sites/production/files/2016-09/documents/parathion.pdf</a>
Pentachlorobenzene	608935	NA	747	New	RfD = 0.0008 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=85">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=85</a>
Pentachlorophenol	87865	28,000	4,667	Lower	RfD = 0.005 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=86">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=86</a>
1,2,4,5-Tetrachlorobenzene	95943	NA	280	New	RfD = 0.0003 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=107">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=107</a>
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016	0.00003	0.0007	Higher	RfD = 0.000000007 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1024">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=1024</a>
1,1,2,2-Tetrachloroethane	79345	56,000	186,667	Higher	RfD = 0.05 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=193">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=193</a>
Tetrachloroethylene	127184	9,333	5,600	Lower	RfD = 0.006 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=106">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=106</a>

Parameters	CAS NUM	Current PBC standard (µg/L)	Proposed PBC standard (µg/L)	Higher/Lower/New	Modified Data used to Calculate Standard	Change data
Thallium	7440280	75 T	9 T	Lower	RfD = 0.00001 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/prtv/documents/ThalliumCarbonate.pdf">https://cfpub.epa.gov/ncea/prtv/documents/ThalliumCarbonate.pdf</a>
Toluene	108883	280,000	149,333	Lower	RfD = 0.08 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=118">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=118</a>
Toxaphene	8001352	933	1,867	Higher	MRL = 0.002 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=346">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=346</a> <a href="https://www.atsdr.cdc.gov/toxprofiles/tp94.pdf">https://www.atsdr.cdc.gov/toxprofiles/tp94.pdf</a>
Tributyltin	688733	NA	280	New	RfD = 0.0003 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=349">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=349</a>
Trichloroethylene	79016	280	467	Higher	RfD = 0.0005 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=199">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=199</a>
2,4,5-Trichlorophenol	95954	NA	93,333	New	RfD = 0.1 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=121">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=121</a>
2,4,6-Trichlorophenol	88062	130	424	Higher	OCSF = 0.011 mg/Kg/day	<a href="https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=122">https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nmbr=122</a>
2(2,4,5-Trichlorophenoxy) propionic acid (2,4,5-TP)	93721	7,467	29,867	Higher	RSC changed to 80%	US EPA RSC = 0.8

RfD = Reference Dose - An estimate (with uncertainty spanning perhaps an order of magnitude) of a daily oral exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime.

MRL = Minimal Risk Level - An Agency for Toxic Substances and Disease Registry (ATSDR) estimate of daily human exposure to a hazardous substance at or below which that substance is unlikely to pose a measurable risk of adverse, noncancerous effects.

§ 304 (a) criteria - U.S. EPA - Human health ambient water quality criteria represent specific levels of chemicals or conditions in a water body that are not expected to cause adverse effects to human health.

PAH = Polycyclic Aromatic Hydrocarbon - Organic compounds containing only carbon and hydrogen—that are composed of multiple aromatic rings.

OCSF = Oral Cancer Slope Factor - An estimate of the risk of cancer associated with exposure to a carcinogenic or potentially carcinogenic substance. A slope factor is an upper bound, approximating a 95% confidence limit, on the increased cancer risk from a lifetime exposure to an agent by ingestion or inhalation.

Cancelled/banned pesticide - Registration cancelled by EPA. Essentially banned.

### *Numeric Water Quality Standards for Aquatic and Wildlife Designated Uses in Table 1*

Currently, there are numeric criteria for 98 pollutants to maintain and protect water quality for the aquatic life and wildlife (A&W) designated uses. In this rulemaking ADEQ proposes new and revised criteria for existing numeric A&W criteria for four parameters. In most cases, CWA § 304(a) national criteria recommendations to protect freshwater aquatic life have been adopted. New numeric water quality standards for previously unregulated pollutants include Carbaryl, Dementon, Diazinon, and Nonylphenol.

Under the CWA § 304(a) criteria for the Aquatic Life use is derived using what data is available for all aquatic species. As such, data from cold water species like salmonids (trout), that tend to be more sensitive to toxins, serve to make criteria more stringent. Because Arizona has an incredibly diverse landscape, from lowland deserts to alpine peaks over 12,000 ft. in altitude, one set of standards covering the entire state makes little sense. To address this issue, the state has broken down the Aquatic Life use into four sub uses that more accurately characterize our varied aquatic ecosystems (cold, warm, effluent dependent, and ephemeral).

Generally, the state starts with data contained in the US EPA CWA § 304(a) Aquatic Life criteria document and then uses the site specific species deletion procedure to recalculate the standards for our different uses. For standards for the Aquatic and Wildlife Coldwater use, the State employs salmonids and other cold water species. For Aquatic and Wildlife Warmwater, data from coldwater species are usually not considered. For Aquatic and Wildlife Effluent Dependent, the State uses warmwater species that generally occur in nutrient rich, lower oxygen environments. For Aquatic and Wildlife Ephemeral, we use data from organisms with short lifecycles such as insects, which can take advantage of short pulses of water from flash floods.

**Aquatic & Wildlife Uses Modifications in Table 1**

POLLUTANT IN TABLE 1		PARAMETER																							
		Cadmium CAS# 7440439		Ammonia (Mussels Absent) CAS # 7664417		Ammonia (Mussels Present) CAS # 7664417		Acrolein CAS# 107028		Standard Change		Change data													
Standard Level	Change in Standard	Standard Level	Change in Standard	Standard Level	Change in Standard	Standard Level	Change in Standard	Standard Level	Change in Standard	Current A&Wc Acute (µg/L)	Proposed A&Wc Acute (µg/L)	Current A&Wc Chronic (µg/L)	Proposed A&Wc Chronic (µg/L)	Current A&Ww Acute (µg/L)	Proposed A&Ww Acute (µg/L)	Current A&Ww Chronic (µg/L)	Proposed A&Ww Chronic (µg/L)	Current A&Wedw Acute (µg/L)	Proposed A&Wedw Acute (µg/L)	Current A&Wedw Chronic (µg/L)	Proposed A&Wedw Chronic (µg/L)	Current A&We Acute (µg/L)	Proposed A&We Acute (µg/L)		
See Table 2		See Table		See Table		See Table		See Table		See Table	34		See Table	34	3		See Table	34		See Table	34		See Table	34	
See Table 2	Lower	See Table	Similar	See Table		See Table	Lower	See Table	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	
See Table 3		See Table		See Table		See Table		See Table		See Table	30		See Table	30		See Table	30		See Table	30		See Table	30		
See Table 3	Higher	See Table	Higher	See Table	Higher	See Table	Higher	See Table	Higher	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	
See Table 2		See Table		See Table		See Table		See Table		See Table	34		See Table	34		See Table	34		See Table	34		See Table	34		
See Table 2	Higher	See Table	Higher	See Table	Higher	See Table	Higher	See Table	Higher	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	
See Table 3		See Table		See Table		See Table		See Table		See Table	30		See Table	30		See Table	30		See Table	30		See Table	30		
See Table 3	Higher	See Table	Higher	See Table	Higher	See Table	Higher	See Table	Higher	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	
See Table 2		See Table		See Table		See Table		See Table		See Table	34		See Table	34		See Table	34		See Table	34		See Table	34		
See Table 2	Higher	See Table	Higher	See Table	Higher	See Table	Higher	See Table	Higher	None	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	
See Table 3		See Table		See Table		See Table		See Table		See Table	30		See Table	30		See Table	30		See Table	30		See Table	30		
See Table 3	Higher	See Table	Higher	See Table	Higher	See Table	Higher	See Table	Higher	None	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	See Table	3	Lower	
See Table 2		None		None		None		None		None	None		None	None		None		None	None		None	None		None	
See Table 2	Lower	None	--	None	--	None	--	None	--	None	3	New	None	3	New	None	3	New	None	3	New	None	3	New	
CWA §304 criteria (2016)		CWA §304 criteria (2013)		CWA §304 criteria (2013)		CWA §304 criteria (2013)		CWA §304 criteria (2009)		Change data		Change data		Change data		Change data		Change data		Change data		Change data		Change data	

Nonyphenol CAS# 104405		Diazinon CAS# 333415		Demeton CAS# 8065483		Carbaryl CAS# 63252		POLUTANT IN TABLE 1	
								Standard Change	PARAMETER
Standard Level	Change in Standard	Standard Level	Change in Standard	Standard Level	Change in Standard	Standard Level	Change in Standard	Standard Change	PARAMETER
None		None		None		None		Current A&Wc Acute (µg/L)	
28	New	0.17	New	None	--	None	New	Proposed A&Wc Acute (µg/L)	
None		None		None		None		Current A&Wc Chronic (µg/L)	
6.6	New	0.17	New	0.01	New	2.1	New	Proposed A&Wc Chronic (µg/L)	
None		None		None		None		Current A&Ww Acute (µg/L)	
28	New	0.17	New	None	--	2.1	New	Proposed A&Ww Acute (µg/L)	
None		None		N/A		None		Current A&Ww Chronic (µg/L)	
6.6	New	0.17	New	0.01	New	2.1	New	Proposed A&Ww Chronic (µg/L)	
None		None		None		None		Current A&Wedw Acute (µg/L)	
28	New	0.17	New	None	--	2.1	New	Proposed A&Wedw Acute (µg/L)	
None		None		None		None		Current A&Wedw Chronic (µg/L)	
6.6	New	0.17	New	0.01	New	2.1	New	Proposed A&Wedw Chronic (µg/L)	
None		None		None		None		Current A&We Acute (µg/L)	
28	New	0.17	New	None	--	2.1	New	Proposed A&We Acute (µg/L)	
CWA §304 criteria (2005)		CWA §304 criteria (2005)		CWA §304 criteria (1985)		CWA §304 criteria (2012)		Change data	

Modifications to Hardness Dependent Tables for Aquatic and Wildlife Uses [Tables 2 through 6]

The numeric water quality standards for certain metals are expressed as a function of hardness because hardness can affect the toxicities of the metals to aquatic life. These “hardness-dependent” pollutants include cadmium, chromium III, copper, lead, nickel, silver, and zinc. Increasing hardness has the effect of decreasing the toxicity of the metals.

In this Triennial Review, ADEQ intends to make modifications to the standards for copper, lead, and cadmium. Copper, and lead are being updated due to rounding errors from the last rulemaking in 2016. In 2016, EPA issued a new § 304(a) criteria document for cadmium. ADEQ is updating its aquatic and wildlife standards for cadmium to align with this EPA criteria. For A&Wc, the acute standard is slightly more stringent while the chronic standard is less stringent. For A&Ww, and A&Wedw, the acute standards are less stringent and the chronic standards are more stringent. For A&We, the acute standard is more stringent. See explanatory table below:

Cadmium – Change in Level (Higher/Lower)						
A&Wc		A&Ww		A&Wedw		A&Weph
Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute
Lower	Higher	Higher	Lower	Higher	Lower	Lower

Ammonia [New Tables 11 through 17]

In 2013, the U.S. EPA issued a new aquatic and wildlife criteria document for ammonia. EPA Office of Water, *Aquatic Life Ambient Water quality Criteria for Ammonia – Freshwater* (2013), available at <https://www.epa.gov/sites/production/files/2015-08/documents/aquatic-life-ambient-water-quality-criteria-for-ammonia-freshwater-2013.pdf>. The new criteria considered toxicological data for unionids, a family of fresh water mussels that were not included in previous criteria documents. As unionids are particularly sensitive to ammonia toxicity, this will have the effect of making the standard more stringent for waters where unionids are present.

A 2009 study by Dr. Terry Myers, funded by an Arizona Game and Fish Heritage Grant, found that there was evidence of wide spread pre-Columbian occurrence for unionids in Arizona, including the Colorado and Santa Cruz rivers, and more recent occurrences in the Little Colorado and San Pedro rivers and Chevelon Creek. Additionally, the study found that there are extant populations in the watershed of the Black River and in the White Mountains. Myers, T. L., *Pre-historical, Historical, and Recent Distribution of Freshwater Mussels (Unionidae: Anodonta) in*

*the Colorado River and Río Yaqui Basins (with notes on Guzmán Basin, Río Sonoyta, Río Asunción/Magdalena, and Río Grande). Arizona Game and Fish Department Heritage Grant Project # I07011 (2009) (on file with the Department).*

Given the CWA goals to restore and maintain the integrity of the Nations waters, the widespread historic range of unionids, both in spatial extent and altitude, and the extant population in the White Mountains, it is important that ADEQ addresses ammonia toxicity to unionids, where they occur or where they could be reestablished.

For the aquatic and wildlife cold and warm water uses, unionids will be assumed to be present unless a study is performed demonstrating that they are absent and there is no historic evidence of their presence, or hydrologic modification has altered the flow regime in a way that would prevent their reestablishment. The aquatic and wildlife effluent dependent water use will apply standards that do not address unionid toxicity because effluent dependent waters (EDWs) are situated in channels that were dry prior to permitted discharge. Therefore, ADEQ proposes ammonia standards for EDWs only for the absence of unionid mussels. No ammonia standards are currently established for ephemeral waters. Because ephemeral waters are dry most of the year and unionid mussels cannot be present, ADEQ is not proposing ammonia standards for ephemeral waters.

The new ammonia standards are applicable by table in Appendix A as follows:

	<i>A&amp;Wc</i>	<i>A&amp;Ww</i>	<i>A&amp;Wedw</i>	<i>A&amp;We</i>
<i>Acute &amp; Mussels Present</i>	New Table 11	New Table 12	None.	None.
<i>Chronic &amp; Mussels Present</i>	New Table 13	New Table 13	None.	None.
<i>Acute &amp; Mussels Absent</i>	New Table 14	New Table 15	New Table 15	None.
<i>Chronic &amp; Mussels Absent</i>	New Table 17	New Table 16	New Table 16	None.

***Modifications to Listed Surface Waters and Designated Uses [Appendix B]***

Appendix B lists surface waters and their designated uses. ADEQ proposes non-substantive updates to Appendix B including name corrections, description updates, and removal of one waterbody listed in error. These updates are needed to be consistent with waterbody names in the National Hydrography Dataset, to make stream reach descriptions and lake locations more accurate, and to

remove errors to make Appendix B more accurate. One such error is the inclusion of Williams Ranch Tanks. Williams Ranch Tanks are two hydrologically isolated water tanks and not subject to Arizona’s CWA jurisdictional authority. Also, one water body segment that was mistakenly omitted in the last triennial review process was re-inserted. This water body is in the Salt River watershed, a reach currently described as the “White Mountain Apache Reservation Boundary at 33°48'52"/110°31'33" to Roosevelt Lake,” but which was previously called “Confluence of White River and Black River to Roosevelt Lake.” *Triennial Review NFRM*, 14 A.A.R. 4708, 4921 (Dec. 26 2008); *but see* *Triennial Review NFRM*, 22 A.A.R. 2328, 2394 (Sept. 2, 2016). ADEQ is not removing Pretty Water Lake or its designated uses from Appendix B as originally proposed in the NPRM. ADEQ proposed to remove this waterbody because erroneous GIS data indicated that the lake was located in California and, therefore, outside of Arizona’s CWA jurisdictional authority. The intended effect of this change was improve the accuracy of Appendix B without affecting waterbodies or corresponding interests within State boundaries. New information now indicates that the GIS location within California was incorrect, and that additional information will be needed before further changes can be made. Therefore, ADEQ is not removing or changing the listing for Pretty Water Lake at this time. This is consistent with the intended effects of the NPRM in that it does not remove protections from any waterbody, or affect corresponding interests, within the State.

ADEQ is proposing to change the names of the following waterbodies for clarification:

<b>Watershed</b>	<b>Current Name</b>	<b>Proposed Name</b>	<b>Reason for Name Change</b>
LC	Blue Ridge Reservoir	Cragin Reservoir	As part of the Arizona Water Settlement Act of 2004, the name of the reservoir was changed to honor C. C. Cragin
MG	Mountain Valley Park Ponds (EDW)	Yavapai Lake (EDW)	Correction; it was incorrectly modified during Mountain Valley Park construction
SP	Golf Course Pond	Mountain View Golf Course Pond	Correction; to indicate which golf course to which this pond belongs
VR	Stone Dam Lake	Masonry Number 2 Reservoir	Correction; Stone Dam Lake was an informal name, now corrected. Stone Dam is the name of the area where this lake located.

In the NPRM preamble, ADEQ indicated an intent to change the name of Pierce Seep and Unnamed Wash (EDW) to further differentiate between Pierce Wash and its tributary. However, ADEQ elected not to change these names, and these changes were not included in the full text of

the rules in the NPRM. ADEQ clarifies here that it is not changing the names of Pierce Seep and Unnamed Wash (EDW).

ADEQ is not proposing substantive changes to Appendix B because the underlying definition of Waters of the United States is so unsettled at this time. Understanding what the definition of “Waters of the United States” (WOTUS) is and what it means has been in flux since the 1972 CWA Amendments. The definition has been highly litigated over the years. The most influential recent Supreme Court case was *Rapanos v. United States*, 547 U.S. 715 (2006), which was a split decision that did not alleviate the confusion surrounding WOTUS interpretations. Since that case was decided, EPA issued the Clean Water Rule in 2015 to attempt to clarify WOTUS.

This 2015 rule was immediately challenged in court, and its implementation has been delayed by various legal mechanisms over the years. *See North Dakota v. United States EPA*, 127 F. Supp. 3d 1047 (D.N.D. 2015) (North Dakota District Court issued a stay of the rule, which is currently still applicable in 13 states, including Arizona, precluding applicability of rule until the court decides the challenge to the rule); *Murray Energy Corp. v. United States DOD* (In re United States DOD), 817 F.3d 261 (6th Cir. 2016) (6<sup>th</sup> Circuit Court of Appeals issued a nationally applicable preliminary injunction); *but see Nat'l Ass'n of Mfrs. v. DOD*, 138 S. Ct. 617, 199 L.Ed.2d 501 (2018) (Supreme Court reversed the lower circuit court’s nationally applicable preliminary injunction decision); *see also Addition of an Applicability Date to 2015 Clean Water Rule*, 83 Fed. Reg. 5200 (Feb. 6, 2018) (final rule immediately delayed applicability of 2015 Clean Water Rule to Feb. 6, 2020); *but See generally Puget Soundkeeper All. v. Wheeler*, No. C15-1342-JCC, 2018 U.S. Dist. LEXIS 199358, at \*1 (W.D. Wash. Nov. 26, 2018) (vacating the new applicability date, so that the 2015 rule is now applicable in numerous states, though not in those states affected by the *North Dakota v. United States EPA* stay noted above).

The current U.S. presidential administration has begun to implement a plan to delay, repeal, and replace the 2015 Clean Water Rule, for which EPA and the U.S. Department of the Army (Army) have already taken rulemaking action. *See* Executive Order 13778, signed on February 28, 2017, entitled “Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the ‘Waters of the United States’ Rule.” Since the publication of the NPRM for this triennial review, EPA and the Army have published a proposed rule defining the scope of waters subject to federal regulation as Water of the United States. *See* 84 Fed. Reg. 4154 (Feb. 14, 2019).

#### ***Modifications to Site Specific Standards [Appendix C]***

In 2016, ADEQ issued site specific standards for copper for Bright Angel Wash and Transept

Canyon. EPA disapproved these site specific standards in 2016. Therefore, ADEQ is repealing the standards in this rulemaking.

**7. A reference to any study relevant to the rule that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**

The majority of the studies reviewed by ADEQ are the § 304(a) criteria for each pollutant. ADEQ has provided references and links to these studies, in context, in this preamble. For numeric standards changes, please refer to the modifications to Appendix A. ADEQ references other studies in their respective section explanation. ADEQ does not maintain a list of studies that it did not rely on after staff considered the abstract of those studies and dismissed them as irrelevant. Likewise, ADEQ has not tracked any studies it may have reviewed in connection with elements of the SWQS that were not changed in this rulemaking.

The following studies were reviewed by ADEQ but are not referenced elsewhere in the document:

Central Arizona Salinity Study (CASS) Concentrate Management Subcommittee *Central Arizona Salinity Study* (2006), available at:

<https://www.usbr.gov/lc/phoenix/programs/cass/pdf/Phase2/5ConMan.pdf>. This report is the result of research, review, and evaluation of various concentrate disposal technologies and practices relevant to desalination efforts in Arizona. ADEQ reviewed this study during its preparation of the EIS. However, ADEQ did not rely on the information within this report because it was specific to desalination and not treatment of ammonia or other relevant parameters.

EPA, *Principles of Design and Operations of Wastewater Treatment Pond Systems for Plant Operators, Engineers, and Managers* (2011), available at:

<https://nepis.epa.gov/Exe/ZyPDF.cgi/P100C8HC.PDF?Dockkey=P100C8HC.PDF>. ADEQ reviewed this document while preparing the EIS. While ADEQ did not directly rely on this document within the EIS, it provided some general background regarding WWTP operations.

Tetra Tech. Inc. *Evaluation of Grab Sample Analysis for Assessing Chronic WQ Standards* (2006), on file with the Department. This document had previously supported use of grab samples.

EPA, *Aquatic Life Ambient Water Quality Criteria Cadmium* (2016), available at:

<https://www.epa.gov/sites/production/files/2016-03/documents/cadmium-final-report-2016.pdf>.

ADEQ relied on this report in setting the standard for Cadmium.

EPA, *Aquatic Life Ambient Water Quality Criteria Carbaryl* (2012), available at: [https://www.epa.gov/sites/production/files/2015-08/documents/aquatic\\_life\\_ambient\\_water\\_quality\\_criteria\\_for\\_carbaryl\\_-\\_2012.pdf](https://www.epa.gov/sites/production/files/2015-08/documents/aquatic_life_ambient_water_quality_criteria_for_carbaryl_-_2012.pdf). ADEQ relied on this report in setting the standard for Carbaryl.

EPA, *Quality Criteria for Water* (1986), available at: <https://www.epa.gov/sites/production/files/2018-10/documents/quality-criteria-water-1986.pdf>. ADEQ relied on this report (known as the EPA “Gold Book”) in setting the standard for Demeton.

EPA, *Aquatic Life Ambient Water Quality Criteria Diazinon* (2005), available at: <https://www.epa.gov/sites/production/files/2019-03/documents/ambient-wqc-diazinon-final.pdf>. ADEQ relied on this report in setting the standard for Diazinon.

ADEQ has made a good faith effort to determine whether it reviewed any other studies that were relevant to this rulemaking. ADEQ is not aware of any such studies, other than those identified above.

**8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:**

Not applicable. The proposed amendments do not diminish a previous grant of authority of a political subdivision of this state.

**9. The economic, small business, and consumer impact statement:**

This Economic, Small Business, and Consumer Impact Statement has been prepared to meet the requirements of A.R.S. § 41-1055.

**A. An identification of the rulemaking:**

The rulemaking addressed by this Economic, Small Business, and Consumer Impact Statement (EIS) consists of amendments made by the Arizona Department of Environmental Quality (ADEQ) to 18 A.A.C. 11, Article 1, in order to adopt and revise Surface Water Quality Standards (SWQS) within the State of Arizona as required under Section 303(c) of the Clean Water Act (CWA).

A.R.S. § 49-222 authorizes ADEQ to adopt surface water quality standards to prevent harm to public health and the environment from polluted water. These revised standards are to assure attainable water quality; provide for protecting the public health and welfare; enhance the quality of water in Arizona; and take into consideration the use and value of water for public water

supplies, the propagation of fish and wildlife, and recreational, agricultural, industrial, and other purposes, including navigation. ADEQ is required to adopt surface water standards that establish numeric limits on the concentrations of each of the 126 toxic pollutants listed by the Environmental Protection Agency (EPA) in 40 CFR Part 423, Appendix A under CWA § 307. Fish, wildlife, tourism, drinking water supplies, and other uses of water would be adversely affected if Arizona's surface water is polluted. To ensure protection of these uses, section 303(c) of the CWA requires ADEQ to review its water quality standards at least once every three years and to modify or adopt those standards as appropriate. This rulemaking is, therefore, needed to improve clarity, correct errors, better align the SWQS with recent changes to EPA standards, and to comply with federal and state law.

Importantly, if EPA determines that ADEQ's SWQS do not meet the requirements of the CWA, EPA will disapprove these standards and promulgate federal standards. 40 C.F.R. § 131.5(b). ADEQ has, therefore, developed the proposed SWQS to comply with federal and state law, and to avoid federally promulgated SWQS. In many cases, ADEQ's standards are developed based on EPA sources. For example, in 2013, the EPA issued a new aquatic and wildlife criteria document for ammonia, which recommended more stringent ammonia standards in some cases. EPA Office of Water, *Aquatic Life Ambient Water quality Criteria for Ammonia – Freshwater* (2013). As such, the costs from stricter ammonia criteria under the revised state standards would likely also accrue if the EPA were to promulgate ammonia standards for Arizona. Likewise, other criteria made more stringent in this rulemaking are also based on EPA documents, and costs related to those revised state standards could also accrue under revised federal standards. As such, ADEQ's position is that the benefits of this rulemaking outweigh the costs, and that similar costs could still likely accrue under federally-promulgated standards. Additionally, water quality criteria must be based on sound scientific rationale to protect the designated use, and not economic considerations. *See* 40 C.F.R. § 131.11(a). In light of the foregoing, ADEQ is not aware of any less intrusive or less costly alternative that would meet ADEQ's legal obligations.

**B. A brief summary of the EIS:**

ADEQ, Arizona pollutant discharge elimination systems (AZPDES) permit holders, and the general public will benefit directly and indirectly from this rulemaking. This rulemaking's clarifications and correction of errors should benefit everyone, but particularly AZPDES permit holders, who read and apply the rules. This rulemaking also lessens some standards, providing relief to some dischargers while still protecting designated uses. Additionally, this rulemaking ensures that clean water will be available as a source for drinking water, bathing, cooking, and

washing clothes, as well as meet safety standards for swimming, fishing, boating, wading, or other water-based recreation. All of these uses provide substantial social and economic benefits within the State.

The primary economic costs of this rulemaking will be borne by AZPDES permit holders, specifically wastewater treatment plants (WWTPs), and laboratories. While most WWTPs will not see serious negative effects, a small number will see moderate to substantial costs associated with one-time structural and process upgrades due to stricter ammonia standards. Additionally, laboratories that test for permit compliance will likely see moderate cost increases due to process development and one-time equipment upgrades to allow these facilities to test at some of the more stringent levels set by this rulemaking. However, ADEQ has estimated this range as moderate to substantial to account for uncertainties in estimating these costs expressed by some stakeholders. These costs could likely be passed on to customers. Because most AZPDES permit holders will not see serious negative costs because of this rulemaking, the cost increases should be relatively minor, and worth the substantial benefits of this rulemaking overall.

Additionally, as stated above, ADEQ is required to review and revise its SWQS under the CWA. Revised water quality criteria must be based on sound scientific rationale to protect the designated use, and not economic considerations. Were ADEQ to propose standards that did not comport with this or any other requirement of the CWA, EPA would reject those standards and promulgate federal standards which could carry similar costs to the present rulemaking.

**C. Identification of the persons who will be directly affected by, bear the costs of, or directly benefit from the rules:**

This rulemaking will affect ADEQ, political subdivisions, public and private entities operating under AZPDES general permits, AZPDES individual permit holders, and public and private laboratories that test for permit compliance. It will also create health, social, and economic benefits to the general public from access to clean water and protection of fish and wildlife.

SWQS are implemented by ADEQ through various general and individual permits under the AZPDES permitting program. Individual permit holders include public and private WWTPs, publically owned treatment works (POTW), fish hatcheries, power plants, mines, truck stops, drinking water plants, marinas, and Water Quality Assurance Revolving Fund (WQARF) remediation projects. Because this rulemaking's effects will be concentrated among WWTPs and POTWs, and are not likely to significantly affect other individual permit holders, ADEQ will divide its analysis between WWTP and non-WWTP individual permit holders. Entities operating under a

general permit include a wide range of persons and industries. Because these entities are not likely to be significantly affected by this rulemaking, ADEQ addresses this group as a whole within this EIS.

Based on the information above, ADEQ has identified the following list of affected persons

*State and local government agencies*

ADEQ,

Agencies operating under individual or general AZPDES permits

*Political subdivisions*

Political subdivisions generally, public WWTPs, POTWs, public laboratories

Non-WWTP government entities operating under AZPDES individual permits

Non-WWTP government entities operating under AZPDES general permits

*Privately-Owned Businesses*

Private entities operating under general permits

Private, non-WWTP individual permit holders

Private WWTPs

Private laboratories

*The General Public*

**D. Cost/benefit analysis:**

**1. Part I - Cost/Benefit Stakeholder Matrix:**

Estimates indicate the costs or benefits to individual entities, unless otherwise indicated.

<b>Minimal</b>	<b>Moderate</b>	<b>Substantial</b>	<b>Significant</b>
\$10,000 or less	\$10,001 to \$1,000,000	\$1,000,001 or more	Cost/Burden cannot be calculated, but the Department expects it to be important to the analysis.

Description of Affected Groups	Description of Effect	Increased Cost/Decreased Revenue	Decreased Cost/Increased Revenue
<b>A. State and Local Government Agencies</b>			
ADEQ	<p>Possible increase in number of surface waters identified as impaired and corresponding changes in 303(d) listings and TMDLs.</p> <p>Possible cost to ADEQ of rulemaking process before issuing variances, as required by federal regulations.</p> <p>Improved implementation and enforcement of the SWQS.</p> <p>Predictability, reduced transaction costs, and responsiveness to stakeholders from avoiding federally-promulgated SWQS.</p> <p>Compliance with state and federal law.</p> <p>Support of ADEQ's mission to protect and enhance public health and the environment.</p>	<p>Minimal</p> <p>Potentially moderate</p>	<p>Significant</p> <p>Significant</p> <p>Significant</p> <p>Significant</p>
<p>Political subdivisions generally</p> <p>Public WWTP and/or POTW</p>	<p>Tax revenues and indirect benefits of clean water dependent industries (including outdoor recreation, tourism, etc.).</p> <p>Increased monitoring costs.</p> <p>Evaluation of compliance with new standards</p> <p>Cost of compliance with stricter SWQS.</p> <p>Improved implementation and enforcement of water quality standards by political subdivisions with pretreatment programs.</p> <p>Greater flexibility in mixing zones.</p> <p>Potential delays in issuing future variances.</p> <p>Cost savings due to less stringent standards.</p>	<p>Significant</p> <p>Minimal to moderate</p> <p>Moderate to substantial for a few permit holders</p> <p>Could be significant in the future for some permit holders</p>	<p>Cumulatively substantial</p> <p>Significant</p> <p>Significant</p>

Description of Affected Groups	Description of Effect	Increased Cost/Decreased Revenue	Decreased Cost/Increased Revenue
Public laboratories	<p>Clarification and correction of errors.</p> <p>Testing for stricter SWQS with accompanying costs.</p>	Moderate to substantial	<p>Significant</p> <p>Significant</p>
Non-WWTP Government entities (individual permits)	<p>Clarification and correction of errors.</p> <p>Cost savings due to less stringent standards.</p> <p>Greater flexibility in mixing zones.</p> <p>Potential delays in issuing future variances.</p> <p>Increased monitoring costs.</p> <p>Cost of compliance with stricter SWQS.</p>	<p>Could be significant in the future for some permit holders</p> <p>Minimal if any</p> <p>Minimal, if any</p>	<p>Significant</p> <p>Significant</p> <p>Significant</p>
Non-WWTP Government entities (general permits)	<p>Clarification and correction of errors.</p> <p>Cost of compliance with stricter SWQS.</p> <p>Cost savings due to less stringent standards.</p>	Minimal, if any	<p>Significant</p> <p>Significant</p>
<b>B. Privately Owned Businesses</b>			
Private entities operating under general permits	<p>Clarification and correction of errors.</p> <p>Cost of compliance with stricter SWQS.</p> <p>Cost savings due to less stringent standards.</p>	Minimal, if any	<p>Significant</p> <p>Significant</p>
Non-WWTP individual permit holders (Power Plants, Mines, Marinas, etc.)	<p>Clarification and correction of errors.</p> <p>Cost savings due to less stringent standards.</p> <p>Greater flexibility in mixing zones.</p> <p>Potential delays in issuing future variances.</p> <p>Increased monitoring costs.</p>	<p>Could be significant in the future</p> <p>Minimal if any</p>	<p>Significant</p> <p>Significant</p> <p>Significant</p>

Description of Affected Groups	Description of Effect	Increased Cost/Decreased Revenue	Decreased Cost/Increased Revenue
	Cost of compliance with stricter SWQS.	Minimal, if any	
	Cost savings due to less stringent standards.		Significant
Private WWTP	Clarification and correction of errors.		Significant
	Cost savings due to less stringent standards.		Significant
	Greater flexibility in mixing zones.		Significant
	Potential delays in issuing future variances.	Could be significant in the future for some permit holders	
	Increased monitoring costs.	Significant	
	Cost of compliance with stricter SWQS	Moderate to substantial for a few permit holders	
	Cost savings due to less stringent standards.		Significant
Laboratories	Clarification and correction of errors.		Significant
	Testing for stricter SWQS with accompanying costs.	Moderate to substantial	
General Public	Economic and social benefits of clean water		Cumulatively substantial

## 2. Part II - Individual Stakeholder Summaries/Calculations:

This section outlines ADEQ's analyses of the estimated costs and benefits of this rulemaking, made after consultation with ADEQ staff, knowledgeable individuals in the area of wastewater treatment and monitoring, and examination of relevant records and reports.

### ADEQ

ADEQ may incur minimal to moderate costs in implementing this rulemaking. It is possible that this rulemaking may lead to a change in the number of surface waters that are identified as impaired waters. This may result in corresponding changes in the number of 303(d) listings for impaired waters and Total Maximum Daily Load (TMDLs) that ADEQ would be required to complete under the CWA. ADEQ estimates that any costs associated with an increase in the

number of surface waters identified as impaired, and corresponding changes in 303(d) listings and TMDLs, would be minimal. Due to EPA changes to its regulations, however, all new variances must be in rule and will be required to go through the public rulemaking process. This rulemaking reflects this requirement. As this rulemaking process would require staff time for technical review, rule composition, and public input, the ADEQ could incur potentially moderate costs.

This rulemaking will likely create significant benefits to ADEQ because of improved clarity, corrected errors, and better alignment of the SWQS with recent EPA standards changes. As a result, ADEQ's responsibility for implementing and enforcing the SWQS will correspondingly improve. Additionally, ADEQ recognizes a significant benefit from the greater predictability, reduced transaction costs, and responsiveness to stakeholders from administering its own SWQS and avoiding federally-promulgated standards. By conducting this rulemaking, ADEQ complies with state and federal law, and promotes its mission to protect and enhance public health and the environment, all of which ADEQ recognizes as significant benefits of this rulemaking.

The Number of New, Full-Time Employees Necessary to Implement and Enforce the Proposed Rule

None

**Political Subdivisions**

Political subdivisions could likely receive cumulatively substantial benefits because of this rulemaking. However, some may also incur individual costs if they own or operate a WWTP or POTW, or operate their own laboratory. Analyses of the effects of this rulemaking on WWTPs and laboratories are included below. Based on those analyses, ADEQ estimates that some public WWTPs and public laboratories could see moderate to substantial costs.

As this rulemaking will better protect water quality, many political subdivisions may receive benefits in the form of tax revenues tied to the use of clean water. A recent technical report on the economic contributions in Arizona for water-based outdoor recreation alone indicates that benefits could be substantial. For example, state and local tax contributions from water-based outdoor recreation ranged among Arizona counties from approximately \$3 million to \$323.6 million. The Audubon Society, *The Economic Impact of Arizona's Rivers, Lakes, and Streams* (2019), available at: <https://www.audubon.org/economic-impact-arizonas-rivers-lakes-and-streams>. Notably, these numbers do not address other benefits of clean water, which include water-based outdoor recreation jobs, money spent on supporting industries, corresponding gross domestic product (GDP), and related taxation revenues. The Tempe Town Lake is another

significant example of how clean water can serve as a significant economic driver. In 2017 alone, the Tempe Office of Tourism estimates that visitors to the Tempe Town Lake spent \$19.8 million in relation to events where participants were either in or on the lake. Data supplied by the Tempe Office of Tourism, on file with ADEQ. While the benefits from this rulemaking will not accrue equally across political subdivisions, the aggregated direct and indirect benefits of the SWQS to political subdivisions will likely be substantial.

There may be additional costs and benefits for some political subdivisions that have a pretreatment program under the CWA. The pretreatment program requires political subdivisions to control industrial wastewater discharged to the sanitary sewer before it is mingled with domestic wastewater and discharged at the treatment facility. These facilities, called POTWs, have the authority to establish water quality standards and issue permits to industrial facilities that discharge pollutants to the sanitary sewer to control industrial wastewater and ensure that water quality standards are met. Currently, 21 Arizona municipalities have pretreatment programs. POTWs may see significant benefits associated with improved implementation and enforcement of water quality standards and significant benefits from potential cost savings due to less stringent standards. However, they may also incur minimal to moderate costs in reviewing this rulemaking to ensure their own compliance and to evaluate the need to change limits and controls on local industrial wastewater to ensure compliance under their AZPDES permit. If changes are necessary, a POTW would make necessary changes to its future permits issued to industrial facilities or through its local regulations.

If a POTW or publically owned WWTP must incur costs to achieve compliance with these rules, then options exist for financial assistance. The Water Infrastructure Finance Authority (WIFA) is an independent agency in Arizona and is authorized to finance the construction, rehabilitation, and/or improvement of drinking water, wastewater, wastewater reclamation, and other water quality facilities and projects. Generally, WIFA offers borrowers below market interest rates on loans for 100 percent of eligible project costs. As a “bond bank,” WIFA is able to issue water quality bonds on behalf of communities for basic water infrastructure, providing significant savings due to lower interest rates and shared/reduced closing costs.

#### **Non-WWTP Government Entities Operating under AZPDES permits**

Other government entities function under AZPDES permits in addition to political subdivisions with WWTPs and/or POTWs. For example, some fish hatcheries owned by the Arizona Game and Fish Department operate under individual AZPDES permits, and the Department of

Transportation as well as individual counties conduct certain activities under general permits. Because the effects of this rulemaking will not be significantly different for these government entities as compared to other permit holders, an analysis of the costs and benefits to these entities is found in the sections regarding AZPDES non-WWTP individual permit holders and general permit holders. ADEQ estimates that some could see significant benefits from clarification and correction of errors, potential cost savings due to less stringent standards, and greater flexibility in mixing zones. Furthermore, costs from compliance with stricter SWQS and increased monitoring costs to these entities should be minimal, if there are any costs at all. As with other non-WWTP facilities, there is the possibility that some entities could experience some costs associated with delays in issuing future variances.

**Private Entities Operating Under AZPDES General Permits**

ADEQ estimates that private entities operating under AZPDES general permits could see significant benefits from clarifications and correction of errors in this rulemaking, and that the cost of compliance with more stringent standards will be minimal, if there is any cost at all.

Surface water quality standards are implemented, in part, through various general and individual permits under the AZPDES permitting program. General permits are best suited for regulation of numerous, similar facilities that pose little environmental risk, while individual permits are required of facilities and sources that have a potentially significant environmental impact. Below are the numbers of authorizations for the current five-year AZPDES general permits. Most of these permits are held by businesses:

<b>AZPDES GENERAL PERMITS</b>	
<b>General Permit Category</b>	<b># Per Category</b>
Multi-Sector General Permit (MSGP)	791
Construction General Permit (CGP)	3416
Municipal Separate Storm Sewer System (MS4) (Phase I permits)	8
Municipal Separate Storm Sewer System (MS4) (Phase II permits)	48
De Minimis General Permit	128

### Clarification and Correction of Errors

This rulemaking clarifies standards and corrects errors that existed in previous SWQS. While it is difficult to quantify a numeric value for such changes, ADEQ believes the clarifications and corrections represent a significant benefit to entities operating under general permits.

### Cost of Compliance with More Stringent Standards and Costs Savings from Less Stringent Standards

There are potential impacts to entities operating under general permits; however, ADEQ does not expect these rule changes to affect significantly large numbers of permittees. The De Minimis permit regulates minor discharges resulting from specified activities and is generally restricted to discharges containing minimum pollutant amounts. The other four general permits regulate stormwater discharges primarily by requiring the use of best management practices (BMPs) to lessen pollutants. This rulemaking could impact a permit holder if a numeric standard becomes stricter, or if a water is listed as impaired under the new SWQS. Conversely, if standards become less stringent, permittees could see cost savings. A project located near an impaired water that seeks general permit coverage, especially the CGP and De Minimis, could see increased monitoring requirements or additional BMPs being required to protect water quality. For example, a small or medium MS4 is not typically required to monitor under the current general permit. This would change if the MS4 had to determine the source of a pollutant if its stormwater discharge contributed to an exceedance of a new water quality standard. Any facility permitted under a general permit with discharges that are above a new water quality standard could lose eligibility under the general permit and be required to seek an individual permit with more specific requirements. However, after consultation with ADEQ permitting staff, ADEQ expects only minimal, if any, impact to each permittee discharging under general permits. Additionally, these entities could see significant benefits from costs savings due to less stringent standards.

### AZPDES Non-WWTP Individual Permit Holders

ADEQ anticipates that non-WWTP individual permit holders will see significant benefits from the clarification and correction of errors, cost savings due to less stringent standards, and greater flexibility in mixing zones. Furthermore, ADEQ anticipates that the cost of compliance with more stringent standards will be minimal, if there is any cost at all. ADEQ recognizes that potential costs could result from delays in issuing future variances.

Facilities and sources that do not qualify to operate under a general permit are required to obtain an individual permit. The table below shows the number of existing AZPDES individual permits, broken down by category type.

<b>AZPDES INDIVIDUAL Permits</b>	
<b>By Flow Regime</b>	<b># of Permits</b>
Ephemerals (EDW), canals, industrial	122
Perennial	19
<b>By Industry</b>	<b># of Permits</b>
Drinking water treatment plants & well discharges	7
Power Generation	7
Mining	6
WQARF/Remediation projects	4
Fish hatcheries	4
Truck Stops	2
Marinas	1
Industrial (other)	5
Waste Water Treatment Plants (WWTP)	105

Cost of Compliance with More Stringent Standards

ADEQ believes that the changes in these rules will affect a relatively small number of existing AZPDES individual permit holders. ADEQ made this assessment after consultation with ADEQ staff and analysis of discharge monitoring reports (DMR). Based on the foregoing, ADEQ estimates that the only significantly affected permit holders will likely be WWTPs. Other individual permit holders that do not operate a WWTP such as mines, power generation facilities, etc., are not anticipated to sustain significant costs. As such, ADEQ anticipates that the costs of compliance with the new SWQS amendments will be minimal, if they exist at all, for all individual permit holders except those who operate WWTPs.

In the event that a permit holder's discharges would exceed the SWQS, options to delay, defray, or minimize the costs of coming into compliance are offered in the existing rules. Permit conditions are reviewed and revised as applicable when permit holders apply for renewal, usually every five years. These permit holders would incur costs if their discharge contains pollutants in a concentration that results in an exceedance of a new surface water quality standard. A permit holder may request a compliance schedule in a permit when a facility cannot meet a new water quality standard. This allows the facility time to evaluate, design and construct treatment or other means of meeting the new standard. Permit holders may also apply for mixing zones and variances.

#### Clarification and Correction of Errors

This rulemaking clarifies standards and corrects errors that existed in previous SWQS. While it is difficult to quantify a numeric value for such changes, ADEQ believes the clarifications and corrections represent a significant benefit to AZPDES individual permit holders.

#### Costs Savings Due to Less Stringent Standards

ADEQ has made a number of water quality criteria less stringent under this rulemaking. In some instances, depending on the designated use of a waterbody, ADEQ has raised criteria for certain parameters significantly. In cases where a permit holder is required to treat for such parameters, the less stringent standards could translate to reduced costs. Such reduced costs will necessarily vary based on the individual circumstances of permit holders, and ADEQ does not have data that would quantify the scope of those reduced costs. However, a cost benefit analysis would not be complete without accounting for such benefits. ADEQ, therefore, estimates cost savings due to less stringent standards as a potentially significant benefit to some permit holders.

#### Greater Flexibility in Mixing Zones:

Occasionally, due to design and economic constraints, permit holders may need to discharge certain pollutants at concentrations that exceed SWQS, using dilution by the receiving water to ameliorate toxicity. ADEQ has made changes to the mixing zone provisions in the SWQS that more accurately define the conditions of the mixing zone and allow dischargers greater flexibility in the design of the mixing zone while still protecting the environment. This may benefit dischargers that need time to come into compliance with the SWQS while stipulating that there will be no acute toxicity to aquatic organisms due to the issuance of the mixing zone. While valuation of the benefits of mixing zones is case-specific and difficult to estimate, greater

flexibility in mixing zones represents a significant benefit to permit holders directly affected by this rulemaking.

#### Potential Delays in Issuing Variances:

Due to changes in EPA regulations on the issuance of variances to water quality standards, all new variances must be in rule and will be required to go through the public rulemaking process. This rulemaking reflects this requirement. This may have the effect of delaying the issuance of a variance, which could create some costs to the discharger. However, a variance would ultimately allow time for upgrades to meet the SWQS. Currently, no facilities are operating with a variance. While it is difficult to quantify the costs of the changes to the variances rule, ADEQ does not anticipate any immediate costs. However, ADEQ recognizes that the requirement could potentially create a significant cost to some future dischargers.

#### Increased Monitoring Costs

ADEQ estimates that the cost of increased monitoring for non-WWTP individual permit holders will be minimal, if there is any cost at all. The SWQS will require some permit holders to monitor at more stringent levels for some pollutants which will increase monitoring costs in some cases. The cost of increased monitoring will vary based on individual circumstances of different facilities. After analysis of DMR data, ADEQ does not expect that non-WWTP facilities will see increased monitoring costs associated with the SWQS. To be sure, it is possible that non-WWTP could see indirect cost increases if laboratories pass on costs of testing for lower detection limits to all customers. However, ADEQ estimates that increased monitoring costs for non-WWTP individual permit holders will be minimal, if there are any costs at all.

#### WWTPs

As is the case with non-WWTP individual permit holders, ADEQ anticipates that WWTPs will realize significant benefits from the clarification and correction of errors, cost savings due to less stringent standards, and greater flexibility in mixing zones. However, ADEQ anticipates that some WWTPs could see increased monitoring costs and moderate to significant costs of compliance with more stringent standards. ADEQ also recognizes that there is potential for some costs due to delays in issuing future variances.

#### Increased Monitoring Costs

The SWQS will require some WWTPs to monitor at more stringent levels for some pollutants which will likely require increased monitoring costs in some cases. The cost of increased

monitoring will vary based on individual circumstances of facilities and laboratories. For example, the size of a system and the frequency of monitoring will directly influence the cost, with larger systems or systems who monitor more frequently spending more. Additionally, if laboratories are required to purchase new instrumentation to test at more stringent standards, then those laboratories may increase monitoring prices for WWTPs to offset those costs. Smaller laboratories may be more likely to raise prices where larger ones may be less likely. As such, it is very difficult to estimate how monitoring prices may increase. ADEQ has been unable to quantify these costs, but estimates that they could be significant.

#### Cost of Compliance with More Stringent Standards

Compliance costs for a typical WWTP can be difficult to estimate because of the various contributing factors. Depending on the interplay of these factors, costs of this rulemaking could range from moderate to substantial for some WWTPs.

ADEQ recognizes that changes in some rules will have more direct impact on WWTPs than other rule changes. The new standard with the highest probability to affect WWTPs is that for ammonia. These new numeric water quality standards for ammonia in surface waters may result in new water quality-based discharge limitations in AZPDES permits for WWTPs discharging to existing perennial waters, with accompanying costs. Of Arizona's 141 AZPDES individual discharge permits, 122 will not be adversely affected by the new ammonia standards, and of those, 61 will have less stringent ammonia standards. Of the 19 permits that will receive stricter ammonia standards, an analysis of DMR data indicates that only four may have issues treating to the new standard. Of those four, ADEQ estimates that only one will have significant difficulties meeting the standard.

Ammonia, a regulated pollutant, is a component of total nitrogen. Total nitrogen in wastewater is typically composed of ammonia, nitrate, organic nitrogen, and soluble organic nitrogen. Nitrogen in the form of ammonia is highly toxic to aquatic life. For wastewater treatment plants that have no other management options to achieve compliance with the ammonia standard, the most cost-effective method of ammonia removal is accomplished through the advanced treatment of biological nutrient removal (BNR) processes. The biological processes that remove the various forms of nitrogen from wastewater are called nitrification and denitrification.

A 2006 EPA report provided costs for BNR upgrades to existing WWTPs in Connecticut and Maryland. EPA, *Biological Nutrient Removal Processes and Costs* (2006), available at: [https://www.epa.gov/sites/production/files/documents/criteria\\_nutrient\\_bioremoval.pdf](https://www.epa.gov/sites/production/files/documents/criteria_nutrient_bioremoval.pdf). The total

costs of BNR retrofits in Connecticut ranged from \$649,320 to \$22,074,225 (2006 dollars, \$810,722 to \$27,561,246 adjusted for inflation). This report demonstrated that site-specific factors such as existing treatment system layout and space availability may cause costs to vary significantly between treatment plants with the same design capacities that are implementing the same type of BNR treatment upgrade. In general, the study showed that despite this variability in costs, the unit cost per mgd generally decreased as the size of the WWTP increased due to economies of scale. EPA calculated the average unit capital costs for BNR upgrades at the Maryland and Connecticut WWTPs as follows:

<b>Average Unit Capital Costs for BNR Upgrades at MD and CT Wastewater Treatment Plants</b>		
<b>Flow (in mgd)</b>	<b>Cost / mgd (in \$2006)</b>	<b>Cost/ mgd adjusted for inflation</b>
> 0.1 – 1.0	\$6,972,000	\$8,705,000
> 1.0 – 10.0	\$1,742,000	\$2,175,000
> 10.0	\$588,000	\$734,000

Another, more recent study indicated that, for 15 WWTPs in Massachusetts, New Hampshire and Vermont, the predicted costs of installing low-cost biological nitrogen removal retrofits and associated operational changes could range, from \$88,514 to \$745,033 (\$95,333 to \$802,431 adjusted for inflation). JJ Environmental, *Final Report - Low Cost Retrofits for Nitrogen Removal at Wastewater Treatment Plants in the Upper Long Island Sound Watershed* (2015), available at: <http://longislandsoundstudy.net/wp-content/uploads/2015/05/LIS-Low-Cost-Retrofit-Final-Report-March-2015-revised.pdf>. In light of these reports, ADEQ anticipates that the costs for wastewater treatment upgrades to provide ammonia and nitrate removal for facilities in need of such upgrades could range from moderate to substantial, depending on the circumstances of those facilities.

**Laboratories**

Outreach by ADEQ to knowledgeable persons in the laboratory industry indicates that this rulemaking could create moderate to substantial costs to Arizona-based laboratories. Many of these laboratories do not currently have equipment capable of testing at some of the levels set in this rulemaking. This is not an issue in cases where the Limit of Quantitation (LOQ) is higher than the applicable standard. In those cases, the analytical method with the lowest LOQ would be used. Additionally, not all labs test for all criteria in the SWQS. However, where current analytical methods are capable of testing for a new standard, laboratories that test for that criteria would be required to meet the new standard. One local laboratory indicates that, in cases where

new equipment could allow laboratories to test at certain more stringent levels, costs could begin at around \$150,000 per instrument, with multiple instruments needed. Another local laboratory roughly estimated its costs of investing in new technology at \$200,000. Hiring new staff could also be required. Additionally, some of the changes to the SWQS would require new method development by labs to test at the more stringent levels, which could raise the cost of monitoring. Notably, however, not all of the standards identified as presenting large costs to laboratories have changed in this rulemaking. For example, the pollutant Aldrin was identified as potentially costing thousands to meet the standard for fish consumption, however, that standard was not modified in this rulemaking. Indeed, this rulemaking raised the Aldrin full body contact standard. Regardless, in those cases where this rulemaking does create costs due to more stringent standards, costs will vary based on the size of the facility. In light of the foregoing, ADEQ, expects moderate costs to some to laboratories. However, in recognition of the difficulty in estimating these costs, and the uncertainty expressed by some stakeholders, ADEQ has conservatively estimated these costs as moderate to substantial.

In cases where a small laboratory is unable to invest in new equipment, small laboratories may contract with other laboratories who are able to test certain parameters at the more stringent levels required by the SWQS. These contract laboratories would likely be large, well-established national firms. However, in other cases, small laboratories that cannot test at more stringent standards may potentially lose business to, or in the extreme case, be bought out by larger, more capable firms.

**E. A general description of the probable impact on private and public employment in business agencies, and political subdivisions of this state directly affected by the rulemaking:**

ADEQ estimates that, for the most part, this rulemaking will not have an impact on public or private employment. However, some facilities may be required to hire additional staff or contract with professionals to install and maintain new equipment when additional equipment is required to comply with this rulemaking, which would represent a positive impact on employment. ADEQ also recognizes the fact that employment could be negatively impacted in a case where an employer's costs would reduce funds available to pay employees and contractors. For example, if a small laboratory is unable to test at the levels required by this rulemaking and loses business to a large firm, there could be a resulting negative impact on employment. However, should that lab be bought out by a larger firm, any negative effect on employment could be negligible if the larger firm keeps on former employees.

**F. A statement of the probable impact of the rules on small business:**

In this EIS, ADEQ uses the term “small business” consistent with A.R.S. § 41-1001(21), which defines a “small business” as a concern, including its affiliates, which is independently owned and operated, which is not dominant in its field and which employs fewer than one hundred full-time employees or which had gross annual receipts of less than four million dollars in its last fiscal year.

**1. An identification of the small business subject to the rules:**

Among the stakeholders listed above, many meet the definition of small business as set forth in A.R.S. § 41-1001(21). For example, ADEQ estimates that all of the 24 privately owned WWTPs, a significant number of general permit holders, most small laboratories in the state, and others are small businesses. However, as a group, not all small businesses will be equally affected by this rulemaking, and ADEQ estimates that most will not be affected at all. ADEQ estimates that the small businesses that will be negatively affected by this rulemaking will be privately owned WWTPs and small laboratories. However, as set forth above, other small businesses may see benefits from this rulemaking associated with clarification and correction of errors, cost savings due to less stringent standards, and greater flexibility in mixing zones.

**2. The administrative and other costs required for compliance with the rules:**

Compliance costs associated with this rulemaking will vary based on the stakeholder involved. ADEQ’s examination of compliance costs for private WWTPs and small laboratories is addressed in the cost benefit analysis above.

**3. A description of the methods that the agency may use to reduce the impact on small businesses, as required in A.R.S. § 41-1035:**

*a. Establishing less stringent compliance or reporting requirements in the rule for small businesses:*

Under the CWA, economic considerations may not be considered when choosing data and deriving aquatic and wildlife criteria values for toxic pollutants. The rules, however, allow the application of measures such as schedules of compliance, variances, water effects ratio studies, mixing zones and site specific standards to address specific chemical exceedances that cannot be successfully managed by the permit holder, including small businesses.

*b. Establishing less stringent schedules or deadlines in the rule for compliance or reporting requirements for small businesses:*

The SWQS do not set compliance or reporting requirements. However, schedules of compliance and variances may be used by dischargers, including small businesses, to extend the time needed to come into compliance with new water quality standards.

*c. Consolidating or simplifying the rule's compliance or reporting requirements for small businesses:*

The SWQS do not set compliance or reporting requirements. However, the State has developed an online permitting and compliance reporting portal called MyDEQ. MyDEQ offers the regulated community, including small businesses, a digital solution to better assist them in meeting their environmental priorities and responsibilities with an easy online tool, that is available at all times to meet business needs.

*d. Establishing performance standards for small businesses to replace design or operational standards in the rule:*

The proposed SWQS do not establish design or operational standards for permit holders.

*e. Exempting small businesses from any or all requirements of the law:*

The Clean Water Act makes no allowances for exemptions to water quality standards due to the size of the business. ADEQ has no authority to exempt small businesses from the requirement to comply with surface water quality standards. However, as previously stated, the rules provide other methods for reducing the immediate impact for dischargers, including small businesses.

**4. The probable costs and benefits to private persons and consumers who are directly affected by the rules:**

While some consumers and private persons may see higher utility bills in some cases, ADEQ anticipates the negative impact will be small because, for the greatest part, the amendments will not substantially increase existing AZPDES compliance costs. AZPDES permittees affected by a change of standard may apply for compliance schedules, mixing zones, variances or low-cost WIFA loans to address any increased

cost, alleviating or amortizing any cost to the consumer. However, overall, ADEQ estimates that the SWQS will provide substantial benefits across the State.

Consumers and the public may have to pay higher utility bills for sewer services in communities where WWTP upgrades are required to comply with new or revised water quality standards. In particular, customers served by wastewater treatment plants that discharge to perennial waters may be affected by the proposed adoption of numeric water quality standards that will limit discharges of ammonia.

ADEQ estimates that this rulemaking could provide substantial benefits to private persons and consumers within the State. Clean and safe water serves as an economic driver within the State for industries that rely on it to provide jobs, income, and pay state and local taxes. For example, the 2018 economic output of retail spending related to Arizona outdoor recreation along waterways and related multiplier effects has been estimated at approximately \$13.5 billion. The Audubon Society, *The Economic Impact of Arizona's Rivers, Lakes, and Streams* (2019), available at:

<https://www.audubon.org/economic-impact-arizonas-rivers-lakes-and-streams>.

Additionally, water-based recreation was estimated to support 114,000 jobs, and to have provided \$4.5 billion in household income and \$1.8 billion in tax revenues. *Id.* SWQS also support agricultural productivity by protecting water quality for agricultural irrigation and livestock watering. A 2014 economic analysis of Arizona agriculture reported that agribusiness in the state contributed \$17.5 billion to state output, and supported more than 88,000 jobs. Kerna and Frisvold, *Agriculture in Arizona's Economy: an Economic Contribution Analysis* (2014), available at:

<https://cals.arizona.edu/arec/sites/cals.arizona.edu/arec/files/publications/aginazeconomy2014%2012-9-14spreads.pdf>. Additional economic benefits from clean water are realized

in property values as illustrated by property development surrounding Tempe Town Lake, which is reported to have generated nearly \$2 billion in economic impact since its opening. City of Tempe Website, *Economic Impact* (accessed April 16, 2019), available at: <https://www.tempe.gov/government/community-services/tempe-town-lake/town-lake-financial-and-regulatory-information/economic-impact>.

Good water quality that meets water quality standards is essential to maintaining and enhancing the economic values realized in the state through water-based outdoor recreation, agriculture, and property values. Additionally, this calculation does not account for the social value that the public

places on clean water. Therefore, ADEQ estimates that the cumulative benefits of this rulemaking to private persons and consumers could be substantial.

**G. A statement of the probable effect on state revenues:**

This rulemaking should not result in a significant decrease in state revenues. As the proposed rule requires that variances must be made through formal rulemaking in order to comply with state and federal law, this rulemaking could create a moderate cost to ADEQ. Other increased and decreased costs to ADEQ are expected to be minimal, as explained above in the analysis of costs and benefits to ADEQ. Because most AZPDES permit holders will not be affected by this rulemaking, ADEQ does not anticipate a significant decrease in business activity in the state or a corresponding loss of state tax revenues.

**H. A description of any less intrusive or less costly alternative methods of achieving the purpose of the rulemaking:**

Under Section 303(c) of the CWA and implementing regulations, ADEQ must review and revise its SWQS. These standards must protect public health or welfare, enhance the quality of water, and serve the purposes of the CWA. This means that SWQS should, wherever attainable, provide water quality for the protection and propagation of fish, shellfish and wildlife and for recreation in and on the water and take into consideration the use and value of water for public water supplies, recreation in and on the water, and agricultural, industrial, and other purposes including navigation. 40 C.F.R. § 131.2. State law imposes similar requirements of SWQS as well. A.R.S. § 49-222. EPA will review ADEQ's SWQS to determine if they are consistent with the requirements of the CWA. 40 C.F.R. § 131.5. If EPA determines that ADEQ's SWQS do not meet the requirements of the CWA, EPA will disapprove ADEQ's SWQS and promulgate federal standards. *Id.* at (b). ADEQ has, therefore, developed the proposed SWQS to comply with federal and state law, and to avoid federally promulgated SWQS. Thus costs related to this rulemaking will likely accrue within Arizona under either state or federal standards. Additionally, water quality criteria must be based on sound scientific rationale to protect the designated use, and not economic considerations. *See* 40 C.F.R. § 131.11(a). In light of the foregoing, ADEQ is not aware of any less intrusive or less costly alternative methods that would meet ADEQ's legal obligations.

**I. A description of any data on which the rule is based with a detailed explanation of how the data was obtained and why the data is acceptable data:**

**Mixing Zone Rule Modifications**

ADEQ established definitions for critical flow conditions for discharges and receiving waters and modified its mixing zone requirements based on Arizona Mixing Zone Water Quality Standards (Jun. 2018) (on file with ADEQ and available at: [http://static.azdeq.gov/wqd/tri\\_rev\\_mixing\\_memo.pdf](http://static.azdeq.gov/wqd/tri_rev_mixing_memo.pdf)), EPA's Technical Support Document for Water Quality-based Toxics Control (1991), available at <https://www3.epa.gov/npdes/pubs/owm0264.pdf>, EPA's Water Quality Standards Handbook, Chapter 5 (Sept. 2014), available at: <https://www.epa.gov/sites/production/files/2014-09/documents/handbook-chapter5.pdf>, EPA's NPDES Permit Writers' Manual (Sept. 2010), available at [https://www.epa.gov/sites/production/files/2015-09/documents/pwm\\_2010.pdf](https://www.epa.gov/sites/production/files/2015-09/documents/pwm_2010.pdf), Mixing Zone Guidance for Chronic Toxicity and Zones of Initial Dilution (2nd Rev., May 1992), available at: <https://www.epa.gov/sites/production/files/2014-12/documents/wiwqs-mixing-zone.pdf>, recommendations from a technical memorandum prepared for ADEQ by PG Environmental, available at: [http://static.azdeq.gov/wqd/tri\\_rev\\_mixing\\_memo.pdf](http://static.azdeq.gov/wqd/tri_rev_mixing_memo.pdf), conversations with PG Environmental staff, as well as ADEQ's expertise and training.

Data provided in EPA Water Quality Standards, handbooks, manuals, technical support, and other guidance are developed and published by EPA to reflect accurate scientific and technical knowledge regarding the establishment and implementation of water quality standards. PG Environmental provides technical expertise in the water sector to state and federal agencies and prepared its technical memorandum for ADEQ based on a comparative analysis of common mixing zone approaches used in other states and on PG Environmental's experience implementing mixing zones in NPDES permits. ADEQ staff are experts in their fields with significant educational and practical experience.

### **Modifications to Numeric Water Quality Standards**

ADEQ uses a hierarchical approach when considering data for use in the derivation of human health water quality standards. Many of the Clean Water Act Toxic and Priority Pollutants have no reference doses (RfDs) or cancer potency slope factors (CPSFs) published in the EPA's Integrated Risk Information System (IRIS) database. Because of this, ADEQ uses the following ordered list of peer reviewed toxicological data when IRIS RfDs and CPSFs are not available:

- Provisional Peer-Reviewed Toxicity Values (PPRTV) used in EPA's Superfund Program.
- Minimal Risk Levels by the Agency for Toxic Substances and Disease Registry (ATSDR).

- California Environmental Protection Agency (CalEPA) values.

While these toxicity values are not expressly developed for the derivation of water quality standards for EPA listed Toxic and Priority Pollutants, they provide valuable, peer reviewed benchmarks which allowed ADEQ to derive water quality standards for the protection of human health where otherwise there would be none.

ADEQ is very careful when selecting surrogate toxicity values to use in the derivation of water quality standards. All data used in the derivation, and the toxicity values themselves must undergo rigorous peer review, including independent external peer review. The EPA IRIS database is always the first choice for toxicity values when they are available. If an RfD or CPSF is listed in the IRIS database, the data are considered adequate and have undergone internal and independent peer review. IRIS values are intended to be used by all EPA programs and are only listed after undergoing cross programmatic evaluation.

Provisional Peer-Reviewed Toxicity Values (PPRTV) are developed according to EPA Standard Operating Procedures (SOPs) and are derived after a review of the relevant scientific literature using the same methods, sources of data, and Agency guidance generally used by the EPA IRIS Program in the development of RfDs and CPSFs. All provisional toxicity values receive internal review by EPA scientists and external peer review by independently selected scientific experts. Minimal Risk Levels are developed as a part of ATSDR's Congressional mandate to produce toxicological profiles (TPs) for hazardous substances found at National Priorities List (NPL) sites. The studies utilized in the development of these TPs are held to the highest standards of data collection, and the peer-review process validates that they are scientifically accurate and reflect current scientific or laboratory best practice with consistent, factual results. The proposed MRLs derived as a part of the TP development undergo a rigorous review process. They are reviewed by ATSDR's toxicologists, a panel of external peer reviewers, an interagency MRL workgroup, with participation from other federal agencies, including NCEH (CDC's National Center for Environmental Health), ATSDR, NTP (National Toxicology Program), NIOSH (National Institute of Occupational Safety and Health), and EPA; and are then submitted for public comment.

The California Environmental Protection Agency (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA) is statutorily mandated by the State of California to carry out human health risk assessments on commercially available pesticides and other toxicants. OEHHA follows EPA risk assessment methodology closely through the Standards and Criteria Work Group

(SCWG), a Cal/EPA Intra-agency group. All studies go through both an internal (OEHHA) and external peer review process pursuant to Health and Safety Code Section 116365(c)(3)(D).

Because Arizona separates the fish and water consumption uses in the Surface Water Quality Standards, ADEQ must calculate water quality standards for Fish Consumption using bioconcentration factors (BCF) from EPA documents or from the technical literature. Arizona has more than 27 different species of sport fish that can be taken and consumed by Arizona anglers. Each of those species occupies a different locus in the aquatic food web, depending on the community composition of each individual waterbody. Because of this variability in species, community composition and food web structure, the BCF value is, by necessity, a broad estimate.

If EPA data are not available, data is gathered from peer reviewed journals, the Extension Toxicology Network (EXTOXNET) and the U.S. National Library of Medicine among other sources. If multiple studies are available or a range given, a rounded mean is calculated for use in deriving standards.

**10. A description of any changes between the proposed rulemaking, to include supplemental notices, and the final rulemaking:**

R18-11-101(36)

- To remove ambiguity in the definition, removed “From these criteria, the Director identifies reference biological assemblages of macroinvertebrates and algae and calculates the Arizona Indexes of Biological Integrity.” Added the phrase “Reference biological assemblages of macroinvertebrates and algae are collected from these reference condition streams for calculating the Arizona Indexes of Biological Integrity thresholds.”

R18-11-107.01(B)(3)

- Changed “AZDES” to “AZPDES” to correct a typographical error.

R18-11-120(B)

- Added “~~grab~~” to correct an inadvertent omission in the NPRM.
- Added “last” in place of “least” to correct for an inadvertent typographical error in the NPRM.

- In response to Comment 25, and to resolve an oversight in the language of the NPRM, clarified that under the enforcement rule, except for chronic aquatic and wildlife criteria, the department will determine compliance with numeric water quality standard criteria from the analytical result of a single sample “unless additional samples are required under this article.”
- In order to clarify that the enforcement rule does not apply to exceedances of a permit, in response to Comment 23, added, “For the purposes of this section, a “non-permitted discharge violation” does not include a discharge regulated under an AZPDES permit.”

#### Appendix A, Table 1

- For the parameter Benz(a)anthracene, changed “0.47” to “47” to correct a typographical error in response to Comment 63.
- For the parameter 3,4 Benz(a)anthracene, changed “3,4 Benz(a)anthracene” to “Benzo[b]fluoranthene” to make consistent with the name used in the EPA list of Priority Pollutants, in response to Comment 33.
- For the parameter Cadmium, removed “see table” in the columns for A&Wc Acute ( $\mu\text{g/L}$ ), A&Ww Acute ( $\mu\text{g/L}$ ), A&Wedw Acute ( $\mu\text{g/L}$ ), and A&We Acute ( $\mu\text{g/L}$ ), and replaced it with “See Table 2” to clarify the language.
- For the parameter Cadmium, removed “see table” in the columns for A&Wc Chronic ( $\mu\text{g/L}$ ), A&Ww Chronic ( $\mu\text{g/L}$ ), and A&Wedw Chronic ( $\mu\text{g/L}$ ), and replaced it with “See Table 3” to clarify the language.
- For parameter Chloronaphthalene beta, removed “Chloronaphthalene beta” and replaced with “beta-Chloronaphthalene” to correct an inadvertent error in response to Comment 34.
- For parameter Chromium (Total), removed “100 T” from the columns FBC ( $\mu\text{g/L}$ ), and PBC ( $\mu\text{g/L}$ ) because the State currently has PBC and FBC standards for Chromium III and VI, in response to Comment 67.
- For parameter “DDT and its breakdown products,” removed “products” and replaced with “products” to correct a typographical error.

- For parameter Demeton, in the columns for A&Wc Chronic ( $\mu\text{g/L}$ ), A&Ww Chronic ( $\mu\text{g/L}$ ), and A&Wedw Chronic ( $\mu\text{g/L}$ ), removed “0.01” and replaced with “0.1” to correct a typographical error in response to Comment 68.
- For parameter 1,4-Dichlorobenzene, in the column FBC ( $\mu\text{g/L}$ ), removed “~~373,333~~ 373” and replaced with “373,333.” In column PBC ( $\mu\text{g/L}$ ), removed “~~373,333~~ 373” and replaced with “~~373,333~~-373,333.” This was done to correct typographical errors in the standards, the NPRM, and in response to Comment 69.
- For parameter Malathion, in the column FC( $\mu\text{g/L}$ ), removed “103” and replaced with “1,455” to correct a typographical error in response to Comment 59.
- For parameter Mirex, in column PBC ( $\mu\text{g/L}$ ), removed “~~187~~ 0.26” and replaced with “187” to reflect the IRIS RfD (0.0002) for mirex, in response to comment 70.
- For parameter N-Nitrosodiphenylamine, renamed as “N-nitrosodi-n-phenylamine” to correct a typographical error in response to Comment 35.
- For parameter Nonylphenol, in the columns for A&Wc Acute ( $\mu\text{g/L}$ ), A&Ww Acute ( $\mu\text{g/L}$ ), A&Wedw Acute ( $\mu\text{g/L}$ ), and A&We Acute ( $\mu\text{g/L}$ ), removed “27.8” and replaced with “28” to represent a rounding up of the 27.8 value, in response to comment 71.
- For the parameter Tetrachlorobenze,1,2,4,5, renamed the parameter “1,2,4,5-Tetrachlorobenzene” to correct an inadvertent error, in response to Comment 38.

#### Appendix A, Table 4

- In the column Chronic Aquatic and Wildlife coldwater, warmwater and edw, removed “~~19.8~~ 10.8” and replaced with 19.8 to correct a typographical error, in response to Comment 66.

#### Appendix A, Table 11

- Inserted language to clarify the application of the ammonia standard, in response to Comment 78.
- Inserted a comma to correct a typographical error in the formula at the end of the table.

#### Appendix A, Table 12

- Inserted language to clarify the application of the ammonia standard, in response to Comment 78.
- Inserted parentheses to correct a typographical error in the formula at the end of the table.

Appendix A, Table 13

- Inserted language to clarify the application of the ammonia standard, in response to Comment 78.

Appendix A, Table 14

- Inserted language to clarify the application of the ammonia standard, in response to Comment 78.
- Inserted a comma to correct a typographical error in the formula at the end of the table.

Appendix A, Table 15

- Inserted language to clarify the application of the ammonia standard, in response to Comment 78.

Appendix A, Table 16

- Inserted language to clarify the application of the ammonia standard, in response to Comment 78.

Appendix A, Table 17

- Inserted language to clarify the application of the ammonia standard, in response to Comment 78.

Appendix B

- Removed reference to “Steele Indian School Pond,” and replaced with previous name, “Indian School Park Lake” in response to Comment 87.
- Renamed “Jack’s Canyon Creek” to “Jacks Canyon Creek,” “Havasu Canyon Creek” to “Havasu Creek,” and “Martinez Creek” to “Martinez Wash,” as well as references thereto, to conform with USGS topographic maps.
- Removed errant period in MG Salt River description.

- ADEQ is not removing Pretty Water Lake or its designated uses from Appendix B as originally proposed in the NPRM. ADEQ proposed to remove this waterbody because erroneous GIS data indicated that the lake was located in California and, therefore, outside of Arizona’s CWA jurisdictional authority. The intended effect of this change was to improve the accuracy of Appendix B without affecting waterbodies or corresponding interests within State boundaries. New information now indicates that the GIS location within California was incorrect, and that additional information will be needed before further changes can be made. Therefore, ADEQ is not removing or changing the listing for Pretty Water Lake at this time. This is consistent with the intended effects of the NPRM in that it does not remove protections from any waterbody, or affect corresponding interests, within the State.

**11. An agency’s summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments:**

**Comment 1: Pima County Administrator – Designated Uses**

ADEQ has rejected Pima County’s request to designate existing uses. We would like to urge ADEQ to designate, in this Triennial Review, at least the warm-water aquatic wildlife uses on County conservation lands we own (see attached table). ADEQ proposes to defer consideration until the next Triennial Review. We find no basis in the Clean Water Act to defer protection of existing uses of surface waters.

We have livestock and warm-water aquatic wildlife uses in Pima County that are not currently being protected. ADEQ’s response to our request (Attachment 4) does not provide any further protection for Pima County’s wildlife. It is not clear why existing wildlife uses on our lands must wait for recognition until ADEQ is considering other wildlife uses elsewhere in the state. Our aquatic sites are discrete and unrelated to other aquatic wildlife waters in the state. We recognize that ADEQ may benefit from considering livestock watering in a state-wide context, but again question the legal basis for deferring any designation of an existing use on lands we own in fee.

**ADEQ Response 1:**

ADEQ did not propose substantive changes to Appendix B in this triennial review because the underlying definition of Waters of the United States is so unsettled at this point. The EPA and the U.S. Department of the Army have recently proposed a new definition of Waters of the United States that could provide greater clarity in the future. For this reason, ADEQ did not add any additional waters or designated uses to Appendix B during this triennial review.

ADEQ notes, however, that a water body need not necessarily be listed in Appendix B to receive the protection of water quality standards. Under the Tributaries Rule, aquatic and wildlife standards (among others) are applied to tributaries of listed surface waters. AAC R18-11-105. Thus, for tributaries of listed surface waters in Pima County (as well as elsewhere in the State), protections for aquatic and wildlife apply.

ADEQ also appreciates the efforts by Pima County to identify additional AgL uses. The methodology proposed by Pima County will require further evaluation before ADEQ can make a determination that a use is presently being attained. ADEQ would be required to provide documentation justifying how its consideration of the use and value of the water support the State's action. 40 C.F.R. § 131.10(a). A use attainability analysis could be used to meet this requirement, which ADEQ would also be required to conduct. *Id.*; 40 C.F.R. § 131.10(j)(1). Such an analysis would require a structured, scientific assessment of the factors affecting the attainment of the use, which could include physical, chemical, biological, and economic factors. 40 C.F.R. § 131.3(g). Additionally, ADEQ will be required to consider water quality standards of any downstream waters. 40 C.F.R. § 131.10(b). Therefore, ADEQ will include these topics for review in the next triennial review.

### **Comment 2: Pima County Administrator – Public Hearing Requested**

We ask that ADEQ hold a public hearing on the proposed rule in Tucson. We appreciate the public meetings that ADEQ has held in Tucson. All have been well-attended, and each has afforded ADEQ the opportunity to hear the preferences and experiences of local citizens in a way that is different from computer-assisted, WebEx meetings which have proved difficult to administer.

### **ADEQ Response 2:**

ADEQ held stakeholder meetings in both Phoenix and Tucson to gather input throughout the triennial review process. ADEQ concluded this process with a recorded hearing in Phoenix to allow stakeholders to submit formal comments. ADEQ appreciates the desire for a public hearing in Pima County. However, during the public comment period, stakeholders are encouraged to submit written comments anytime during the comment period, and attend the public hearing as their schedules allow. Written comments receive the same weight as oral comments made at a hearing. Stakeholders may also contact ADEQ staff at any time, not just during the comment period, to discuss or submit letters or emails regarding any issues of concern to stakeholders.

### **Comment 3: Pima County Administrator –Protection for Outstanding Waters**

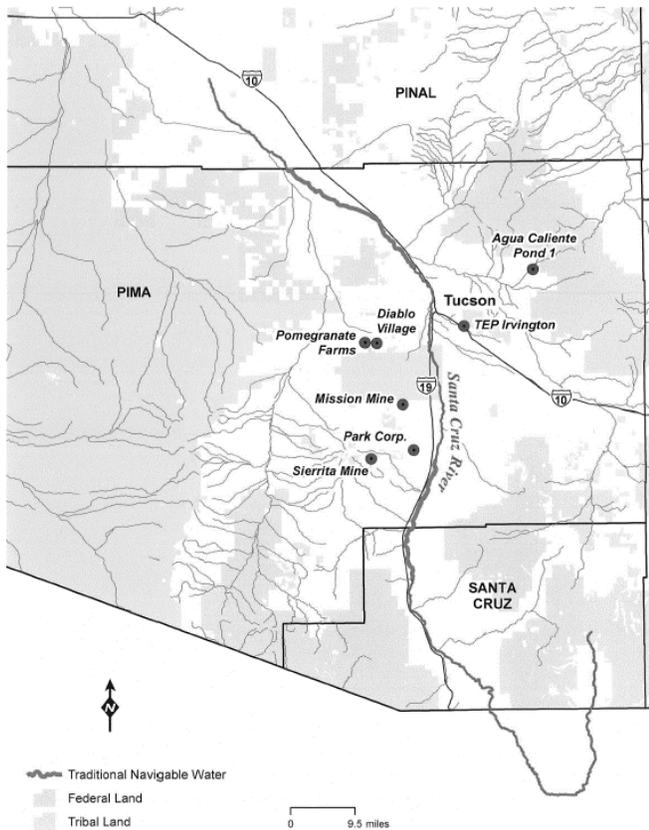
We are gratified to see that this proposed rule does not reduce any existing protections for Outstanding Waters per se.

**ADEQ Response 3:**

Thank you for the comment. ADEQ did not propose any revisions to the OAW rule during this triennial review.

**Comment 4: Pima County Administrator – The Surface Water Definition Must Not be Narrowed**

The proposed narrowing of the surface water definition to Navigable Waters, a term which is further defined in statute to mean Waters of the U.S., in the current rule proposal is of grave concern. Arizona needs to maintain a definition of surface water in the water quality rule that is expansive enough to include all surface waters that constitute “waters of the state” in accordance with that statutory definition in A.R.S. §49-201(41). The existing definition is sufficiently broad to allow ADEQ to develop rules for waters of the state, which would be distinct from Waters of the U.S. The proposed restriction of the definition is not. For this reason, we oppose narrowing the definition of surface waters in Rule 18-11. As you know, many streams and water bodies have already been classified by the U. S. Army Corps of Engineers as lacking sufficient connection to a traditionally navigable Water of the U. S. to merit continued regulation under the Clean Water Act. My staff has mapped the locations in Pima County where the U. S. Army Corps of Engineers has determined certain water bodies are no longer Waters of the U.S. [*Map provided in Attachment 5, a black on white version is presented below*] Because ADEQ has not adopted any rules for these and other surface waters in Arizona that are no longer Waters of the U.S., the state cannot continue to regulate the discharge of pollutants at these locations via the existing Clean Water Act permits. ADEQ has compiled a state-wide inventory of waterbodies listed in Appendix B that are no longer regulated under the Clean Water Act, along with those that may no longer be regulated under the existing definition of Waters of the U.S. Narrowing the definition of surface water to exclude waters of the state while retaining waters of the state in Appendix B, as is currently proposed, will create an inaccurate record.



**ADEQ Response 4:**

As stated in the preamble discussing the change to the definition of “surface water,” under the section titled “*New or Modified Definitions [R18-11-101]*,” the definition of “surface water” in Article 1 has been intended, throughout the years, to align with the federal definition. This is because the definition establishes the foundation upon which ADEQ’s federally based programs are built. Unless specifically authorized by the legislature, in applying these federal programs, ADEQ must be consistent with and no more stringent than the corresponding federal law. *See* A.R.S. §§ 49-104(A)(16); 49-255.01(B). These federal programs are established to protect waters of the United States. These are the only waters for which the federal government shares oversight jurisdiction with the state under the CWA. Therefore, our interpretation of the definition of “surface water” in A.A.C. Title 18, Chapter 11, Art. 1 must be consistent with the federal definition.

Water quality standards under the CWA apply to waters of the United States. Because of this, it is important to be clear which waters are currently federally jurisdictional. This ensures that NDPES

and other CWA program requirements are met and that communication between the state and EPA, in its oversight role, is clear.

For example, under the Clean Water Act, the discharge of any pollutant by any person from any point source into waters of the United States is prohibited unless the source has a NPDES permit. *See* 33 U.S.C. § 1311(a). ADEQ has primacy over the NPDES program in Arizona, called AZPDES. NPDES permits must include appropriate limitations to ensure that water quality standards established under the CWA will be met in the event that technology-based CWA-required treatment is not enough to ensure the attainment of such standards. *See* 33 U.S.C. § 1311(b)(1)(C). EPA has the opportunity to review and object to permits that do not adequately meet water quality standards. *See* 33 U.S.C. § 1342(d). It is important then that it is clear over which waters and standards EPA has authority to review and object to a permit in order to prevent confusion and rework.

ADEQ also notes that future adjustments to Appendix B may be needed as the definition of waters of the United States becomes clearer. However, as stated in the preamble, ADEQ is not making substantive changes to Appendix B because the underlying definition of waters of the United States is so unsettled at this point. Until the scope of waters of the United States is clearer, changes made to Appendix B could lead to further confusion and inaccuracies. ADEQ, therefore, declines to make substantive changes to Appendix B.

#### **Comment 5: Pima County Administrator – Adopt Water Quality Standards for Waters of the State**

Arizona Revised Statutes §49-203 gives ADEQ the authority to adopt standards for waters of the state determined through future Approved Jurisdictional Determinations or federal Waters of the U.S. rule changes. We urge ADEQ to adopt water quality standards for streams that would allow for continued and uniform enforcement of the standard so that these could be applied to new or existing discharges of pollutants to streams (or tributaries of streams) that lose Waters of the U.S. status. The increasing discrepancy between regulated versus non-regulated stream reaches is confusing and potentially dangerous to applicants who propose to discharge into watercourses. A change in the definition of Waters of the U.S. could result in the loss of any protection to a watercourse. If further changes to the definition occur due to lawsuits, which are anticipated, there is a risk to the discharger. By developing water quality standards for the waters of the state, this risk is reduced since protections to these water bodies will remain. Counties in the state of Arizona cannot fill the governance gap left by the continued erosion of the Clean Water Act's

scope because the power to regulate discharges of pollutants is reserved to the state. State assumption of the current Corps' role in determining jurisdiction will not fill the gap. Indeed, if the state takes up the Corps' role, the state may well accelerate the growth of this emerging class of unregulated streams and lakes.

Because of the need for addressing the growing number of streams and lakes that are no longer regulated under the Clean Water Act, ADEQ should more fully develop in rule the ability to regulate pollutant discharges to waters of the state that are no longer deemed waters of the US.

**ADEQ Response 5:**

Thank you for your comment. ADEQ notes that while it currently does have the authority to create standards for waters of the state that are not waters of the United States (i.e. federal "navigable waters" under the CWA), ADEQ would need additional authority to broadly implement such standards at this time. *See* A.R.S. § 49-221(B). ADEQ acknowledges the recommendation for a waters of the state program, and intends to evaluate the possibility of pursuing such a program. Any development of such a program would be preceded by significant interaction with stakeholders and the general public.

**Comment 6: Pima County Administrator – Use the Aquifer Protection Program**

Arizona already has a well-established Aquifer Protection Program (APP) that regulates the release of pollutants to isolated bodies of water where there is a reasonable probability that the pollutant may reach an aquifer. We urge ADEQ to use the APP to establish permitting for point source discharges to waterbodies that are waters of state that are not Waters of the U.S. The APP is a permit program that could be adopted to utilize surface water standards identified in rule for waters of the state in order to set permit limits and regulate facilities in a similar manner to what is now done in the AZPDES program. Because of the need for addressing the growing number of streams and lakes that are no longer regulated under the Clean Water Act, ADEQ should more fully develop in rule the ability to regulate pollutant discharges to waters of the state that are no longer deemed waters of the US.

**ADEQ Response 6:**

Were the WOTUS definition to change as is currently being proposed, the existing APP program would offer protection to the level of the Aquifer Water Quality standards for discharges that have a reasonable probability of reaching an aquifer. As stated in prior responses, ADEQ intends to evaluate the possibility of establishing a waters of the state program. Adapting the existing

APP program may be one avenue by which non-WOTUS waters of the state could be provided protection; this option and others identified by ADEQ and via the associated stakeholder engagement process will be further explored in the course of that evaluation.

**Comment 7: Pima County Administrator –Public process: Notification of rulemaking**

Comment: ADEQ notification process biases its outreach to members of the regulated community. ADEQ should make an effort to provide a more general notification to affected communities at the beginning of each Triennial Review. ADEQ should broaden its notification methods, prior to the release of this year’s public rule.

**ADEQ Response 7:**

Thank you for your comment. ADEQ is currently reevaluating its Triennial Review process flow and will consider this recommendation in its reevaluation of the process. However, ADEQ notes that the mailings have been sent out to thousands of interested persons for each public stakeholder meeting and notification of draft or proposed rules for this rulemaking. The last mailing for the proposed rule and comment period went out to 5,407 recipients.

**Comment 8: Pima County Administrator –Tribal engagement**

Issue: Changes proposed by ADEQ could affect many streams that cross tribal lands.

Comment: Outreach and engagement with tribes is appropriate.

**ADEQ Response 8:**

Thank you for your comment. The rulemaking process is open to all residents of the state, including tribes, with the corresponding ability to engage and participate. During this current triennial review, ADEQ sent notices to representatives of Tribal Nations with an invitation to participate. Additionally, ADEQ is actively working to improve its tribal consultation policy and engagement processes.

**Comment 9: Pima County Administrator – ARS 49-221, AAC R18-11-101 (41) Surface Water Definition**

Issue: Current definition of “Surface water” within AAC R18-11-101 (41) is broader than CWA.

Comment: ADEQ should propose and adopt rules to provide water quality standards for waters of the state, instead of narrowing the definition to align with WOTUS. Past decisions of the U. S.

Army Corps have identified waters of the state that are not Waters of the US (WOTUS). Narrowing the definition to mean only navigable waters will change which watercourses are regulated under these rules. Even without the rule revision, the Corps are determining more streams non-navigable each year.

The term “surface waters” should include all above-ground waters in the state with “navigable waters” as a subset covering those surface waters subject to federal jurisdiction. Non-WOTUS surface waters in the state demand protection. Writing them out of the “surface water” definition makes that impossible.

The definition of WOTUS is still unclear in most parts of the state. The Corps’ AJDs are made only on a project-level, not a watershed level; this piecemeal approach is another reason why aligning to WOTUS decisions should be deferred, at least until and unless ADEQ is able to assume the jurisdictional determinations.

ADEQ has not afforded the public an opportunity to understand the consequences of changing this definition. This idea was rejected by the designated-use workgroup because of the uncertainty in the direction of the national WOTUS rule.

We note that Appendix B still includes waters of state that the Corps has determined are not waters of the US. Narrowing the surface water definition while retaining the current Appendix B creates unresolved inconsistencies, indeed inaccuracies, within the rule itself. Allowing for the adoption of rules to provide water quality standards for waters of the state will preserve the protections to waters in Appendix B.

**ADEQ Response 9:**

Thank you for your comment. Please see Responses 4 and 5 above.

ADEQ has consistently interpreted the definition of “surface water” to mean “waters of the United States.” Indeed, the existing standards were developed and approved under CWA authority. Therefore, there is no practical difference between applying statutory definition of “navigable waters” and the current rule definition. The analysis on the ground is the same and is based on federal guidance and case law.

In the event that the definition of waters of the United States should narrow, ADEQ would not be authorized to implement AAC R18-11-101 et seq. standards as they are currently applied. To systematically implement waters of the state standards, ADEQ would need additional statutory authority.

**Comment 10: Pima County Administrator – Effluent Dependent Water Definition**

Issue: Current definition of “Effluent Dependent Water” (EDW) within AAC R18-11-101 (17).

Comment: Revise to provide greater clarity for effluent dependent water definition.

**ADEQ Response 10:**

During its review of the surface water quality standards, ADEQ established an Antidegradation and Effluent Dependent Waters (EDW) workgroup to provide technical recommendations regarding the antidegradation rule and EDW definition. The workgroup produced a document with its final recommendations, available on the ADEQ website at <https://azdeq.gov/node/3933>. In that document, the workgroup agreed that the EDW definition should be revised to account for infrequent, short-duration discharges that may not establish an effluent dependent water. However, there was no consensus as to the exact frequency or duration required to create an EDW.

In addition to the inability to agree on a specific definition for EDW, ADEQ identified a number of other issues that complicated any effort to revise the EDW definition. One such issue was that further research regarding frequency, duration, and volume of discharges, as well as a study of stream ecosystems created by point source discharges, would be needed to scientifically support a modification. For example, some stakeholders suggested that the EDW definition should be revised to define an EDW as a waterbody that consists of a discharge that continues for longer than 14 days more than two times per year. However, it is unclear how the suggested duration and frequency was determined, and there are likely instances in which a permittee may discharge for shorter periods than 14 days much more frequently than twice per year. Another issue was that if the definition of EDW were to change, that would change the application of the surface water quality standards. Therefore, ADEQ would need to ensure that any change for each applicable water body would be justifiable under the Clean Water Act. See 40 C.F.R. § 131.10(a). Because of the complex issues surrounding a change to the EDW rule, ADEQ elected not to modify the definition of EDW in this triennial review. ADEQ will consider this issue in the next triennial review.

**Comment 11: Pima County Administrator – AAC R18-11-101(30) Perennial Definition**

Issue: Current definition of “Perennial water” within AAC R18-11-101(30).

Comment: We support this change.

**ADEQ Response 11:**

Thank you for your comment. ADEQ notes that it is not proposing changes to the definition of “perennial water” at this time.

**Comment 12: Pima County Administrator – Wastewater Definition**

Issue: Current definition of “Wastewater” within AAC R18-11-101 (48), which defines by exclusion. At Pima County’s request, ADEQ amended the workgroup charter to discuss topic of

Comment: Provide greater clarity for wastewater definition relevant to the applicability of effluent dependent water.

**ADEQ Response 12:**

In meetings of the Antidegradation and EDW workgroup (discussed in Response 10), there was also a suggestion that the definition of wastewater should be modified to mean only effluent from a sewage or industrial wastewater treatment facility. This was because EDW criteria were established based on studies and assumptions related to discharges of effluent from municipal wastewater treatment plants. However, “wastewater” as used in Chapter 11, Article 1 has a broader meaning than just treated water. Rather, the word is used to describe the water discharged from a point source, which may not always be treated. ADEQ is required to regulate all non-exempted discharges of pollutants from point sources, whether the discharged water is treated or not. *See* 33 U.S.C. § 1311(a). Therefore, considering the use of “wastewater” throughout Chapter 11, Article 1, and its broad meaning, the term cannot be limited to only treated water.

In the 2008 triennial review, ADEQ explained that “wastewater” is a broader term than “treated wastewater” and must be applied broadly to comply with CWA requirements. 14 AAR 4713 (December 20, 2008). Depending on the particular circumstance, the discharge of untreated wastewater from a point source may still comply with applicable standards, regulations, and permit conditions. The 2008 triennial review used the example of a point source discharge consisting of untreated cooling wastewater from a power plant to ephemeral water. However, “discharge of wastewater” as used in the rules is more limited than “discharge of pollutants” because wastewater is defined by what it is not, excluding certain classes of pollutant discharges (e.g. stormwater). ADEQ considered modifying the term “wastewater,” but could not find a different term that adequately accounted for everything that “wastewater” is, as it is used in this

article. Therefore, ADEQ intends to retain the term “wastewater” as it is currently defined.

**Comment 13: Pima County Administrator – R18-11-102 Applicability to Riparian Projects**

Exempt riparian restoration projects. The rationale for this change is that riparian restoration projects as described would be using high-quality recycled water, and would be operated in a manner that would prohibit discharge to surface water under normal operating conditions. In addition, ADEQ already has the Recycled Water Rules permit program, under which these facilities may be reviewed and approved for permit.

**ADEQ Response 13:**

ADEQ appreciates the comment. The addition of the suggested new exemption listing under R18-11-102 is a new idea which would take considerable time to evaluate. Therefore, ADEQ recommends submitting the idea for consideration in the 2022 triennial review. However, ADEQ notes that surface water quality standards apply to align with federal law. Under the Clean Water Act, the discharge of any pollutant by any person from any point source into waters of the United States is prohibited unless the source has a permit to do so. *See* 33 U.S.C. § 1311(a). If a project is anticipated to produce a discharge regulated under CWA, and is not authorized to do so, the discharge would be a violation of the CWA. ADEQ cannot exempt a class of likely dischargers to a water of the United States from its water quality standards, nor could EPA approve such an action.

**Comment 14: Pima County Administrator –R18-11-102 Applicability to Pits**

At Issue: (B)(2) A man-made surface impoundment and any associated ditch and conveyance used in the extraction, beneficiation, or processing of metallic ores that is not a surface water or is located in an area that once was a surface water but is no longer a surface water because it has been and remains legally converted, including

a. A pit,

Comment: ADEQ should remove the exemption in the rule R18-11-102.B.2. (Applicability) that exempts pit lakes from surface water quality standards. These should be considered waters of the state.

**ADEQ Response 14:**

The surface water quality standards contained in R18-11-1 only apply to a surface water. As stated in R18-11-101, a surface water is defined as a water of the United States. Since 102(B)(2) specifically relates to waters that are not or are no longer surface waters, the surface water quality standards do not apply. As such, the surface water standards set forth in Title 18, Chapter 11, Article 1 will not apply to any pit that is not a surface water. Although ADEQ has authority to adopt water quality standards for waters of the state, there is no current rule-making process to adopt state standards. However, ADEQ will engage stakeholders on any future rule-making.

**Comment 15: Pima County Administrator –AAC R18-11-105, Appendix B, Designated Uses**

Issue: NO ACTION to update Appendix B to improve the accuracy of designated uses. ADEQ by letter informed Pima County that they will defer until a future TR.

Comment: Define new designated uses to tributaries where warranted to protect existing uses on County-owned lands. We have AgL and A&Ww uses in Pima County that are not being protected by ADEQ's response to our request dated 12/18/2018 (attached). There is no reason why existing wildlife uses on our lands must wait for recognition until ADEQ is considering other wildlife uses elsewhere in the state.

Likewise, amend Appendix B to better identify the isolated lakes and ponds that have already been determined to be waters of the state by the Corps. Consider creation of a separate Waters of the State list (possibly adding an Appendix C) so it is clear that associated designated uses are no longer protected under the Clean Water Act.

**ADEQ Response 15:**

ADEQ did not propose substantive changes to Appendix B because the underlying definition of Waters of the United States is so unsettled at this point. The EPA and the U.S. Department of the Army have recently proposed a new definition of Waters of the United States that could provide greater clarity in the future. ADEQ also notes that the Army Corps of Engineers does not make waters of the State determinations.

As for additional designated use determinations, please see Response 1.

**Comment 16: Pima County Administrator –AAC R18-11- 107.01(C)(4) Tier 3**

Issue: Proposed to move OAW language in (C)(4) into its own new section (C)(5) and clarify

occurrence of temporary impacts cannot be “regularly occurring” The proposed change broadens the allowance of temporary impacts to Tier 3 protected OAWs so that it would include discharges beyond those regulated under §404 which require §401 approval.

Comment: The suggested use of the term “regularly occurring” in an attempt to better clarify the occurrence of temporary impacts instead invites further confusion. We do support the move of OAW language in (C)(4) into its own new section (C)(5).

**ADEQ Response 16:**

ADEQ understands the comment to mean that AAC R18-11-107.01(C)(4) will apply to §404 discharges that may affect existing water quality in an OAW, and not only those that require §401 approval. This is consistent with the text of the rule. ADEQ proposed moving the allowable temporary impacts from R18-11-107.01 (C)(4) into its own section (C)(5) in early triennial review discussions, but that proposal was not included in the NPRM nor will it be part of the NFRM. ADEQ’s position is that the term “regularly occurring” serves to better show what qualifies as a temporary water quality impact. While ADEQ declines to define the term in the rule, ADEQ notes here that the intent is to protect OAWs from impacts that may be less than 6 months in duration but occur every 3 months, for example.

**Comment 17: Pima County Administrator –AAC R18-11-107.01 Tier 2**

Consideration should be given to broaden Tier 2 antidegradation standards to include intermittent streams, as well as ephemeral reaches that are directly adjacent to or tributary to intermittent or perennial streams during the Triennial Review.

**ADEQ Response 17:**

ADEQ has established that the most current, scientifically defensible methodology for allocating a Tier class is by flow-regime. Significant degradation for a Tier 2 water is determined at critical flow conditions, R18-11-107.01(B)(2). R18-11-101(13) defines critical flow condition as the "lowest flow condition over seven days that has a probability of occurring once in ten years (7Q10)." Since both ephemeral and intermittent waters have extended periods of no flow, it is not possible to determine if significant degradation to water quality would occur when there is no water in the stream channel. Tier 1 antidegradation protection is therefore applied to ephemeral and intermittent waters unless an intermittent water is an OAW, where Tier 3 would apply.

**Comment 18: Pima County Administrator – AAC R18-11-107.01(B)(3)(c) Tier 2 baseline**

Issue: To renumber the Baseline Characterization section from R18-11-107.01(B)(3)(c) to R18-11-107.01(B)(3)(a).

Comment: We support this change.

**ADEQ Response 18:**

Thank you for the comment.

**Comment 19: Pima County Administrator –AAC R18-11- 107(D) OAW**

Issue: The anti-degradation policy prohibits any degradation of an OAW, requiring existing water quality to be maintained and protected as a “Tier 3” water.

Comment: We support the current language preventing degradation of OAWs, and are pleased to see that ADEQ rejected Hudbay’s proposal to weaken protections for these streams.

**ADEQ Response 19:**

Thank you for the comment.

**Comment 20: Pima County Administrator –R18-11-109(A).**

Issues:

- New standard “Statistical Threshold Value” replaces “Single Sample Maximum” and is ambiguous regarding the confidence intervals.
- Provide SWQS consistent with scientific studies.

Comment: ADEQ proposes to use the new term “statistical threshold value” (STV) in place of “single sample maximum” (SSM). While STV is consistent with EPA’s criteria, the new term is confusing because it implies the data must be evaluated statistically, instead ADEQ means that the number 410 was statistically derived. Clarification can be provided by 1) adding a footnote to the term that STV means SSM or 2) adding a new definition for STV in R18-11-101.

**ADEQ Response 20:**

As Pima County noted, ADEQ is removing the term “Single Sample Maximum” and replacing it with “Statistical Threshold Value” in R18-11-109(A) to be consistent with EPA’s 2012 Recreational Water Quality Criteria. Pima County is correct that the Statistical

Threshold Value is statistically derived based on the 90<sup>th</sup> percentile distribution of the water quality data used to calculate the geometric mean criteria. Using the 90<sup>th</sup> percentile statistical value accounts for natural variability while limiting the number of allowable exceedances prior to determining a water is impaired. The Single Sample Maximum values were often interpreted to be “never to exceed” thresholds. That interpretation is more stringent than the 1986 Beach Act intended. As such, ADEQ declines to define the Statistical Threshold Value as the Single Sample Maximum as this could perpetuate this misunderstanding. However, ADEQ reiterates that the commenter is correct that the Statistical Threshold Value is a static number for purposes of these rules.

**Comment 21: Pima County Administrator – Antidegradation reviews for CWA 401 certifications**

Issue: ADEQ is proposing modification to antidegradation criteria to ensure there will be a legal mechanism to account for review of 404 permits issued by state. For state-issued 404, 401 does not apply and certification is not required.

Comment: Arizona’s water bodies are principally ephemeral streams. Perennial waters are few in number, and their chemical, physical and biological integrity is greatly affected by the more numerous ephemeral and intermittent tributaries cited here, and attached for your convenience. Because of these relationships, and the extreme variability in our climate (also discussed in the attached paper), it makes little sense to limit Tier 2 designations based on rigid and imperfect distinctions on flow regime. Consideration should be given to broaden Tier 2 antidegradation standards to include intermittent streams, as well as ephemeral reaches that are directly adjacent to or tributary to intermittent or perennial streams during the Triennial Review.

**ADEQ Response 21:**

The comment here does not seem to relate directly to the issue identified above it. Regarding that issue (antidegradation of 404 permits issued by the state), please see the explanation in the preamble for the modifications to R18-11-107.01 and the response to Comment 29. As for broadening Tier 2 antidegradation review, please see Response 17.

**Comment 22: Pima County Administrator – R18-11-112(D)(1) OAW**

Criteria for flow regime and “free-flowing condition” was added in 2002 rulemaking. Support deletion of flow regime criterion entirely. Most states do not use this as a criterion. Most streams in Arizona are not perennial, but there is limited information about intermittency. Because of

this, and the extreme variability in our climate, it makes little sense to limit based on rigid and imperfect classification of flow regime.

**ADEQ Response 22:**

ADEQ acknowledges the concern regarding use of perennial or intermittent flows as a criterion for OAW nomination; however, ADEQ is not proposing any revisions to the OAW rule during this triennial review. This flow regime question was the subject of Charter Question #4 of the OAW Workgroup convened in November 2017 to analyze the OAW rule and provide recommendations to ADEQ. Workgroup members did not reach consensus, but did identify three positions: 1) drop the flow requirement provision entirely, 2) retain the current language, and 3) limit OAW designations to perennial waters only. For more information, the Workgroup discussion was summarized in the “Final Recommendations” document, posted on the ADEQ website at <http://azdeq.gov/node/3933>. ADEQ will consider the Workgroup recommendations during the next triennial review.

**Comment 23: Pima County Administrator – R18-11-120: Enforcement**

Issue: Delete an enforcement provision in R18-11-120(a) and (d). Alter (b) and (c).

Comment: If ADEQ merely wants to clarify that exceedances from permitted discharges are not subject to enforcement due to the permit shield, then that would be consistent with federal law for numeric standards. But the current wording is not entirely clear, so we oppose it as written. This could be discussed during the next Triennial Review.

**ADEQ Response 23:**

ADEQ recognizes that some ambiguity existed in the proposed rule and has added language to the enforcement rule to clarify that it will not apply to discharges regulated under a permit.

As stated previously by ADEQ, the enforcement rule at R18-11-120 does not apply to permit violations. In its response to comments in the 2002 triennial review rulemaking, ADEQ stated that this rule did not apply to discharge limitations in NPDES permits or how EPA enforces those permit conditions.” *NFRM*, 8 A.A.R. 1264, 1393 (Mar. 29, 2002). Likewise, now that ADEQ has obtained federal approval of its AZPDES program, this enforcement rule does not apply to exceedances of limits or noncompliance with conditions in current permits.

In order to clarify this point, ADEQ has added the following language to subsection (B):

For the purposes of this section, a “non-permitted discharge violation” does not include a discharge regulated under an AZPDES.

Additionally, the commenter postulates that ADEQ is attempting to clarify that “exceedances from permitted discharges are not subject to enforcement due to the permit shield...” ADEQ wishes to make clear that this rule does not apply to the application of a permit shield, and that any inference that the enforcement rule or statements made in this rulemaking articulate a standard for application of a “permit shield” for permitted facilities is incorrect. A permit shield protects permit holders from certain legal liabilities, provided the relevant permit holder complies with the terms of its permit. CWA § 402(k); see also A.R.S. § 49-255.01(F); A.A.C. R18-9-A904(A). Any application of a permit shield would necessarily involve compliance with a permit, and ADEQ has made clear that this enforcement rule does not apply to discharges regulated under a current permit. Therefore, this rule does not and cannot create any standard for application of a permit shield.

**Comment 24: Arizona Mining Association (AMA) - AMA Supports ADEQ’s Proposed Change to the Definition of “Surface Water” in R18-11- 101.**

ADEQ proposes to change the definition of “surface water” in R18-11-101(45) to mean “navigable waters” as defined in A.R.S. § 49-201(22). AMA supports this change. A.R.S. § 49-201(22) defines “navigable waters” to correspond with the federal definition of “waters of the United States” (WOTUS) under the CWA. The proposed revision to the regulatory definition of “surface water” will allow it to be consistent with governing state and federal law and provide needed flexibility in light of the uncertainty surrounding the federal WOTUS definition.

By contrast, retaining the current definition would create confusion, as that definition is not consistent with (1) the scope of WOTUS as implemented in Arizona today (using guidance issued by EPA and the Corps following the Supreme Court’s decision in *Rapanos v. United States*, 547 U.S. 715 (2006)); (2) the scope of WOTUS included in the 2015 definition of WOTUS adopted by EPA and the Corps (but not applicable in Arizona as a result of an injunction issued in *State of North Dakota et al. v. United States*, 127 F. Supp. 3d 1047 (D.N.D. 2015)); and (3) the scope of WOTUS included in the rule recently proposed by EPA and the Corps (84 Fed. Reg. 4154 (February 14, 2019)).

ADEQ correctly notes in the preamble that the existing surface water quality standards have historically been designed to align with federal requirements and implement the federal definition. ADEQ has been quite clear on this point in the past. *See, e.g.*, 8 Ariz. Admin. Reg.

1264, 1273 (March 29, 2002) (“the surface water quality standards apply to “navigable waters” as defined in the Clean Water Act. That is, they apply to waters of the United States.”) (preamble to final 2002 triennial review rules). This is more than a matter of administrative discretion; the process followed by ADEQ to adopt the existing standards is one mandated under the Clean Water Act *only* for navigable waters as defined in that statute (*i.e.*, waters of the United States). *See* 40 C.F.R. § 131.3(i) (defining “water quality standards” as uses and criteria adopted “for the waters of the United States”). Moreover, even though ADEQ does possess the authority to adopt standards for “waters of the state” that do not constitute waters of the United States, it must follow a somewhat different process when doing so. Specifically, in adopting standards for waters of the state that are not waters of the United States, ADEQ must consider additional factors that it need not consider when adopting standards for waters of the United States. *See* A.R.S. § 49-221(B). ADEQ has not evaluated those additional factors when adopting the existing surface water quality standards in Title 18, Chapter 11, Article 1.

For all the foregoing reasons, AMA supports the proposal to modify the definition of “surface water” in A.A.C. R18-11-101 to track the definition of “navigable waters” provided in A.R.S. § 49-201 and used to implement Clean Water Act programs.

**ADEQ Response 24:**

Thank you for your comment.

**Comment 25: Arizona Mining Association - AMA Strongly Disagrees with ADEQ’s Proposed Changes to the Enforcement Rule, R18-11-120, and the Preamble Language Regarding the Scope and Applicability of the Rule**

ADEQ proposes to modify R18-11-120 to “clarify that enforcement for all numeric standards, except for [aquatic and wildlife] chronic standards, would be determined by analysis of a single sample.” 25 Ariz. Admin. Reg. 177, 186 (Feb. 1, 2019). This proposal plainly lacks any basis in law or fact, is inconsistent with existing water quality standards and must be abandoned. The illegality of the proposed revisions is demonstrated by the fact that multiple water quality standards expressly require more than one sample for purposes of determining compliance. For example:

- Suspended sediment concentration — must be determined from “a minimum of four samples collected at least seven days apart.” A.A.C. R18-11-109(D).

- Nutrient criteria — must be determined from “[a] minimum of 10 samples, each taken at least 10 days apart in a consecutive 12-month period,” which are then used to determine a 90th percentile that 10 percent of the samples may not exceed. A.A.C. R18-11-109(F).

Additionally, AMA has serious concerns with ADEQ’s preamble language relating to the scope and applicability of R18-11-120. First, ADEQ states that this rule “should only apply to non-permitted discharges.” 25 Ariz. Admin. Reg. at 186. This statement and the discussion that follows appear to reflect confusion between compliance with water-quality based effluent limitations for discharges subject to individual AZPDES permitting and compliance with water quality standards in the receiving water. R18-11-120 does not apply to “discharges” at all; it applies only to compliance with water quality standards in the receiving water. This remains true both in the permitted and non-permitted context. For example, if a permit includes a condition that requires sampling in the receiving water body, the sampling requirements specified in the applicable water quality standard would apply—such as “four samples collected at least seven days apart” in the case of suspended sediment. For ADEQ to attempt to modify the enforcement rule to avoid or override the sampling requirements in the water quality standards is arbitrary and unsupportable.

Second, ADEQ states that the enforcement rule is “not intended for CWA assessment purposes.” 25 Ariz. Admin. Reg. at 186. This clearly contradicts agency statements in preambles to prior rulemakings.

Specifically, in ADEQ’s 2002 preamble to the revision of R18-11-120, ADEQ clearly indicated that R18-11-120 was relevant to, and in fact guided, the agency’s “ongoing monitoring of the surface waters in the state.” 8 Ariz. Admin. Reg. at 1315. The agency further explained that “ADEQ amended R18-11-120 to make it possible to assess compliance with chronic A&W water quality standards.” *Id.* In its preamble to the 2002 revision of the impaired water identification rule (in Title 18, Chapter 11, Article 6 of the Arizona Administrative Code), ADEQ recognized that certain water quality standards, such as chronic aquatic and wildlife criteria, require “similar, multiple sampling events to amass the minimum number of samples to perform the necessary statistics” and do “not allow for a one time or nonrecurring event to serve as justification for listing a stream”). 8 Ariz. Admin. Reg. 3394, 3396-97, 3446 (Aug. 9, 2002). Clearly, the chronic compliance language in R18-11-120 is applicable to assessment and impairment determinations, consistent with Arizona’s impaired water identification rule and prior express statements in the revisions made to R18-11-120. In the current proposal, ADEQ attempts to get around these earlier preamble statements by citing to a 2004 prepared statement by Deputy Administrative Counsel

Joan Card before the Governor's Regulatory Review Council. This is unavailing. ADEQ's prior statements in regulatory preambles, which explain the agency's official intent and justification for the rule, bear more weight than, and are not nullified by, later remarks of its counsel.

In light of ADEQ's past inconsistent statements on the application and intent of R18-11-120, we recommend that ADEQ not make any changes to R18-11-120 and not include in the final preamble any statements attempting to clarify the rule's scope at this time. Such changes should be made, if at all, at a future time after the application of the language in R18-11-120 is clarified in the context of changes to Arizona's impaired water identification rule.

### **ADEQ Response 25:**

ADEQ acknowledges its oversight in the language regarding use of a single sample, and thanks the commenter for raising the issue. The Department has added clarifying language to the enforcement rule such that, except for chronic aquatic and wildlife criteria, the department will determine compliance with numeric water quality standard criteria from the analytical result of a single sample "unless additional samples are required under this article."

However, ADEQ disagrees with the remaining points made in this comment. CWA assessments and 303(d) listing processes are not enforcement actions. The comment incorrectly conflates these distinctions in an attempt to require ADEQ to use enforcement methodologies and sampling requirements for CWA assessments and 303(d) listing determinations. However, ADEQ rejects this position as evidenced by its statements in prior rulemakings and by ADEQ counsel.

Under the CWA, ADEQ is required to assess whether a water or segment of a water of the United States in Arizona is attaining designated uses or not, and submit this information to the EPA in what is known as a 305(b) report. *See*, CWA § 305(b). Additionally, ADEQ must provide the EPA with a list of impaired waters, which are those waters identified in the 305(b) report as not attaining water quality standards. *See*, CWA § 303(d). This list, known as the 303(d) list, prioritizes those impaired waters for calculations of total maximum daily loads for each pollutant impairing the water. *Id.* In conducting assessments for use in the 305(b) report or 303(d) list, ADEQ must follow the relevant sampling requirements as set forth in A.A.C. Chapter 11, Article 1, as well as requirements on data interpretation and credibility in A.A.C. Chapter 11, Article 6.

Enforcement actions are distinct from CWA assessments and 303(d) listing processes identified above. In an attempt to conflate the two principles (between causing a water quality violation and water impairment listings), the comment quotes statements made by ADEQ in the preamble to the 2002 water quality standards revisions. However, the quoted statements do not support the

argument that enforcement actions should apply the sampling requirements for assessment and listing decisions. For example, the comment stated,

ADEQ recognized that certain water quality standards, such as chronic aquatic and wildlife criteria, require “similar, multiple sampling events to amass the minimum number of samples to perform the necessary statistics” and do “not allow for a one time or nonrecurring event to serve as justification for listing a stream.”

The statements quoted in the comment reference the sampling requirements for CWA assessments, not enforcement actions. Indeed, the last quoted sentence expressly stated that the sampling requirements applied to “justification for *listing* a stream.” (Emphasis added). Later in that same preamble, ADEQ clarified that “[t]he Department has repeatedly stated that the assessment and listing processes are *not enforcement* actions....” 8 Ariz. Admin. Reg. 3419 (Aug. 9, 2002) (emphasis added).

The comment also cites to the preamble of the last revision of the enforcement rule, arguing that ADEQ “clearly indicated” that the enforcement rule “was relevant to, and in fact guided, the agency’s ‘ongoing monitoring of the surface waters in the state.’” ADEQ acknowledges that the language referenced by the comment was unclear. However, context is key. Within the context of other statements made in that same preamble, statements made in the preamble of the 2002 water quality standards revisions, and statements of ADEQ counsel, it is clear that enforcement actions are distinct from CWA assessments and 303(d) listing determinations. Arizona’s waters are diverse, geographically distant, and often remote. The realities of enforcement *and* assessment are such that ADEQ monitoring efforts may be tailored to allow for both. However, this does not erase the distinction between the two. Indeed, later in the same preamble, ADEQ responded to a comment requesting that the enforcement rule follow the sample collection requirements of the impaired waters identification rule. ADEQ reiterated the distinction between enforcement and assessment, saying,

The impaired water identification rule prescribes requirements for § 303(d) listing and the minimum requirements for data that is used for water quality assessment purposes.

ADEQ may adopt different criteria for purposes of determining compliance with water quality standards.

8 Ariz. Admin. Reg. 1391 (Mar. 29, 2002).

Again in 2004, ADEQ clarified the distinction between enforcement and assessment and listing through statements by its counsel before the Governor’s Regulatory Review Council. *See*,

*Testimony by Joan Card, Deputy Administrative Counsel at ADEQ, 2004 Meeting of the Governor's Regulatory Review Council Minutes (Dec. 7, 2004).* Transcripts of that testimony state,

Ms. Card said 605(D)(2)(b), which is at issue, is the listing standard. She said it is the standard the Department uses to determine whether a water should be included on the impaired waters list. It plainly says that more than one exceedance of a standard leads to listing. It does not address the sampling and assessment methodology as is done in 120(C). She said 120(C) was a different standard-- an enforcement standard versus a listing standard. She said what the impaired waters list does is allow the agency to go forward with creating further standards called TMDLs for an impaired stream. She said it is plainly different standard that is more protective of the critters in a stream than an enforcement standard, which would result in the Agency potentially taking a punitive action.

*Id.* The comment attempts to dismiss this testimony as unpersuasive because they were not included within the preamble of a rule. However, this testimony is consistent with, and gives further evidence of, the Department's interpretation of the enforcement rule.

ADEQ's position is that the sampling requirements of CWA assessments and 303(d) listing determinations do not apply to the enforcement rule, as seen in the preamble to the 2002 revision to the enforcement rule, the 2002 revisions to the water quality standards, statements by agency counsel, and again in this rulemaking. 8. Ariz. Admin. Reg. 1391 (Mar. 29, 2002); 8 Ariz. Admin. Reg. 3419 (Aug. 9, 2002); *Testimony by Joan Card, Deputy Administrative Counsel at ADEQ, 2004 Meeting of the Governor's Regulatory Review Council Minutes (Dec. 7, 2004).*

The comment also states that the enforcement rule "does not apply to 'discharges' at all," but to compliance with water quality standards. The point of this statement appears to be that assessment and listing determination sampling requirements should be required for enforcement actions, or vice versa. Again, the comment conflates enforcement and assessment, but this time couples it with a distinction regarding "discharges." ADEQ's enforcement authority allows ADEQ to take action against any person who violates a water quality standard. A.R.S. § 49-263(A)(4). Under the Clean Water Act, discharge means "any addition of any pollutant to navigable waters from any point source." CWA § 502(12). Surely, discharges are included as a primary way that a person would violate a water quality standard. ADEQ maintains that this enforcement rule only applies non-permitted discharges. However, assuming for the sake of

argument that the enforcement rule did not apply to discharges, the fact remains that enforcement actions are distinct from CWA assessments and listing determinations and have distinct sampling requirements.

In light of the foregoing, the comment's assertion that the enforcement rule must use the same sampling requirements as CWA assessments and 303(d) determinations, or vice versa, is incorrect. However, ADEQ will evaluate its current Impaired Waters Identification Rule in the future, and will invite stakeholders to participate in that process. ADEQ will evaluate any suggestions stakeholders have regarding the Department's assessment methodologies at that time.

**Comment 26: Arizona Mining Association - AMA Recommends Changes to R18-11-113(D) Regarding Effluent-Dependent Waters.**

As ADEQ recognized in meetings with AMA, not all discharges of effluent to an ephemeral water justify automatic application of effluent-dependent water (EDW) criteria in the context of AZPDES permitting and ADEQ should have regulatory discretion to recognize such circumstances. Some proposed discharges will simply not create the type of conditions that the EDW criteria were intended to protect. Consequently, we request that the following change be made to subsection (D) of R18-11-113:

D. The Director ~~shall~~ may use the water quality standards that apply to an effluent-dependent water to derive water quality-based effluent limits for a point source discharge of wastewater to an ephemeral water.

**ADEQ Response 26:**

ADEQ agrees that the frequency, duration and magnitude of point sources discharges to ephemeral streams varies greatly in Arizona and there is a need to develop criteria that further refine the application of AZPDES permitting requirements. However, simply changing "shall" to "may," as requested in R18-11-113(D), would add additional uncertainty as to the circumstances that ADEQ would classify a water as effluent-dependent as the rule is silent on the criteria ADEQ would use to determine a water is effluent-dependent. ADEQ will consider this issue in the next triennial review.

**Comment 27: Arizona Mining Association - AMA Appreciates ADEQ's Commitment to Further Consider AMA's Concerns Regarding Natural Adaptive Process, Natural Background, Suspended Sediment Concentration, and the Definitions of "EDW" and "Wastewater"; AMA Would Also Like to Discuss**

## **Outstanding Arizona Water Issues as Part of Future Triennial Reviews.**

ADEQ and AMA have previously discussed AMA's concerns regarding the current regulatory language on natural adaptive process (specifically, the proposed removal of that language), natural background and suspended sediment concentration in R18-11-115(B)(5), R18-11-119 and R18-11-109(D), respectively. AMA believes that these discussions have been fruitful to date and appreciates [ADEQ's] commitment to continue these discussions in the context of the next triennial review.

AMA also appreciates ADEQ's commitment to evaluate the definition of "effluent-dependent waters" (EDW) in the context of the next triennial review. Specifically, we ask ADEQ to appropriately evaluate what effluent flow may create the conditions appropriate for imposition of the criteria adopted for EDW and then to make appropriate changes to the definition. AMA further concurs with the recommendations made by ADEQ's Antidegradation and Effluent Dependent Waters Workgroup relating to EDWs (Topic #4) and the related definition of "wastewater" (Topic #5). In particular, AMA concurs with the workgroup recommendation that the "EDW definition should be revised to account for infrequent, short duration discharges that may not establish an [EDW]." This change is critical because the EDW criteria should be limited to waters permitted to receive treated waters on a consistent basis. AMA also agrees with the recommendation that the definition of "wastewater" needs to be revised to clarify that it means effluent from a domestic wastewater treatment plant or from an industrial treatment plant treating wastewater from an industrial process.

Finally, the AMA looks forward continuing to discuss Outstanding Arizona Water (OAW) issues in future triennial reviews. As was evident from the diversity of viewpoints expressed as part of the Outstanding Arizona Waters Workgroup convened by ADEQ during this triennial review process, this is a topic of great interest to many stakeholders. ADEQ proposed no changes to the OAW rules as part of this triennial review, but we believe there are issues that will need to be addressed in the future. As we have previously commented, the state is not required under the CWA to have an outstanding waters program, and many Western states do not have such programs. Given potential implementation issues, we believe that ADEQ should re-evaluate whether an OAW program is justified. If ADEQ decides to retain the OAW program, the AMA believes that ADEQ should establish minimum data quality and quantity requirements for demonstrating good water quality (which should remain a prerequisite to listing), and that such data should cover a wide range of stream conditions. If only limited data is gathered, or the data gathered covers only certain stream conditions, then it becomes very difficult to ascertain whether

a regulated discharge is degrading existing water quality in a downstream OAW (the required analysis associated with a Tier 3 water pursuant to A.A.C. R18-11-107.01(C)(3)). There are numerous other issues associated with the current OAW program and rules, and the AMA hopes that ADEQ will be willing to discuss these issues and consider changes as part of future triennial reviews.

**ADEQ Response 27:**

ADEQ appreciates the AMA's comments and looks forward to working with all stakeholders during the next triennial review to address their suggestions, questions and concerns.

**Comment 28: Arizona Mining Association - AMA Encourages ADEQ to Request that EPA Rescind 40 C.F.R. § 131.31(b), as Recommended by the Surface Waters and Designated Uses Workgroup**

One of the consensus recommendations of the Surface Waters and Designated Uses Workgroup formed by ADEQ during this triennial review was that ADEQ should urge EPA to rescind 40 C.F.R. § 131.31(b). In that regulation, adopted in 1996, EPA assigned the fish consumption designated use to some Arizona waters, but indicated that it would remove those uses for segments where ADEQ demonstrated through a use attainability analysis (UAA) that fish consumption was not a designated use. Subsequent to the adoption of the EPA rule, ADEQ has either designated the fish consumption use, or submitted an approved UAA showing that the fish consumption use is not attainable, for every water covered in 40 C.F.R. § 131.31(b). Therefore, the federal rule is unnecessary for some waters (those where the fish consumption use has now been designated under state law), and inconsistent for others (those where ADEQ has since submitted, and EPA has approved, a UAA demonstrating that fish consumption is not an attainable use).

The AMA therefore urges ADEQ to follow through on the workgroup recommendation to request that EPA rescind 40 C.F.R. § 131.31(b). The workgroup recommendation and accompanying rationale is available at: [http://static.azdeq.gov/wqd/tri\\_rev\\_topic3\\_finalrec.pdf](http://static.azdeq.gov/wqd/tri_rev_topic3_finalrec.pdf).

**ADEQ Response 28:**

ADEQ recognizes the efforts of the Surface Waters and Designated Uses Workgroup and the recommendation that ADEQ request EPA to rescind that the federal rule because it is outdated. However, ADEQ has not implemented all of the fish consumption standards listed in 40 C.F.R. § 131.31 into Appendix B of the state standards rule. The designated uses of all fourteen surface

waters must be evaluated to ensure that uses are being adequately protected under Appendix B before ADEQ can request repeal of the federal standards in 40 C.F.R. § 131.13. ADEQ will confer with EPA during the next triennial review regarding this issue.

**Comment 29: Arizona Mining Association - Rationale for Legal Gap Modification Changes to A.A.C. R18-11-107.01**

The AMA does not oppose the “legal gap modification” changes suggested to A.A.C. R18-11-107.01, which ADEQ proposed in order to provide flexibility in the event that Arizona assumes the Section 404 permit program at some point in the future. In the preamble explanation of those changes, ADEQ cites to an EPA guidance document (the Water Quality Standards Handbook) for the proposition that if a proposed discharge of dredged or fill material satisfies the prohibition against significant degradation contained in the Section 404(b)(1) Guidelines (40 C.F.R. § 230.10(c)), it will be deemed consistent with the federal antidegradation requirement to protect existing uses. 25 Ariz. Admin. Reg. at 182-3. This is a reasonable approach, but the AMA believes that ADEQ should make clear that significant degradation in the context of the Guidelines and antidegradation in the context of the water quality standards are distinct concepts. Specifically, antidegradation focuses solely on water quality, whereas significant degradation may allow for consideration of broader factors. This distinction can be important when considering potential secondary effects of a discharge of dredged or fill material, particularly where such effects occur outside of the location where dredged or fill material is placed.

The AMA is not suggesting any changes to the proposed rule language, but believes some explanation of the differences between significant degradation under the Guidelines and antidegradation under A.A.C. R18- 11-107.01 may be appropriate in the preamble to the final rule.

The AMA and its member companies appreciate the opportunity to submit comments on ADEQ’s proposed rulemaking on water quality standards. We respectfully request that you issue the final version of the water quality standards rulemaking consistent with these comments. If you have any questions or need any additional information, please feel free to contact me.

**ADEQ Response 29:**

ADEQ appreciates the request for this clarification. The comment is correct that a § 404 significant degradation analysis is distinct from an antidegradation review. However, ADEQ considers antidegradation review for individual § 404 permits to be satisfied by conducting a

“significant degradation” review of a proposed discharge under the CWA § 404(b)(1) Guidelines, except in cases where a discharge may degrade existing water quality in an OAW or a water listed on the 303(d) List of impaired waters. In those cases, ADEQ will conduct an antidegradation review.

**Comment 30: Tucson Audubon - Outstanding Arizona Waters**

We appreciate the decision to keep protections for Outstanding Arizona Waters. In order to continue and strengthen bird habitats across Arizona, we need to continue protecting our healthiest waters through the OAW program. We encourage ADEQ to keep up the good work keeping strong OAW protections and, hopefully soon in the future, begin accepting new waters into the program.

**ADEQ Response 30:**

ADEQ appreciates the comment. While no new OAWs were adopted during this triennial review, ADEQ accepts nominations at any time. Any new nominations will be reviewed and considered in the next triennial review.

**Comment 31: Tucson Audubon – Surface water definition**

We are extremely concerned with ADEQ’s proposed change to the definition of ‘surface water’ in R18-11-101. Confining the definition to ‘navigable waters’, further narrowed to ‘waters of the United States’ is an unnecessary and unreasonable step for ADEQ to take and has the potential to threaten protections for over 94% of Arizona waters given the current federal legal debate of the definition of ‘Waters of the United States’. Arizona needs to maintain protections for springs, seeps, ephemeral, intermittent and effluent dependent or recycled waters. Like the GWAC, we subscribe to the One Water viewpoint. All water is precious. Tying our definition of ‘surface water’ to ‘navigable waters’ would be a step backwards in ensuring these protections and maintaining waters for nature and our citizenry alike. Instead, ADEQ should take this opportunity to maintain a consistent definition of surface water in Arizona as “waters of the state” in accordance with that statutory definition in A.R.S. §49-201(41).

**ADEQ Response 31:**

ADEQ disagrees with the assertion that this is an unreasonable modification. The modification does not narrow the application of the definition of “surface water” and is therefore not a step backwards. The practical application of the definition is the same. Please see the responses for Comments 4, 5, and 9 above.

**Comment 32: Pima County Wastewater Reclamation – Numeric Standards – CAS Numbers**

The CAS numbers of analytes throughout the document are wrong. A CAS number requires the dash between numbers. For example, the listed CAS of Acenaphthene in the proposed WQS is 83329. The correct CAS for this compound is 83-32-9. This is not a new issue.

**ADEQ Response 32:**

As the Chemistry Abstract System (CAS) number for any one chemical is a discrete set of integers, it can be referenced either with or without hyphens. The Department chose to remove the hyphens in 2009 to simplify use of the CAS numbers by staff and the public and to align with how the USEPA displays CAS numbers in their National Recommended Criteria Tables.

**Comment 33: Pima County Wastewater Reclamation – Numeric Standards - 3,4-Benzfluoranthene**

*3,4-Benzfluoranthene* (CAS: 205-99-2) is more commonly known as Benzo[b]fluoranthene in analytical methodology. Benzo[k]fluoranthene is already listed in the WQS, so naming conventions should be kept consistent.

**ADEQ Response 33:**

The Department agrees. Benzo[b]fluoranthene is the synonym for this chemical used in the USEPA's list of Priority Pollutants and will be used in these standards.

**Comment 34: Pima County Wastewater Reclamation – Numeric Standards - 2-chloronaphthalene**

*2-chloronaphthalene* (CAS: 91-58-7): This analyte is being renamed as "Chloronaphthalene beta" even though it is known as 2-chloronaphthalene in all analytical methodology. The NIST WebBook lists 2-chloronaphthalene as a primary name for this compound, and it should not be changed.

**ADEQ Response 34:**

Chloronaphthalene beta (CAS: 91587) is referred to in USEPA's Integrated Risk Information (IRIS) database as beta-chloronaphthalene. The "beta" was moved for alphabetizing and inadvertently left in place. The Department will use beta-chloronaphthalene.

**Comment 35: Pima County Wastewater Reclamation – Numeric Standards - N-**

### **Nitrosodiphenylamine**

*N-Nitrosodiphenylamine* (CAS: 86-30-6): This analyte is being renamed as N-nitrosodipropylamine on Page 45, which is incorrect.

#### **ADEQ Response 35:**

The Department agrees and will correct this typographical error.

### **Comment 36: Pima County Wastewater Reclamation – Numeric Standards - Demeton**

*Demeton* (CAS: 8065-48-3): The CAS listed in the Draft appears incorrect. The NIST WebBook provides a CAS Number of 126-75-0 for Demeton-S.

#### **ADEQ Response 36:**

As per EPA's integrated Risk Information System database, 8065-48-3 is the correct CAS reference. The Department has chosen to simplify the number to 8065483, as it is referenced in the National Recommended Criteria Tables.

### **Comment 37: Pima County Wastewater Reclamation – Numeric Standards - Nonylphenol**

*Nonylphenol* (CAS: 104-40-5): This compound is listed only as Nonylphenol in the WQS, which is a broad term for all possible nonylphenol structures, and is not specific as listed. The CAS of 104-40-5 refers strictly to the single analyte of 4-n-Nonylphenol.

#### **ADEQ Response 37:**

EPA's 2005 Ambient Aquatic Life Water Quality Criteria document for nonylphenol states that: "CAS numbers 104-40-5 (phenol, 4-nonyl-) and 25154-52-3 (phenol, nonyl) have also been used to describe these compounds." As such, no change will be made.

### **Comment 38: Pima County Wastewater Reclamation – Numeric Standards - 1,2,4,5-Tetrachlorobenzene**

*1,2,4,5-Tetrachlorobenzene* (CAS: 95-94-3): This is the proper naming convention, as opposed to what is in the WQS (Tetrachlorobenze,1,2,4,5-)

#### **ADEQ Response 38:**

The "1,2,4,5-" was moved for alphabetizing and inadvertently left in place. The Department will

correct to 1,2,4,5-Tetrachlorobenzene.

**Comment 39: Pima County Wastewater Reclamation – Numeric Standards - 4-Chlorophenyl phenyl ether**

*4-Chlorophenyl phenyl ether (CAS: 7005-72-3):* The Bromine analogue of this analyte is listed in the WQS as p-bromodiphenyl ether. The naming conventions should be similar, whether the decision is to rename the bromine analogue 4-Bromophenyl phenyl ether, or to name the chlorine analogue p- chlorodiphenyl ether.

**ADEQ Response 39:**

Both chemicals are referenced by either synonym in USEPA databases. The Department will change p-bromodiphenyl ether to 4-Bromophenyl phenyl ether to match the naming convention used in the CWA list of Priority Pollutants.

**Comment 40: Pima County Wastewater Reclamation – Numeric Standards – Analytes with “No Data”**

The following analytes have been added to the WQS, but are accompanied by No Data. What purpose will they have? Will limits be added later?

Analyte Name	CAS Number
2-Nitrophenol	88-75-5
4-Chlorophenyl phenyl ether	7005-72-3
Benzorghi]perylene	191-24-2
1,1-Dichloroethane	75-34-3

**ADEQ Response 40:**

These chemicals are listed as CWA Priority Pollutants. At this time there is no toxicological data in USEPA or ATSDR databases. The Department retains these chemicals in the Surface Water Quality Standards in order to fully address the list of Priority Pollutants and as place holders awaiting development of toxicological data.

**Comment 41: Pima County Wastewater Reclamation – Numeric Standards – Analytical Standard Practice**

The following analytes have been given limits that may be unreachable in standard practice. ADEQ should not set standards at levels that are not achievable by current analytical technology. Any proposed standards associated with these pollutants would go through a future triennial review process prior to being adopted.

Analyte Name	CAS Number	Proposed WQS Limit
Chrysene	218-01-9	0.6 ug/L
N-nitrosodi-n-propylamine	621-64-7	0.7 ug/L
Acrolein	107-02-8	3 ug/L
Demeton	8065-48-3	0.01 ug/L
Diazinon	333-41-5	0.17 ug/L

**ADEQ Response 41:**

Under the CWA, SWQS criteria must be based on “sound scientific rationale,” sufficient to protect the designated use. 40 C.F.R. § 131.11(a). Notably, this requirement does not provide for economic considerations or industry standard practice. The Department sets the standards as they are calculated from the available toxicity data. This issue can be addressed in the AZPDES permitting process. If the Limit of Quantitation (LOQ) is higher than the applicable water quality standard, a permittee will use the analytical method with the lowest LOQ. In these scenarios, the permittee would report discharge monitoring results using special codes called NODI (No Detection Indicator) codes that list the result as either less than the detection limit or less than the limit of quantitation. These codes do not represent a permit violation.

**Comment 42: Sierra Club – Grand Canyon Chapter; Friends of Arizona Rivers; Friends of the Sonoran Desert; Save the Scenic Santa Ritas; Center for Biological Diversity; Arizona Mining Reform Coalition; Cascabel Conservation Association; Maricopa Audubon Society (*hereafter “Conservation Groups”*)– Surface Water Definition (from the letter dated March 28, 2019)**

In light of proposed changes to federal definitions related to Waters of the United States (WOTUS), the definition of surface water in R18-11-101 should be strengthened to ensure protection of Arizona’s unique desert watersheds. To limit water quality provisions to waters deemed to be navigable ignores the reality that ephemeral waters are critical for drinking water,

ecological health, and recreation in the arid Southwest. “Surface water” should be redefined to include springs, ephemeral streams, and cienegas.

**ADEQ Response 42:**

As stated in the preamble discussing the change to the definition of “surface water,” under the section titled “*New or Modified Definitions [R18-11-101]*,” the definition of “surface water” in Article 1 has been intended, throughout the years, to align with the federal definition. This is because the definition establishes the foundation upon which ADEQ’s federally based programs are built. Unless specifically authorized by the legislature, in applying these federal programs, ADEQ must be consistent with and no more stringent than the corresponding federal law. *See* A.R.S. §§ 49-104(A)(16); 49-255.01(B). Please see the responses to Comments 4, 5, 9, and 31 above.

**Comment 43: Conservation Groups – Enforcement (from the letter dated March 28, 2019)**

Regarding enforcement provisions, R18-11-120, we note that enforcement is narrowed to non-permitted discharge and that reference to A.R.S. Title 49, Chapter 2, Article 4 has been stricken from the rule. Restricting enforcement to non-permitted discharge and assuming that the Arizona Pollutant Discharge Elimination System (AZPDES) program alleviates the need for enforcement weakens water quality standard provisions. Violation of a permit should be enforced in state law the same as non-permitted discharge, because it essentially amounts to the same impacts. The river doesn’t recognize the difference between the exceedance by a permitted facility and non-permitted discharge. This is especially concerning at this time, as multiple non-permitted discharges occurred in Queen Creek earlier this year, raising questions about how and when enforcement actions will be taken.

To exempt permitted facilities from R18-11-120 by stating that enforcement provisions should not apply to permitted facilities is moving in the wrong direction. We need strict provisions to prevent this kind of discharge, not exemptions for permit holders. Enforcement provisions should be clear, predictable and uniformly applied when non-permitted discharge occurs. R18-11-120 describes how occurrence of a non-permitted discharge will be determined, but makes no mention of what consequences the discharger will face. Removing reference to ARS49:2.4 creates lack of clarity regarding the range of ramifications for non-permitted discharges and the context in which such enforcement actions will occur. We understand that this was removed because the applicability of enabling legislation is assumed, but enforcement provisions need more clarity, not

less. Removing reference to legislation enabling enforcement action and failing to craft any language describing what enforcement actions will occur while narrowing the scope of enforcement provisions to exclude permitted facilities raises concerns that violations of water quality standards will not be enforced in a meaningful way.

**ADEQ Response 43:**

ADEQ appreciates the concern for Arizona’s waters and the protection of surface water quality standards. However, ADEQ does not believe the changes to the enforcement rule will adversely impact enforcement of surface water quality standards. First, the current iteration of the enforcement rule does not contemplate enforcement of AZPDES permits as evidenced by ADEQ’s response to comments by EPA in the 2002 triennial review rulemaking. There, ADEQ stated that the rule did not regulate how discharge limits are set, or the enforcement of permit conditions. NFRM, 8 A.A.R. 1264, 1393 (Mar. 29, 2002). ADEQ has not weakened the rule by adding express language stating that it only applies to non-permitted discharges. Additionally, ADEQ can and does still take enforcement actions for violations of permit conditions and limits. A.R.S. § 49-261.

Second, removing reference to A.R.S. Title 49, Chapter 2, Article 4 does not create a lack of clarity regarding ramifications of non-permitted discharges. A rule is an agency statement of general applicability that implements, interprets or prescribes law or policy, or describes the procedure or practice requirements of an agency. A.R.S. § 41-1001(19). A statement or citation of statutory authority does not meet that definition and should not be included in a rule. *See* Office of Secretary of State & the Rulewriters’ Consortium, *Arizona Rulemaking Manual 2* (2011); *see also* AAC R1-1-401 (stating that Rulemaking notices shall be prepared, drafted and filed in accordance with the Arizona Rulewriters Manual). Similarly, explanatory statements should not be included in rule, but may be included in the preamble. *Arizona Rulemaking Manual* at 2. Therefore, while any reference to statute has been removed from the rule to conform with the definition of “rule” and the Arizona Rulemaking Manual, ADEQ clarifies here that all of the enforcement provisions of A.R.S. Title 49, Chapter 2, Article 4, including its provisions regarding civil penalties and criminal violations, remain in force.

**Comment 44: Conservation Groups – Outstanding Arizona Waters (from the letter dated March 28, 2019)**

Because these water quality standards are generally not done every three years as they should be, we think it is essential that ADEQ take greater care with them. As was noted in our previous

comments, we are extremely disappointed that ADEQ did not consider the upper Verde River for designation as an Outstanding Arizona Water (OAW). Again, the standards are not reviewed very often and Sierra Club was told repeatedly to wait until this round of rulemaking to submit its OAW nomination for this truly outstanding water.

**ADEQ Response 44:**

ADEQ appreciates the comment and acknowledges that the triennial review process has not happened every three years in the past. However, ADEQ has now put in place a process to facilitate review of surface water quality standards every three years.

Regarding consideration of the upper Verde River as an OAW, ADEQ reviewed the nomination and issued a response letter to Sierra Club on September 11, 2018. ADEQ indicated that additional data was needed before ADEQ would be able to make a decision regarding this nomination. As stated in that letter, ADEQ is willing to discuss the nomination in greater detail to determine how ADEQ may be able to assist with additional data collection to satisfy OAW requirements.

**Comment 45: Conservation Groups– Antidegradation (from the incorporated letter dated September 27, 2018 commenting on the *draft* NPRM)**

The clarification in R18-11-107.01, relating to antidegradation is appropriate as a temporary impact to a water should not be “regularly occurring.”

**ADEQ Response 45:**

Thank you for your comment.

**Comment 46: Conservation Groups – Nutrient Criteria (from the incorporated letter dated September 27, 2018 commenting on the *draft* NPRM)**

ADEQ should provide additional explanation relating the changes in R18-11-114 regarding nutrient criteria. While the agency says it will reflect flexibility” and will “ensure that downstream uses will also be protected, as necessary,” we are concerned about the latter part of that and would like to hear more on how the agency will ensure that is the case. In its explanation, the words “as necessary,” give us pause and concern. What is “as necessary?”

**ADEQ Response 46:**

The comment refers to R18-11-114, however, the content seems to refer to the clarifying modifications regarding applying nutrient criteria standards as prescribed in R18-11-109. If there

is significant contribution of nutrients from any tributary to one of waters of the United States listed in the rule, it is then “necessary” to apply the nutrient criteria standard to the upstream tributary in order to protect nutrient water quality in the listed surface water. The determination of what is necessary to protect nutrient water quality in the listed surface water will be based on the volume, frequency, magnitude, and duration of the discharge, and the distance to the downstream surface water listed in the rule.

**Comment 47: Conservation Groups – Mixing Zone (from the incorporated letter on draft NPRM dated September 27, 2018)**

Regarding mixing zones in R18-11-114, we find removing the explicit length limit of 500m and replacing that language with “as small as possible” problematic, as it is ill-defined and thus unenforceable. We understand the reasons for this, but the Arizona Department of Environmental Quality (ADEQ) must find a solution that is clear, quantifiable, and enforceable, otherwise, it is all too likely that the size of the mixing zone will become whatever the regulated entity desires. We appreciate the clarification that a mixing zone cannot be lethal or acutely toxic for organisms passing through it.

**ADEQ Response 47:**

ADEQ has removed the 500 meter criteria and replaced it with “as small as possible” to limit the size of the mixing zone to the actual size (as demonstrated through modeling for non-rapid and incomplete mixed discharge scenarios) and provide greater flexibility to permittees for requests associated with non-acutely toxic pollutants (i.e. nutrients). The mixing zone size will need to be determined by the Permittee, and approved by ADEQ, in order to establish the mixing zone condition in the permit. The ADEQ Director has authority to approve or deny the mixing zone if it is determined a water quality standard will be violated outside of the mixing zone. (R18-11-114(E)(1)). ADEQ will also reevaluate the mixing zone during modification, or reissuance of an existing permit to determine if the size of the originally approved mixing zone is still appropriate. (R18-11-114(G)).

**Comment 48: Conservation Groups – Outstanding Arizona Waters (from the incorporated letter on draft NPRM dated September 27, 2018)**

We do not object to leaving the Outstanding Arizona Waters (OAW) designation process unchanged in this Triennial Review, although, as was noted in the process, there are things that could improve protections for Arizona waters, and are strongly supportive of retaining Davidson

Canyon, Cienega Creek and other OAWs in their current designated status. We object the omitting the Upper Verde OAW nomination we submitted. While there may have been a needed change, such as the exclusion of the reach of the Verde from Sycamore to Oak Creek due to its status as impaired for E. coli, otherwise we have demonstrated the outstanding values of these waters and continue to request their designation as OAWs.

**ADEQ Response 48:**

ADEQ appreciates the comment. Regarding nomination of the upper Verde River as an OAW, please see ADEQ response to comment 44.

**Comment 49: Conservation Groups – Variance (from the incorporated letter on draft NPRM dated September 27, 2018)**

Regarding variance rule modifications in R18-11-122, we disagree with ADEQ’s interpretation that variances must be permitted in this rule and that somehow omitting this provision would make the rule more stringent than federal requirements. There is no requirement that you have variances, just that if you do, they be included in the rule. This variance language is a loophole to ignore designated uses as it allows the water quality criteria to diverge from the designated use criteria for the water. Further, it allows variances for more than five years. At a minimum, ADEQ should set a tight timeline for these so-called “temporary” variances from water quality criteria. The explanation of the variances being either discharger or water body specific is less than adequate as well. Who gets the variance? The first ones to ask? We do not support application of variances and ask that ADEQ remove it from the draft rule.

**ADEQ Response 49:**

It is currently ADEQ’s position that there should be an opportunity for a facility to request a variance where the facility cannot currently meet a water quality standard but it can be met in the future. This is a stance that ADEQ has had since 1996. See NFRM, 2 A.A.R. 1783, 1795 (May 17, 1996). ADEQ also notes that A.R.S. § 49-255.01(C) directs ADEQ to establish rules that “shall provide for... [m]odifications and variances as allowed by the clean water act.” EPA explains that variances are a tool States can use to improve to improve water quality over time with accountability measures to assure the public that progress will occur. ADEQ is simply modifying its rule to align with current EPA requirements. This rule is not a loophole, but rather another method to bring a facility into compliance with a water quality standard. As stated in the preamble above in the section titled “Variances Rule Modifications [R18-11-122],” ADEQ

considers this to be a “vital tool to improving water quality in partnership with facilities.”

A variance is a temporary change to a water quality standard that must be approved in rule. Once the variance is established in rule, it would be implemented through a discharger-specific AZPDES permit(s). ADEQ will review the variance during subsequent triennial reviews to ensure the highest attainable criteria is being met. The term of the variance must be a specified timeframe in rule and must only be as long as necessary to achieve the highest attainable condition. Specific criteria need to be met in order to successfully apply for a variance and obtain approval. Variances will only be issued if it is appropriate and in conformance with the rule. ADEQ notes that it does not currently have any active variances.

**Comment 50: Conservation Groups– Appendix C (from the incorporated letter on draft NPRM dated September 27, 2018)**

Regarding Appendix C and as we noted in previous comments, we do not support the site-specific standard for copper for Pinto Creek and ask that it be deleted in the draft rule. ADEQ must err on the protective end of the scale and adopt a more conservative and strict set of standards and strive for the best water quality possible in Pinto Creek to ensure that it is maintained to meet Aquatic and Wildlife standards. That means dischargers should have to do more to clean it up and help it attain the standards for copper. We attach our letter of May 30, 2017 specifically related to Pinto Creek to further document our position on this matter.

[Attached comments from above mentioned May 30, 2017 letter commenting on the ADEQ proposed Total Maximum Daily Load for Pinto Creek:

*We have reviewed the TMDL analysis and find that rather than reducing the site specific standard for copper from 42 µg/L to 34 µg/L, the standard should be set at 26 µg/L, to protect the creek and dependent wildlife. Attached you will find a letter written by David Chambers, dated May 30, 2008, which articulates the factors to be taken into consideration to calculate the TMDL to ensure that Pinto Creek is maintained to meet Aquatic and Wildlife standards. Even with a reduction to 34 µg/L, the statement made in Mr. Chambers’ letter of 2008 that ADEQ’s choice of natural background “is higher than all of the EPA calculated values for impacts on aquatic organisms” is still true.*

*Attached you will also find notes from visits to numerous sites along Pinto Creek, detailing impacts to the creek from roads and mine tailings. The ecological significance of a remaining creek with perennial flow in the Sonoran Desert is such that it must be handled with caution and care. The more protective standard of 26 µg/L, or the calculated background minus the 8 µg/L*

*margin of error, should be adopted. The Arizona Department of Environmental Quality (ADEQ) has not adequately determined natural background, because it is based on samples taken from tributaries, which while assumed to be relatively unaffected by anthropogenic sources are typified by well over a hundred years of mineral exploration and extraction and still littered with abandoned mine shafts, open pits, tailings piles both large and small, and untold numbers of all of the aforementioned throughout the surrounding uplands. Because of this, it is extremely difficult to postulate that those referenced tributaries are unaffected by human activities. Further, with Carlota continuing to mine the Eder pits and with the planned expansion of the Pinto Valley Mine, it's imperative to set strict standards and strive for the best water quality possible in Pinto Creek. That is why ADEQ must err on the protective end of the scale and adopt a more conservative and more protective standard for Pinto Creek.]*

**ADEQ Response 50:**

ADEQ has not reduced the site-specific standard for Pinto Creek in this rulemaking, and is not proposing any revisions to that standard during this triennial review. In 2016, ADEQ set the site-specific standard for dissolved copper in Pinto Creek at 34 µg/L. This was not a reduction of a previous standard, but was less than a previously-proposed, site-specific standard for Pinto Creek. ADEQ continues to rely on the justification it articulated in the 2016 rulemaking for the 34 µg/L standard. *See*, NFRM 22 A.A.R. 2333-34 (Sep. 2, 2016).

**Comment 51: Conservation Groups – Outstanding Arizona Waters – Upper Verde River (from incorporated letter dated May 15, 2018, submitted in preliminary stages of this Triennial Review)**

The Sierra Club – Grand Canyon Chapter has sought to nominate the Upper Verde for OAW designation since 2012. The ADEQ stated repeatedly that the Triennial Review would be the appropriate time for a nomination and consideration of such a nomination. The fact that changes to the language governing OAW designation are being considered is not a compelling reason to refuse to consider such a nomination now. Any time the rule is opened, changes to language may be proposed. Changes may be considered concurrently with consideration of nominations based on the language that existed at the time of nomination. We ask that ADEQ consider the nomination of the Upper Verde River for OAW during this rulemaking process.

**ADEQ Response 51:**

ADEQ appreciates the comment and considered a nomination to designate the Upper Verde as an OAW once it was determined that ADEQ would not revise the OAW program during this triennial review. See ADEQ Response 44 regarding ADEQ's response to this nomination.

**Comment 52: Conservation Groups – Outstanding Arizona Waters (from incorporated letter dated May 15, 2018, submitted in preliminary stages of this Triennial Review)**

We also strongly support keeping Davidson Canyon, Cienega Creek, and other OAWs as OAWs and urge ADEQ to work with stakeholders to ensure that the values for which this waters were designated are protected. As precious as our waters are in Arizona, we should not be looking at removing special designations and the accompanying protections.

**ADEQ Response 52:**

Thank you for the comment. ADEQ is not proposing any revisions to the OAW rule during this triennial review.

**Comment 53: Conservation Groups – Outstanding Arizona Waters – “Good Water Quality” (from incorporated letter dated May 15, 2018, submitted in preliminary stages of this Triennial Review)**

How can ADEQ define “good water quality” (R18-11-112(D)(3)) more clearly to avoid confusion in determining whether a water is eligible for OAW consideration? “Good water quality” should be removed from OAW criteria to avoid confusion. If water quality is sufficient to support the recreational and/or ecological values for which an OAW was designated, no further consideration of water quality should be required. Furthermore, requiring “good water quality” may incentivize pollution of a reach by entities seeking to prevent any such future designation, and rigorous water quality monitoring is unfortunately prohibitively expensive for public agencies and private nonprofit organizations. Once an OAW has been established for outstanding recreational and/or ecological values, water quality should not be allowed to be degraded in any way that would impact those values, and all examination of water quality should be in the context of preserving those values.

**ADEQ Response 53:**

ADEQ acknowledges the concern that the “good water quality” provision of the OAW rule needs clarification, however ADEQ is not proposing any revisions to the OAW rule during this triennial

review. This provision of the rule was the subject of Charter Question #1 of the OAW Workgroup convened in November 2017 to analyze the OAW rule and provide recommendations to ADEQ. There was no consensus within the Workgroup on how to update the “good water quality” provision in the rule, and opposing arguments were summarized in a “Final Recommendations” document, posted on the ADEQ website at <http://azdeq.gov/node/3933>. ADEQ will consider the Workgroup recommendations during the next triennial review.”

**Comment 54: Conservation Groups – Outstanding Arizona Waters – Tier 3 Protection (from incorporated letter dated May 15, 2018, submitted in preliminary stages of this Triennial Review)**

Once a water has become an OAW what action should be undertaken to ensure that it is being maintained and protected as a Tier 3 water under R18-11-107(D)? Again, OAWs should be eligible for establishment and continued designated status based on recreational and ecological values independent of water quality. Requiring nominating entities and/or ADEQ to provide baseline data prior to nomination would be unnecessarily burdensome, impractical, and counterproductive. ADEQ should consider establishing baseline data subsequent to an OAW listing. Also, if available information points to a new source of degradation in an OAW, steps should be taken to identify and address the source.

**ADEQ Response 54:**

ADEQ acknowledges the concern that the “baseline water quality” provision of the OAW rule is problematic for nominations. However, ADEQ is not proposing any revisions to the OAW rule during this triennial review. This provision of the rule was the subject of Charter Question #2 of the OAW Workgroup, which was convened in November 2017 to analyze the OAW rule and provide recommendations to ADEQ. The Workgroup discussed but did not agree on a solution to the baseline water quality issue. The Workgroup discussion was summarized in the “Final Recommendations” document, posted on the ADEQ website at <http://azdeq.gov/node/3933>.

**Comment 55: Conservation Groups – Outstanding Arizona Waters – Data from OAWs (from incorporated letter dated May 15, 2018, submitted in preliminary stages of this Triennial Review)**

What actions should ADEQ take if data show that water quality is degrading in or if impairment status is determined on a water that is listed as an OAW? If degradation or impairment is identified in an OAW, the water should be prioritized for action including identification of the

source of degradation, cessation of the degradation, and restoration as needed. Removal of OAW designation must only occur through rulemaking, just as designation of OAWs occurs through rulemaking, and should be avoided. ADEQ should instead focus on protecting OAWs. As stated above, once an OAW has been established for exceptional values, water quality should not be allowed to be degraded in any way that would impact those values, so ADEQ should act long before values could be so degraded that any removal of designation could be justified.

**ADEQ Response 55:**

ADEQ recognizes the concern regarding degradation of water quality in an OAW. Degradation of water quality in an OAW was a topic addressed by the OAW Workgroup during the triennial review process, however ADEQ is not proposing any revisions to the OAW rule during this triennial review. The OAW Workgroup discussion of this topic can be found in the “Final Recommendations” document, posted on the ADEQ website at <http://azdeq.gov/node/3933>. ADEQ will consider the Workgroup recommendations during the next triennial review.

**Comment 56: Conservation Groups – Outstanding Arizona Water – flow regime eligibility (from incorporated letter dated May 15, 2018, submitted in preliminary stages of this Triennial Review)**

Should ADEQ consider modifying the flow-regime based OAW eligibility requirements in this rulemaking? If so, what changes are recommended by the workgroup, and why? As with reference to “good water quality,” reference to flow regime should be removed from OAW eligibility requirements. If flow is adequate to support exceptional recreational and/or ecological values for which a water was designated, no further demonstration of flow should be required. Such requirements may be counterproductive by discouraging nomination, as flow data are not always available and, as many of our remarkable and truly outstanding waters are ephemeral. In addition to their support of plants and animals, they also help to recharge groundwater, something which is critically important in our arid state. Again, as with “good water quality,” reference to flow may incentivize bad actors who wish to prevent future designations. Limiting designation based on flow regimes was added in 2002 to limit the nomination of OAWs. It was inappropriate then and it is inappropriate now.

**ADEQ Response 56:**

ADEQ acknowledges the concern regarding use of perennial or intermittent flows as a criterion for OAW nomination, however ADEQ is not proposing any revisions to the OAW rule during

this triennial review. This flow regime question was the subject of Charter Question #4 of the OAW Workgroup convened in November 2017, to analyze the OAW rule and provide recommendations to ADEQ. No consensus was reached among the Workgroup members, but three positions were identified: 1) drop the flow requirement provision entirely, 2) retain the current language, and 3) limit OAW designations to perennial waters only. For more information, the Workgroup discussion was summarized in the “Final Recommendations” document, posted on the ADEQ website at <http://azdeq.gov/node/3933>. ADEQ will consider the Workgroup recommendations during the next triennial review.

**Comment 57: Conservation Groups – Antidegradation – Temporary Impacts (from incorporated letter dated May 15, 2018, submitted in preliminary stages of this Triennial Review)**

ADEQ is proposing that the temporary impacts to OAWs language found in R18-11-107.01 (C)(4) be moved to its own section (5) and clarify that the temporary impacts cannot be “regularly occurring.”

Temporary impacts to OAWs should not be regularly occurring and should generally be a one-time impact. If they are regularly occurring, then they are not temporary and should not be allowed. A closer look at the actual impacts of a so-called “temporary impact” is needed. If it is temporary, but wipes out threatened or endangered species or destroys a healthy macroinvertebrate community, then is the impact really temporary? We also oppose the idea of extending temporary impacts to other kinds of permits.

Throughout its regulations, ADEQ should consider, and to the best of its ability manage and mitigate, the future impacts of climate change on Arizona’s rivers. Our rivers will take the brunt of the impacts which the climatologists are predicting to be: 1) overall warming and drying, and 2) increased extremes in precipitation and stream flows (greater number of low flow conditions and a greater number of flash flood events). These changing conditions call for slower, steadier, cleaner releases of storm water from urban areas into washes and rivers, where riparian vegetation can assist with cleaning the flow.

**ADEQ Response 57:**

While this comment was incorporated in the Conservation Groups’ formal comment letter, the comment regarding temporary impacts does not appear to apply to the current proposed rule. ADEQ is not proposing to move the “temporary water quality impacts” language into its own

section. Also, it appears that ADEQ addressed the commenters issue that temporary impacts should not be regularly occurring as the proposed rule adds the phrase, “and are not regularly occurring,” to R18-11-107.01(C)(4).

Regarding the request that ADEQ consider climate change in its regulations, ADEQ thanks you for your comment.

**Comment 58: City of Phoenix - Numeric Standards - Appendix A – Provisional or Screening Data**

The following table lists new or revised proposed standards derived using provisional data or screening values from the Environmental Protection Agency (EPA); this list may not be inclusive of all such examples in the proposed rule. Use of provisional or screening data for setting SWQS is questionable, particularly because the EPA reference document identifies several of these values as low confidence or inappropriate to derive a reference dose (RfD) for the parameter (e.g., thallium). In addition, 4,6-dinitro-o-cresol appears to use an inappropriate uncertainty factor. Several standards were also noted with Integrated Risk Information System (IRIS) data of low or medium confidence and/or inadequate carcinogenicity data. *Please justify use of the provisional data, screening data, and data with low confidence in developing SWQS, and provide an explanation of how the new or revised standards were derived using this data.*

<b>Parameter/CAS Number</b>	<b>Page</b>	<b>Relevant Standard</b> DWS (domestic water source) FBC (full-body contact) PBC (partial-body contact) FC (fish consumption)
<b>Provisional or Screening Value</b>		
bis(2-chloroethoxy)methane/111911	189, 193, 196, 215	New: DWS, FBC, PBC
chloroethane/75003	189, 193, 196, 216	New: DWS, FBC, PBC
di-n-octyl phthalate/117840	194, 196, 217	Revised: FBC, PBC
4,6-dinitro-o-cresol/534521	190, 191, 194, 196, 216	Revised: DWS, FC, FBC, PBC
parathion/56382	190, 192, 195, 197, 217	New: DWS, FC, FBC, PBC
thallium/7440280	192, 195, 197, 218	Revised: FC, FBC, PBC
<b>IRIS data of low or medium confidence/ inadequate carcinogenicity data</b>		
n-nitrosodi-n-phenylamine <u>OR</u> n-nitrosodipropylamine/86306	195, 197, 217	Revised: FBC, PBC
n-nitrosodi-n-propylamine/621647	195, 197, 217	Revised: FBC, PBC
pentachlorobenzene/608935	190, 195, 197, 217	New: DWS, FBC, PBC
1,2,4,5-tetrachlorobenzene/95943	190, 195, 197, 218	New: DWS, FBC, PBC
toluene/108883	192, 195, 197, 218	Revised: FC, FBC, PBC
2,4,5-trichlorophenol/ 95954	190, 195, 198, 218	New: DWS, FBC, PBC

### **ADEQ Response 58:**

ADEQ uses a hierarchical approach when considering data for use in the derivation of human health water quality standards. As many listed CWA Toxic and Priority Pollutants have no reference doses (RfDs) or cancer potency slope factors (CPSFs) published in the USEPA's Integrated Risk Information System (IRIS) database, in order to provide surface water quality standards that are protective of the health of the public, the Department defaults to the following ordered list of peer reviewed toxicological data when IRIS RfDs and CPSFs are not available:

- Provisional Peer-Reviewed Toxicity Values (PPRTV) used in EPA's Superfund Program.
- Minimal Risk Levels produced by the Agency for Toxic Substances and Disease Registry (ATSDR).
- California Environmental Protection Agency (CalEPA) values.

While these toxicity values are not expressly developed for the derivation of water quality standards for USEPA listed Toxic and Priority Pollutants, they provide valuable, peer reviewed benchmarks which allow the Department to derive water quality standards for the protection of human health where otherwise, there would be none.

ADEQ is very careful when selecting surrogate toxicity values to use in the derivation of Surface Water Quality Standards. All data used in the derivation, and the toxicity values themselves must undergo rigorous peer review, including independent external peer review. The USEPA IRIS database is always the first choice for toxicity values when they are available. If an RfD or CPSF is listed in the IRIS database, the data are considered adequate and have undergone internal and independent peer review. IRIS values are intended to be used by all USEPA programs and are only listed after undergoing cross programmatic evaluation.

Provisional Peer-Reviewed Toxicity Values (PPRTV) are developed according to USEPA Standard Operating Procedures (SOPs) and are derived after a review of the relevant scientific literature using the same methods, sources of data, and Agency guidance generally used by the EPA IRIS Program in the development of RfDs and CPSFs. All provisional toxicity values receive internal review by EPA scientists and external peer review by independently selected scientific experts.

Minimal Risk Levels are developed as a part of ATSDR's Congressional mandate to produce toxicological profiles (TPs) for hazardous substances found at National Priorities List (NPL) sites. The studies utilized in the development of these TPs are held to the highest standards of

data collection, and the peer-review process validates that they are scientifically accurate and reflect current scientific or laboratory best practice with consistent, factual results. The proposed MRLs derived as a part of the TP development undergo a rigorous review process. They are reviewed by ATSDR's toxicologists, a panel of external peer reviewers, an interagency MRL workgroup, with participation from other federal agencies, including NCEH (CDC's National Center for Environmental Health), ATSDR, NTP (National Toxicology Program), NIOSH (National Institute of Occupational Safety and Health), and EPA; and are then submitted for public comment.

The California Environmental Protection Agency (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA) is statutorily mandated by the State of California to carry out human health risk assessments on commercially available pesticides and other toxicants. OEHHA follows USEPA risk assessment methodology closely through the Standards and Criteria Work Group (SCWG), a Cal/EPA Intra-agency group. All studies go through both an internal (OEHHA) and external peer review process pursuant to Health and Safety Code Section 116365(c)(3)(D).

The commenter specifically references thallium and 4,6-dinitro-o-cresol. The Department's rationale for these pollutants is as follows:

**Thallium:** The Department bases the RfD for thallium on the 2012 PPRTV screening chronic provisional RfD. The State of California (CalEPA) derived the same value using the same study, toxic endpoint and uncertainty factors. Other states including Massachusetts, Minnesota, Michigan and New Jersey have also adopted this toxicity value. Beyond the principal study used in the development of the provisional RfD, there is evidence of kidney damage, blood pressure variations and alopecia in humans. Some human and animal data also suggest thallium may produce developmental toxicity. ADEQ believes that given the supplementary supporting data found within the IRIS Chemical Assessment Summary, there is ample evidence as to the toxicity of thallium and will retain the standard as proposed.

**4,6-dinitro-o-cresol appears to use an inappropriate uncertainty factor:** 4,6-dinitro-o-cresol is a low use chemical used in the plastics industry to inhibit polymerization in styrene. The Department is using the RfD from the 2010 USEPA PPRTV which derives a less stringent standard than the criterion published in the 2015 USEPA Update of Human Health Ambient Water Quality Criteria: 2-Methyl-4,6-dinitrophenol (a synonym for 4,6-dinitro-o-cresol) The reference have been changed in the preamble. The Department will research using the USEPA

304(a) criterion in the next Triennial Review.

The commenter questions the use of “ IRIS (US EPA) data of low or medium confidence/ inadequate carcinogenicity data”. The Department’s rationale for the use of these peer reviewed data is as follows:

The confidence designation given to data used in an IRIS assessment does not indicate the confidence in the derived toxicity value, but to the likelihood that more data might precipitate a change in the future. If a toxicity value is published in an IRIS assessment, this means that USEPA methodology has been followed and internal and external peer review have found the data adequate. Quantifiable evidence of human toxicity or carcinogenicity that can be used to determine IRIS toxicity values is rare and collected through episodic human epidemiological studies. Because of this, animal models are often the primary source of the data used in deriving toxicity values. When animal data are used, human data is often labeled as “inadequate.” This is not an indication that the other IRIS data are inappropriate for deriving water quality standards, it means that data derived from animal models and other supporting evidence were used.

**Comment 59: City of Phoenix - Numeric SWQS, Appendix A – Fish Consumption Data**

The following table of proposed new FC standards derived by ADEQ using bioconcentration (BCF) data use reference documents that indicate these parameters are estimates (dinoseb), are derived using averages (chlorpyrifos, malathion), or the BCF value used is not specifically listed in the provided reference document (diquat, endothall). This list may not be inclusive of all such examples in the proposed rule, but are the instances noted by the City during our review. *Please provide the rationale applied for using this BCF data, and provide an explanation of how the new standards were derived using this data.*

<b>Parameter/CAS Number</b>	<b>Page</b>	<b>Relevant Standard FC (fish consumption)</b>
chlorpyrifos/2921882	191,216	New: FC
dinoseb/88857	191,217	New: FC
diquat/85007	191,217	New: FC
endothall/145733	191,217	New: FC
malathion/121755	191,217	New: FC Note: The preamble (1455 ug/L) and rule (103 ug/L) have different values for the new FC standard. <i>Please provide correct value and justification for the calculation.</i>

**ADEQ Response 59:**

Because ADEQ separates the fish and water consumption uses in the Surface Water Quality Standards, water quality standards for our Fish Consumption use are calculated using bioconcentration factors (BCF) from USEPA documents or from the technical literature. BCFs are a measure of how much a pollutant in the water column will concentrate in the tissue over time. It is important to address bioconcentration for the fish consumption use because the standard, as calculated, is functionally a translator that guards against the buildup of the pollutant in question to concentrations that may pose a threat to those that may consume wild caught fish. Arizona has more than 27 different species of sport fish that can be taken and consumed by Arizona anglers. Each of those species occupies a different locus in the aquatic food web, depending on the community composition of each individual waterbody. Because of this variability in species, community composition and food web structure, the BCF value is, by necessity, a broad estimate.

If USEPA data are not available, data is gathered from peer-reviewed journals, the Extension Toxicology Network (EXTOXNET) and the U.S. National Library of Medicine among other sources. If multiple studies are available or a range given, a rounded mean is calculated for use in deriving standards. *Methodologies for Deriving Criteria for the Fish Consumption (FC) Designated Use*

Numeric water quality criteria for the fish consumption (FC) designated use were derived using the following equations:

For carcinogens: 
$$\frac{70\text{kg} * 10^{-6}}{OCSF * 17.5 \frac{\text{grams}}{\text{day}} * BCF}$$

Example: Aldrin 
$$\frac{70 * 10^{-6}}{17 * 17.5 * 4670} = 0.00005 \mu\text{g/L}$$

For non-carcinogens: 
$$\frac{\text{RfD} * \text{RSC} * 70 \text{ kg}}{17.5 \frac{\text{grams}}{\text{day}} * BCF}$$

Example: Chlorpyrifos  $\frac{0.003*0.2*70}{17.5*2500} = 0.96 \mu\text{g/L}$  (rounded to 0.1  $\mu\text{g/L}$ )

In the carcinogen equation, 70 kg is the average weight of a human male in kilograms;  $10^{-6}$  is the excess cancer risk level; OCSF is the oral cancer slope factor, 17.5 grams /day is the national average fish consumption rate, and BCF is a bioconcentration factor. In the non-carcinogen equation, RfD is the reference dose, RSC is the relative source contribution factor, 70 kg is the average weight of a human male in kilograms, 17.5 grams/day is the national average fish consumption rate, and BCF is the bioconcentration factor.

**Malathion:** The value listed in the Appendix A. table (103  $\mu\text{L}$ ) is a typographical error. The value listed in the preamble (1455  $\mu\text{L}$ ) is correct. The Department used the mean bioconcentration factor of 11 for edible fish tissue from the April, 2018 USDA Draft Human Health and Ecological Risk Assessment for Malathion in Exotic Fruit Fly Applications.

**Comment 60: City of Phoenix - Numeric SWQS, Appendix A**

The following table lists proposed revised PBC standards that were derived with no RfD listed in the provided reference documents. This list may not be inclusive of all such examples in the proposed rule, but were parameters noted by the City. Per the preamble, the RfD and relative source contribution (RSC) factor are used to calculate the PBC standard (page 195). *Please provide an explanation as to how these revised PBC standards were obtained with no RfD, and provide reference links.* In addition, the RSC factor used to calculate new standards using the non-carcinogenic formula for Arizona is not provided for FC, FBC, and PBC standards. *Please provide an explanation of the RSC values and how the RSC was used in the revised or new standard calculations for FC, FBC, and PBC.*

Parameter/CAS Number	Page	Relevant Standard FBC (full-body contact) PBC (partial-body contact)
bis(chloroethyl) ether/111444	193,196,215	Revised: PBC No RfD; Minimum Risk Level (MRL) is for inhalation.
2,6-dinitrotoluene/606202	194,196,216	Revised: PBC No RfD. Note: The reference document link for the RfD PBC and oral cancer slope factor (OCSF) FBC does not work.
n-nitrosodi-n-phenylamine <u>OR</u> n-nitrosodipropylamine/86306	195,197,217	Revised: PBC No RfD; no MRL provided.
n-nitrosodi-n-propylamine/621647	195,197,217	Revised: PBC No RfD; no MRL provided.

### ADEQ Response 60:

**Bis(chloroethyl) ether:** Bis(chloroethyl) ether is a CWA Priority Pollutant, listed in the USEPA National Recommended Water Quality Criteria – Human Health Criteria Table and is classified by the USEPA as a B2, or *probable*, human carcinogen on the strength of causing hepatomas in hybrid mouse strains and being a direct acting mutagen in microbial studies. On this basis, the Department chose to use the OCSF to set a PBC standard in the absence of an available RfD. The resultant new standard is less stringent than the current PBC standard or the value listed in the USEPA Human Health Criteria Table. The Department believes this to be an important exception to the standard practice of using only RfDs when deriving PBC standards and has noted this excursion in the preamble. See the ADEQ decision criteria hierarchy in the *Methodologies for Deriving Criteria for the Partial Body Contact (PBC) Designated Use*.

**2,6-dinitrotoluene:** The Department used the PPRTV chronic provisional reference dose of  $0.0003 \text{ (mg/Kg-d)}^{-1}$  from the USEPA 2013 final Provisional Peer-Reviewed Toxicity Values for 2,6-Dinitrotoluene. The reference document has been clarified in the preamble.

**N-nitrosodiphenylamine:** N-nitrosodiphenylamine is a CWA Priority Pollutant, listed in the USEPA National Recommended Water Quality Criteria – Human Health Criteria Table and is a B2, or *probable* human carcinogen on the strength of increased bladder tumors in male and female rats and DNA damage assays in rats. On this basis, the Department chose to use the OCSF to set a PBC standard in the absence of an available RfD. The resultant new standard is more stringent than the current PBC standard and less stringent than the value listed in the USEPA Human Health Criteria Table. The Department believes this to be an important exception to the

standard practice of using only RfDs when deriving PBC standards and has noted this excursion in the preamble (see the ADEQ decision criteria hierarchy in the *Methodologies for Deriving Criteria for the Partial Body Contact (PBC) Designated Use*).

**N-nitrosodi-n-propylamine:** N-nitrosodi-n-propylamine is a CWA Priority Pollutant, listed in the USEPA National Recommended Water Quality Criteria – Human Health Criteria Table and is a B2, or *probable* human carcinogen on the strength of liver carcinomas and esophageal and tongue tumors in rats. Macaque monkeys also showed an increased incidence of hepatocellular carcinomas. On this basis, the Department chose to use the OCSF to set a PBC standard in the absence of an available RfD. The resultant new standard is more stringent than the current PBC standard and less stringent than the value listed in the USEPA Human Health Criteria Table. The Department believes this to be an important exception to the standard practice of using only RfDs when deriving PBC standards and has noted this excursion in the preamble (see the ADEQ decision criteria hierarchy in the *Methodologies for Deriving Criteria for the Partial Body Contact (PBC) Designated Use*).

**Comment 61: City of Phoenix - Numeric SWQS, Appendix A**

The following table lists items that need additional explanation, substantive typographical errors and inconsistencies that were noted by the City during our review; this list may not be inclusive of all such examples in the proposed rule. The comment for each parameter is noted below.

**ADEQ Response 61:**

ADEQ has divided the table referenced in this comment based on parameter and has responded to each in turn. These comments and ADEQ’s responses comprise Comments and Responses 62-74.

**Comment 62: City of Phoenix - Numeric SWQS, Appendix A-  
acenaphthylene/208968 (pp.189, 193, 196, 215)**

The provided preamble reference link for this new standard is for a different parameter: acenaphthene (CAS/83329). Please specify which parameter the new DWS, FBC, and PBC standards apply to and provide justification for these new standards. In addition, acenaphthylene is a new parameter, there should be no strikethrough text “cenaphthylene” in the proposed rule.

**ADEQ Response 62:**

**Acenaphthylene:** The reference to “cenaphthylene” in the proposed rule was a carryover from a transcription mistake in the draft and has been deleted in the proposed rule.

For the polycyclic aromatic hydrocarbons (PAH) with no published RfD or OCSF, the Department uses the toxicity endpoints from benzo[*a*]pyrene and anthracene as surrogates to calculate standards for carcinogens or non-carcinogens, respectively. This use is based on data indicating PAHs that cause cancer are typically first modified by enzymes found in living tissue into compounds that react with DNA, causing mutations to occur. When DNA associated with cell replication is affected, the result can sometimes be cancer. Mutagenic PAHs, such as benzo[*a*]pyrene, usually have a “bay region,” a pocket with four or more sides in its molecular structure that increases reactivity of the molecule with DNA. There is no convincing evidence that the PAHs lacking a bay region structure (acenaphthene, acenaphthylene, and fluorene) are genotoxic. Because of this difference in structure, the Department chose to use the RfD from the closely related acenaphthene to calculate the standard for acenaphthylene rather than the surrogate toxicity endpoints used for carcinogenic PAHs (benzo[*a*]pyrene).

**Comment 63: City of Phoenix - Numeric SWQS, Appendix A- benz(a)anthracene/ 56553 (pp.193, 215)**

The preamble (47.0 ug/L) and rule (0.47 ug/L) have different values for the revised FBC standard. The nomenclature of this parameter is inconsistent throughout the rule and preamble. *Please provide the correct revised FBC standard, justification for the standard, and correct parameter nomenclature.*

**ADEQ Response 63:**

**Benz(a)anthracene:** The FBC standard listed in the preamble is correct. Appendix A. will be corrected to reflect the 47 µ/L value. This standard is based on the USEPA OCSF of 7.3 (mg/Kg-d)<sup>-1</sup> for the polycyclic aeromantic hydrocarbon benzo (a) pyrene, which is used as a surrogate in this instance. Typographical errors in the nomenclature will be corrected throughout the document. See the discussion under acenaphthylene (Response 62) for an explanation of the use of toxicological surrogates for PAHs.

**Comment 64: City of Phoenix - Numeric SWQS, Appendix A- bis(chloromethyl)ether/ 542881 (pp.193, 215)**

EPA 304(a) criteria is used to determine the new FBC standard. There is no justification for use of the EPA 304(a) criteria for determining the FBC in the preamble pages 192 – 193. In addition, please specify which EPA 304(a) criteria is used. The only 304(a) values listed by EPA are: Human Health for the consumption of Water + Organism 0.00015 µg/L and Human Health for

the consumption of Organism 0.017 µg/L. *Please justify the use of the EPA 304(a) criteria for the FBC standard and how the standard was calculated.*

**ADEQ Response 64:**

**Bis(chloromethyl)ether:** Bis(chloromethyl)ether is a class A, demonstrated human carcinogen on the basis of statistically significant increases in lung tumors observed in six studies of exposed workers. The reference to the Clean Water Act 304(a) human health ambient water quality criterion noted in the preamble was in error. The Department used the USEPA IRIS OCSF of 220 (mg/Kg-d)<sup>-1</sup> to calculate the FBC standard.

**Comment 65: City of Phoenix - Numeric SWQS, Appendix A - dissolved cadmium/7440439 (pp.215-216)**

For all Aquatic & Wildlife standards, the specific Table reference (2 or 3) and footnote d (hardness) have been removed from Table 1. *Please include the appropriate table number for each standard and clarification if footnote (d) still applies to dissolved cadmium.*

**ADEQ Response 65:**

The corrections to the tables and footnotes have been made.

**Comment 66: City of Phoenix - Numeric SWQS, Appendix A -dissolved chromium III/16065831 (pp.200-201, 216, 219-220)**

For the chronic A&Wc, A&Ww and A&Wedw standards, the preamble states that Appendix A, Table 4 was updated to correct a rounding error at hardness 20 mg/L from “19.8 µg/L” to “10.8 µg/L.” In the 2009 rule, this standard was “19.84 µg/L” at hardness 20 mg/L. *There does not appear to be a typographical error. Please provide an explanation of this typographical error or revert back to the current standard.*

**ADEQ Response 66:**

**Dissolved Chromium III** The commenter is correct. The published draft standard for chromium III at a hardness of 20 (10.8) is a typographical error. The value should be 19.8. The published formula returns the correct value as well.

**Comment 67: City of Phoenix - Numeric SWQS, Appendix A - total chromium/7440473 (pp.193, 196, 216)**

According to the preamble, total chromium FBC & PBC standards have: “Reverted to old standards despite lack of EPA data.” These standards are lower than those for total chromium III and chromium VI. Chromium III results are determined by subtracting chromium VI from total chromium so the total standard cannot be lower than the component standards. *Please provide justification for these new standards or remove.*

**ADEQ Response 67:**

**Total Chromium** The draft standard for total chromium was based on USEPA correspondence which stated that ADEQ...“*can't eliminate (PBC and FBC total chromium standards) without replacement. Ask ADEQ to correct in next triennial review.*” This statement was later retracted. As the Department currently has PBC and FBC standards for Chromium III and VI, the two species that make up total chromium, the Department removed the total chromium PBC and FBC standards.

**Comment 68: City of Phoenix - Numeric SWQS, Appendix A - demeton/8065483 (pp.198, 216)**

The proposed new Aquatic & Wildlife chronic standards do not match the EPA 304(a) criteria which is listed as 0.1 µg/L for Freshwater (chronic). *Please provide justification or correction for this difference.* This parameter has a typographical error in nomenclature on page 198.

**ADEQ Response 68:**

The commenter is correct. The typographical error will be corrected to match the USEPA 304(a) criterion of 0.1 µg/L for Freshwater (chronic).

**Comment 69: City of Phoenix - Numeric SWQS, Appendix A - 1,4-dichlorobenzene/106467 (pp.194, 196, 216)**

The PBC & FBC standards have been lowered significantly due to a “corrected mistake.” *Please provide justification/background in the rule preamble for this corrected mistake.*

**ADEQ Response 69:**

In the 2009 triennial review rulemaking, ADEQ revised both the PBC and FBC standards for 1,4-dichlorobenzene from 560,000 µg/L to 373,333 µg/L, as explained in the preamble to the final rule. 14 AAR 4708, 4728; 4738 (December 26, 2008). The full text of the rule correctly listed the standard for FBC as 373,333 µg/L, but mistakenly replaced a comma with a decimal point for the PBC standard, listing it as 373.333 µg/L. During this current triennial review, ADEQ recognized

that an error occurred and sought to correct the mistake. However, ADEQ incorrectly changed the FBC standard to mirror the PBC standard in the NPRM when it should have done the opposite. The correct standard for both the PBC and FBC uses is 373,333 µg/L, as derived using the ATSDR MRL of 0.4 mg/Kg/day found at <https://www.atsdr.cdc.gov/toxprofiles/tp10-c8.pdf>.

**Comment 70: City of Phoenix - Numeric SWQS, Appendix A -mirex/2385855 (pp.195,197, 217)**

The preamble states that the data used to calculate the revised FBC and PBC standards are the RfD. However, pages 195 and 197 of the preamble “data source” states changed OCSF and BCF. In addition, the link: <https://oehha.ca.gov/chemicals/mirex> does not appear to list the RfD, but the RfD is listed in the second link. *Please provide the RfD and clarify if the RfD is used to calculate the revised FBC and PBC standards, and ensure links are correct.*

**ADEQ Response 70:**

**Mirex:** The OCSF for mirex from the first OEHHA reference (18) was used to calculate the FBC standard. The PBC standard has been changed to reflect the IRIS RfD (0.0002) for mirex. The references have been changed in the preamble.

**Comment 71: City of Phoenix - Numeric SWQS, Appendix A – nonylphenol/104405 (pp.200, 217)**

The (chemical abstracts service) CAS number listed in ADEQ rule does not match the CAS number on the EPA 304a criteria (CAS 84852153). In addition, the Freshwater (acute) value in the EPA 304a criteria is 28 ug/L, not 27.8 ug/L as in the ADEQ rules. *Please provide justification or correction for these differences.*

**ADEQ Response 71:**

The 2005 USEPA Ambient Aquatic Life Water Quality Criteria document for nonylphenol states that: “CAS numbers 104-40-5 (phenol, 4-nonyl-) and 25154-52-3 (phenol, nonyl) have also been used to describe these compounds.” Also in this USEPA criteria document, the final calculated Criterion Maximum Concentration (CMC) is 27.75 µ/L. The Department has rounded this value to 28 µ/L. No change will be made to the CAS number.

**Comment 72: City of Phoenix - Numeric SWQS, Appendix A - oxamyl/23135220 (pp. 217)**

A new FC standard has been added to rule, but is not noted in the preamble. *Please provide justification for this new standard.*

**ADEQ Response 72:**

A new standard was added because a new BCF of 3.1 was incorporated from the US National Library of Medicine, National Center for Biotechnology Information (NCBI). <https://pubchem.ncbi.nlm.nih.gov/compound/oxamyl>. The notation has been made in the preamble.

**Comment 73: City of Phoenix - Numeric SWQS, Appendix A - paraquat/1910425 (pp.217)**

A new FC standard has been added to rule, but is not noted in the preamble. *Please provide justification for this new standard.*

**ADEQ Response 73:**

A new BCF of 0.3 was incorporated from the Extension Toxicology Network (EXTOXNET) Pesticide Information Profile for Paraquat. <http://pmep.cce.cornell.edu/profiles/extoxnet/metiram-propoxur/paraquat-ext.html>. The notation has been made in the preamble.

**Comment 74: City of Phoenix - Numeric SWQS, Appendix A - picloram/1918021 (pp.192, 217)**

The reference link for the FC RfD is incorrect. In addition, the EPA RfD is 0.05 mg/kg/day not 0.07 mg/kg/day per the reference. *Please provide the correct link, correct RfD, and justification for the new FC standard.*

**ADEQ Response 74:**

The RfD referenced in the preamble and employed in the standard calculation is correct as per the USEPA IRIS database. A typographical error listed the reference for the RfD for permethrin in the preamble. The correct link to the picloram reference dose is [https://cfpub.epa.gov/ncea/iris/iris\\_documents/documents/subst/0256\\_summary.pdf](https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0256_summary.pdf) and has been incorporated in the preamble.

**Comment 75: City of Phoenix - Proposed Numeric SWQS, Appendix A, Ammonia - Tables 11 to 17**

More stringent standards for ammonia have been added due to the Unionidae mussel family,

particularly “making the standard more stringent for waters where unionids are present” (preamble page 201). The preamble also states that “for the aquatic & wildlife cold and warm water uses, Unionidae will be assumed to be present unless a study is performed demonstrating that they are absent and there is no historic evidence of their presence, or hydrologic modification has altered the flow regime that would prevent their reestablishment” (page 201) However, this assumption of presence and therefore, application of this standard to the entire state is excessive based on current knowledge regarding the extent of this mussel family presence as detailed in the 2009 Arizona Game & Fish Department (AGFD) Heritage Grant Study I07011. *Please consider coordinating with AGFD to determine where probable habitat is likely present to more appropriately apply these standards.*

#### **ADEQ Response 75:**

While the number of locations where present or historic evidence of Unionidae has been found in the study by Dr. Meyers is relatively small, this is an artifact of the extent of the study and should not be construed as a historic range, or the potential range of a recovered population. Given that evidence of, or extant populations were found at altitudes from 80 ft. ASL at the southern border to over 8000 ft. ASL in the White Mountains, ADEQ will assume Unionidae to be present unless a study is performed demonstrating that they are absent and there is no historic evidence of their presence, or hydrologic modification has altered the flow regime in a way that would prevent their reestablishment.

The stated goals of the CWA are to restore and maintain the integrity of the Nation’s waters. While Unionidae have been extirpated from large portions of the State’s waters, the goal of the CWA to restore these waters necessitates intact and viable ecosystems, including native organisms. It is important that ADEQ address ammonia toxicity to unionids, where they occur or where they could be reestablished. It is the Department’s position that perennial waters with either the A&Wc or A&Ww designated uses provide appropriate conditions for habitation by Unionid mussels.

#### **Comment 76: City of Phoenix - Proposed Numeric SWQS, Appendix A, Ammonia - Tables 11 to 17**

ADEQ has not applied the unionid mussel standard to A&Wedw “because effluent dependent waters are situated in channels that were dry prior to permitted discharges” (preamble page 201). However, the following waters that are classified as A&Ww in the Middle Gila also would fall

under this category:

Urban Lakes – man-made isolated waterbodies.

Middle Gila Salt River segment “Below Interstate 10 bridge to the City of Phoenix 23rd Ave WWTP outfall at 33°24’44” N, 112°07’59” W” – segment of the Salt River for which the City has an AZPDES permit to create the Rio Salado Habitat Restoration Area. In addition, a hydrologic study to substantiate the modification of the flow regime in the Salt River, downstream of Granite Reef Dam and Tempe Town Lake seems excessive to prove unionid mussel absence.

*Please consider classifying these surface waters as unionid mussel absent as these surface water cannot support the-Unionidae mussel species.*

**ADEQ Response 76:**

An analysis will need to be conducted on a waterbody specific basis and consider water source, connectivity, historic flow regime, design intent and de facto public uses, among other factors. As the Middle Gila/Salt River segment in question was designated A&We prior to 2009, and the downstream segment is designated A&Wedw, this segment may meet the hydrological modification exemption due to upstream dams, long term dewatering, and channelization. As this segment is now designated A&Ww, a site-specific analysis considering these modifications, present sources of water, and historic dewatering will need to be performed. ADEQ will further consider the application of this rule to man-made, isolated waterbodies in the next triennial review.

**Comment 77: City of Phoenix - Proposed Numeric SWQS, Appendix A, Ammonia - Tables 11 to 17**

Please provide links to U.S. Fish and Wildlife Service guidance or protocols on how the permittee would conduct a study or survey demonstrating the presence / absence of the unionid mussel, which is not stated in the preamble and rule.

**ADEQ Response 77:**

As of this writing, there is no specific USFWS guidance for undertaking surveys for unionid mussels. Dr. Terry Meyers suggested the use of:

- Strayer, David L. and David R. Smith. *A guide to sampling freshwater mussel populations* (2003) American Fisheries Society, Monograph 8. Bethesda, Maryland. ISBN 1-888569-50-6.
- *The Mollusks: A guide to their study, collection and preservation*, Edited by Sturm, Pearce, and Valdes. A publication of the American Malacological Society. ISBN 1-58112-930-0.

**Comment 78: City of Phoenix - Proposed Numeric SWQS, Appendix A, Ammonia - Tables 11 to 17**

The City suggests adding a notation in the rule that the unionid mussel present standards do not apply to A&Wedw, Aquatic & Wildlife ephemeral (A&We) or to other classifications of waters that would be predominantly dry without permitted discharges.

**ADEQ Response 78:**

The Department has added notes clarifying the application of the ammonia standard to each table.

**Comment 79: City of Phoenix - AAC R18-11-101, Definitions – “Critical flow conditions of the receiving water”**

Please define “harmonic mean flow” which is used in section (c) of this definition.

**ADEQ Response 79:**

The EPA Technical Support Document For Water Quality Based Toxics Control (1991), defines the harmonic mean flow as “the number of daily flow measurements divided by the sum of the reciprocals of the flows. That is, it is the reciprocal of the mean of reciprocals.” Because EPA’s definition is consistent with the commonly understood definition of harmonic mean, ADEQ has not defined the term “harmonic mean flow” in the rule.

**Comment 80: City of Phoenix - AAC R18-11-101, Definitions – “Pollution Minimization Program”**

The City suggests changing “and” to “or” in the following statement: “...pollutant controls that will prevent or reduce pollutant loadings.” Not all surface waters have established TMDLs.

**ADEQ Response 80:**

The definition the City is referring to is Pollutant Minimization Program (R18-11-101(34)). This definition was added in support of revisions to the variance language contained in R18-11-122. The definition is consistent with the federal definition found at 40 CFR 131.3(p), therefore,

ADEQ will retain the proposed definition. The reduced pollutant loadings referred to in the definition are not explicitly related to TMDLs. The Pollution Minimization Program in this context refers to those actions taken by a permittee to reduce pollutant loadings where additional pollutant control technologies are not available.

**Comment 81: City of Phoenix - AAC R18-11-101, Definitions – “Statistical Threshold”**

Please add a definition for “statistical threshold” as it relates to the new E.coli reporting requirements.

**ADEQ Response 81:**

The term “statistical threshold” does not relate to new *E. coli* reporting requirements, rather it relates to how the proposed surface water quality standard was derived mathematically. Changes to AZPDES reporting requirements are addressed during the permitting process not in the triennial review. Please see Response 20 for discussion regarding the definition of Statistical Threshold Value.

**Comment 82: City of Phoenix - AAC R18-11-101, Definitions – “Highest Attainable Condition”**

ADEQ has removed the definition proposed in the informal draft rule for “Highest attainable condition” as it relates to variances/R18-11-122, but does not provide justification for why this definition was removed from the proposed rule. The City suggests that a definition for “Highest attainable condition” be added to the rule.

**ADEQ Response 82:**

While ADEQ’s informal draft included a definition of “highest attainable condition,” ADEQ received negative comments regarding this informally proposed definition. For that reason, and given that the federal government did not define the term, ADEQ did not include the definition in its Notice of Proposed Rulemaking or the final rule.

**Comment 83: City of Phoenix - AAC R18-11-101, Definitions – “Zone of Initial Dilution”**

Please consider specifying the criteria for determining the “Zone of Initial Dilution” in the variance rule/R18-11-122, specifically the terms “small area” and “turbulence is high and causes rapid mixing with the surrounding water.”

**ADEQ Response 83:**

ADEQ has adapted the “Zone of Initial Dilution” (ZID) definition from several different sources, which are summarized in the EPA Guidance Document titled, “Compilation of Mixing Zone Guidance Documents” found here: <https://www.epa.gov/sites/production/files/2018-10/documents/compilation-epa-mixingzone-documents.pdf>.

The ZID is applicable to toxic pollutants and the ZID’s specific area or size would be characterized on a case-by-case basis using hydraulic modeling. The model determines the size of the ZID by evaluating how much dilution occurs initially (subsequently determines how rapidly mixing occurs) by using the critical flow conditions of the receiving water, critical flow condition of the discharge, and the upstream receiving water and discharge concentration variables. One can assume if there is a relatively high amount of water upstream in the receiving water compared to a relatively low amount of water in the discharge the dilution ratio will be larger and the size of ZID would be smaller compared to the alternative. Because these determinations will be made on a case-by-case basis, ADEQ will not specify criteria for the terms “small area” and “turbulence is high and causes rapid mixing with the surrounding water.”

**Comment 84: City of Phoenix – R18-11-107.01 Antidegradation Criteria**

Under subsection (d) review of a Section 404 permit, it states that for an individual Section 404 permit, ADEQ will conduct an antidegradation review if the discharge may degrade existing water quality in an Outstanding Arizona Water (OAW) or a 303(d)-listed water. 404(b)(1) guidelines apply to discharges in all Waters of the U.S., not just OAW or 303(d)-listed waters. Please update this section to reflect 404(b)(1) antidegradation review requirements per 40 Code of Federal Regulations 230.10(c).

**ADEQ Response 84:**

ADEQ agrees that water quality antidegradation protections extend to all surface waters. It is ADEQ’s position that, for purposes of individual § 404 permits, antidegradation review is satisfied by conducting a “significant degradation” review of a proposed discharge under the CWA § 404(b)(1) Guidelines, except in cases where a discharge may degrade existing water quality in an OAW or a water listed on the 303(d) List of impaired waters. In those cases, ADEQ will conduct an antidegradation review. R18-11-107.01(D) was crafted to ensure antidegradation protections extend to all surface waters while accounting for the interplay between various facets of the § 404 permitting process and antidegradation review, and is not intended to be

substantively different from the currently applicable antidegradation rule as approved by EPA on January 21, 2009. Please see the preamble section entitled *Legal Gap Modifications*, and Response 29.

**Comment 85: City of Phoenix - AAC R18-11-109, *E. Coli* bacterial Numeric Water Quality Standards**

Please provide clarification regarding subsection (A) to explain how the new *E. coli* standard (sampling, reporting, exceedances, etc.) will be applied.

**ADEQ Response 85:**

ADEQ does not anticipate any changes in the current sampling or reporting procedures for *E. coli*. The change is to the criteria only. The Statistical Threshold Value (term replacing SSM) is statistically arrived at but does not require a statistical analysis to determine if monitoring data meets the value. Sample results will directly compared to the applicable STV. Any changes to AZPDES permit limits will occur during permit renewal following the adoption of the new criteria.

**Comment 86: City of Phoenix - AAC R18-11-122, Variances**

ADEQ must comply with new federal regulations that say that variances are water quality standards, and must go through the rulemaking process when they were issued as part of AZPDES permits.

AAC R18-11-122(M) has been added, which states “Upon expiration of a variance, point source dischargers shall comply with the water quality standard.” The AZPDES program and associated rules and permits should implement variance requirements for point source dischargers, and reference to point source dischargers should be removed from the SWQS. *The City suggests AAC R18-11-122(M) be removed.*

**ADEQ Response 86:**

As mentioned in the preamble, variances are now a change to a water quality standard pursuant to federal law and in Arizona water quality standards must be established by rule. See 40 C.F.R. § 131.14 and A.R.S. § 49-221(A). As of the promulgation date of this proposed rule, no ADEQ Permittee is operating under a variance. However, ADEQ is updating the variance rules to be consistent with federal law because variances can still be a vital tool to improving water quality in partnership with point source dischargers. Because variances are now a change to a water quality standard (although temporary) and can be discharger specific, the language in AAC R18-11-

122(M) and all other references to point source discharges needs to be maintained in the SWQS in order to properly implement variances in Arizona consistent with the federal rule. For additional explanation of this rule, please see Response 49.

**Comment 87: City of Phoenix - Appendix B-Surface Waters and Designated Uses. Middle Gila Watershed**

ADEQ has incorrectly renamed “Indian School Park Lake” to “Steele Indian School Pond” because - per preamble page 202 - the “City of Phoenix changed the name of the waterbody.” Indian School Park Lake is a Scottsdale lake, not a Phoenix lake. The current version of Appendix B correctly refers to the location of this lake at Indian School Road & Hayden Road, Scottsdale at 33°29'39" N, 111°54'37" W. *Please restore to the existing listing of this lake in Appendix B.*

**ADEQ Response 87:**

ADEQ renamed Indian School Park Lake to Steele Indian School Pond in the draft rule in error. We thank the City of Phoenix for this observation. The name will be reverted to the correct original name in the final rule.

**Comment 88 and Response 88: Laboratories – Appendix A – Cost of testing more stringent standards.**

A number of laboratories provided comments to assist ADEQ in preparing the Economic, Small Business, and Consumer Impact Statement. Generally, these responses indicated that testing for some of the more stringent levels set by this rulemaking could create a large costs to laboratories, and that some levels surpassed laboratories’ current detection capabilities. ADEQ appreciates these comments, and has incorporated these comments into the Economic, Small Business, and Consumer Impact Statement. Please see also Response 41 for discussion regarding economic considerations in setting water quality criteria.

**Comment 89 and ADEQ Response: Tempe Tourism Office – Economic Impact of Tempe Town Lake**

ADEQ received data from the Tempe Tourism Office indicating the significant economic impact of Tempe Town Lake. ADEQ appreciates this information and has included it in the Economic, Small Business, and Consumer Impact Statement.

**12. All agencies shall list other matters prescribed by statute applicable to the specific**

**agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:**

There are no other matters prescribed by statute applicable specifically to ADEQ or this specific rulemaking.

**a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:**

Not applicable. This rulemaking is a water quality standards rulemaking and does not require a permit.

**b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:**

The federal Clean Water Act and implementing regulations adopted by EPA apply to the subject of this rule, as described in section 5 above. This rulemaking is no more stringent than required by federal law. However, pursuant to A.R.S. § 49-221(B), ADEQ does have inherent authority to establish water quality standards for all waters of the state, including waters beyond those required to be regulated under the Clean Water Act.

**c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:**

No such analysis has been submitted.

**13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:**

None.

**14. Whether the rule was previously made, amended, or repealed as an emergency rule. If so, cite the notice published in the Register as specified in R1-1-409(A). Also, the agency shall state where the text was changed between the emergency and the final rulemaking packages:**

This rule was not.

**15. The full text of the rules follows:**

**TITLE 18. ENVIRONMENTAL QUALITY**  
**CHAPTER 11. DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**WATER QUALITY STANDARDS**

**ARTICLE 1. WATER QUALITY STANDARDS FOR SURFACE WATER**

Section

- R18-11-101. Definitions
- R18-11-107.01. Antidegradation Criteria
- R18-11-109. Numeric Water Quality Standards
- R18-11-114. Mixing Zones
- R18-11-115. Site-Specific Standards
- R18-11-120. Enforcement of Non-Permitted Discharges
- R18-11-122. Variances
- Appendix A. Numeric Water Quality Standards
  - Table 1. Water Quality Criteria By Designated Use
  - Table 2. Acute Water Quality Standards for Dissolved Cadmium
  - Table 3. Chronic Water Quality Standards for Dissolved Cadmium
  - Table 4. Water Quality Standards for Dissolved Chromium III
  - Table 5. Water Quality Standards for Dissolved Copper
  - Table 6. Water Quality Standards for Dissolved Lead
  - Table 11. ~~Acute Criteria for Total Ammonia (in mg/L as N) Aquatic and Wildlife coldwater, warmwater, and edw~~ Acute Standards for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife coldwater, Unionid Mussels Present
  - Table 12. ~~Chronic Criteria for Total Ammonia (mg/L as N) Aquatic and Wildlife coldwater, warmwater, and edw~~ Acute Standards for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife warmwater, Unionid Mussels Present
  - Table 13. ~~Repealed~~ Chronic Criteria for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife coldwater and warmwater, Unionid Mussels Present
  - Table 14. ~~Repealed~~ Acute Standards for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife Coldwater, Unionid Mussels Absent
  - Table 15. ~~Repealed~~ Acute Standards for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife Warmwater and Effluent Dependent, Unionid Mussels Absent
  - Table 16. ~~Repealed~~ Chronic Standards for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife Warmwater and Effluent Dependent, Unionid Mussels Absent
  - Table 17. ~~Repealed~~ Chronic Criteria for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife coldwater, Unionid Mussels Absent
- Appendix B. Surface Waters and Designated Uses

Appendix C. Site-Specific Standards

## R18-11-101. Definitions

The following terms apply to this Article:

1. “Acute toxicity” means toxicity involving a stimulus severe enough to induce a rapid response. In aquatic toxicity tests, an effect observed in 96 hours or less is considered acute.
2. “Agricultural irrigation (AgI)” means the use of a surface water for crop irrigation.
3. “Agricultural livestock watering (AgL)” means the use of a surface water as a water supply for consumption by livestock.
4. “Annual mean” is the arithmetic mean of monthly values determined over a consecutive 12-month period, provided that monthly values are determined for at least three months. A monthly value is the arithmetic mean of all values determined in a calendar month.
5. “Aquatic and wildlife (cold water) (A&Wc)” means the use of a surface water by animals, plants, or other cold-water organisms, generally occurring at an elevation greater than 5000 feet, for habitation, growth, or propagation.
6. “Aquatic and wildlife (effluent-dependent water) (A&Wedw)” means the use of an effluent-dependent water by animals, plants, or other organisms for habitation, growth, or propagation.
7. “Aquatic and wildlife (ephemeral) (A&We)” means the use of an ephemeral water by animals, plants, or other organisms, excluding fish, for habitation, growth, or propagation.
8. “Aquatic and wildlife (warm water) (A&Ww)” means the use of a surface water by animals, plants, or other warm-water organisms, generally occurring at an elevation less than 5000 feet, for habitation, growth, or propagation.
9. “Arizona Pollutant Discharge Elimination System (AZPDES)” means the point source discharge permitting program established under 18 A.A.C. 9, Article 9.
10. “Assimilative capacity” means the difference between the baseline water quality concentration for a pollutant and the most stringent applicable water quality criterion for that pollutant.
11. “Clean Water Act” means the Federal Water Pollution Control Act [33 U.S.C. 1251 to 1387].
12. “Complete Mixing” means the location at which concentration of a pollutant across a transect of a surface water differs by less than five percent.
- ~~13.~~ “Criteria” means elements of water quality standards that are expressed as pollutant concentrations, levels, or narrative statements representing a water quality that supports a designated use.
- ~~14.~~ “Critical flow condition conditions of the discharge” means the lowest flow over seven consecutive days that has a probability of occurring once in 10 years (7-Q-10) hydrologically based discharge flow averages that the director uses to calculate and implement applicable water quality criteria to a mixing zone’s receiving water as follows:
  - a. For acute aquatic water quality standard criteria, the discharge flow critical condition is represented by the maximum one-day average flow analyzed over a reasonably representative timeframe.
  - b. For chronic aquatic water quality standard criteria, the discharge flow critical flow condition is represented by the maximum monthly average flow analyzed over a reasonably representative timeframe.

- c. For human health based water quality standard criteria, the discharge flow critical condition is the long-term arithmetic mean flow, averaged over several years so as to simulate long-term exposure.
15. “Critical flow conditions of the receiving water” means the hydrologically based receiving water low flow averages that the director uses to calculate and implement applicable water quality criteria:
- a. For acute aquatic water quality standard criteria, the receiving water critical condition is represented as the lowest one-day average flow event expected to occur once every ten years, on average (1Q10).
- b. For chronic aquatic water quality standard criteria, the receiving water critical flow condition is represented as the lowest seven-consecutive-day average flow expected to occur once every ten years, on average (7Q10), or
- c. For human health based water quality standard criteria, in order to simulate long-term exposure, the receiving water critical flow condition is the harmonic mean flow.
- ~~14-16.~~ “Deep lake” means a lake or reservoir with an average depth of more than 6 meters.
- ~~15-17.~~ “Designated use” means a use specified in Appendix B of this Article for a surface water.
- ~~16-18.~~ “Domestic water source (DWS)” means the use of a surface water as a source of potable water. Treatment of a surface water may be necessary to yield a finished water suitable for human consumption.
- ~~17-19.~~ “Effluent-dependent water (EDW)” means a surface water, classified under R18-11-113 that consists of a point source discharge of wastewater. An effluent-dependent water is a surface water that, without the point source discharge of wastewater, would be an ephemeral water.
- ~~18-20.~~ “Ephemeral water” means a surface water that has a channel that is at all times above the water table and flows only in direct response to precipitation.
- ~~19-21.~~ “Existing use” means a use attained in the waterbody on or after November 28, 1975, whether or not it is included in the water quality standards.
- ~~20-22.~~ “Fish consumption (FC)” means the use of a surface water by humans for harvesting aquatic organisms for consumption. Harvestable aquatic organisms include, but are not limited to, fish, clams, turtles, crayfish, and frogs.
- ~~21-23.~~ “Full-body contact (FBC)” means the use of a surface water for swimming or other recreational activity that causes the human body to come into direct contact with the water to the point of complete submergence. The use is such that ingestion of the water is likely and sensitive body organs, such as the eyes, ears, or nose, may be exposed to direct contact with the water.
- ~~22-24.~~ “Geometric mean” means the nth root of the product of n items or values. The geometric mean is calculated using the following formula:
- $$GM_Y = \sqrt[n]{(Y_1)(Y_2)(Y_3)^{1/4} (Y_n)}$$
- ~~23-25.~~ “Hardness” means the sum of the calcium and magnesium concentrations, expressed as calcium carbonate (CaCO<sub>3</sub>) in milligrams per liter.
- ~~24-26.~~ “Igneous lake” means a lake located in volcanic, basaltic, or granite geology and soils.

- ~~25-27.~~ “Intermittent water” means a stream or reach that flows continuously only at certain times of the year, as when it receives water from a spring or from another surface source, such as melting snow.
- ~~26-28.~~ “Mixing zone” means an area or volume of a surface water that is contiguous to a point source discharge where dilution of the discharge takes place.
- ~~27-29.~~ “Oil” means petroleum in any form, including crude oil, gasoline, fuel oil, diesel oil, lubricating oil, or sludge.
- ~~28-30.~~ “Outstanding Arizona water (OAW)” means a surface water that is classified as an outstanding state resource water by the Director under R18-11-112.
- ~~29-31.~~ “Partial-body contact (PBC)” means the recreational use of a surface water that may cause the human body to come into direct contact with the water, but normally not to the point of complete submergence (for example, wading or boating). The use is such that ingestion of the water is not likely and sensitive body organs, such as the eyes, ears, or nose, will not normally be exposed to direct contact with the water.
- ~~30-32.~~ “Perennial water” means a surface water that flows continuously throughout the year.
- ~~31-33.~~ “Pollutant” means fluids, contaminants, toxic wastes, toxic pollutants, dredged spoil, solid waste, substances and chemicals, pesticides, herbicides, fertilizers and other agricultural chemicals, incinerator residue, sewage, garbage, sewage sludge, munitions, petroleum products, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and mining, industrial, municipal, and agricultural wastes or any other liquid, solid, gaseous, or hazardous substance.  
A.R.S § 49-201(29)
34. “Pollutant Minimization Program” means a structured set of activities to improve processes and pollutant controls that will prevent and reduce pollutant loadings.
- ~~32-35.~~ “Practical quantitation limit” means the lowest level of quantitative measurement that can be reliably achieved during a routine laboratory operation.
- ~~33-36.~~ “Reference condition” means a set of ~~ecological measurements from a population of relatively undisturbed waterbodies within a region that establish a basis for making comparisons of biological condition among samples~~ abiotic physical stream habitat, water quality, and site selection criteria established by the Director that describe the typical characteristics of stream sites in a region that are least disturbed by environmental stressors. Reference biological assemblages of macroinvertebrates and algae are collected from these reference condition streams for calculating the Arizona Indexes of Biological Integrity thresholds.
- ~~34-37.~~ “Regional Administrator” means the Regional Administrator of Region IX of the U.S. Environmental Protection Agency.
- ~~35-38.~~ “Regulated discharge” means a point-source discharge regulated under an AZPDES permit, a discharge regulated by a § 404 permit, and any discharge authorized by a federal permit or license that is subject to state water quality certification under § 401 of the Clean Water Act.
- ~~36-39.~~ “Riffle habitat” means a stream segment where moderate water velocity and substrate roughness produce moderately turbulent conditions that break the surface tension of the water and may produce breaking wavelets that turn the surface water into white water.

- ~~37.40.~~ “Run habitat” means a stream segment where there is moderate water velocity that does not break the surface tension of the water and does not produce breaking wavelets that turn the surface water into white water.
- ~~38.41.~~ “Sedimentary lake” means a lake or reservoir in sedimentary or karst geology and soils.
- ~~39.42.~~ “Shallow lake” means a lake or reservoir, excluding an urban lake, with a smaller, flatter morphology and an average depth of less than 3 meters and a maximum depth of less than 4 meters.
- ~~40.43.~~ “Significant degradation” means:
- a. The consumption of 20 percent or more of the available assimilative capacity for a pollutant of concern at critical flow conditions, or
  - b. Any consumption of assimilative capacity beyond the cumulative cap of 50 percent of assimilative capacity.
- ~~41.44.~~ “Surface water” means ~~a water of the United States and includes the following:~~
- ~~a. A water that is currently used, was used in the past, or may be susceptible to use in interstate or foreign commerce;~~
  - ~~b. An interstate water, including an interstate wetland;~~
  - ~~c. All other waters, such as an intrastate lake, reservoir, natural pond, river, stream (including an intermittent or ephemeral stream), creek, wash, draw, mudflat, sandflat, wetland, slough, backwater, prairie pothole, wet meadow, or playa lake, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce, including any such water:~~
    - ~~i. That is or could be used by interstate or foreign travelers for recreational or other purposes;~~
    - ~~ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or~~
    - ~~iii. That is used or could be used for industrial purposes by industries in interstate or foreign commerce;~~
  - ~~d. An impoundment of a surface water as defined by this definition;~~
  - ~~e. A tributary of a surface water identified in subsections (41)(a) through (d); and~~
  - ~~f. A wetland adjacent to a surface water identified in subsections (41)(a) through (e). “Navigable waters” as defined in A.R.S. § 49-201(22).~~
- ~~42.45.~~ “Total nitrogen” means the sum of the concentrations of ammonia (NH<sub>3</sub>), ammonium ion (NH<sub>4</sub><sup>+</sup>), nitrite (NO<sub>2</sub>), and nitrate (NO<sub>3</sub>), and dissolved and particulate organic nitrogen expressed as elemental nitrogen.
- ~~43.46.~~ “Total phosphorus” means all of the phosphorus present in a sample, regardless of form, as measured by a persulfate digestion procedure.
- ~~44.47.~~ “Toxic” means a pollutant or combination of pollutants, that after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism, either directly from the environment or indirectly by ingestion through food chains, may cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction), or physical deformations in the organism or its offspring.
- ~~45.48.~~ “Urban lake” means a manmade lake within an urban landscape.

46.49. “Use attainability analysis” means a structured scientific assessment of the factors affecting the attainment of a designated use including physical, chemical, biological, and economic factors.

50. “Variance” means a time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition during the term of the variance.

47.51. “Wadeable” means a surface water can be safely crossed on foot and sampled without a boat.

48.52. “Wastewater” does not mean:

- a. Stormwater,
- b. Discharges authorized under the De Minimus General Permit,
- c. Other allowable non-stormwater discharges permitted under the Construction General Permit or the Multi-sector General Permit, or
- d. Stormwater discharges from a municipal storm sewer system (MS4) containing incidental amounts of non-stormwater that the MS4 is not required to prohibit.

49.53. “Wetland” means an area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. A wetland includes a swamp, marsh, bog, cienega, tinaja, and similar areas.

~~50.~~ “~~Zone of passage~~” means a ~~continuous water route of volume, cross sectional area, and quality necessary to allow passage of free-swimming or drifting organisms with no acutely toxic effect produced on the organisms.~~

54. “Zone of initial dilution” means a small area in the immediate vicinity of an outfall structure in which turbulence is high and causes rapid mixing with the surrounding water.

#### **R18-11-107.01. Antidegradation Criteria**

##### **A.** Tier 1 antidegradation protection.

1. Tier 1 antidegradation protection applies to the following surface waters:
  - a. A surface water listed on the 303(d) list for the pollutant that resulted in the listing,
  - b. An effluent dependent water,
  - c. An ephemeral water,
  - d. An intermittent water, and
  - e. A canal listed in Appendix B.
2. A regulated discharge shall not cause a violation of a surface water quality standard or a wasteload allocation in a total maximum daily load approved by EPA.
3. Except as provided in subsections (E) and (F), Tier 1 antidegradation review requirements are satisfied for a point-source discharge regulated under an individual AZPDES permit to an ephemeral water, effluent dependent water, intermittent water, or a canal listed in Appendix B, if water quality-based effluent limitations designed to achieve compliance with applicable surface water quality standards are established in the permit and technology-based requirements of the Clean Water Act for the point source discharge are met.

##### **B.** Tier 2 antidegradation protection.

1. Tier 2 antidegradation protection applies to a perennial water with existing water quality that is better than applicable water quality standards. A perennial water that is not listed in subsection (A)(1) nor classified as an OAW under A.A.C. R18-9-112(G) has Tier 2 antidegradation protection for all pollutants of concern.
2. A regulated discharge that meets the following criteria, at critical flow conditions, does not cause significant degradation:
  - a. The regulated discharge consumes less than 20 percent of the available assimilative capacity for each pollutant of concern, and
  - b. At least 50 percent of the assimilative capacity for each pollutant of concern remains available in the surface water for each pollutant of concern.
3. Antidegradation review. Any person proposing a new or expanded regulated discharge under an individual AZPDES permit that may cause significant degradation shall provide ADEQ with the following information:
  - a. Baseline characterization. A person seeking authorization to discharge under an individual AZPDES permit to a perennial water shall provide baseline water quality data on pollutants of concern where no data exists or there are insufficient data to characterize baseline water quality and to determine available assimilative capacity. A discharger shall characterize baseline water quality at a location upstream of the proposed discharge location;
  - ~~a~~b. Alternative analysis.
    - i. The person seeking authorization for the discharge shall prepare and submit a written analysis of alternatives to the discharge. The analysis shall provide information on all reasonable, cost-effective, less-degrading or non-degrading discharge alternatives. Alternatives may include wastewater treatment process changes or upgrades, pollution prevention measures, source reduction, water reclamation, alternative discharge locations, groundwater recharge, land application or treatment, local pretreatment programs, improved operation and maintenance of existing systems, seasonal or controlled discharge to avoid critical flow conditions, and zero discharge;
    - ii. The alternatives analysis shall include cost information on base pollution control measures associated with the regulated discharge and cost information for each alternative;
    - iii. The person shall implement the alternative that is cost-effective and reasonable, results in the least degradation, and is approved by the Director. An alternative is cost-effective and reasonable if treatment costs associated with the alternative are less than a 10 percent increase above the cost of base pollution control measures;
    - iv. For purposes of this subsection, “base pollution control measures” are water pollution control measures required to meet technology-based requirements of the Clean Water Act and water quality-based effluent limits designed to achieve compliance with applicable water quality standards; and
  - ~~b~~c. Social and economic justification. The person shall demonstrate to the Director that significant degradation is necessary to accommodate important economic or social development in the local area. The person seeking authorization for the discharge shall prepare a written social and economic justification that includes a description of the following:

- i. The geographic area where significant degradation of existing water quality will occur;
  - ii. The current baseline social and economic conditions in the local area;
  - iii. The net positive social and economic effects of development associated with the regulated discharge and allowing significant degradation;
  - iv. The negative social, environmental, and economic effects of allowing significant degradation of existing water quality; and
  - v. Alternatives to the regulated discharge that do not significantly degrade water quality yet may yield comparable social and economic benefits;
- ~~e. Baseline characterization. A person seeking authorization to discharge under an individual AZPDES permit to a perennial water shall provide baseline water quality data on pollutants of concern where no data exist or there are insufficient data to characterize baseline water quality and to determine available assimilative capacity. A discharger shall characterize baseline water quality at a location upstream of the proposed discharge location; and~~
- 4. For purposes of this Section, the term “pollutant of concern” means a pollutant with either a numeric or narrative water quality standard.
  - 5. Public participation. The Director shall provide public notice and an opportunity to comment on an antidegradation review under subsection (B)(3) and shall provide an opportunity for a public hearing under A.A.C. R18-9-A908(B).
- C. Tier 3 antidegradation protection.**
- 1. Tier 3 antidegradation protection applies only to an OAW listed in R18-11-112(G).
  - 2. A new or expanded point-source discharge directly to an OAW is prohibited.
  - 3. A person seeking authorization for a regulated discharge to a tributary to, or upstream of, an OAW shall demonstrate in a permit application or in other documentation submitted to ADEQ that the regulated discharge will not degrade existing water quality in the downstream OAW.
  - 4. A discharge regulated under a § 404 permit that may affect existing water quality of an OAW requires ~~an individual § 401 water quality certification~~ a determination by the Director to ensure that existing water quality is maintained and protected and any water quality impacts are temporary. Temporary water quality impacts are those impacts that occur for a period of six months or less and are not regularly occurring. The form of such a determination shall be as follows:
    - a. For Corps-issued § 404 permits, an individual § 401 water quality certification.
    - b. For Director-issued § 404 permits, a § 404 permit action, wherein the Director shall conduct a water quality evaluation as a part of the state’s requirements for issuing § 404 permits and in accordance with this section.
- D. Antidegradation review of a § 404 permit; shall be conducted as follows:**
- 1. For a Corps-issued § 404 permit. The Director shall conduct the antidegradation review of any discharge authorized under a nationwide or regional § 404 permit as part of the § 401 water quality certification prior to issuance of the nationwide or regional permit. The Director shall conduct the antidegradation review of an

individual § 404 permit if the discharge may degrade existing water quality in an OAW or a water listed on the 303(d) List of impaired waters. For regulated discharges that may degrade water quality in an OAW or a water that is on the 303(d) List of impaired waters, the Director shall conduct the antidegradation review as part of the § 401 water quality certification process.

2. For a Director-issued § 404 permit. The Director shall conduct the antidegradation review of any discharge authorized under a general § 404 permit as a part of its determination whether to issue a general permit in accordance with state requirements for issuing a § 404 general permit and with this section. The Director shall conduct the antidegradation review of an individual § 404 permit as part of the § 404 permit action in accordance with state requirements for issuing a § 404 permit and in accordance with this section.

- E. Antidegradation review of an AZPDES stormwater permit. An individual stormwater permit for a municipal separate storm sewer system (MS4) meets antidegradation requirements if the permittee complies with the permit, including developing a stormwater management plan containing controls that reduce the level of pollutants in stormwater discharges to the maximum extent practicable.
- F. Antidegradation review of a general permit. The Director shall conduct the antidegradation review of a regulated discharge authorized by a general permit at the time the general permit is issued or renewed. A person seeking authorization to discharge under a general permit is not required to undergo an individual antidegradation review at the time the Notice of Intent is submitted unless the discharge may degrade existing water quality in an OAW or a water listed on the 303(d) List of impaired waters.

**R18-11-109. Numeric Water Quality Standards**

A. *E. coli* bacteria. The following water quality standards for *Escherichia coli* (*E. coli*) are expressed in colony forming units per 100 milliliters of water (cfu / 100 ml) or as a Most Probable Number (MPN):

<i>E. coli</i>	FBC	PBC
Geometric mean (minimum of four samples in 30 days)	126	126
<del>Single sample maximum</del> <u>Statistical threshold value</u>	<del>235410</del>	<del>575576</del>

B. pH. The following water quality standards for pH are expressed in standard units:

pH	DWS	FBC, PBC, A&W <sup>1</sup>	AgI	AgL
Maximum	9.0	9.0	9.0	9.0
Minimum	5.0	6.5	4.5	6.5

Footnotes:

1. "1" Includes A&Wc, A&Ww, A&Wedw, and A&We.

C. The maximum allowable increase in ambient water temperature, due to a thermal discharge is as follows:

<b>A&amp;Ww</b>	<b>A&amp;Wedw</b>	<b>A&amp;Wc</b>
3.0° C	3.0° C	1.0° C

**D. Suspended sediment concentration.**

1. The following water quality standards for suspended sediment concentration, expressed in milligrams per liter (mg/L), are expressed as a median value determined from a minimum of four samples collected at least seven days apart:

<b>A&amp;Wc</b>	<b>A&amp;Ww</b>
25	80

2. The Director shall not use the results of a suspended sediment concentration sample collected during or within 48 hours after a local storm event to determine the median value.

**E. Dissolved oxygen.** A surface water meets the water quality standard for dissolved oxygen when either:

1. The percent saturation of dissolved oxygen is equal to or greater than 90 percent, or
2. The single sample minimum concentration for the designated use, as expressed in milligrams per liter (mg/L) is as follows:

<b>Designated Use</b>	<b>Single sample minimum concentration in mg/L</b>
A&Ww	6.0
A&Wc	7.0
A&W edw for a sample taken from three hours after sunrise to sunset	3.0
A&W edw for a sample taken from sunset to three hours after sunrise	1.0

The single sample minimum concentration is the same for the designated use in a lake, but the sample must be taken from a depth no greater than one meter.

- F. Nutrient criteria.** The following are water quality standards for total phosphorus and total nitrogen (expressed in milligrams per liter (mg/L)) that apply to the surface waters listed below. A minimum of 10 samples, each taken at least 10 days apart in a consecutive 12-month period, are required to determine a 90th percentile. Not more than 10 percent of the samples may exceed the 90th percentile value listed below. The Director will apply these water quality standards for total phosphorus and total nitrogen to a the surface water waters listed below, and to their perennial tributaries, if listed. The Director may also apply these total phosphorus and total nitrogen standards to any source discharging to a any tributary (ephemeral, intermittent, effluent dependent water, or

perennial) of the surface waters listed below, if necessary to protect nutrient water quality in the listed surface water, based on the volume, frequency, magnitude and duration of the discharge, and distance to the downstream surface water listed below:

1. Verde River and its perennial tributaries from the Verde headwaters to Bartlett Lake:

<b>Surface Water</b>	<b>Annual Mean</b>	<b>90th Percentile</b>	<b>Single Sample Maximum</b>
Total phosphorus	0.10	0.30	1.00
Total nitrogen	1.00	1.50	3.00

2. Black River, Tonto Creek and their perennial tributaries for any segments that are not located on tribal lands:

<b>Surface Water</b>	<b>Annual Mean</b>	<b>90th Percentile</b>	<b>Single Sample Maximum</b>
Total phosphorus	0.10	0.20	0.80
Total nitrogen	0.50	1.00	2.00

3. Salt River and its perennial tributaries above Roosevelt Lake for any segments that are not located on tribal lands:

<b>Surface Water</b>	<b>Annual Mean</b>	<b>90th Percentile</b>	<b>Single Sample Maximum</b>
Total phosphorus	0.12	0.30	1.00
Total nitrogen	0.60	1.20	2.00

4. Salt River below Stewart Mountain Dam to its confluence with the Verde River:

<b>Surface Water</b>	<b>Annual Mean</b>	<b>90th Percentile</b>	<b>Single Sample Maximum</b>
Total phosphorus	0.05	–	0.20
Total nitrogen	0.60	–	3.00

5. Little Colorado River and its perennial tributaries upstream from:
  - a. The headwaters to River Reservoir,
  - b. South Fork of Little Colorado River at 34°00'49"/109°24'18" to above South Fork Campground at 34°04'49"/109°24'18", and
  - c. The headwaters of Water Canyon Creek to the Apache-Sitgreaves National Forest boundary:

<b>Surface Water</b>	<b>Annual Mean</b>	<b>90th Percentile</b>	<b>Single Sample Maximum</b>
Total phosphorus	0.08	0.10	0.75
Total nitrogen	0.60	0.75	1.10

6. From the Little Colorado River and State Route 260 at 34°06'39"/109°18'55" to Lyman Lake:

<b>Surface Water</b>	<b>Annual Mean</b>	<b>90th Percentile</b>	<b>Single Sample Maximum</b>
Total phosphorus	0.20	0.30	0.75
Total nitrogen	0.70	1.20	1.50

7. Colorado River at the Northern International Boundary near Morelos Dam:

<b>Surface Water</b>	<b>Annual Mean</b>	<b>90th Percentile</b>	<b>Single Sample Maximum</b>
Total phosphorus	–	0.33	–
Total nitrogen	–	2.50	–

8. Oak Creek from its headwaters at 35°01'30"/111°44'12" to its confluence with the Verde River and the West Fork of Oak Creek from its headwaters at 35°02'44"/111°54'48" to its confluence with Oak Creek.

<b>Surface Water</b>	<b>Annual Mean</b>	<b>90th Percentile</b>	<b>Single Sample Maximum</b>
Total phosphorus	0.1	0.25	0.30
Total nitrogen	1.00	1.50	2.50

9. No discharge of wastewater to Show Low Creek or its perennial tributaries upstream of and including Fools Hollow Lake shall exceed 0.16 mg/L total phosphates as P.
10. No discharge of wastewater to the San Francisco River or its perennial tributaries upstream of Luna Lake Dam shall exceed 1.0 mg/L total phosphates as P.

**G. Footnotes:**

1. ~~“1” includes A&We, A&Ww, A&Wedw, and A&We.~~

**R18-11-114. Mixing Zones**

- A. The Director may establish a mixing zone for a point source discharge to a surface water as a condition of an individual AZPDES permit on a pollutant-by-pollutant basis. A mixing zone is prohibited in an ephemeral water or where there is no water for dilution, or as prohibited pursuant to subsection (H) of this section.
- B. The owner or operator of a point source seeking the establishment of a mixing zone shall submit a request to the Director for a mixing zone as part of an application for an AZPDES permit. The request shall include:
  1. An identification of the pollutant for which the mixing zone is requested;
  2. A proposed outfall design;
  3. A definition of the boundary of the proposed mixing zone. For purposes of this subsection, the boundary of a mixing zone ~~means the location is~~ where the concentration of wastewater across a transect of the surface water differs by less than five percent complete mixing occurs; and
  4. A complete and detailed description of the existing physical, biological, and chemical conditions of the receiving water and the predicted impact of the proposed mixing zone on those conditions. The description shall also address the factors listed in subsection (D) of this section that the Director must consider when deciding to grant or deny a request and shall address the mixing zone requirements in subsection (H) of this section.
- ~~C. The Director shall review the request for a mixing zone to determine whether the written request is complete. If the request is incomplete, the Director shall provide the applicant with a list of the additional information required.~~
- ~~D.C.~~ The Director shall consider the following factors when deciding whether to grant or deny a request for a mixing zone:
  1. The assimilative capacity of the receiving water;
  2. The likelihood of adverse human health effects;
  3. The location of drinking water plant intakes and public swimming areas;
  4. The predicted exposure of biota and the likelihood that resident biota will be adversely affected;
  5. Bioaccumulation;
  6. Whether there will be acute toxicity in the mixing zone, and, if so, the size of the zone of initial dilution;
  7. The known or predicted safe exposure levels for the pollutant for which the mixing zone is requested;
  8. The size of the mixing zone;
  9. The location of the mixing zone relative to biologically sensitive areas in the surface water;
  10. The concentration gradient of the pollutant within the mixing zone;

11. Sediment deposition;
12. The potential for attracting aquatic life to the mixing zone; and
13. The cumulative impacts of other mixing zones and other discharges to the surface water.

**F.D.** Director determination.

1. The Director shall deny a request to establish a mixing zone if a water quality standard will be violated outside the boundaries of the proposed mixing zone. ~~The Director shall notify the owner or operator of the denial in writing and shall state the reason for the denial.~~
2. If the Director approves the request to establish a mixing zone, the Director shall establish the mixing zone as a condition of an AZPDES permit. The Director shall include any mixing zone condition in the AZPDES permit that is necessary to protect human health and the designated uses of the surface water.

**F.E.** Any person who is adversely affected by the Director's decision to grant or deny a request for a mixing zone may appeal the decision under A.R.S. § 49-321 et seq. and A.R.S. § 41-1092 et seq.

**G.F.** The Director shall reevaluate a mixing zone upon issuance, reissuance, or modification of the AZPDES permit for the point source or a modification of the outfall structure.

**H.G.** Mixing zone requirements.

1. ~~The length of a mixing zone shall not exceed 500 meters in a stream.~~ A mixing zone shall be as small as practicable in that it shall not extend beyond the point in the waterbody at which complete mixing occurs under the critical flow conditions of the discharge and of the receiving water.
2. The total horizontal area allocated to all mixing zones on a lake shall not exceed 10 percent of the surface area of the lake.
3. Adjacent mixing zones in a lake shall not overlap or be located closer together than the greatest horizontal dimension of the largest mixing zone.
4. ~~A mixing zone shall provide for a zone of passage of not less than 50 percent of the cross-sectional area of a river or stream.~~
5. ~~4.~~ The design of any discharge outfall shall maximize initial dilution of the wastewater in a surface water.
6. ~~5.~~ The size of the zone of initial dilution in a mixing zone shall prevent lethality to organisms passing through the zone of initial dilution. The mixing zone shall prevent acute toxicity and lethality to organisms passing through the mixing zone.

**I.H.** The Director shall not establish a mixing zone in an AZPDES permit for the following persistent, bioaccumulative pollutants:

1. Chlordane,
2. DDT and its metabolites (DDD and DDE),
3. Dieldrin,
4. Dioxin,
5. Endrin,
6. Endrin aldehyde,
7. Heptachlor,

8. Heptachlor epoxide,
9. Lindane,
10. Mercury,
11. Polychlorinated biphenyls (PCBs), and
12. Toxaphene.

**R18-11-115. Site-Specific Standards**

- A. The Director shall adopt a site-specific standard by rule.
- B. The Director may adopt a site-specific standard based upon a request or upon the Director’s initiative for any of the following reasons:
  1. Local physical, chemical, or hydrological conditions of a surface water such as pH, hardness, fate and transport, or temperature alters the biological availability or toxicity of a pollutant;
  2. The sensitivity of resident aquatic organisms that occur in a surface water to a pollutant differs from the sensitivity of the species used to derive the numeric water quality standards to protect aquatic life in Appendix A;
  3. Resident aquatic organisms that occur in a surface water represent a narrower mix of species than those in the dataset used by ADEQ to derive numeric water quality standards to protect aquatic life in Appendix A;
  4. The natural background concentration of a pollutant is greater than the numeric water quality standard to protect aquatic life prescribed in Appendix A. “Natural background” means the concentration of a pollutant in a surface water due only to non-anthropogenic sources; or
  - ~~5. Natural adaptive processes have enabled a viable, balanced population of aquatic life to exist in a surface water where the level of a pollutant is greater than the numeric water quality standard to protect aquatic life prescribed in Appendix A; or~~
  - ~~6.~~5. Other factors or combination of factors that upon review by the Director warrant changing a numeric water quality standard for a surface water.
- C. Site-specific standard by request. To request that the Director adopt a site-specific standard, a person must conduct a study to support the development of a site-specific standard using a scientifically-defensible procedure.
  1. Before conducting the study, a person shall submit a study outline to the Director for approval that contains the following elements:
    - a. Identifies the pollutant;
    - b. Describes the reach’s boundaries;
    - c. Uses one of the following procedures, as defined by the most recent EPA guidance documents:
      - i. The recalculation procedure,
      - ii. The water effects ratio for metals,
      - iii. The streamlined water effects ratio, or
      - iv. The Biotic ligand model.
    - d. Demonstrates that all designated uses are protected.
  2. Alternatively, a study outline submitted for the Director’s approval must contain the following elements:

- a. Identifies the pollutant;
- b. Describes the reach's boundaries;
- c. Describes the hydrologic regime of the waterbody;
- d. Describes the scientifically-defensible procedure, which can include relevant aquatic life studies, ecological studies, laboratory tests, biological translators, fate and transport models, and risk analyses;
- e. Describes and compares the taxonomic composition, distribution and density of the aquatic biota within the reach to a reference reach and describes the basis of any major taxonomic differences;
- f. Describes the pollutant's effect on the affected species or appropriate surrogate species and on the other designated uses listed for the reach;
- g. Demonstrates that all designated uses are protected; and
- h. A person seeking to develop a site-specific standard based on natural background may use statistical or modeling approaches to determine natural background concentration. Modeling approaches include Better Assessment Science Integrating Source and Nonpoint Sources (Basins), Hydrologic Simulation Program-Fortran (HSPF), and Hydrologic Engineering Center (HEC) programs developed by the U.S. Army Corps of Engineers.

#### **R18-11-120. Enforcement of Non-permitted Discharges**

~~A. Any person who causes a violation of a water quality standard or any provision of this Article is subject to the enforcement provisions in A.R.S. Title 49, Chapter 2, Article 4.~~

~~B.A.~~ The Department may establish a numeric water quality standard at a concentration that is below the practical quantitation limit. ~~In such cases, Therefore, in enforcement actions pursuant to subsection (B) of this section, the~~ water quality standard is enforceable at the practical quantitation limit.

~~C.B.~~ ~~The~~ Except for chronic aquatic and wildlife criteria, for non-permitted discharge violations, the Department shall determine compliance with numeric water quality standard criteria ~~acute aquatic and wildlife criteria~~ from the analytical result of a ~~grab~~ single sample, unless additional samples are required under this article. ~~Compliance with~~ For chronic aquatic and wildlife criteria, compliance for non-permitted discharge violations shall be determined from the geometric mean of the analytical results of the last four samples taken at least 24 hours apart. For the purposes of this section, a "non-permitted discharge violation" does not include a discharge regulated under an AZPDES permit.

~~D. A person is not subject to penalties for violation of a water quality standard provided that the person is in compliance with the provisions of a compliance schedule issued under R18-11-121.~~

#### **R18-11-122. Variances**

~~A. The Director shall consider a variance from a water quality standard for a point source discharge if the discharger demonstrates that treatment more advanced than that required to comply with technology based effluent limitations is necessary to comply with the water quality standard and:~~

- ~~1. It is not technically feasible to achieve compliance within the next five years,~~
- ~~2. The cost of the treatment would result in substantial and widespread economic and social impact, or~~

- ~~3. Human caused conditions or sources of pollution prevent attainment of the water quality standard and cannot be remedied within the next five years.~~
- ~~B. If the Director grants a variance for a point source discharge:~~
- ~~1. The Director shall issue the variance for a fixed term not to exceed five years;~~
  - ~~2. The variance shall apply only on a pollutant specific basis. The point source discharge shall meet all other applicable water quality standards for which a variance is not granted, and~~
  - ~~3. The variance shall not modify a water quality standard. Other point source discharges to the surface water shall meet applicable water quality standards.~~
- ~~C. Upon expiration of a variance, a point source discharger shall either comply with the water quality standard or apply for renewal of the variance. To renew a variance, the applicant shall demonstrate reasonable progress towards compliance with the water quality standard during the term of the variance.~~
- ~~D. The Director shall reevaluate a variance upon the issuance, reissuance, or modification of the AZPDES permit for the point source discharge.~~
- ~~E. A person who seeks a variance from a water quality standard shall submit a written request for a variance to the Director. A request for a variance shall include the following information:~~
- ~~1. Identification of the specific pollutant and water quality standard for which a variance is sought;~~
  - ~~2. Identification of the receiving surface water;~~
  - ~~3. For an existing point source discharge, a detailed description of the existing discharge control technologies that are used to achieve compliance with applicable water quality standards. For a new point source discharge, a detailed description of the proposed discharge control technologies that will be used to achieve compliance with applicable water quality standards;~~
  - ~~4. Documentation that the existing or proposed discharge control technologies will comply with applicable technology based effluent limitations and that more advanced treatment technology is necessary to achieve compliance with the water quality standard for which a variance is sought;~~
  - ~~5. A detailed discussion of the reasons why compliance with the water quality standard cannot be achieved;~~
  - ~~6. A detailed discussion of the discharge control technologies that are available for achieving compliance with the water quality standard for which a variance is sought;~~
  - ~~7. Documentation of one of the following:~~
    - ~~a. That it is not technically feasible to install and operate any of the available discharge control technologies to achieve compliance with the water quality standard for which a variance is sought;~~
    - ~~b. That installation and operation of each of the available discharge technologies to achieve compliance with the water quality standard would result in substantial and widespread economic and social impact;~~

~~or~~
    - ~~c. That human caused conditions or sources of pollution prevent the attainment of the water quality standard for which the variance is sought and it is not possible to remedy the conditions or sources of pollution within the next five years;~~

- ~~8. Documentation that the point source discharger has reduced, to the maximum extent practicable, the discharge of the pollutant for which a variance is sought through implementation of a local pretreatment, source reduction, or waste minimization program; and~~
- ~~9. A detailed description of proposed interim discharge limitations that represent the highest level of treatment achievable by the point source discharger during the term of the variance.~~
- ~~F. The Director shall consider the following factors when deciding whether to grant or deny a variance request:~~
- ~~1. Bioaccumulation;~~
  - ~~2. The predicted exposure of biota and the likelihood that resident biota will be adversely affected;~~
  - ~~3. The known or predicted safe exposure levels for the pollutant for which the variance is requested; and~~
  - ~~4. The likelihood of adverse human health effects.~~
- ~~G. The Director shall issue a public notice and provide an opportunity for a public hearing on whether the request for a variance should be granted or denied under A.A.C. R18-9-A907 and A.A.C. R18-9-A908. An interested party may request a public hearing on a variance under A.A.C. R18-9-A908(B).~~
- ~~H. Any variance granted by the Director is subject to review and approval by the Regional Administrator.~~
- ~~I. Any person who is adversely affected by a decision of the Director to grant or deny a variance and who has exercised any right to comment on the decision may appeal the decision under A.R.S. § 49-321 et seq. and A.R.S. § 41-1092 et seq.~~
- ~~J. The Director shall not grant a variance for a point source discharge to an OAW listed in R18-11-112(G).~~
- A. Upon request, the Director may establish, by rule, a discharger-specific or water segment(s)-specific variance from a water quality standard if requirements pursuant to this section are met.
- B. A person who requests a variance must demonstrate all of the following information:
1. Identification of the specific pollutant and water quality standard for which a variance is sought.
  2. Identification of the receiving surface water segment or segments to which the variance would apply.
  3. A detailed discussion of the need for the variance, including the reasons why compliance with the water quality standard cannot be achieved over the term of the proposed variance, and any other useful information or analysis to evaluate attainability.
  4. A detailed discussion of the discharge control technologies that are available for achieving compliance with the water quality standard for which a variance is sought.
  5. Documentation that more advanced treatment technology than applicable technology-based effluent limitations is necessary to achieve compliance with the water quality standard for which a variance is sought.
  6. A detailed description of proposed interim discharge limitations and pollutant control activities that represent the highest level of treatment achievable by a point source discharger or dischargers during the term of the variance.
  7. Documentation that the proposed term is only as long as necessary to achieve the highest attainable condition.
  8. Documentation that is appropriate to the type of use to which the variance would apply as follows:

- a. For a water quality standard variance to a use specified in Clean Water Act § 101(a)(2), documentation must include demonstration of at least one of the following factors that preclude attainment of the use during the term of the variance:
    - i. Naturally occurring pollutant concentrations prevent attainment of the use;
    - ii. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating state water conservation requirements to enable uses to be met;
    - iii. That human-caused conditions or sources of pollution prevent the attainment of the water quality standard for which the variance is sought and either (1) it is not possible to remedy the conditions or sources of pollution or (2) remedying the human-caused conditions would cause more environmental damage to correct than to leave in place;
    - iv. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use;
    - v. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses;
    - vi. That installation and operation of each of the available discharge technologies more advanced than those required to comply with technology-based effluent limitations to achieve compliance with the water quality standard would result in substantial and widespread economic and social impact; or
    - vii. Actions necessary to facilitate lake, wetland, or stream restoration through dam removal or other significant reconfiguration activities preclude attainment of the designated use and criterion while the actions are being implemented.
  - b. For a water quality standard variance to a use other than those uses specified in Clean Water Act § 101(a)(2), documentation must justify how consideration and value of the water subject to the use appropriately supports the variance and term. A demonstration consistent with (B)(8)(a) of this section may be used to satisfy this requirement.
9. For a waterbody segment(s)-specific variance, the following information is required before the Director may issue a variance, in addition to all other required documentation pursuant to this section:
- a. Identification and documentation of any cost-effective and reasonable best management practices for nonpoint source controls related to the pollutant(s) or water quality parameter(s) and water body or waterbody segment(s) specified in the variance that could be implemented to make progress towards attaining the underlying designated use and criterion; and
  - b. If any variance pursuant to (B)(9)(a) of this section previously applied to the water body or waterbody segment(s), documentation must also demonstrate whether and to what extent best management practices for nonpoint source controls were implemented to address the pollutant(s) or water quality parameter(s) subject to the water quality variance and the water quality progress achieved.

10. For a discharger-specific variance, the following information is required before the Director may issue a variance, in addition to all other required documentation pursuant to this section:
- a. Identification of the permittee subject to the variance;
  - b. For an existing point source discharge, a detailed description of the existing discharge control technologies that are used to achieve compliance with applicable water quality standards. For a new point source discharge, a detailed description of the proposed discharge control technologies that will be used to achieve compliance with applicable water quality standards; and
  - c. Documentation that the existing or proposed discharge control technologies will comply with applicable technology-based effluent limitations.
- C. The Director shall consider the following factors when deciding whether to grant or deny a variance request:
1. Bioaccumulation,
  2. The predicted exposure of biota and the likelihood that resident biota will be adversely affected,
  3. The known or predicted safe exposure levels for the pollutant for which the variance is requested, and
  4. The likelihood of adverse human health effects.
- D. The variance shall represent the highest attainable condition of the water body or water body segment applicable throughout the term of the variance.
- E. A variance shall not result in any lowering of the currently attained ambient water quality, unless the variance is necessary for restoration activities, consistent with (B)(8)(a)(vii) of this section. The Director must specify the highest attainable condition of the water body or waterbody segment as a quantifiable expression of one of the following:
1. The highest attainable interim criterion,
  2. The interim effluent condition that reflects the greatest pollutant reduction achievable; or
  3. If no additional feasible pollutant control technology can be identified, the interim criterion or interim effluent condition that reflects the greatest pollutant reduction achievable with the pollutant control technologies installed at the time of the issuance of the variance, and the adoption and implementation of a Pollutant Minimization Program.
- F. A variance shall not modify the underlying designated use and criterion. A variance is only a time limited exception to the underlying standard. For discharge-specific variances, other point source dischargers to the surface water that are not granted a variance shall still meet all applicable water quality standards.
- G. Point source discharges shall meet all other applicable water quality standards for which a variance is not granted.
- H. The Director may not grant a variance for a point source discharge to an OAW listed in R18-11-112(G).
- I. Each variance established by the Director is subject to review and approval by the Regional Administrator.
- J. The term of the water quality variance may only be as long as necessary to achieve the highest attainable condition and must be consistent with the supporting documentation in subsection (E) of this section. The variance term runs from the approval of the variance by the Regional Administrator.
- K. The Director shall reevaluate, in its triennial review, whether each variance continues to represent the highest attainable condition. Comment on the variance shall be considered regarding whether the variance continues to

represent the highest attainable condition. If the Director determines that the requirements of the variance do not represent the highest attainable condition, then the Director shall modify or repeal the variance in its triennial review rulemaking.

**L.** If the variance is modified by rulemaking, the requirements of the variance shall represent the highest attainable condition at the time of initial adoption of the variance, or the highest attainable condition identified during the current reevaluation, whichever is more stringent.

**M.** Upon expiration of a variance, point source dischargers shall comply with the water quality standard.

**N.** The following are discharger-specific variances adopted by the Director:

1. [Reserved]

**O.** The following are water body and waterbody segment-specific variances adopted by the Director:

1. [Reserved]

## Appendix A Numeric Water Quality Standards

**Table 1 Water Quality Criteria By Designated Use (see f)**

Parameter	CAS NUMBER	DWS (µg/L)	FC (µg/L)	FBC (µg/L)	PBC (µg/L)	A&Wc Acute (µg/L)	A&Wc Chronic (µg/L)	A&Ww Acute (µg/L)	A&Ww Chronic (µg/L)	A&Wedw Acute (µg/L)	A&Wedw Chronic (µg/L)	A&We Acute (µg/L)	AgI (µg/L)	AgL (µg/L)
Acenaphthene	83329	420	198	56,000	56,000	850	550	850	550	850	550			
Acenaphthylene	208968	420		56,000	56,000									
Acrolein	107028	3.5	1.9	467	467	343	303	343	303	343	303	3		
Acrylonitrile	107131	0.06 0.006	0.2	39	37,333	3,800	250	3,800	250	3,800	250			
Alachlor	15972608	2		9,333	9,333	2,500	170	2,500	170	2,500	170			
Aldrin	309002	0.002	0.00005	0.08 0.27	28	3		3		3		4.5	0.003	See (b)
Alpha Particles (Gross) Radioactivity		15 pCi/L See (h)												
Ammonia	7664417					See (e) & Table 11 (present) & 14 (absent)	See (e) & Table 12 (present) & 17 (absent)	See (e) & Table 11 (present) & 15 (absent)	See (e) & Table 12 (present) & 16 (absent)	See (e) & Table 11 (absent)	See (e) & Table 12 (absent)			
Anthracene	120127	2,100	74	280,000	280,000									
Antimony	7440360	6 T	640 T	747 T	747 T	88 D	30 D	88 D	30 D	1,000 D	600 D			
Arsenic	7440382	10 T	80 T	30 T	280 T	340 D	150 D	340 D	150 D	340 D	150 D	440 D	2,000 T	200 T
Asbestos	1332214	See (a)												
Atrazine	1912249	3		32,667	32,667									
Barium	7440393	2,000 T		98,000 T 186,667 T	98,000 T 186,667 T									
Benz(a)anthracene	56553	0.005	0.02	0.2 47	0.2 280									
Benzene	71432	5	140 114	93 133	3,733	2,700	180	2,700	180	8,800	560			
Benzo[b]fluoranthene	205992	0.005	0.02	1.9 47	1.9 280									
Benzofluoranthene														
Benzidine	92875	0.0002	0.0002	0.01 0.02	2,800	1,300	89	1,300	89	1,300	89	10,000	0.01	0.01
Benzo(a)pyrene	50328	0.2	0.02 0.1	0.2 47	0.2 280									
Benzo(k)fluoranthene	207089	0.005	0.02	1.9 47	1.9 280									
Beryllium	7440417	4 T	84 T	1,867 T	1,867 T	65 D	5.3 D	65 D	5.3 D	65 D	5.3 D			
Beta particles and photon		4 millirems												

Parameter	CAS NUMBER	DWS (µg/L)	FC (µg/L)	FBC (µg/L)	PBC (µg/L)	A&Wc Acute (µg/L)	A&Wc Chronic (µg/L)	A&Ww Acute (µg/L)	A&Ww Chronic (µg/L)	A&Wedw Acute (µg/L)	A&Wedw Chronic (µg/L)	A&We Acute (µg/L)	AgI (µg/L)	AgL (µg/L)
emitters		/year See (i)												
Bis(2-chloroethoxy) methane	111911	21		2,800	2,800									
Bis(2-chloroethyl) ether	111444	0.03	0.5	4.4	4.4	120,000	6,700	120,000	6,700	120,000	6,700			
Bis(2-chloroisopropyl) ether	108601	280	3,441	37,333	37,333									
Bis(chloromethyl) ether	542881	0.00015		0.02										
Boron	7440428	1,400 T		186,667 T	186,667 T								1,000 T	
Bromodichloromethane	75274	TTHM See (g)	17	TTHM	18,667									
to 4-Bromophenyl phenyl ether	101553					180	14	180	14	180	14			
Bromoform	75252	TTHM See (g)	133	480 591	18,667	15,000	10,000	15,000	10,000	15,000	10,000			
Bromomethane	74839	9.8	299	1,307	1,307	5,500	360	5,500	360	5,500	360			
Butyl benzyl phthalate	85687	1,400	386	186,667	186,667	1,700	130	1,700	130	1,700	130			
Cadmium	7440439	5 T	84 T 6 T	700 T 467 T	700 T 467 T	See (d) & Table 2 See Table 2	See (d) & Table 3 See Table 3	See (d) & Table 2 See Table 2	See (d) & Table 3 See Table 3	See (d) & Table 2 See Table 2	See (d) & Table 3 See Table 3	See (d) & Table 2 See Table 2	50	50
Carbaryl	63252					2.1	2.1	2.1	2.1	2.1	2.1	2.1		
Carbofuran	1563662	40		4,667	4,667	650	50	650	50	650	50			
Carbon tetrachloride	56235	5	2.3	44 67	980 3,733	18,000	1,100	18,000	1,100	18,000	1,100			
Chlordane	57749	2	0.0008	4 13	467	2.4	0.004	2.4	0.2	2.4	0.2	3.2		
Chlorine (total residual)	7782505	4,000		4,000 93,333	4,000 93,333	19	11	19	11	19	11			
Chlorobenzene	108907	100	1,553	18,667	18,667	3,800	260	3,800	260	3,800	260			
Chloroethane	75003	280		93,333	93,333									
2-Chloroethyl vinyl ether	110758					180,000	9,800	180,000	9,800	180,000	9,800			
Chloroform	67663	TTHM See (g)	470 2,133	230 9,333	9,333	14,000	900	14,000	900	14,000	900			
p-Chloro-m-cresol	59507					15	4.7	15	4.7	15	4.7	48,000		
Chloromethane	74873					270,000	15,000	270,000	15,000	270,000	15,000			
2-Chloronaphthalene beta-Chloronaphthalene	91587	560 2240	347 1267	74,667 298,667	74,667 298,667									
2-Chlorophenol	95578	35	30	4,667	4,667	2,200	150	2,200	150	2,200	150			
Chloropyrifos	2921882	21	1.0	2,800	2,800	0.08	0.04	0.08	0.04	0.08	0.04			
Chromium III	16065831	10,500	75,000 T	1,400,000 T	1,400,000 T	See (d) & Table 4								
Chromium VI	18540299	21 T	150 T	2,800 T	2,800 T	16 D	11 D	16 D	11 D	16 D	11 D	34 D		
Chromium (Total)	7440473	100 T											1,000	1,000
Chrysene	218019	0.005	0.02	49 0.6	49 0.6									
Copper	7440508	1,300 T		1,300 T	1,300 T	See (d) & Table 5	5,000 T	500 T						
Cyanide (as free cyanide)	57125	200 T	46,000 T 504 T	48,667 T 588 T	48,667 T 588 T	22 T	5.2 T	41 T	9.7 T	41 T	9.7 T	84 T		200 T
Dalapon	75990	200	8,000	28,000	28,000									
DDT and its breakdown products	50293	0.1	0.0003	14	467	1.1	0.001	1.1	0.001	1.1	0.001	1.1	0.001	0.001
Demeton	8065483						0.1		0.1		0.1			

Parameter	CAS NUMBER	DWS (µg/L)	FC (µg/L)	FBC (µg/L)	PBC (µg/L)	A&We Acute (µg/L)	A&We Chronic (µg/L)	A&Ww Acute (µg/L)	A&Ww Chronic (µg/L)	A&Wedw Acute (µg/L)	A&Wedw Chronic (µg/L)	A&We Acute (µg/L)	AgI (µg/L)	AgL (µg/L)
Diazinon	333415					0.17	0.17	0.17	0.17	0.17	0.17	0.17		
Dibenz (ah) anthracene	53703	<del>0.005</del> 0.350	0.02	<del>1.9</del> 47.0	<del>1.9</del> 280.0									
Dibromochloromethane	124481	TTHM See (g)	13	TTHM	18,667									
1,2-Dibromo-3-chloropropane	96128	0.2		2,800	2,800									
1,2-Dibromoethane	106934	<del>0.05</del> 0.02		<del>8,400</del> 2	8,400									
Dibutyl phthalate	84742	700	899	93,333	93,333	470	35	470	35	470	35	1,100		
1,2-Dichlorobenzene	95501	600	205	84,000	84,000	790	300	1,200	470	1,200	470	5,900		
1,3-Dichlorobenzene	541731					2,500	970	2,500	970	2,500	970			
1,4-Dichlorobenzene	106467	75	5755	373,333	<del>373,333</del> 373,333	560	210	2,000	780	2,000	780	6,500		
3,3'-Dichlorobenzidine	91941	0.08	0.03	<del>3</del> 10	<del>3</del> 10									
p,p'-Dichlorodiphenyltrichloroethane (DDT) and metabolites (DDD) and (DDE)	50293	0.1	0.0002	4	467	1.1	0.001	1.1	0.001	1.1	0.001	1.1	0.001	0.001
1,2-Dichloroethane	107062	5	37	15	186,667	59,000	41,000	59,000	41,000	59,000	41,000			
1,1-Dichloroethylene	75354	7	7,143	46,667	46,667	15,000	950	15,000	950	15,000	950			
1,2-cis-Dichloroethylene	156592	70		<del>70</del> 1,867	<del>70</del> 1,867									
1,2-trans-Dichloroethylene	156605	100	10,127	18,667	18,667	68,000	3,900	68,000	3,900	68,000	3,900			
Dichloromethane	75092	5	<del>593</del> 2,222	<del>190</del> 2,333	<del>56,000</del> 5,600	97,000	5,500	97,000	5,500	97,000	5,500			
2,4-Dichlorophenol	120832	21	59	2,800	2,800	1,000	88	1,000	88	1,000	88			
2,4-Dichlorophenoxyacetic acid (2,4-D)	94757	70		9,333	9,333									
1,2-Dichloropropane	78875	5	17,518	84,000	84,000	26,000	9,200	26,000	9,200	26,000	9,200			
1,3-Dichloropropene	542756	0.7	42	<del>420</del> 93	28,000	3,000	1,100	3,000	1,100	3,000	1,100			
Dieldrin	60571	0.002	0.00005	<del>0.09</del> 0.3	47	0.2	0.06	0.2	0.06	0.2	0.06	4	0.003	See (b)
Diethyl phthalate	84662	5,600	8,767	746,667	746,667	26,000	1,600	26,000	1,600	26,000	1,600			
Di (2-ethylhexyl) adipate	103231	400		<del>560,000</del> 3,889	560,000									
Di (2-ethylhexyl) phthalate	117817	6	3	<del>400</del> 333	18,667	400	360	400	360	400	360	3,100		
2,4-Dimethylphenol	105679	140	171	18,667	18,667	1,000	310	1,000	310	1,000	310	150,000		
Dimethyl phthalate	131113					17,000	1,000	17,000	1,000	17,000	1,000			
4,6-Dinitro-o-cresol	534521	<del>28</del> 0.6	<del>582</del> 12	<del>3,733</del> 75	<del>3,733</del> 75	310	24	310	24	310	24			
2,4-Dinitrophenol	51285	14	1,067	1,867	1,867	110	9.2	110	9.2	110	9.2			
2,4-Dinitrotoluene	121142	14	421	1,867	1,867	14,000	860	14,000	860	14,000	860			
2,6-Dinitrotoluene	606202	0.05		<del>2</del> 7	<del>3,733</del> 280									
Di-n-octyl phthalate	117840	<del>2,800</del> 70		<del>373,333</del> 9,333	<del>373,333</del> 9,333									
Dinoseb	88857	7	<del>12</del>	933	933									
1,2-Diphenylhydrazine	122667	0.04	0.2	<del>1.8</del> 6	<del>1.8</del> 6	130	11	130	11	130	11			
Diquat	85007	20	<del>176</del>	2,053	2,053									
Endosulfan sulfate	103107 8	42	18	5,600	5,600	0.2	0.06	0.2	0.06	0.2	0.06	3		
Endosulfan (Total)	115297	42	18	5,600	5,600	0.2	0.06	0.2	0.06	0.2	0.06	3		
Endothall	145733	100	<del>16,000</del>	18,667	18,667									
Endrin	72208	2	0.06	<del>280</del> 1,120	<del>280</del> 1,120	0.09	0.04	0.09	0.04	0.09	0.04	0.7	0.004	0.004

Parameter	CAS NUMBER	DWS (µg/L)	FC (µg/L)	FBC (µg/L)	PBC (µg/L)	A&Wc Acute (µg/L)	A&Wc Chronic (µg/L)	A&Ww Acute (µg/L)	A&Ww Chronic (µg/L)	A&Wedw Acute (µg/L)	A&Wedw Chronic (µg/L)	A&We Acute (µg/L)	AgI (µg/L)	AgL (µg/L)
Endrin aldehyde	742193 3	<u>2</u>	<u>0.06</u>	<u>1.120</u>	<u>1.120</u>	0.09	0.04	0.09	0.04	0.09	0.04	0.7		
Ethylbenzene	100414	700	2,133	93,333	93,333	23,000	1,400	23,000	1,400	23,000	1,400			
Fluoranthene	206440	280	28	37,333	37,333	2,000	1,600	2,000	1,600	2,000	1,600			
Fluorene	86737	280	1,067	37,333	37,333									
Fluoride	778241 4	4,000		140,000	140,000									
Glyphosate	1071836	700	266,667	93,333	93,333									
Guthion	86500	<u>21</u>	<u>92</u>	<u>2,800</u>	<u>2,800</u>		0.01		0.01		0.01			
Heptachlor	76448	0.4	0.00008	<u>0.4</u>	467	0.5	0.004	0.5	0.004	0.6	0.01	0.9		
Heptachlor epoxide	102457 3	0.2	0.00004	<u>0.2</u>	12	0.5	0.004	0.5	0.004	0.6	0.01	0.9		
Hexachlorobenzene	118741	1	0.0003	<u>4</u>	747	6	3.7	6	3.7	6	3.7			
Hexachlorobutadiene	87683	0.4	18	<u>18</u>	187	45	8.2	45	8.2	45	8.2			
Hexachlorocyclohexane alpha	319846	0.006	0.005	<u>0.22</u>	7,467	1,600	130	1,600	130	1,600	130	1,600		
Hexachlorocyclohexane beta	319857	0.02	0.02	<u>0.78</u>	560	1,600	130	1,600	130	1,600	130	1,600		
Hexachlorocyclohexane delta	319868					1,600	130	1,600	130	1,600	130	1,600		
Hexachlorocyclohexane gamma (lindane)	58899	0.2	<u>1.8</u>	<u>280</u>	<u>700</u>	1	0.08	1	0.28	1	0.61	11		
Hexachlorocyclopentadiene	77474	50	<u>580</u>	<u>9,800</u>	<u>9,800</u>	3.5	0.3	3.5	0.3	3.5	0.3			
Hexachloroethane	67721	<u>2.5</u>	<u>3.3</u>	<u>400</u>	<u>933</u>	490	350	490	350	490	350	850		
Hydrogen sulfide	778306 4						2 See (c)		2 See (c)		2 See (c)			
Indeno (1,2,3-cd) pyrene	193395	<u>0.05</u>	<u>0.4</u>	<u>0.49</u>	<u>1.9</u>									
Iron	7439896						1,000 D		1,000 D		1,000 D			
Isophorone	78591	37	961	<u>1,500</u>	<u>4,912</u>	186,667	59,000	43,000	59,000	43,000	59,000	43,000		
Lead	743997 1	15 T		15 T	15 T	See (d) & Table 6	See (d) & Table 6	See (d) & Table 6	See (d) & Table 6	See (d) & Table 6	See (d) & Table 6	See (d) & Table 6	10,000 T	100 T
Malathion	121755	140	<u>1.455</u>	18,667	18,667		0.1		0.1		0.1			
Manganese	7439965	980		130,667	130,667								10,000	
Mercury	7439976	2 T		280 T	280 T	2.4 D	0.01 D	2.4 D	0.01 D	2.4 D	0.01 D	5 D		10 T
Methoxychlor	72435	40		<u>4,667</u>	<u>4,667</u>		0.03		0.03		0.03			
Methylmercury	229679 26		0.3 mg/kg											
Mirex	2385855	1	<u>0.0002</u>	<u>187</u>	187		0.001		0.001		0.001			
Naphthalene	91203	140	1,524	18,667	18,667	1,100	210	3,200	580	3,200	580			
Nickel	744002 0	<u>140</u>	<u>210</u>	<u>4,600</u>	28,000 T	28,000 T	See (d) & Table 7	See (d) & Table 7	See (d) & Table 7	See (d) & Table 7	See (d) & Table 7	See (d) & Table 7	See (d) & Table 7	
Nitrate	14797558	10,000		3,733,333	3,733,333									
Nitrite	14797650	1,000		233,333	233,333									
Nitrate + Nitrite		10,000												
Nitrobenzene	98953	<u>3.5</u>	<u>14</u>	<u>138</u>	<u>554</u>	467	1,867	467	1,867	1,300	850	1,300	850	
p-Nitrophenol	100027					4,100	3,000	4,100	3,000	4,100	3,000			
Nitrosodibutylamine	<u>924163</u>	<u>0.006</u>	<u>0.2</u>	<u>0.9</u>										
Nitrosodiethylamine	<u>55185</u>	<u>0.0002</u>	<u>0.1</u>	<u>0.03</u>										

Parameter	CAS NUMBER	DWS (µg/L)	FC (µg/L)	FBC (µg/L)	PBC (µg/L)	A&We Acute (µg/L)	A&We Chronic (µg/L)	A&Ww Acute (µg/L)	A&Ww Chronic (µg/L)	A&Wedw Acute (µg/L)	A&Wedw Chronic (µg/L)	A&We Acute (µg/L)	AgI (µg/L)	AgL (µg/L)
N-nitrosodimethylamine	62759	0.001	3	<del>0.03</del> 0.09	<del>0.03</del> 0.09									
N-nitrosodi-n-phenylamine N-Nitrosodiphenylamine	86306	7.1	6	<del>290</del> 952	<del>290</del> 952	2,900	200	2,900	200	2,900	200			
N-nitrosodi-n-propylamine	621647	0.005	0.5	<del>0.2</del> 0.7	<del>88,667</del> 0.7									
N-nitrosopyrrolidine	930552	0.02	34	2										
Nonylphenol	104405					28	6.6	28	6.6	28	6.6	28		
Oxamyl	23135220	200	<del>6452</del>	23,333	23,333									
Parathion	56382	42	16	5,600	5,600	0.07	0.01	0.07	0.01	0.07	0.01			
Pentachlorobenzene	608935	6		747	747									
Paraquat	1910425	32	12,000	4,200	4,200	100	54	100	54	100	54			
Pentachlorophenol	87865	1	<del>1,000</del> 111	12	<del>28,000</del> 4,667	See (e), (j) & Table 10								
Permethrin	526455 31	350	77	46,667	46,667	0.3	0.2	0.3	0.2	0.3	0.2			
Phenanthrene	85018					30	6.3	30	6.3	30	6.3			
Phenol	108952	2,100	37	280,000	280,000	5,100	730	7,000	1,000	7,000	1,000	180,000		
Picloram	1918021	500	<del>2,710</del> 1,806	65,333	65,333									
Polychlorinatedbiphenyls (PCBs)	1336363	0.5	0.00006	<del>49</del> 2	19	2	0.01	2	0.02	2	0.02	11	0.001	0.001
Pyrene	129000	210	800	28,000	28,000									
Radium 226 + Radium 228		5 pCi/L												
Selenium	7782492	50 T	667 T	4,667 T	4,667 T		2 T		2 T		2 T	33 T	20 T	50 T
Silver	7440224	35 T	8,000 T	4,667 T	4,667 T	See (d) & Table 8		See (d) & Table 8		See (d) & Table 8		See (d) & Table 8		
Simazine	112349	4		4,667	4,667									
Strontium	7440246	8 pCi/L												
Styrene	100425	100		186,667	186,667	5,600	370	5,600	370	5,600	370			
Sulfides												100		
1,2,4,5-Tetrachlorobenzene	95943	2.1		280	280									
2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	1746016	0.00003	<del>5x10-9</del> 0.000000 1	<del>0.00003</del> 0.0007	<del>0.0009</del> 0.0007	0.01	0.005	0.01	0.005	0.01	0.005	0.1		
1,1,2,2-Tetrachloroethane	79345	0.2	<del>4</del> 32,000	<del>7</del> 23	<del>56,000</del> 186,667	4,700	3,200	4,700	3,200	4,700	3,200			
Tetrachloroethylene	127184	5	<del>261</del> 62	<del>9,333</del> 2,222	<del>9,333</del> 5,600	2,600	280	6,500	680	6,500	680	15,000		
Thallium	7440280	2 T	<del>7.2</del> T 0.07 T	<del>75</del> T 9 T	<del>75</del> T 9 T	700 D	150 D	700 D	150 D	700 D	150 D			
Toluene	108883	1,000	<del>201,000</del> 11,963	<del>280,000</del> 149,333	<del>280,000</del> 149,333	8,700	180	8,700	180	8,700	180			
Toxaphene	8001352	3	0.0003	<del>1.3</del> 4	<del>933</del> 1,867	0.7	0.0002	0.7	0.0002	0.7	0.0002	11	0.005	0.005
<del>Tributyltin</del> Tributyltin	688733		0.08	280	280	0.5	0.07	0.5	0.07	0.5	0.07			
1,2,4-Trichlorobenzene	120821	70	70	9,333	9,333	750	130	1,700	300	1,700	300			
1,1,1-Trichloroethane	71556	200	<del>428,571</del> 285,714	1,866,667	1,866,667	2,600	1,600	2,600	1,600	2,600	1,600		1,000	

Parameter	CAS NUMBER	DWS (µg/L)	FC (µg/L)	FBC (µg/L)	PBC (µg/L)	A&Wc Acute (µg/L)	A&Wc Chronic (µg/L)	A&Ww Acute (µg/L)	A&Ww Chronic (µg/L)	A&Wedw Acute (µg/L)	A&Wedw Chronic (µg/L)	A&We Acute (µg/L)	AgI (µg/L)	AgL (µg/L)
1,1,2-Trichloroethane	79005	5	16	<del>25</del> 82	3,733	18,000	12,000	18,000	12,000	18,000	12,000			
Trichloroethylene	79016	5	<del>29</del> 8	<del>280,000</del> 101	<del>280</del> 467	20,000	1,300	20,000	1,300	20,000	1,300			
<u>2,4,5- Trichlorophenol</u>	<u>95954</u>	<u>700</u>		<u>93,333</u>	<u>93,333</u>									
2,4,6-Trichlorophenol	88062	3.2	2	<del>130</del> 424	<del>130</del> 424	160	25	160	25	160	25	3,000		
2,4,5-Trichlorophenoxy propionic acid (2,4,5-TP)	93721	50		<del>7,467</del> <del>29,867</del>	<del>7,467</del> <del>29,867</del>									
Trihalomethanes (T)		80												
Tritium	<u>10028178</u>	20,000 pCi/L												
Uranium	7440611	30 D		2,800	2,800									
Vinyl chloride	75014	2	5	<del>2</del> 6	2,800									
Xylenes (T)	1330207	10,000		186,667	186,667									
Zinc	7440666	2,100 T	5,106 T	280,000 T	280,000 T	See (d) & Table 9	See (d) & Table 9	See (d) & Table 9	See (d) & Table 9	See (d) & Table 9	See (d) & Table 9	See (d) & Table 9	10,000 T	25,000 T
<u>2-nitrophenol</u>	<u>88755</u>		No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
<u>1,1-dichloroethane</u>	<u>85343</u>		No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
<u>4-chlorophenyl phenyl ether</u>	<u>7005723</u>		No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data
<u>Benzo (ghi) perylene</u>	<u>191242</u>		No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data

Footnotes

- a. The asbestos standard is 7 million fibers (longer than 10 micrometers) per liter.
- b. The aldrin/dieldrin standard is exceeded when the sum of the two compounds exceeds 0.003 µg/L.
- c. In lakes, the acute criteria for hydrogen sulfide apply only to water samples taken from the epilimnion, or the upper layer of a lake or reservoir.
- d. Hardness, expressed as mg/L CaCO<sub>3</sub>, is determined according to the following criteria:
  - i. If the receiving water body has an A&Wc or A&Ww designated use, then hardness is based on the hardness of the receiving water body from a sample taken at the same time that the sample for the metal is taken, except that the hardness may not exceed 400 mg/L CaCO<sub>3</sub>.
  - ii. If the receiving water has an A&Wedw or A&We designated use, then the hardness is based on the hardness of the effluent from a sample taken at the same time that the sample for the metal is taken, except that the hardness may not exceed 400 mg/L CaCO<sub>3</sub>.
  - iii. The mathematical equations for the hardness-dependent parameter represent the water quality standards. Examples of criteria for the hardness-dependent parameters have been calculated and are presented in separate tables at the end of Appendix A for the convenience of the user.
- e. pH is determined according to the following criteria:

- i. If the receiving water has an A&Wc or A&Ww designated use, then pH is based on the pH of the receiving water body from a sample taken at the same time that the sample for pentachlorophenol or ammonia is taken.
  - ii. If the receiving water body has an A&Wedw or A&We designated use, then the pH is based on the pH of the effluent from a sample taken at the same time that the sample for pentachlorophenol or ammonia is taken.
  - iii. The mathematical equations for ammonia represent the water quality standards. Examples of criteria for ammonia have been calculated and are presented in separate tables at the end of Appendix A for the convenience of the user.
- f. Table 1 abbreviations.
- i.  $\mu\text{g/L}$  = micrograms per liter,
  - ii.  $\text{mg/kg}$  = milligrams per kilogram,
  - iii.  $\text{pCi/L}$  = picocuries per liter,
  - iv. D = dissolved,
  - v. T = total recoverable,
  - vi. TTHM indicates that the chemical is a trihalomethane.
- g. The total trihalomethane (TTHM) standard is exceeded when the sum of these four compounds exceeds  $80 \mu\text{g/L}$ , as a rolling annual average.
- h. The concentration of gross alpha particle activity includes radium-226, but excludes radon and uranium.
- i. The average annual concentration of beta particle activity and photon emitters from manmade radionuclides shall not produce an annual dose equivalent to the total body or any internal organ greater than four millirems per year.
- j. The mathematical equations for the pH-dependent parameters represent the water quality standards. Examples of criteria for the pH-dependent parameters have been calculated and are presented in separate tables at the end of Appendix A for the convenience of the user.
- k. Abbreviations for the mathematical equations are as follows:
- e = the base of the natural logarithm and is a mathematical constant equal to 2.71828
  - LN = is the natural logarithm
  - CMC = Criterion Maximum Concentration (acute)
  - CCC = Criterion Continuous Concentration (chronic)

**Table 2. Acute Water Quality Standards for Dissolved Cadmium**

Aquatic and Wildlife coldwater	Aquatic and Wildlife	Aquatic and Wildlife ephemeral
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		warmwater, and edw			
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	<del>0.42</del> <u>0.40</u>	20	<del>0.74</del> <u>2.1</u>	20	<del>11.3</del> <u>4.9</u>
100	<del>2.0</del> <u>1.8</u>	100	<del>4.3</del> <u>9.4</u>	100	<del>64.6</del> <u>22</u>
400	<del>7.7</del> <u>6.5</u>	400	<del>19.1</del> <u>34</u>	400	<del>290</del> <u>80</u>
<del><math>e^{(1.0166 * \text{LN}(\text{Hardness}) - 3.924)} * (1.136672 - \text{LN}(\text{Hardness})) * 0.041838</math></del> <del><math>e^{(0.9789 * \text{LN}(\text{Hardness}) - 3.866)} * (1.136672 - \text{LN}(\text{Hardness})) * 0.041838</math></del>		<del><math>e^{(1.128 * \text{LN}(\text{Hardness}) - 3.6867)} * (1.136672 - \text{LN}(\text{Hardness})) * 0.041838</math></del> <del><math>e^{(0.9789 * \text{LN}(\text{Hardness}) - 2.208)} * (1.136672 - \text{LN}(\text{Hardness})) * 0.041838</math></del>		<del><math>e^{(1.128 * \text{LN}(\text{Hardness}) - 0.9691)} * (1.136672 - \text{LN}(\text{Hardness})) * 0.041838</math></del> <del><math>e^{(0.9789 * \text{LN}(\text{Hardness}) - 1.363)} * (1.136672 - \text{LN}(\text{Hardness})) * 0.041838</math></del>	

**Table 3. Chronic Water Quality Standards for Dissolved Cadmium**

Aquatic and Wildlife coldwater, <u>warmwater, and edw</u>		Aquatic and Wildlife <del>warmwater, and edw</del>	
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	<del>0.08</del> <u>0.21</u>	20	<del>0.68</del>
100	<del>0.25</del> <u>0.72</u>	100	<del>2.2</del>
400	<del>0.64</del> <u>2.0</u>	400	<del>6.2</del>
<del><math>e^{(0.7409 * \text{LN}(\text{Hardness}) - 4.719)} * (1.101672 - \text{LN}(\text{Hardness})) * 0.041838</math></del> <del><math>e^{(0.7977 * \text{LN}(\text{Hardness}) - 3.909)} * (1.101672 - \text{LN}(\text{Hardness})) * 0.041838</math></del>		<del><math>e^{(0.7852 * \text{LN}(\text{Hardness}) - 2.715)} * (1.101672 - \text{LN}(\text{Hardness})) * 0.041838</math></del>	

**Table 4. Water Quality Standards for Dissolved Chromium III**

Acute Aquatic and Wildlife coldwater, warmwater and edw		Chronic Aquatic and Wildlife coldwater, warmwater and edw		Acute Aquatic and Wildlife ephemeral	
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	152	20	19.8	20	512
100	570	100	74.1	100	1,912
400	1,773	400	231	400	5,950

$e^{(0.819*LN(Hardness)+3.7256)*(0.316)}$	$e^{(0.819*LN(Hardness)+0.6848)*(0.86)}$	$e^{(0.819*LN(Hardness)+4.9361)*(0.316)}$
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**Table 5. Water Quality Standards for Dissolved Copper**

Acute Aquatic and Wildlife coldwater, warmwater and edw		Chronic Aquatic and Wildlife coldwater, warmwater and edw		Acute Aquatic and Wildlife ephemeral	
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	2.9	20	2.3	20	5.1
100	<del>13.4</del> <u>13</u>	100	9.0	100	<del>23.3</del> <u>23</u>
400	<del>49.6</del> <u>50</u>	400	<del>29.3</del> <u>29</u>	400	<del>85.9</del> <u>86</u>
$e^{(0.9422*LN(Hardness)-1.702)*(0.96)}$		$e^{(0.8545*LN(Hardness)-1.702)*(0.96)}$		$e^{(0.9422*LN(Hardness)-1.1514)*(0.96)}$	

**Table 6. Water Quality Standards for Dissolved Lead**

Acute Aquatic and Wildlife coldwater, warmwater and edw		Chronic Aquatic and Wildlife coldwater, warmwater and edw		Acute Aquatic and Wildlife ephemeral	
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	10.8	20	<del>0.4</del> <u>0.42</u>	20	22.8
100	64.6	100	2.5	100	136.3
400	281	400	10.9	400	592.7
$e^{(1.273*LN(Hardness)-1.46)*(1.46203-(LN(Hardness))*(0.145712))}$		$e^{(1.273*LN(Hardness)-4.705)*(1.46203-(LN(Hardness))*(0.145712))}$		$e^{(1.273*(LN(Hardness))-0.7131)*(1.46203-(LN(Hardness))*(0.145712))}$	

**Table 11. Acute Criteria for Total Ammonia (in mg/L as N) Aquatic and Wildlife coldwater, warmwater, and edw**

pH	A&We	A&Ww and A&W edw
6.5	<del>32.6</del>	48.8
6.6	<del>31.3</del>	46.8
6.7	<del>29.8</del>	44.6
6.8	<del>28.1</del>	42.0
6.9	<del>26.2</del>	39.1
7.0	<del>24.1</del>	36.1
7.1	<del>22.0</del>	32.8

7.2	19.7	29.5
7.3	17.5	26.2
7.4	15.4	23.0
7.5	13.3	19.9
7.6	11.4	17.0
7.7	9.7	14.4
7.8	8.1	12.1
7.9	6.8	10.1
8.0	5.6	8.4
8.1	4.6	7.0
8.2	3.8	5.7
8.3	3.2	4.7
8.4	2.6	3.9
8.5	2.1	3.2
8.6	1.8	2.7
8.7	1.5	2.2
8.8	1.2	1.8
8.9	1.0	1.6
9.0	0.9	1.3
Formula:	$CMC = \frac{0.275}{1 + 10^{7.204 - pH}} + \frac{39.0}{1 + 10^{pH - 7.204}}$	$CMC = \frac{0.411}{1 + 10^{7.204 - pH}} + \frac{58.4}{1 + 10^{pH - 7.204}}$

**Table 11. Acute Standards for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife coldwater, Unionid Mussels Present**

For the aquatic and wildlife coldwater uses, unionids will be assumed to be present unless a study is performed demonstrating that they are absent and there is no historic evidence of their presence, or hydrologic modification has altered the flow regime in a way that would prevent their reestablishment.

<b>Temperature (°C)</b>																	
<b>pH</b>	<u>0-14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>
6.5	33	33	32	29	27	25	23	21	19	18	16	15	14	13	12	11	9.9
6.6	31	31	30	28	26	24	22	20	18	17	16	14	13	12	11	10	9.5
6.7	30	30	29	27	24	22	21	19	18	16	15	14	13	12	11	9.8	9
6.8	28	28	27	25	23	21	20	18	17	15	14	13	12	11	10	9.2	8.5
6.9	26	26	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9
7	24	24	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	8	7.3
7.1	22	22	21	20	18	17	15	14	13	12	11	10	9.3	8.5	7.9	7.2	6.7
7.2	20	20	19	18	16	15	14	13	12	11	9.8	9.1	8.3	7.7	7.1	6.5	6

Temperature (°C)																	
pH	0-14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
7.3	18	18	17	16	14	13	12	11	10	9.5	8.7	8	7.4	6.8	6.3	5.8	5.3
7.4	15	15	15	14	13	12	11	9.8	9	8.3	7.7	7	6.5	6	5.5	5.1	4.7
7.5	13	13	13	12	11	10	9.2	8.5	7.8	7.2	6.6	6.1	5.6	5.2	4.8	4.4	4
7.6	11	11	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5
7.7	9.6	9.6	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5	3.2	3
7.8	8.1	8.1	7.9	7.2	6.7	6.1	5.6	5.2	4.8	4.4	4	3.7	3.4	3.2	2.9	2.7	2.5
7.9	6.8	6.8	6.6	6	5.6	5.1	4.7	4.3	4	3.7	3.4	3.1	2.9	2.6	2.4	2.2	2.1
8	5.6	5.6	5.4	5	4.6	4.2	3.9	3.6	3.3	3	2.8	2.6	2.4	2.2	2	1.9	1.7
8.1	4.6	4.6	4.5	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4
8.2	3.8	3.8	3.7	3.5	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2
8.3	3.1	3.1	3.1	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1	0.96
8.4	2.6	2.6	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79
8.5	2.1	2.1	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	0.98	0.9	0.83	0.77	0.71	0.65
8.6	1.8	1.8	1.7	1.6	1.5	1.3	1.2	1.1	1	0.96	0.88	0.81	0.75	0.69	0.63	0.59	0.54
8.7	1.5	1.5	1.4	1.3	1.2	1.1	1	0.94	0.87	0.8	0.74	0.68	0.62	0.57	0.53	0.49	0.45
8.8	1.2	1.2	1.2	1.1	1	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37
8.9	1	1	1	0.93	0.85	0.79	0.72	0.67	0.61	0.56	0.52	0.48	0.44	0.4	0.37	0.34	0.32
9	0.88	0.88	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37	0.34	0.32	0.29	0.27
$MIN\left(\left(\frac{0.275}{1 + 10^{7.204-pH}} + \frac{39.0}{1 + 10^{pH-7.204}}\right), \left(0.7249 \times \left(\frac{0.0114}{1 + 10^{7.204-pH}} + \frac{1.6181}{1 + 10^{pH-7.204}}\right) \times (23.12 \times 10^{0.036 \times (20-T)})\right)\right)$																	

**Table 12. — Chronic Criteria for Total Ammonia (mg/L as N) Aquatic and Wildlife coldwater, warmwater, and edw**

pH	Temperature, °C									
	0	14	16	18	20	22	24	26	28	30
6.5	6.7	6.7	6.1	5.3	4.7	4.1	3.6	3.2	2.8	2.5
6.6	6.6	6.6	6.0	5.3	4.6	4.1	3.6	3.1	2.8	2.4
6.7	6.4	6.4	5.9	5.2	4.5	4.0	3.5	3.1	2.7	2.4
6.8	6.3	6.3	5.7	5.0	4.4	3.9	3.4	3.0	2.6	2.3
6.9	6.1	6.1	5.6	4.9	4.3	3.8	3.3	2.9	2.6	2.3
7.0	5.9	5.9	5.4	4.7	4.2	3.6	3.2	2.8	2.5	2.2
7.1	5.7	5.7	5.2	4.5	4.0	3.5	3.1	2.7	2.4	2.1
7.2	5.4	5.4	4.9	4.3	3.8	3.3	2.9	2.6	2.3	2.0
7.3	5.1	5.1	4.6	4.1	3.6	3.1	2.8	2.4	2.1	1.9

7.4	4.7	4.7	4.3	3.8	3.3	2.9	2.6	2.3	2.0	1.7
7.5	4.4	4.4	4.0	3.5	3.1	2.7	2.4	2.1	1.8	1.6
7.6	4.0	4.0	3.6	3.2	2.8	2.5	2.2	1.9	1.7	1.5
7.7	3.6	3.6	3.3	2.9	2.5	2.2	1.9	1.7	1.5	1.3
7.8	3.1	3.2	2.9	2.5	2.2	2.0	1.7	1.5	1.3	1.2
7.9	2.8	2.8	2.5	2.2	2.0	1.7	1.5	1.3	1.2	1.0
8.0	2.4	2.4	2.2	1.9	1.7	1.5	1.3	1.2	1.0	0.90
8.1	2.1	2.1	1.9	1.7	1.5	1.3	1.1	1.0	0.88	0.77
8.2	1.8	1.8	1.6	1.4	1.3	1.1	0.97	0.86	0.75	0.66
8.3	1.5	1.5	1.4	1.2	1.1	0.94	0.83	0.73	0.64	0.56
8.4	1.3	1.3	1.2	1.0	0.91	0.80	0.70	0.62	0.54	0.48
8.5	1.1	1.1	1.0	0.90	0.77	0.67	0.59	0.52	0.46	0.40
8.6	0.92	0.92	0.84	0.74	0.65	0.57	0.50	0.44	0.37	0.34
8.7	0.78	0.78	0.71	0.62	0.55	0.48	0.42	0.37	0.33	0.29
8.8	0.66	0.66	0.60	0.53	0.46	0.41	0.36	0.32	0.28	0.24
8.9	0.57	0.57	0.51	0.45	0.40	0.35	0.31	0.27	0.24	0.21
9.0	0.49	0.49	0.44	0.39	0.34	0.30	0.26	0.23	0.20	0.18

$$CCC = \left( \frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH}} \right) - \text{MIN} (2.85, 1.45 * 10^{0.028 * (25 - T)})$$

**Table 12. Acute Standards for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife warmwater, Unionid Mussels Present**

For the aquatic and wildlife warmwater uses, unionids will be assumed to be present unless a study is performed demonstrating that they are absent and there is no historic evidence of their presence, or hydrologic modification has altered the flow regime in a way that would prevent their reestablishment.

pH	Temperature (°C)																				
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	51	48	44	41	37	34	32	29	27	25	23	21	19	18	16	15	14	13	12	11	9.9
6.6	49	46	42	39	36	33	30	28	26	24	22	20	18	17	16	14	13	12	11	10	9.5
6.7	46	44	40	37	34	31	29	27	24	22	21	19	18	16	15	14	13	12	11	9.8	9
6.8	44	41	38	35	32	30	27	25	23	21	20	18	17	15	14	13	12	11	10	9.2	8.5
6.9	41	38	35	32	30	28	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9
7	38	35	33	30	28	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9	7.3
7.1	34	32	30	27	25	23	21	20	18	17	15	14	13	12	11	10	9.3	8.5	7.9	7.2	6.7
7.2	31	29	27	25	23	21	19	18	16	15	14	13	12	11	9.8	9.1	8.3	7.7	7.1	6.5	6

Temperature (°C)																						
pH	0-	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
7.3	27	26	24	22	20	18	17	16	14	13	12	11	10	9.5	8.7	8	7.4	6.8	6.3	5.8	5.3	
7.4	24	22	21	19	18	16	15	14	13	12	11	9.8	9	8.3	7.7	7	6.5	6	5.5	5.1	4.7	
7.5	21	19	18	17	15	14	13	12	11	10	9.2	8.5	7.8	7.2	6.6	6.1	5.6	5.2	4.8	4.4	4	
7.6	18	17	15	14	13	12	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5	
7.7	15	14	13	12	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5	3.2	2.9	
7.8	13	12	11	10	9.3	8.5	7.9	7.2	6.7	6.1	5.6	5.2	4.8	4.4	4	3.7	3.4	3.2	2.9	2.7	2.5	
7.9	11	9.9	9.1	8.4	7.7	7.1	6.6	3	5.6	5.1	4.7	4.3	4	3.7	3.4	3.1	2.9	2.6	2.4	2.2	2.1	
8	8.8	8.2	7.6	7	6.4	5.9	5.4	5	4.6	4.2	3.9	3.6	3.3	3	2.8	2.6	2.4	2.2	2	1.9	1.7	
8.1	7.2	6.8	6.3	5.8	5.3	4.9	4.5	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4	
8.2	6	5.6	5.2	4.8	4.4	4	3.7	3.4	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	
8.3	4.9	4.6	4.3	3.9	3.6	3.3	3.1	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1	0.96	
8.4	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79	
8.5	3.3	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	0.98	0.9	0.83	0.77	0.71	0.65	
8.6	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.5	1.3	1.2	1.1	1	0.96	0.88	0.81	0.75	0.69	0.63	0.58	0.54	
8.7	2.3	2.2	2	1.8	1.7	1.6	1.4	1.3	1.2	1.1	1	0.94	0.87	0.8	0.74	0.68	0.62	0.57	0.53	0.49	0.45	
8.8	1.9	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37	
8.9	1.6	1.5	1.4	1.3	1.2	1.1	1	0.93	0.85	0.79	0.72	0.67	0.61	0.56	0.52	0.48	0.44	0.4	0.37	0.34	0.32	
9	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37	0.34	0.32	0.29	0.27	
$0.7249 \times \left( \frac{0.0114}{1 + 10^{7.204 - pH}} + \frac{1.6181}{1 + 10^{pH - 7.204}} \right) \times \text{MIN}(51.93, 23.12 \times 10^{0.036 \times (20 - T)})$																						

**Table 13. Repealed**

**Table 13. Chronic Criteria for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife coldwater and warmwater, Unionid Mussels Present**

For the aquatic and wildlife cold and warm water uses, unionids will be assumed to be present unless a study is performed demonstrating that they are absent and there is no historic evidence of their presence, or hydrologic modification has altered the flow regime in a way that would prevent their reestablishment.

Temperature (°C)																								
pH	0-7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	4.9	4.6	4.3	4.1	3.8	3.6	3.3	3.1	2.9	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.6	1.5	1.5	1.4	1.3	1.2	1.1
6.6	4.8	4.5	4.3	4	3.8	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1
6.7	4.8	4.5	4.2	3.9	3.7	3.5	3.2	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1
6.8	4.6	4.4	4.1	3.8	3.6	3.4	3.2	3	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1
6.9	4.5	4.2	4	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1

Temperature (°C)																								
pH	0-7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
7	4.4	4.1	3.8	3.6	3.4	3.2	3	2.8	2.6	2.4	2.3	2.2	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	0.99
7.1	4.2	3.9	3.7	3.5	3.2	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	0.95
7.2	4	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	0.96	0.9
7.3	3.8	3.5	3.3	3.1	2.9	2.7	2.6	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	0.97	0.91	0.85
7.4	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	0.96	0.9	0.85	0.79
7.5	3.2	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	0.95	0.89	0.83	0.78	0.73
7.6	2.9	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.6	1.5	1.4	1.4	1.3	1.2	1.1	1.1	0.98	0.92	0.86	0.81	0.76	0.71	0.67
7.7	2.6	2.4	2.3	2.2	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1	0.94	0.88	0.83	0.78	0.73	0.68	0.64	0.6
7.8	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	0.95	0.89	0.84	0.79	0.74	0.69	0.65	0.61	0.57	0.53
7.9	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	0.95	0.89	0.84	0.79	0.74	0.69	0.65	0.61	0.57	0.53	0.5	0.47
8	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1	0.94	0.88	0.83	0.78	0.73	0.68	0.64	0.6	0.56	0.53	0.5	0.44	0.44	0.41
8.1	1.5	1.5	1.4	1.3	1.2	1.1	1.1	0.99	0.92	0.87	0.81	0.76	0.71	0.67	0.63	0.59	0.55	0.52	0.49	0.46	0.43	0.4	0.38	0.35
8.2	1.3	1.2	1.2	1.1	1	0.96	0.9	0.84	0.79	0.74	0.7	0.65	0.61	0.57	0.54	0.5	0.47	0.44	0.42	0.39	0.37	0.34	0.32	0.3
8.3	1.1	1.1	0.99	0.93	0.87	0.82	0.76	0.72	0.67	0.63	0.59	0.55	0.52	0.49	0.46	0.43	0.4	0.38	0.35	0.33	0.31	0.29	0.27	0.26
8.4	0.95	0.89	0.84	0.79	0.74	0.69	0.65	0.61	0.57	0.53	0.5	0.47	0.44	0.41	0.39	0.36	0.34	0.32	0.3	0.28	0.26	0.25	0.23	0.22
8.5	0.8	0.75	0.71	0.67	0.62	0.58	0.55	0.51	0.48	0.45	0.42	0.4	0.37	0.35	0.33	0.31	0.29	0.27	0.25	0.24	0.22	0.21	0.2	0.18
8.6	0.68	0.64	0.6	0.56	0.53	0.49	0.46	0.43	0.41	0.38	0.36	0.33	0.31	0.29	0.28	0.26	0.24	0.23	0.21	0.2	0.19	0.18	0.16	0.15
8.7	0.57	0.54	0.51	0.47	0.44	0.42	0.39	0.37	0.34	0.32	0.3	0.28	0.27	0.25	0.23	0.22	0.21	0.19	0.18	0.17	0.16	0.15	0.14	0.13
8.8	0.49	0.46	0.43	0.4	0.38	0.35	0.33	0.31	0.29	0.27	0.26	0.24	0.23	0.21	0.2	0.19	0.17	0.16	0.15	0.14	0.13	0.13	0.12	0.11
8.9	0.42	0.39	0.37	0.34	0.32	0.3	0.28	0.27	0.25	0.23	0.22	0.21	0.19	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.12	0.11	0.1	0.09
9	0.36	0.34	0.32	0.3	0.28	0.26	0.24	0.23	0.21	0.2	0.19	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.11	0.1	0.09	0.09	0.08

$$0.8876 \times \left( \frac{0.0278}{1 + 10^{7.688-pH}} + \frac{1.1994}{1 + 10^{pH-7.688}} \right) \times (2.126 \times 10^{0.028 \times (20 - \text{MAX}(T,7))})$$

**Table 14. — Repealed**

**Table 14. Acute Standards for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife**

**Coldwater, Unionid Mussels Absent**

For the aquatic and wildlife coldwater uses, unionids will be assumed to be present unless a study is performed demonstrating that they are absent and there is no historic evidence of their presence, or hydrologic modification has altered the flow regime in a way that would prevent their reestablishment.

<b>Temperature (°C)</b>																	
<b>pH</b>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>
6.5	33	33	33	33	33	33	33	33	33	33	33	33	33	33	31	29	27
6.6	31	31	31	31	31	31	31	31	31	31	31	31	31	31	30	28	26
6.7	30	30	30	30	30	30	30	30	30	30	30	30	30	30	29	26	24
6.8	28	28	28	28	28	28	28	28	28	28	28	28	28	28	27	25	23
6.9	26	26	26	26	26	26	26	26	26	26	26	26	26	26	25	23	21
7	24	24	24	24	24	24	24	24	24	24	24	24	24	24	23	21	20
7.1	22	22	22	22	22	22	22	22	22	22	22	22	22	22	21	19	18
7.2	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	17	16
7.3	18	18	18	18	18	18	18	18	18	18	18	18	18	18	17	16	14
7.4	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	14	13
7.5	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	12	11
7.6	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	10	9.3
7.7	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.3	8.6	7.9
7.8	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	7.8	7.2	6.6
7.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.5	6	5.5
8	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.4	5	4.6
8.1	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.1	3.8
8.2	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7	3.4	3.1
8.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3	2.8	2.6
8.4	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.3	2.1
8.5	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.9	1.8
8.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.6	1.4
8.7	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.3	1.2
8.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1
8.9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	0.8
9	0.88	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7

$$\frac{MIN\left(\left(\frac{0.275}{1 + 10^{7.204 - pH}} + \frac{39.0}{1 + 10^{pH - 7.204}}\right), \left(0.7249 \times \left(\frac{0.0114}{1 + 10^{7.204 - pH}} + \frac{1.6181}{1 + 10^{pH - 7.204}}\right) \times (62.15 \times 10^{0.036 \times (20 - T)})\right)\right)}{}$$

**Table 15. — Repealed**

**Table 15. Acute Standards for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife Warmwater and Effluent Dependent, Unionid Mussels Absent**

For the aquatic and wildlife warmwater uses, unionids will be assumed to be present unless a study is performed

demonstrating that they are absent and there is no historic evidence of their presence, or hydrologic modification has altered the flow regime in a way that would prevent their reestablishment. For the aquatic and wildlife effluent dependent uses, unionids will be assumed to be absent.

<b>Temperature (°C)</b>																	
<b>pH</b>	<u>0-14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>
<u>6.5</u>	<u>51</u>	<u>51</u>	<u>51</u>	<u>51</u>	<u>51</u>	<u>51</u>	<u>51</u>	<u>51</u>	<u>51</u>	<u>48</u>	<u>44</u>	<u>40</u>	<u>37</u>	<u>34</u>	<u>31</u>	<u>29</u>	<u>27</u>
<u>6.6</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>49</u>	<u>46</u>	<u>42</u>	<u>39</u>	<u>36</u>	<u>33</u>	<u>30</u>	<u>28</u>	<u>26</u>
<u>6.7</u>	<u>46</u>	<u>46</u>	<u>46</u>	<u>46</u>	<u>46</u>	<u>46</u>	<u>46</u>	<u>46</u>	<u>46</u>	<u>43</u>	<u>40</u>	<u>37</u>	<u>34</u>	<u>31</u>	<u>29</u>	<u>26</u>	<u>24</u>
<u>6.8</u>	<u>44</u>	<u>44</u>	<u>44</u>	<u>44</u>	<u>44</u>	<u>44</u>	<u>44</u>	<u>44</u>	<u>44</u>	<u>41</u>	<u>38</u>	<u>35</u>	<u>32</u>	<u>29</u>	<u>27</u>	<u>25</u>	<u>23</u>
<u>6.9</u>	<u>41</u>	<u>41</u>	<u>41</u>	<u>41</u>	<u>41</u>	<u>41</u>	<u>41</u>	<u>41</u>	<u>41</u>	<u>38</u>	<u>35</u>	<u>32</u>	<u>30</u>	<u>27</u>	<u>25</u>	<u>23</u>	<u>21</u>
<u>7</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>38</u>	<u>35</u>	<u>32</u>	<u>30</u>	<u>27</u>	<u>25</u>	<u>23</u>	<u>21</u>	<u>20</u>
<u>7.1</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>34</u>	<u>32</u>	<u>29</u>	<u>27</u>	<u>25</u>	<u>23</u>	<u>21</u>	<u>19</u>	<u>18</u>
<u>7.2</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>31</u>	<u>29</u>	<u>26</u>	<u>24</u>	<u>22</u>	<u>21</u>	<u>19</u>	<u>17</u>	<u>16</u>
<u>7.3</u>	<u>27</u>	<u>27</u>	<u>27</u>	<u>27</u>	<u>27</u>	<u>27</u>	<u>27</u>	<u>27</u>	<u>27</u>	<u>26</u>	<u>23</u>	<u>22</u>	<u>20</u>	<u>18</u>	<u>17</u>	<u>16</u>	<u>14</u>
<u>7.4</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>22</u>	<u>21</u>	<u>19</u>	<u>17</u>	<u>16</u>	<u>15</u>	<u>14</u>	<u>13</u>
<u>7.5</u>	<u>21</u>	<u>21</u>	<u>21</u>	<u>21</u>	<u>21</u>	<u>21</u>	<u>21</u>	<u>21</u>	<u>21</u>	<u>19</u>	<u>18</u>	<u>16</u>	<u>15</u>	<u>14</u>	<u>13</u>	<u>12</u>	<u>11</u>
<u>7.6</u>	<u>18</u>	<u>18</u>	<u>18</u>	<u>18</u>	<u>18</u>	<u>18</u>	<u>18</u>	<u>18</u>	<u>18</u>	<u>17</u>	<u>15</u>	<u>14</u>	<u>13</u>	<u>12</u>	<u>11</u>	<u>10</u>	<u>9.3</u>
<u>7.7</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>14</u>	<u>13</u>	<u>12</u>	<u>11</u>	<u>10</u>	<u>9.3</u>	<u>8.6</u>	<u>7.9</u>
<u>7.8</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>12</u>	<u>11</u>	<u>10</u>	<u>9.2</u>	<u>8.5</u>	<u>7.8</u>	<u>7.2</u>	<u>6.6</u>
<u>7.9</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>9.9</u>	<u>9.1</u>	<u>8.4</u>	<u>7.7</u>	<u>7.1</u>	<u>6.5</u>	<u>6</u>	<u>5.5</u>
<u>8</u>	<u>8.8</u>	<u>8.8</u>	<u>8.8</u>	<u>8.8</u>	<u>8.8</u>	<u>8.8</u>	<u>8.8</u>	<u>8.8</u>	<u>8.8</u>	<u>8.2</u>	<u>7.5</u>	<u>6.9</u>	<u>6.4</u>	<u>5.9</u>	<u>5.4</u>	<u>5</u>	<u>4.6</u>
<u>8.1</u>	<u>7.3</u>	<u>7.3</u>	<u>7.3</u>	<u>7.3</u>	<u>7.3</u>	<u>7.3</u>	<u>7.3</u>	<u>7.3</u>	<u>7.3</u>	<u>6.8</u>	<u>6.2</u>	<u>5.7</u>	<u>5.3</u>	<u>4.9</u>	<u>4.5</u>	<u>4.1</u>	<u>3.8</u>
<u>8.2</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>5.6</u>	<u>5.1</u>	<u>4.7</u>	<u>4.4</u>	<u>4</u>	<u>3.7</u>	<u>3.4</u>	<u>3.1</u>
<u>8.3</u>	<u>4.9</u>	<u>4.9</u>	<u>4.9</u>	<u>4.9</u>	<u>4.9</u>	<u>4.9</u>	<u>4.9</u>	<u>4.9</u>	<u>4.9</u>	<u>4.6</u>	<u>4.2</u>	<u>3.9</u>	<u>3.6</u>	<u>3.3</u>	<u>3</u>	<u>2.8</u>	<u>2.6</u>
<u>8.4</u>	<u>4.1</u>	<u>4.1</u>	<u>4.1</u>	<u>4.1</u>	<u>4.1</u>	<u>4.1</u>	<u>4.1</u>	<u>4.1</u>	<u>4.1</u>	<u>3.8</u>	<u>3.4</u>	<u>3.2</u>	<u>3</u>	<u>2.7</u>	<u>2.5</u>	<u>2.3</u>	<u>2.1</u>
<u>8.5</u>	<u>3.3</u>	<u>3.3</u>	<u>3.3</u>	<u>3.3</u>	<u>3.3</u>	<u>3.3</u>	<u>3.3</u>	<u>3.3</u>	<u>3.3</u>	<u>3.1</u>	<u>2.9</u>	<u>2.6</u>	<u>2.4</u>	<u>2.2</u>	<u>2.1</u>	<u>1.9</u>	<u>1.8</u>
<u>8.6</u>	<u>2.8</u>	<u>2.8</u>	<u>2.8</u>	<u>2.8</u>	<u>2.8</u>	<u>2.8</u>	<u>2.8</u>	<u>2.8</u>	<u>2.8</u>	<u>2.6</u>	<u>2.4</u>	<u>2.2</u>	<u>2</u>	<u>1.9</u>	<u>1.7</u>	<u>1.6</u>	<u>1.4</u>
<u>8.7</u>	<u>2.3</u>	<u>2.3</u>	<u>2.3</u>	<u>2.3</u>	<u>2.3</u>	<u>2.3</u>	<u>2.3</u>	<u>2.3</u>	<u>2.3</u>	<u>2.2</u>	<u>2</u>	<u>1.8</u>	<u>1.7</u>	<u>1.5</u>	<u>1.4</u>	<u>1.3</u>	<u>1.2</u>
<u>8.8</u>	<u>1.9</u>	<u>1.9</u>	<u>1.9</u>	<u>1.9</u>	<u>1.9</u>	<u>1.9</u>	<u>1.9</u>	<u>1.9</u>	<u>1.9</u>	<u>1.8</u>	<u>1.7</u>	<u>1.5</u>	<u>1.4</u>	<u>1.3</u>	<u>1.2</u>	<u>1.1</u>	<u>1</u>
<u>8.9</u>	<u>1.6</u>	<u>1.6</u>	<u>1.6</u>	<u>1.6</u>	<u>1.6</u>	<u>1.6</u>	<u>1.6</u>	<u>1.6</u>	<u>1.6</u>	<u>1.5</u>	<u>1.4</u>	<u>1.3</u>	<u>1.2</u>	<u>1.1</u>	<u>1</u>	<u>0.92</u>	<u>0.85</u>
<u>9</u>	<u>1.4</u>	<u>1.4</u>	<u>1.4</u>	<u>1.4</u>	<u>1.4</u>	<u>1.4</u>	<u>1.4</u>	<u>1.4</u>	<u>1.4</u>	<u>1.3</u>	<u>1.2</u>	<u>1.1</u>	<u>1</u>	<u>0.93</u>	<u>0.85</u>	<u>0.78</u>	<u>0.72</u>
$0.7249 \times \left( \frac{0.0114}{1 + 10^{7.204 - pH}} + \frac{1.6181}{1 + 10^{pH - 7.204}} \right) \times \text{MIN} \left( 51.93, (62.15 \times 10^{0.036 \times (20 - T)}) \right)$																	

**Table 16. Repealed**

**Table 16. Chronic Standards for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife Warmwater and Effluent Dependent, Unionid Mussels Absent**

For the aquatic and wildlife warmwater uses, unionids will be assumed to be present unless a study is performed demonstrating that they are absent and there is no historic evidence of their presence, or hydrologic modification has altered the flow regime in a way that would prevent their reestablishment. For the aquatic and wildlife effluent dependent uses, unionids will be assumed to be absent.

Temperature (°C)																													
pH	0-7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
6.5	19	17	16	15	14	13	13	12	11	10	9.7	9.1	8.5	8	7.5	7	6.6	6.2	5.8	5.4	5.1	4.8	4.5	4.2					
6.6	18	17	16	15	14	13	12	12	11	10	9.6	9	8.4	7.9	7.4	6.9	6.5	6.1	5.7	5.4	5	4.7	4.4	4.1					
6.7	18	17	16	15	14	13	12	11	11	10	9.4	8.8	8.3	7.7	7.3	6.8	6.4	6	5.6	5.3	4.9	4.6	4.3	4.1					
6.8	17	16	15	14	14	13	12	11	10	9.8	9.2	8.6	8.1	7.6	7.1	6.7	6.2	5.8	5.5	5.1	4.8	4.5	4.2	4					
6.9	17	16	15	14	13	12	12	11	10	9.5	8.9	8.4	7.8	7.4	6.9	6.5	6.1	5.7	5.3	5	4.7	4.4	4.1	3.9					
7	16	15	14	14	13	12	11	10	9.8	9.2	8.6	8.1	7.6	7.1	6.7	6.2	5.9	5.5	5.1	4.8	4.5	4.2	4	3.7					
7.1	16	15	14	13	12	11	11	10	9.4	8.8	8.3	7.7	7.3	6.8	6.4	6	5.6	5.3	4.9	4.6	4.3	4.1	3.8	3.6					
7.2	15	14	13	12	12	11	10	9.5	9	8.4	7.9	7.4	6.9	6.5	6.1	5.7	5.3	5	4.7	4.4	4.1	3.9	3.6	3.4					
7.3	14	13	12	12	11	10	9.6	9	8.4	7.9	7.4	6.9	6.5	6.1	5.7	5.4	5	4.7	4.4	4.1	3.9	3.6	3.4	3.2					
7.4	13	12	12	11	10	9.5	9	8.4	7.9	7.4	6.9	6.5	6.1	5.7	5.3	5	4.7	4.4	4.1	3.9	3.6	3.4	3.2	3					
7.5	12	11	11	10	9.4	8.8	8.2	7.7	7.2	6.8	6.4	6	5.6	5.2	4.9	4.6	4.3	4.1	3.8	3.6	3.3	3.1	2.9	2.8					
7.6	11	10	10	9.1	8.5	8	7.5	7	6.6	6.2	5.8	5.4	5.1	4.8	4.5	4.2	3.9	3.7	3.5	3.2	3	2.9	2.7	2.5					
7.7	9.9	9.3	8.7	8.1	7.7	7.2	6.8	6.3	5.9	5.6	5.2	4.9	4.6	4.3	4	3.8	3.5	3.3	3.1	2.9	2.7	2.6	2.4	2.3					
7.8	8.8	8.3	7.8	7.3	6.8	6.4	6	5.6	5.3	5	4.6	4.4	4.1	3.8	3.6	3.4	3.2	3	2.8	2.6	2.4	2.3	2.1	2					
7.9	7.8	7.3	6.8	6.4	6	5.6	5.3	5	4.6	4.4	4.1	3.8	3.6	3.4	3.2	3	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8					
8	6.8	6.3	6	5.6	5.2	4.9	4.6	4.3	4	3.8	3.6	3.3	3.1	2.9	2.7	2.6	2.4	2.3	2.1	2	1.9	1.7	1.6	1.5					
8.1	5.8	5.5	5.1	4.8	4.5	4.2	4	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3					
8.2	5	4.7	4.4	4.1	3.9	3.6	3.4	3.2	3	2.8	2.6	2.5	2.3	2.2	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1					
8.3	4.2	4	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	0.96					
8.4	3.6	3.4	3.2	3	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	0.99	0.92	0.87	0.81					
8.5	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	0.95	0.89	0.83	0.78	0.73	0.69					
8.6	2.6	2.4	2.2	2.1	2	1.9	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	0.97	0.91	0.85	0.8	0.75	0.7	0.66	0.62	0.58					
8.7	2.2	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1	0.93	0.88	0.82	0.77	0.72	0.68	0.63	0.6	0.56	0.52	0.49					
8.8	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	0.96	0.9	0.85	0.79	0.74	0.7	0.65	0.61	0.58	0.54	0.51	0.47	0.44	0.42					
8.9	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1	0.94	0.88	0.82	0.77	0.72	0.68	0.64	0.6	0.56	0.52	0.49	0.46	0.43	0.4	0.38	0.36					
9	1.4	1.3	1.2	1.1	1	0.98	0.92	0.86	0.81	0.76	0.71	0.66	0.62	0.58	0.55	0.51	0.48	0.45	0.42	0.4	0.37	0.35	0.33	0.31					

Temperature (°C)																								
pH	0-7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
$0.9405 \times \left( \frac{0.0278}{1 + 10^{7.688-pH}} + \frac{1.1994}{1 + 10^{pH-7.688}} \right) \times (7.547 \times 10^{0.028 \times (20 - \text{MAX}(T,7))})$																								

**Table 17. Repealed**

**Table 17. Chronic Criteria for Total Ammonia (in mg/L, as N) for Aquatic and Wildlife coldwater, Unionid Mussels Absent**

For the aquatic and wildlife coldwater uses, unionids will be assumed to be present unless a study is performed demonstrating that they are absent and there is no historic evidence of their presence, or hydrologic modification has altered the flow regime in a way that would prevent their reestablishment.

Temperature (°C)																		
pH	0-14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
6.5	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7	6.6	6.2	5.8	5.4	5.1	4.8	4.5	4.2	
6.6	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	6.9	6.5	6.1	5.7	5.4	5	4.7	4.4	4.1	
6.7	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	6.8	6.4	6	5.6	5.3	4.9	4.6	4.3	4.1	
6.8	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.6	6.2	5.8	5.5	5.1	4.8	4.5	4.2	4	
6.9	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.5	6.1	5.7	5.3	5	4.7	4.4	4.1	3.9	
7	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.2	5.8	5.5	5.1	4.8	4.5	4.2	4	3.7	
7.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6	5.6	5.3	4.9	4.6	4.3	4.1	3.8	3.6	
7.2	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.7	5.3	5	4.7	4.4	4.1	3.9	3.6	3.4	
7.3	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.4	5	4.7	4.4	4.1	3.9	3.6	3.4	3.2	
7.4	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5	4.7	4.4	4.1	3.9	3.6	3.4	3.2	3	
7.5	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.6	4.3	4.1	3.8	3.6	3.3	3.1	2.9	2.8	
7.6	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.2	3.9	3.7	3.5	3.2	3	2.9	2.7	2.5	
7.7	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.8	3.5	3.3	3.1	2.9	2.7	2.6	2.4	2.3	
7.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.2	3	2.8	2.6	2.4	2.3	2.1	2	
7.9	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	
8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.4	2.3	2.1	2	1.9	1.7	1.6	1.5	
8.1	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	
8.2	2	2	2	2	2	2	2	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	
8.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	0.96	
8.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.2	1.1	1.1	0.99	0.93	0.87	0.81	
8.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1	0.95	0.89	0.83	0.78	0.73	0.69	
8.6	1	1	1	1	1	1	1	1	0.97	0.91	0.85	0.8	0.75	0.7	0.66	0.62	0.58	
8.7	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.82	0.77	0.72	0.68	0.64	0.6	0.56	0.52	0.49	
8.8	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.7	0.65	0.61	0.58	0.54	0.51	0.47	0.44	0.42	

Temperature (°C)																	
pH	0-14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
8.9	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.6	0.56	0.52	0.49	0.46	0.43	0.41	0.38	0.36
9	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.51	0.48	0.45	0.42	0.4	0.37	0.35	0.33	0.31

$$0.9405 \times \left( \frac{0.0278}{1 + 10^{7.688-pH}} + \frac{1.1994}{1 + 10^{pH-7.688}} \right) \times \text{MIN} \left( 6.920, (7.547 \times 10^{0.028 \times (20-T)}) \right)$$

**Appendix B. Surface Waters and Designated Uses**

(Coordinates are from the North American Datum of 1983 (NAD83). All latitudes in Arizona are north and all longitudes are west, but the negative signs are not included in the Appendix B table. Some web-based mapping systems require a negative sign before the longitude values to indicate it is a west longitude.)

**Watersheds:**

BW = Bill Williams

CG = Colorado – Grand Canyon

CL = Colorado – Lower Gila

LC = Little Colorado

MG = Middle Gila

SC = Santa Cruz – Rio Magdalena – Rio Sonoyta

SP = San Pedro – Willcox Playa – Rio Yaqui

SR = Salt River

UG = Upper Gila

VR = Verde River

**Other Abbreviations:**

WWTP = Wastewater Treatment Plant

Km = kilometers

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health			Agricultural		
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
BW	Alamo Lake	34°14'06"/113°35'00"	Deep		A&Ww			FBC			FC		AgL
BW	Big Sandy River	Headwaters to Alamo Lake			A&Ww			FBC			FC		AgL
BW	Bill Williams River	Alamo Lake to confluence with Colorado River			A&Ww			FBC			FC		AgL
BW	Blue Tank	34°40'14"/112°58'17"			A&Ww			FBC			FC		AgL
BW	Boulder Creek	Headwaters to confluence with unnamed tributary at 34°41'13"/113°03'37"		A&Wc				FBC			FC		AgL
BW	Boulder Creek	Below confluence with unnamed tributary to confluence with Burro Creek			A&Ww			FBC			FC		AgL
BW	Burro Creek (OAW)	Headwaters to confluence with Boulder Creek			A&Ww			FBC			FC		AgL
BW	Burro Creek	Below confluence with Boulder Creek to confluence with Big Sandy River			A&Ww			FBC			FC		AgL
BW	Carter Tank	34°52'27"/112°57'31"			A&Ww			FBC			FC		AgL
BW	Conger Creek	Headwaters to confluence with unnamed tributary at 34°45'15"/113°05'46"		A&Wc				FBC			FC		AgL
BW	Conger Creek	Below confluence with unnamed tributary to confluence with Burro Creek			A&Ww			FBC			FC		AgL
BW	Copper Basin Wash	Headwaters to confluence with unnamed tributary at 34°28'12"/112°35'33"		A&Wc				FBC			FC		AgL
BW	Copper Basin Wash	Below confluence with unnamed tributary to confluence with Skull Valley Wash				A&We			PBC				AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
BW	Cottonwood Canyon	Headwaters to Bear Trap Spring		A&Wc				FBC			FC		AgL
BW	Cottonwood Canyon	Below Bear Trap Spring to confluence at <u>Smith Canyon Sycamore Creek</u>			A&Ww			FBC			FC		AgL
BW	Date Creek	Headwaters to confluence with Santa Maria River			A&Ww			FBC			FC		AgL
BW	Francis Creek (OAW)	Headwaters to confluence with Burro Creek			A&Ww			FBC		DWS	FC	AgI	AgL
BW	Kirkland Creek	Headwaters to confluence with Santa Maria River			A&Ww			FBC			FC	AgI	AgL
BW	Knight Creek	Headwaters to confluence with Big Sandy River			A&Ww			FBC			FC		AgL
BW	Peeples Canyon (OAW)	Headwaters to confluence with Santa Maria River			A&Ww			FBC			FC		AgL
BW	Red Lake	35°12'18"/113°03'57"	Sedimentary		A&Ww			FBC			FC		AgL
BW	Santa Maria River	Headwaters to Alamo Lake			A&Ww			FBC			FC	AgI	AgL
BW	Trout Creek	Headwaters to confluence with unnamed tributary at 35°06'47"/113°13'01"		A&Wc				FBC			FC		AgL
BW	Trout Creek	Below confluence with unnamed tributary to confluence with Knight Creek			A&Ww			FBC			FC		AgL
CG	Agate Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Beaver Dam Wash	Headwaters to confluence with the Virgin River			A&Ww			FBC			FC		AgL
CG	Big Springs Tank	36°36'08"/112°21'01"		A&Wc				FBC			FC		AgL
CG	Boucher Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Bright Angel Creek	Headwaters to confluence with Roaring Springs Creek		A&Wc				FBC			FC		
CG	Bright Angel Creek	Below Roaring Spring Springs Creek to confluence with Colorado River			A&Ww			FBC			FC		
CG	Bright Angel Wash	Headwaters to Grand Canyon National Park South Rim WWTP outfall at 36°02'59"/112°09'02"				A&We			PBC				
CG	Bright Angel Wash (EDW)	Grand Canyon National Park South Rim WWTP outfall to Coconino Wash					A&Wedw		PBC				AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
CG	Bulrush Canyon Wash	Headwaters to confluence with Kanab Creek				A&We			PBC				
CG	Cataract Creek	Headwaters to Santa Fe Reservoir		A&Wc				FBC		DWS	FC	AgI	AgL
CG	Cataract Creek	Santa Fe Reservoir to City of Williams WWTP outfall at 35°14'40"/112°11'18"		A&Wc				FBC			FC	AgI	AgL
CG	Cataract Creek (EDW)	City of Williams WWTP outfall to 1 km downstream					A&Wedw		PBC				
CG	Cataract Creek	Red Lake Wash to Havasupai Indian Reservation boundary				A&We			PBC				AgL
CG	Cataract Lake	35°15'04"/112°12'58"	Igneous	A&Wc				FBC		DWS	FC		AgL
CG	Chuar Creek	Headwaters to confluence with unnamed tributary at 36°11'35"/111°52'20"		A&Wc				FBC			FC		
CG	Chuar Creek	Below unnamed tributary to confluence with the Colorado River			A&Ww			FBC			FC		
CG	City Reservoir	35°13'57"/112°11'25"	Igneous	A&Wc				FBC		DWS	FC		
CG	Clear Creek	Headwaters to confluence with unnamed tributary at 36°07'33"/112°00'03"		A&Wc				FBC			FC		
CG	Clear Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww			FBC			FC		
CG	Coconino Wash (EDW)	South Grand Canyon Sanitary District Tusayan WRF outfall at 35°58'39"/112°08'25" to 1 km downstream					A&Wedw		PBC				
CG	Colorado River	Lake Powell to Lake Mead		A&Wc				FBC		DWS	FC	AgI	AgL
CG	Cottonwood Creek	Headwaters to confluence with unnamed tributary at 35°20'46"/113°35'31"		A&Wc				FBC			FC		AgL
CG	Cottonwood Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww			FBC			FC		AgL
CG	Crystal Creek	Headwaters to confluence with unnamed tributary at 36°13'41"/112°11'49"		A&Wc				FBC			FC		
CG	Crystal Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww			FBC			FC		
CG	Deer Creek	Headwaters to confluence with unnamed tributary at 36°26'15"/112°28'20"		A&Wc				FBC			FC		

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
CG	Deer Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww			FBC			FC		
CG	Detrital Wash	Headwaters to Lake Mead				A&We			PBC				
CG	Dogtown Reservoir	35°12'40"/112°07'54"	Igneous	A&Wc				FBC		DWS	FC	AgI	AgL
CG	Dragon Creek	Headwaters to confluence with Milk Creek		A&Wc				FBC			FC		
CG	Dragon Creek	Below confluence with Milk Creek to confluence with Crystal Creek			A&Ww			FBC			FC		
CG	Garden Creek	Headwaters to confluence with Pipe Creek			A&Ww			FBC			FC		
CG	Gonzalez Lake	35°15'26"/112°12'09"	Shallow		A&Ww			FBC			FC	AgI	AgL
CG	Grand Wash	Headwaters to <del>Lake Mead</del> Colorado River				A&We			PBC				
CG	Grapevine Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Grapevine Wash	Headwaters to <del>Lake Mead</del> Colorado River				A&We			PBC				
CG	Hakatai Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Hance Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Havasut Canyon Creek	From the Havasupai Indian Reservation boundary to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Hermit Creek	Headwaters to Hermit Pack Trail crossing at 36°03'38"/112°14'00"		A&Wc				FBC			FC		
CG	Hermit Creek	Below Hermit Pack Trail crossing to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Horn Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Hualapai Wash	Headwaters to Lake Mead				A&We			PBC				
CG	Jacob Lake	36°42'27"/112°13'50"	Sedimentary	A&Wc				FBC			FC		
CG	Kaibab Lake	35°17'04"/112°09'32"	Igneous	A&Wc				FBC		DWS	FC	AgI	AgL
CG	Kanab Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC		DWS	FC		AgL
CG	Kwagunt Creek	Headwaters to confluence with unnamed tributary at 36°13'37"/111°54'50"		A&Wc				FBC			FC		
CG	Kwagunt Creek	Below confluence with unnamed tributary to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Lake Mead	36°06'18"/114°26'33"	Deep	A&Wc				FBC		DWS	FC	AgI	AgL
CG	Lake Powell	36°59'53"/111°08'17"	Deep	A&Wc				FBC		DWS	FC	AgI	AgL
CG	Lonetree Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Matkatamiba Creek	Below Havasupai Indian Reservation boundary to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Monument Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
CG	Nankoweap Creek	Headwaters to confluence with unnamed tributary at 36°15'29"/111°57'26"		A&Wc				FBC			FC		
CG	Nankoweap Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww			FBC			FC		
CG	National Canyon Creek	Headwaters to Hualapai Indian Reservation boundary at 36°15'15"/112°52'34"			A&Ww			FBC			FC		
CG	North Canyon Creek	Headwaters to confluence with unnamed tributary at 36°33'58"/111°55'41"		A&Wc				FBC			FC		
CG	North Canyon Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww			FBC			FC		
CG	Olo Creek Canyon	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Parashant Canyon	Headwaters to confluence with unnamed tributary at 36°21'02"/113°27'56"		A&Wc				FBC			FC		
CG	Parashant Canyon	Below confluence with unnamed tributary to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Paria River	Utah border to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Phantom Creek	Headwaters to confluence with unnamed tributary at 36°09'29"/112°08'13"		A&Wc				FBC			FC		

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
CG	Phantom Creek	Below confluence with unnamed tributary to confluence with Bright Angel Creek			A&Ww			FBC			FC		
CG	Pipe Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Red Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Red Lake	35°40'03"/114°04'07"			A&Ww			FBC			FC		AgL
CG	Roaring Springs	36°11'45"/112°02'06"		A&Wc				FBC		DWS	FC		
CG	Roaring Springs Creek	Headwaters to confluence with Bright Angel Creek		A&Wc				FBC			FC		
CG	Rock Canyon	Headwaters to confluence with Truxton Wash				A&We			PBC				
CG	Royal Arch Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Ruby Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Russell Tank	35°52'21"/111°52'45"		A&Wc				FBC			FC		AgL
CG	Saddle Canyon Creek	Headwaters to confluence with unnamed tributary at 36°21'36"/112°22'43"		A&Wc				FBC			FC		
CG	Saddle Canyon Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww			FBC			FC		
CG	Santa Fe Reservoir	35°14'31"/112°11'10"	Igneous	A&Wc				FBC		DWS	FC		
CG	Sapphire Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Serpentine Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Shinumo Creek	Headwaters to confluence with unnamed tributary at 36°18'18"/112°18'07"		A&Wc				FBC			FC		
CG	Shinumo Creek	Below confluence with unnamed tributary to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Short Creek	Headwaters to confluence with the Virgin River Fort Pearce Wash				A&We			PBC				
CG	Slate Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Spring Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Stone Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Tapeats Creek	Headwaters to confluence with the Colorado River		A&Wc				FBC			FC		
CG	Thunder River	Headwaters to confluence with Tapeats Creek		A&Wc				FBC			FC		
CG	Trail Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Transept Canyon	Headwaters to Grand Canyon National Park North Rim WWTP outfall at 36°12'20"/112°03'35"				A&We			PBC				
CG	Transept Canyon (EDW)	Grand Canyon National Park North Rim WWTP outfall to 1 km downstream					A&Wedw		PBC				
CG	Transept Canyon	From 1 km downstream of the Grand Canyon National Park North Rim WWTP outfall to confluence with Bright Angel Creek				A&We			PBC				
CG	Travertine Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Truxton Wash	Headwaters to Red Lake				A&We			PBC				
CG	Turquoise Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Unkar Creek	Below confluence with unnamed tributary at 36°07'54"/111°54'06" to confluence with Colorado River			A&Ww			FBC			FC		
CG	Unnamed Wash (EDW)	Grand Canyon National Park Desert View WWTP outfall at 36°02'06"/111°49'13" to confluence with Cedar Canyon					A&Wedw		PBC				
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
CG	Unnamed Wash (EDW)	Valle Airpark WRF outfall at 35°38'34"/112°09'22" to confluence with Spring Valley Wash					A&Wedw		PBC				
CG	Vasey's Paradise	A spring at 36°29'52"/111°51'26"		A&Wc				FBC			FC		
CG	Virgin River	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC	AgI	AgL
CG	Vishnu Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
CG	Warm Springs Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	West Cataract Creek	Headwaters to confluence with Cataract Creek		A&Wc				FBC			FC		AgL
CG	White Creek	Headwaters to confluence with unnamed tributary at 36°18'45"/112°21'03"		A&Wc				FBC			FC		
CG	White Creek	Below confluence with unnamed tributary to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Wright Canyon Creek	Headwaters to confluence with unnamed tributary at 35°20'48"/113°30'40"		A&Wc				FBC			FC		AgL
CG	Wright Canyon Creek	Below confluence with unnamed tributary to confluence with Truxton Wash			A&Ww			FBC			FC		AgL
CL	A10 Backwater	33°31'45"/114°33'19"	Shallow		A&Ww			FBC			FC		
CL	A7 Backwater	33°34'27"/114°32'04"	Shallow		A&Ww			FBC			FC		
CL	Adobe Lake	33°02'36"/114°39'26"	Shallow		A&Ww			FBC			FC		
CL	Cibola Lake	33°14'01"/114°40'31"	Shallow		A&Ww			FBC			FC		
CL	Clear Lake	33°01'59"/114°31'19"	Shallow		A&Ww			FBC			FC		
CL	Columbus Wash	Headwaters to confluence with the Gila River				A&We			PBC				
CL	Colorado River	Lake Mead to Topock Marsh		A&Wc				FBC		DWS	FC	AgI	AgL
CL	Colorado River	Topock Marsh to Morelos Dam			A&Ww			FBC		DWS	FC	AgI	AgL
CL	Gila River	Painted Rock Dam to confluence with the Colorado River			A&Ww			FBC			FC	AgI	AgL
CL	Holy Moses Wash	Headwaters to City of Kingman Downtown WWTP outfall at 35°10'33"/114°03'46"				A&We			PBC				
CL	Holy Moses Wash (EDW)	City of Kingman Downtown WWTP outfall to 3 km downstream					A&Wedw		PBC				
CL	Holy Moses Wash	From 3 km downstream of City of Kingman Downtown WWTP outfall to confluence with Sawmill Wash				A&We			PBC				
CL	Hunter's Hole Backwater	32°31'13"/114°48'07"	Shallow		A&Ww			FBC			FC		AgL
CL	Imperial Reservoir	32°53'02"/114°27'54"	Shallow		A&Ww			FBC		DWS	FC	AgI	AgL
CL	Island Lake	33°01'44"/114°36'42"	Shallow		A&Ww			FBC			FC		
CL	Laguna Reservoir	32°51'35"/114°28'29"	Shallow		A&Ww			FBC		DWS	FC	AgI	AgL
CL	Lake Havasu	34°35'18"/114°25'47"	Deep		A&Ww			FBC		DWS	FC	AgI	AgL
CL	Lake Mohave	35°26'58"/114°38'30"	Deep	A&Wc				FBC		DWS	FC	AgI	AgL
CL	Martinez Lake	32°58'49"/114°28'09"	Shallow		A&Ww			FBC			FC	AgI	AgL
CL	Mittry Lake	32°49'17"/114°27'54"	Shallow		A&Ww			FBC			FC		
CL	Mohave Wash	Headwaters to Lake Havasu to Lower Colorado River				A&We			PBC				
CL	Nortons Lake	33°02'30"/114°37'59"	Shallow		A&Ww			FBC			FC		
CL	Painted Rock (Borrow Pit) Lake	33°04'55"/113°01'17"	Sedimentary		A&Ww			FBC			FC	AgI	AgL
CL	Pretty Water Lake	33°19'51"/114°42'19"	Shallow		A&Ww			FBC			FC		
CL	Quigley Ponds	32°43'40"/113°57'44"	Shallow		A&Ww			FBC			FC		
CL	Redondo Lake	32°44'32"/114°29'03"	Shallow		A&Ww			FBC			FC		
CL	Sacramento Wash	Headwaters to Topock Marsh				A&We			PBC				
CL	Sawmill Canyon	Headwaters to abandoned gaging station at 35°09'45"/113°57'56"			A&Ww			FBC			FC		AgL
CL	Sawmill Canyon	Below abandoned gaging station to confluence with Holy Moses Wash				A&We			PBC				AgL
CL	Topock Marsh	34°43'27"/114°28'59"	Shallow		A&Ww			FBC		DWS	FC	AgI	AgL
CL	Tyson Wash (EDW)	Town of Quartzsite WWTP outfall at 33°42'39"/114°13'10" to 1 km downstream					A&Wedw		PBC				
CL	Wellton Canal	Wellton-Mohawk Irrigation District								DWS		AgI	AgL
CL	Wellton Ponds	32°40'32"/114°00'26"			A&Ww			FBC			FC		
CL	YPG Yuma Proving Ground Pond	32°50'58"/114°26'14"			A&Ww			FBC			FC		
CL	Yuma Area Canals	Above municipal water treatment plant intakes								DWS		AgI	AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural		
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL	
CL	Yuma Area Canals	Below municipal water treatment plant intakes and all drains											AgI	AgL
LC	Als Lake	35°02'10"/111°25'17"	Igneous		A&Ww			FBC				FC		AgL
LC	Ashurst Lake	35°01'06"/111°24'18"	Igneous	A&Wc				FBC				FC	AgI	AgL
LC	Atcheson Reservoir	33°59'59"/109°20'43"	Igneous		A&Ww			FBC				FC	AgI	AgL
LC	Auger Creek	Headwaters to confluence with Nutrioso Creek		A&Wc				FBC				FC		AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>								
LC	Barbershop Canyon Creek	Headwaters to confluence with East Clear Creek		A&Wc				FBC				FC		AgL
LC	Bear Canyon Creek	Headwaters to confluence with General Springs Canyon		A&Wc				FBC				FC		AgL
LC	Bear Canyon Creek	Headwaters to confluence with Willow Creek		A&Wc				FBC				FC		AgL
LC	Bear Canyon Lake	34°24'00"/111°00'06"	Sedimentary	A&Wc				FBC				FC	AgI	AgL
LC	Becker Lake	34°09'11"/109°18'23"	Shallow	A&Wc				FBC				FC		AgL
LC	Billy Creek	Headwaters to confluence with Show Low Creek		A&Wc				FBC				FC		AgL
LC	Black Canyon Creek	Headwaters to confluence with Chevelon Creek		A&Wc				FBC				FC	AgI	AgL
LC	Black Canyon Lake	34°20'32"/110°40'13"	Sedimentary	A&Wc				FBC		DWS		FC	AgI	AgL
LC	Blue Ridge Reservoir	34°32'40"/111°11'33"	Deep	A&We				FBC				FC	AgI	AgL
LC	Boot Lake	34°58'54"/111°20'11"	Igneous	A&Wc				FBC				FC		AgL
LC	Bow and Arrow Wash	Headwaters to confluence with Rio de Flag				A&We			PBC					
LC	Buck Springs Canyon Creek	Headwaters to confluence with Leonard Canyon Creek		A&Wc				FBC				FC		AgL
LC	Bunch Reservoir	34°02'20"/109°26'48"	Igneous	A&Wc				FBC				FC	AgI	AgL
LC	Camillo Tank	34°55'03"/111°22'40"	Igneous		A&Ww			FBC				FC		AgL
LC	Carnero Lake	34°06'57"/109°31'42"	Shallow	A&Wc				FBC				FC		AgL
LC	Chevelon Canyon Lake	34°29'18"/110°49'30"	Sedimentary	A&Wc				FBC				FC	AgI	AgL
LC	Chevelon Creek	Headwaters to confluence with the Little Colorado River		A&Wc				FBC				FC	AgI	AgL
LC	Chevelon Creek, West Fork	Headwaters to confluence with Chevelon Creek		A&Wc				FBC				FC		AgL
LC	Chilson Tank	34°51'43"/111°22'54"	Igneous		A&Ww			FBC				FC		AgL
LC	Clear Creek	Headwaters to confluence with the Little Colorado River		A&Wc				FBC		DWS		FC		AgL
LC	Clear Creek Reservoir	34°57'09"/110°39'14"	Shallow	A&Wc				FBC		DWS		FC	AgI	AgL
LC	Coconino Reservoir	35°00'05"/111°24'10"	Igneous	A&Wc				FBC				FC	AgI	AgL
LC	Colter Creek	Headwaters to confluence with Nutrioso Creek		A&Wc				FBC				FC		AgL
LC	Colter Reservoir	33°56'39"/109°28'53"	Shallow	A&Wc				FBC				FC		AgL
LC	Concho Creek	Headwaters to confluence with Carrizo Wash		A&Wc				FBC				FC		AgL
LC	Concho Lake	34°26'37"/109°37'40"	Shallow	A&Wc				FBC				FC	AgI	AgL
LC	Cow Lake	34°53'14"/111°18'51"	Igneous		A&Ww			FBC				FC		AgL
LC	Coyote Creek	Headwaters to confluence with the Little Colorado River		A&Wc				FBC				FC	AgI	AgL
LC	Cragin Reservoir (formerly Blue Ridge Reservoir)	34°32'40"/111°11'33"	Deep	A&Wc				FBC				FC	AgI	AgL
LC	Crisis Lake (Snake Tank #2)	34°47'51"/111°17'32"			A&Ww			FBC				FC		AgL
LC	Dane Canyon Creek	Headwaters to confluence with Barbershop Canyon Creek		A&Wc				FBC				FC		AgL
LC	Daves Tank	34°44'22"/111°17'15"			A&Ww			FBC				FC		AgL
LC	Deep Lake	35°03'34"/111°25'00"	Igneous		A&Ww			FBC				FC		AgL
LC	Dry Lake (EDW)	34°38'02"/110°23'40"	EDW				A&Wedw		PBC					
LC	Ducksnest Lake	34°59'14"/111°23'57"			A&Ww			FBC				FC		AgL
LC	East Clear Creek	Headwaters to confluence with Clear Creek		A&Wc				FBC				FC	AgI	AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
LC	Ellis Wiltbank Reservoir	34°05'25"/109°28'25"	Igneous		A&Ww			FBC			FC	AgI	AgL
LC	Estates at Pine Canyon lakes (EDW)	35°09'32"/111°38'26"	EDW				A&Wedw		PBC				
LC	Fish Creek	Headwaters to confluence with the Little Colorado River		A&Wc				FBC			FC		AgL
LC	Fool's Hollow Lake	34°16'30"/110°03'43"	Igneous	A&Wc				FBC			FC		AgL
LC	General Springs Canyon Creek	Headwaters to confluence with East Clear Creek		A&Wc				FBC			FC		AgL
LC	Geneva Reservoir	34°01'45"/109°31'46"	Igneous		A&Ww			FBC			FC		AgL
LC	Hall Creek	Headwaters to confluence with the Little Colorado River		A&Wc				FBC			FC	AgI	AgL
LC	Hart Canyon Creek	Headwaters to confluence with Willow Creek		A&Wc				FBC			FC		AgL
LC	Hay Lake	34°00'11"/109°25'57"	Igneous	A&Wc				FBC			FC		AgL
LC	Hog Wallow Lake	33°58'57"/109°25'39"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Horse Lake	35°03'55"/111°27'50"			A&Ww			FBC			FC		AgL
LC	Hulsey Creek	Headwaters to confluence with Nutrioso Creek		A&Wc				FBC			FC		AgL
LC	Hulsey Lake	33°55'58"/109°09'40"	Sedimentary	A&Wc				FBC			FC		AgL
LC	Indian Lake	35°00'39"/111°22'41"			A&Ww			FBC			FC		AgL
LC	Jack's Jacks Canyon Creek	Headwaters to confluence with the Little Colorado River		A&Wc				FBC			FC	AgI	AgL
Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife	Human Health	Agricultural							
LC	Jarvis Lake	33°58'59"/109°12'36"	Sedimentary		A&Ww			FBC			FC		AgL
LC	Kinnikinick Lake	34°53'53"/111°18'18"	Igneous	A&Wc				FBC			FC		AgL
LC	Knoll Lake	34°25'38"/111°05'13"	Sedimentary	A&Wc				FBC			FC		AgL
LC	Lake Humphreys (EDW)	35°11'51"/111°35'19"	EDW				A&Wedw		PBC				
LC	Lake Mary, Lower	35°06'21"/111°34'38"	Igneous	A&Wc				FBC		DWS	FC		AgL
LC	Lake Mary, Upper	35°03'23"/111°28'34"	Igneous	A&Wc				FBC		DWS	FC		AgL
LC	Lake of the Woods	34°09'40"/109°58'47"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Lee Valley Creek (OAW)	Headwaters to Lee Valley Reservoir		A&Wc				FBC			FC		
LC	Lee Valley Creek	From Lee Valley Reservoir to confluence with the East Fork of the Little Colorado River		A&Wc				FBC			FC		AgL
LC	Lee Valley Reservoir	33°56'29"/109°30'04"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Leonard Canyon Creek	Headwaters to confluence with Clear Creek		A&Wc				FBC			FC		AgL
LC	Leonard Canyon Creek, East Fork	Headwaters to confluence with Leonard Canyon Creek		A&Wc				FBC			FC		AgL
LC	Leonard Canyon Creek, Middle Fork	Headwaters to confluence with Leonard Canyon, West Fork		A&Wc				FBC			FC		AgL
LC	Leonard Canyon Creek, West Fork	Headwaters to confluence with Leonard Canyon, East Fork		A&Wc				FBC			FC		AgL
LC	Lily Creek	Headwaters to confluence with Coyote Creek		A&Wc				FBC			FC		AgL
LC	Little Colorado River	Headwaters to Lyman Reservoir		A&Wc				FBC			FC	AgI	AgL
LC	Little Colorado River	Below Lyman Reservoir to confluence with the Puerco River		A&Wc				FBC		DWS	FC	AgI	AgL
LC	Little Colorado River	<u>Below confluence with the Puerco River to the Navajo Nation Reservation boundary Below Puerco River confluence to the Colorado River, excluding segments on Native American Lands.</u>			A&Ww			FBC		DWS	FC	AgI	AgL
LC	Little Colorado River, East Fork	Headwaters to confluence with the Little Colorado River		A&Wc				FBC			FC		AgL
LC	Little Colorado River, South Fork	Headwaters to confluence with the Little Colorado River		A&Wc				FBC			FC		AgL
LC	Little Colorado River, West Fork (OAW)	Headwaters to Government Springs		A&Wc				FBC			FC		

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
LC	Little Colorado River, West Fork	Below Government Springs to confluence with the Little Colorado River		A&Wc				FBC			FC		AgL
LC	Little George Reservoir	34°00'37"/109°19'15"	Igneous		A&Ww			FBC			FC	AgI	
LC	Little Mormon Lake	34°17'00"/109°58'06"	Igneous		A&Ww			FBC			FC	AgI	AgL
LC	Little Ortega Lake	34°22'47"/109°40'06"	Igneous	A&Wc				FBC			FC		
LC	Long Lake, Lower	34°47'16"/111°12'40"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Long Lake, Upper	35°00'08"/111°21'23"	Igneous	A&Wc				FBC			FC		AgL
LC	Long Tom Tank	34°20'35"/110°49'22"		A&Wc				FBC			FC		AgL
LC	Lower Walnut Canyon Lake (EDW)	35°12'04"/111°34'07"	EDW				A&Wedw		PBC				
LC	Lyman Reservoir	34°21'21"/109°21'35"	Deep	A&Wc				FBC			FC	AgI	AgL
LC	Mamie Creek	Headwaters to confluence with Coyote Creek		A&Wc				FBC			FC		AgL
LC	Marshall Lake	35°07'18"/111°32'07"	Igneous	A&Wc				FBC			FC		AgL
LC	McKay Reservoir	34°01'27"/109°13'48"		A&Wc				FBC			FC	AgI	AgL
LC	Merritt Draw Creek	Headwaters to confluence with Barbershop Canyon Creek		A&Wc				FBC			FC		AgL
LC	Mexican Hay Lake	34°01'58"/109°21'25"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Milk Creek	Headwaters to confluence with Hulsey Creek		A&Wc				FBC			FC		AgL
LC	Miller Canyon Creek	Headwaters to confluence with East Clear Creek		A&Wc				FBC			FC		AgL
LC	Miller Canyon Creek, East Fork	Headwaters to confluence with Miller Canyon Creek		A&Wc				FBC			FC		AgL
LC	Mineral Creek	Headwaters to Little Ortega Lake		A&Wc				FBC			FC	AgI	AgL
LC	Mormon Lake	34°56'38"/111°27'25"	Shallow	A&Wc				FBC		DWS	FC	AgI	AgL
LC	Morton Lake	34°53'37"/111°17'41"	Igneous	A&Wc				FBC			FC		AgL
LC	Mud Lake	34°55'19"/111°21'29"	Shallow		A&Ww			FBC			FC		AgL
LC	Ned Lake (EDW)	34°17'17"/110°03'22"	EDW				A&Wedw		PBC				
LC	Nelson Reservoir	34°02'52"/109°11'19"	Sedimentary	A&Wc				FBC			FC	AgI	AgL
LC	Norton Reservoir	34°03'57"/109°31'27"	Igneous		A&Ww			FBC			FC		AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
LC	Nutrios Creek	Headwaters to confluence with the Little Colorado River		A&Wc				FBC			FC	AgI	AgL
LC	Paddy Creek	Headwaters to confluence with Nutrios Creek		A&Wc				FBC			FC		AgL
LC	Phoenix Park Wash	Headwaters to Dry Lake				A&We			PBC				
LC	Pierce Seep	34°23'39"/110°31'17"		A&Wc					PBC				
LC	Pine Tank	34°46'49"/111°17'21"	Igneous		A&Ww			FBC			FC		AgL
LC	Pintail Lake (EDW)	34°18'05"/110°01'21"	EDW				A&Wedw		PBC				
LC	Porter Creek	Headwaters to confluence with Show Low Creek		A&Wc				FBC			FC		AgL
LC	Potato Lake	35°03'15"/111°24'13"	Igneous	A&Wc				FBC			FC		AgL
LC	Pratt Lake	34°01'32"/109°04'18"	Sedimentary	A&Wc				FBC			FC		
LC	Puerco River	Headwaters to confluence with the Little Colorado River			A&Ww			FBC		DWS	FC	AgI	AgL
LC	Puerco River (EDW)	Sanders Unified School District WWTP outfall at 35°12'52"/109°19'40" to 0.5 km downstream					A&Wedw		PBC				
LC	Rainbow Lake	34°09'00"/109°59'09"	Shallow Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Reagan Reservoir	34°02'09"/109°08'41"	Igneous		A&Ww			FBC			FC		AgL
LC	Rio de Flag	Headwaters to City of Flagstaff WWTP outfall at 35°12'21"/111°39'17"				A&We			PBC				
LC	Rio de Flag (EDW)	From City of Flagstaff WWTP outfall to the confluence with San Francisco Wash					A&Wedw		PBC				

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
LC	River Reservoir	34°02'01"/109°26'07"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Rogers Reservoir	33°56'30"/109°16'20"	Igneous		A&Ww			FBC			FC		AgL
LC	Rudd Creek	Headwaters to confluence with Nutriosio Creek		A&Wc				FBC			FC		AgL
LC	Russel Reservoir	33°59'29"/109°20'01"	Igneous		A&Ww			FBC			FC	AgI	AgL
LC	San Salvador Reservoir	33°58'51"/109°19'55"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Scott Reservoir	34°10'31"/109°57'31"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Show Low Creek	Headwaters to confluence with Silver Creek		A&Wc				FBC			FC	AgI	AgL
LC	Show Low Lake	34°11'36"/110°00'12"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Silver Creek	Headwaters to confluence with the Little Colorado River		A&Wc				FBC			FC	AgI	AgL
LC	Slade Reservoir	33°59'41"/109°20'26"	Igneous		A&Ww			FBC			FC	AgI	AgL
LC	Soldiers Annex Lake	34°47'15"/111°13'51"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Soldiers Lake	34°47'47"/111°14'04"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Spaulding Tank	34°30'17"/111°02'06"			A&Ww			FBC			FC		AgL
LC	Sponseller Lake	34°14'09"/109°50'45"	Igneous	A&Wc				FBC			FC		AgL
LC	St Johns Reservoir (Little Reservoir)	34°29'10"/109°22'06"	Igneous		A&Ww			FBC			FC	AgI	AgL
LC	Telephone Lake (EDW)	34°17'35"/110°02'42"	EDW				A&Wedw		PBC				
LC	Tremaine Lake	34°46'02"/111°13'51"	Igneous	A&Wc				FBC			FC		AgL
LC	Tunnel Reservoir	34°01'53"/109°26'34"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Turkey Draw (EDW)	High Country Pines II WWTP outfall at 33°25'35"/110°38'13" to confluence with Black Canyon Creek					A&Wedw		PBC				
LC	Unnamed Wash (EDW)	Bison Ranch WWTP outfall at 34°23'31"/110°31'29" to Pierce Seep					A&Wedw		PBC				
LC	Unnamed Wash (EDW)	Black Mesa Ranger Station WWTP outfall at 34°23'35"/110°33'36" to confluence of Oklahoma Flat Draw					A&Wedw		PBC				
LC	Vail Lake	35°05'23"/111°30'46"	Igneous	A&Wc				FBC			FC		AgL
LC	Walnut Creek	Headwaters to confluence with Billy Creek		A&Wc				FBC			FC		AgL
LC	Water Canyon Creek	Headwaters to confluence with the Little Colorado River		A&Wc				FBC			FC		AgL
LC	Water Canyon Reservoir	34°00'16"/109°20'05"	Igneous		A&Ww			FBC			FC	AgI	AgL
LC	Whale Lake (EDW)	35°11'13"/111°35'21"	EDW				A&Wedw		PBC				
LC	Whipple Lake	34°16'49"/109°58'29"	Igneous		A&Ww			FBC			FC		AgL
LC	White Mountain Lake	34°21'57"/109°59'21"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	White Mountain Reservoir	34°00'12"/109°30'39"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Willow Creek	Headwaters to confluence with Clear Creek		A&Wc				FBC			FC		AgL
LC	Willow Springs Canyon Creek	Headwaters to confluence with Chevelon Creek		A&Wc				FBC			FC		AgL
LC	Willow Springs Lake	34°18'13"/110°52'16"	Sedimentary	A&Wc				FBC			FC	AgI	AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
LC	Woodland Reservoir	34°07'35"/109°57'01"	Igneous	A&Wc				FBC			FC	AgI	AgL
LC	Woods Canyon Creek	Headwaters to confluence with Chevelon Creek		A&Wc				FBC			FC		AgL
LC	Woods Canyon Lake	34°20'09"/110°56'45"	Sedimentary	A&Wc				FBC			FC	AgI	AgL
LC	Zuni River	Headwaters to confluence with the Little Colorado River		A&Wc				FBC			FC	AgI	AgL
MG	Agua Fria River	Headwaters to confluence with unnamed tributary at 34°35'14"/112°16'18"				A&We			PBC				AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
MG	Agua Fria River (EDW)	Below confluence with unnamed tributary to State Route 169					A&Wedw		PBC				AgL
MG	Agua Fria River	From State Route 169 to Lake Pleasant			A&Ww			FBC		DWS	FC	AgI	AgL
MG	Agua Fria River	Below Lake Pleasant to the City of El Mirage WWTP at ' 33°34'20"/112°18'32"				A&We			PBC				AgL
MG	Agua Fria River (EDW)	From City of El Mirage WWTP outfall to 2 km downstream					A&Wedw		PBC				
MG	Agua Fria River	Below 2 km downstream of the City of El Mirage WWTP to City of Avondale WWTP outfall at 33°23'55"/112°21'16"				A&We			PBC				
MG	Agua Fria River	From City of Avondale WWTP outfall to confluence with Gila River					A&Wedw		PBC				
MG	Alvord Park Lake	35th Avenue & Baseline Road, Phoenix at 33°22'23"/ 112°08'20"	Urban		A&Ww				PBC		FC		
MG	Andorra Wash	Headwaters to confluence with Cave Creek Wash				A&We			PBC				
MG	Antelope Creek	Headwaters to confluence with Martinez Creek Wash			A&Ww			FBC			FC		AgL
MG	Arlington Canal	From Gila River at 33°20'54"/112°35'39" to Gila River at 33°13'44"/112°46'15"											AgL
MG	Ash Creek	Headwaters to confluence with Tex Canyon			A&Wc			FBC			FC	AgI	AgL
MG	Ash Creek	Below confluence with Tex Canyon to confluence with Agua Fria River				A&Ww		FBC			FC	AgI	AgL
MG	Beehive Tank	32°52'37"/111°02'20"				A&Ww		FBC			FC		AgL
MG	Big Bug Creek	Headwaters to confluence with Eugene Gulch			A&Wc			FBC			FC	AgI	AgL
MG	Big Bug Creek	Below confluence with Eugene Gulch to confluence with Agua Fria River				A&Ww		FBC			FC	AgI	AgL
MG	Black Canyon Creek	Headwaters to confluence with the Agua Fria River				A&Ww		FBC			FC		AgL
MG	Blind Indian Creek	Headwaters to confluence with the Hassayampa River				A&Ww		FBC			FC		AgL
MG	Bonsall Park Lake	59th Avenue & Bethany Home Road, Phoenix at 33°31'24"/112°11'08"	Urban			A&Ww			PBC		FC		
MG	Canal Park Lake	College Avenue & Curry Road, Tempe at 33°26'54"/ 111°56'19"	Urban			A&Ww			PBC		FC		
MG	Cave Creek	Headwaters to the Cave Creek Dam				A&Ww		FBC			FC		AgL
MG	Cave Creek	Cave Creek Dam to the Arizona Canal					A&We		PBC				
MG	Centennial Wash	Headwaters to confluence with the Gila River at 33°16'32"/112°48'08"					A&We		PBC				AgL
MG	Centennial Wash Ponds	33°54'52"/113°23'47"				A&Ww		FBC			FC		AgL
MG	Chaparral Park Lake	Hayden Road & Chaparral Road, Scottsdale at 33°30'40"/111°54'27"	Urban			A&Ww			PBC		FC	AgI	
MG	Cortez Park Lake	35th Avenue & Dunlap, Glendale at 33°34'13"/ 112°07'52"	Urban			A&Ww			PBC		FC	AgI	
MG	Desert Breeze Lake	Galaxy Drive, West Chandler at 33°18'47"/ 111°55'10"	Urban			A&Ww			PBC		FC		
MG	Devils Canyon	Headwaters to confluence with Mineral Creek				A&Ww			FBC		FC		AgL
MG	Dobson Lake	Dobson Road & Los Lagos Vista Avenue, Mesa at 33°22'48"/111°52'35"	Urban			A&Ww			PBC		FC		
MG	East Maricopa Floodway	From Brown and Greenfield Rds to the Gila River Indian Reservation Boundary				A&We			PBS				AgL
MG	Eldorado Park Lake	Miller Road & Oak Street, Tempe at 33°28'25"/ 111°54'53"	Urban			A&Ww			PBC		FC		
MG	Encanto Park Lake	15th Avenue & Encanto Blvd., Phoenix at 33°28'28"/ 112°05'18"	Urban			A&Ww			PBC		FC	AgI	
MG	Fain Lake	Town of Prescott Valley Park Lake 34°34'29"/ 112°21'06"	Urban			A&Ww			PBC		FC		
MG	French Gulch	Headwaters to confluence with Hassayampa River				A&Ww			PBC				AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health				Agricultural			
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL	
MG	Galena Gulch	Headwaters to confluence with the Agua Fria River				A&We				PBC				AgL
MG	Galloway Wash (EDW)	Town of Cave Creek WWTP outfall at 33°50'15"/111°57'35" to confluence with Cave Creek					A&Wedw			PBC				
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>								
MG	Gila River	San Carlos Indian Reservation boundary to the Ashurst-Hayden Dam			A&Ww				FBC			FC	AgI	AgL
MG	Gila River	Ashurst-Hayden Dam to the Town of Florence WWTP outfall at 33°02'20"/111°24'19"				A&We				PBC				AgL
MG	Gila River (EDW)	Town of Florence WWTP outfall to Felix Road					A&Wedw			PBC				
MG	Gila River	Felix Road to the Gila River Indian Reservation boundary				A&We				PBC				AgL
MG	Gila River (EDW)	From the confluence with the Salt River to Gillespie Dam					A&Wedw			PBC		FC	AgI	AgL
MG	Gila River	Gillespie Dam to confluence with Painted Rock Dam			A&Ww			FBC				FC	AgI	AgL
MG	Granada Park Lake	6505 North 20th Street, Phoenix at 33°31'56"/112°02'16"	Urban		A&Ww					PBC		FC		
MG	Groom Creek	Headwaters to confluence with the Hassayampa River		A&Wc					FBC		DWS	FC		AgL
MG	Lower Lake Pleasant	33°50'32"/112°16'03"			A&Ww				FBC			FC	AgI	AgL
MG	Hassayampa Lake	34°25'45"/112°25'33"	Igneous	A&Wc					FBC		DWS	FC		
MG	Hassayampa River	Headwaters to confluence with unnamed tributary at 34°26'09"/112°30'32" Copper Creek		A&Wc					FBC			FC	AgI	AgL
MG	Hassayampa River	Below confluence with unnamed tributary to confluence with unnamed tributary at 33°54'52"/112°39'56" Copper Creek to the confluence with Blind Indian Creek.				A&Ww			FBC			FC	AgI	AgL
MG	Hassayampa River	Below confluence with Blind Indian Creek unnamed tributary to the Buckeye Irrigation Company Canal				A&We				PBC				AgL
MG	Hassayampa River	Below Buckeye Irrigation Company canal to the Gila River			A&Ww				FBC			FC		AgL
MG	Horsethief Lake	34°09'42"/112°17'57"	Igneous	A&Wc					FBC		DWS	FC		AgL
MG	Indian Bend Wash	Headwaters to confluence with the Salt River				A&We				PBC				
MG	Indian Bend Wash Lakes	Scottsdale at 33°30'32"/111°54'24"	Urban			A&Ww				PBC		FC		
MG	Indian School Park Lake	Indian School Road & Hayden Road, Scottsdale at 33°29'39"/111°54'37"	Urban			A&Ww				PBC		FC		
MG	Kiwanis Park Lake	6000 South Mill Avenue, Tempe at 33°22'27"/111°56'22"	Urban			A&Ww				PBC		FC	AgI	
MG	Lake Pleasant	33°53'46"/112°16'29"	Deep		A&Ww				FBC		DWS	FC	AgI	AgL
MG	Lower Lake Pleasant	33°50'32"/112°16'03"			A&Ww				FBC			FC	AgI	AgL
MG	The Lake Tank	32°54'14"/111°04'15"			A&Ww				FBC			FC		AgL
MG	Lion Canyon	Headwaters to confluence with Weaver Creek				A&Ww			FBC			FC		AgL
MG	Little Ash Creek	Headwaters to confluence with Ash Creek at				A&Ww			FBC			FC		AgL
MG	Lynx Creek	Headwaters to confluence with unnamed tributary at 34°34'29"/112°21'07"		A&Wc					FBC			FC		AgL
MG	Lynx Creek	Below confluence with unnamed tributary at 34°34'29"/112°21'07" to confluence with Agua Fria River				A&Ww			FBC			FC		AgL
MG	Lynx Lake	34°31'07"/112°23'07"	Deep	A&Wc					FBC		DWS	FC	AgI	AgL
MG	Maricopa Park Lake	33°35'28"/112°18'15"	Urban			A&Ww				PBC		FC		
MG	Martinez Canyon	Headwaters to confluence with Box Canyon				A&Ww			FBC			FC		AgL
MG	Martinez Creek Wash	Headwaters to confluence with the Hassayampa River				A&Ww			FBC			FC	AgI	AgL
MG	McKellips Park Lake	Miller Road & McKellips Road, Scottsdale at 33°27'14"/111°54'49"	Urban			A&Ww				PBC		FC	AgI	
MG	McMicken Wash (EDW)	City of Peoria Jomax WWTP outfall at 33°43'31"/112°20'15" to confluence with Agua Fria River					A&Wedw			PBC				

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
MG	Mineral Creek	Headwaters to 33°12'34"/110°59'58"			A&Ww			FBC			FC		AgL
MG	Mineral Creek (diversion tunnel and lined channel)	33°12'24"/110°59'58" to 33°07'56"/110°58'34"						PBC					
MG	Mineral Creek	End of diversion channel to confluence with Gila River			A&Ww			FBC			FC		AgL
MG	Minnehaha Creek	Headwaters to confluence with the Hassayampa River			A&Ww			FBC			FC		AgL
MG	Mountain Valley Park Ponds (EDW)	Town of Prescott Valley WWTP outfall 002 at 34°36'07"/112°18'48" to Navajo Wash	EDW				A&Wedw		PBC				
MG	New River	Headwaters to Interstate 17 at 33°54'19.5"/112°08'46"			A&Ww			FBC			FC	AgI	AgL
MG	New River	Below Interstate 17 to confluence with Agua Fria River				A&We			PBC				AgL
MG	Painted Rock Reservoir	33°04'23"/113°00'38"	Sedimentary		A&Ww			FBC			FC	AgI	AgL
MG	Papago Park Ponds	Galvin Parkway, Phoenix at 33°27'15"/111°56'45"	Urban		A&Ww				PBC		FC		
MG	Papago Park South Pond	Curry Road, Tempe 33°26'22"/111°55'55"	Urban		A&Ww				PBC		FC		
MG	Perry Mesa Tank	34°11'03"/112°02'01"			A&Ww			FBC			FC		AgL
MG	Phoenix Area Canals	Granite Reef Dam to all municipal WTP intakes								DWS		AgI	AgL
MG	Phoenix Area Canals	Below municipal WTP intakes and all other locations										AgI	AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
MG	Picacho Reservoir	32°51'10"/111°28'25"	Shallow		A&Ww			FBC			FC	AgI	AgL
MG	Poland Creek	Headwaters to confluence with Lorena Gulch		A&Wc				FBC			FC		AgL
MG	Poland Creek	Below confluence with Lorena Gulch to confluence with Black Canyon Creek			A&Ww			FBC			FC		AgL
MG	Queen Creek	Headwaters to the Town of Superior WWTP outfall at 33°16'33"/111°07'44"			A&Ww				PBC		FC		AgL
MG	Queen Creek (EDW)	Below Town of Superior WWTP outfall to confluence with Potts Canyon					A&Wedw		PBC				
MG	Queen Creek	Below Potts Canyon to Whitlow Dam			A&Ww			FBC			FC		AgL
MG	Queen Creek	Below Whitlow Dam to confluence with Gila River				A&We			PBC				
MG	Riverview Park Lake	Dobson Road & 8th Street, Mesa at 33°25'50"/111°52'29"	Urban		A&Ww				PBC		FC		
MG	Roadrunner Park Lake	36th Street & Cactus, Phoenix at 33°35'56"/112°00'21"	Urban		A&Ww				PBC		FC		
MG	Salt River	Verde River to 2 km below Granite Reef Dam			A&Ww			FBC		DWS	FC	AgI	AgL
MG	Salt River	2 km below Granite Reef Dam to City of Mesa NW WRF outfall at 33°26'22"/111°53'14"				A&We			PBC				
MG	Salt River (EDW)	City of Mesa NW WRF outfall to Tempe Town Lake					A&Wedw		PBC				
MG	Salt River	Below Tempe Town Lake to Interstate 10 bridge				A&We			PBC				
MG	Salt River	Below Interstate 10 bridge to the City of Phoenix 23rd Avenue WWTP outfall at 33°24'44"/112°07'59"			A&Ww				PBC		FC		
MG	Salt River (EDW)	From City of Phoenix 23rd Avenue WWTP outfall to confluence with Gila River					A&Wedw		PBC		FC	AgI	AgL
MG	Siphon Draw (EDW)	Superstition Mountains CFD WWTP outfall at 33°21'40"/111°33'30" to 6 km downstream					A&Wedw		PBC				
MG	Sycamore Creek	Headwaters to confluence with Tank Canyon		A&Wc				FBC			FC		AgL
MG	Sycamore Creek	Below confluence with Tank Canyon to confluence with Agua Fria River			A&Ww			FBC			FC		AgL
MG	Tempe Town Lake	At Mill Avenue Bridge at 33°26'00"/111°56'26"	Urban		A&Ww			FBC			FC		
MG	The Lake Tank	32°54'14"/111°04'15"			A&Ww			FBC			FC		AgL
MG	Tule Creek	Headwaters to confluence with the Agua Fria River			A&Ww			FBC			FC		AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
MG	Turkey Creek	Headwaters to confluence with unnamed tributary at 34°19'28"/112°21'33"		A&Wc				FBC			FC	AgI	AgL
MG	Turkey Creek	Below confluence with unnamed tributary to confluence with Poland Creek			A&Ww			FBC			FC	AgI	AgL
MG	Unnamed Wash (EDW)	Gila Bend WWTP outfall to confluence with the Gila River					A&Wedw		PBC				
MG	Unnamed Wash (EDW)	Luke Air Force Base WWTP outfall at 33°32'00"/44°2'49.03" 33°32'21"/112°19'15" to confluence with the Agua Fria River					A&Wedw		PBC				
MG	Unnamed Wash (EDW)	North Florence WWTP outfall at 33°03'50"/111°23'13" to confluence with Gila River					A&Wedw		PBC				
MG	Unnamed Wash (EDW)	Town of Prescott Valley WWTP outfall at 34°35'16"/112°16'18" to confluence with the Agua Fria River					A&Wedw		PBC				
MG	Unnamed Wash (EDW)	Town of Cave Creek WRF outfall at 33°48'02"/111°59'22" to confluence with Cave Creek					A&Wedw		PBC				
MG	Wagner Wash (EDW)	City of Buckeye Festival Ranch WRF outfall at 33°39'14"/112°40'18" to 2 km downstream					A&Wedw		PBC				
MG	Walnut Canyon Creek	Headwaters to confluence with the Gila River			A&Ww			FBC			FC		AgL
MG	Weaver Creek	Headwaters to confluence with Antelope Creek, tributary to Martinez Wash			A&Ww			FBC			FC		AgL
MG	White Canyon Creek	Headwaters to confluence with Walnut Canyon Creek			A&Ww			FBC			FC		AgL
MG	Yavapai Lake (EDW)	Town of Prescott Valley WWTP outfall 002 at 34°36'07"/112°18'48" to Navajo Wash	EDW				A&Wedw		PBC				
SC	Agua Caliente Lake	12325 East Roger Road, Tucson 32°16'51"/110°43'52"	Urban		A&Ww				PBC		FC		
SC	Agua Caliente Wash	Headwaters to confluence with Soldier Trail			A&Ww			FBC			FC		AgL
SC	Agua Caliente Wash	Below Soldier Trail to confluence with Tanque Verde Creek				A&We			PBC				AgL
SC	Aguirre Wash	From the Tohono O'odham Indian Reservation boundary to 32°28'38"/111°46'51"				A&We			PBC				
SC	Alambre Wash	Headwaters to confluence with Brawley Wash				A&We			PBC				
SC	Alamo Wash	Headwaters to confluence with Rillito Creek				A&We			PBC				
SC	Altar Wash	Headwaters to confluence with Brawley Wash				A&We			PBC				
SC	Alum Gulch	Headwaters to 31°28'20"/110°43'51"				A&We			PBC				AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
SC	Alum Gulch	From 31°28'20"/110°43'51" to 31°29'17"/110°44'25"			A&Ww			FBC			FC		AgL
SC	Alum Gulch	Below 31°29'17"/110°44'25" to confluence with Sonoita Creek				A&We			PBC				AgL
SC	Arivaca Creek	Headwaters to confluence with Altar Wash			A&Ww			FBC			FC		AgL
SC	Arivaca Lake	31°31'52"/111°15'06"	Igneous		A&Ww			FBC			FC	AgI	AgL
SC	Atterbury Wash	Headwaters to confluence with Pantano Wash				A&We			PBC				AgL
SC	Bear Grass Tank	31°33'01"/111°11'03"			A&Ww			FBC			FC		AgL
SC	Big Wash	Headwaters to confluence with Cañada del Oro				A&We			PBC				
SC	Black Wash (EDW)	Pima County WWMD Avra Valley WWTP outfall at 32°09'58"/111°11'17" to confluence with Brawley Wash					A&Wedw		PBC				
SC	Bog Hole Tank	31°28'36"/110°37'09"			A&Ww			FBC			FC		AgL
SC	Brawley Wash	Headwaters to confluence with Los Robles Wash				A&We			PBC				
SC	California Gulch	Headwaters To U.S./Mexico border			A&Ww			FBC			FC		AgL
SC	Cañada del Oro	Headwaters to State Route 77			A&Ww			FBC			FC	AgI	AgL
SC	Cañada del Oro	Below State Route 77 to confluence with the Santa Cruz River				A&We			PBC				AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
SC	Cienega Creek	Headwaters to confluence with Gardner Canyon			A&Ww			FBC			FC		AgL
SC	Cienega Creek (OAW)	From confluence with Gardner Canyon to USGS gaging station (#09484600)			A&Ww			FBC			FC		AgL
SC	Davidson Canyon	Headwaters to unnamed spring at 31°59'00"/110°38'49"				A&We			PBC				AgL
SC	Davidson Canyon (OAW)	From unnamed Spring to confluence with unnamed tributary at 31°59'09"/110°38'44"			A&Ww			FBC			FC		AgL
SC	Davidson Canyon (OAW)	Below confluence with unnamed tributary to unnamed spring at 32°00'40"/110°38'36"				A&We			PBC				AgL
SC	Davidson Canyon (OAW)	From unnamed spring to confluence with Cienega Creek			A&Ww			FBC			FC		AgL
SC	Empire Gulch	Headwaters to unnamed spring at 31°47'18"/110°38'17"				A&We			PBC				
SC	Empire Gulch	From 31°47'18"/110°38'17" to 31°47'03"/110°37'35"			A&Ww			FBC			FC		
SC	Empire Gulch	From 31°47'03"/110°37'35" to 31°47'05"/110°36'58"				A&We			PBC				AgL
SC	Empire Gulch	From 31°47'05"/110°36'58" to confluence with Cienega Creek			A&Ww			FBC			FC		
SC	Flux Canyon	Headwaters to confluence with Alum Canyon Gulch				A&We			PBC				AgL
SC	Gardner Canyon Creek	Headwaters to confluence with Sawmill Canyon		A&Wc				FBC			FC		
SC	Gardner Canyon Creek	Below Sawmill Canyon to confluence with Cienega Creek			A&Ww			FBC			FC		
SC	Greene Wash	<u>Greene Reservoir at 32°37'09"/111°41'12" to the Tohono O'odham Indian Reservation boundary Santa Cruz River to the Tohono O'odham Indian Reservation boundary</u>				A&We			PBC				
SC	Greene Wash	Tohono O'odham Indian Reservation boundary to confluence with Santa Rosa Wash at 32°53'52"/111°56'48"				A&We			PBC				
SC	Harshaw Creek	Headwaters to confluence with Sonoita Creek at				A&We			PBC				AgL
SC	Hit Tank	32°43'57"/111°03'18"			A&Ww			FBC			FC		AgL
SC	Holden Canyon Creek	Headwaters to U.S./Mexico border			A&Ww			FBC			FC		
SC	Huachuca Tank	31°21'11"/110°30'18"			A&Ww			FBC			FC		AgL
SC	Julian Wash	Headwaters to confluence with the Santa Cruz River				A&We			PBC				
SC	Kennedy Lake	Mission Road & Ajo Road, Tucson at 32°10'49"/111°00'27"	Urban		A&Ww				PBC		FC		
SC	Lakeside Lake	8300 East Stella Road, Tucson at 32°11'11"/110°49'00"	Urban		A&Ww				PBC		FC		
SC	Lemmon Canyon Creek	Headwaters to confluence with unnamed tributary at 32°23'48"/110°47'49"		A&Wc				FBC			FC		
SC	Lemmon Canyon Creek	Below unnamed tributary at 32°23'48"/110°47'49" to confluence with Sabino Canyon Creek			A&Ww			FBC			FC		
SC	Los Robles Wash	Headwaters to confluence with the Santa Cruz River				A&We			PBC				
SC	Madera Canyon Creek	Headwaters to confluence with unnamed tributary at 31°43'42"/110°52'51"		A&Wc				FBC			FC		AgL
SC	Madera Canyon Creek	Below unnamed tributary at 31°43'42"/110°52'51" to confluence with the Santa Cruz River			A&Ww			FBC			FC		AgL
SC	Mattie Canyon	Headwaters to confluence with Cienega Creek "			A&Ww			FBC			FC		AgL
SC	Nogales Wash	Headwaters to confluence with Potrero Creek			A&Ww				PBC		FC		
SC	Oak Tree Canyon	Headwaters to confluence with Cienega Creek				A&We			PBC				
Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife	Human Health	Agricultural							
SC	Palisade Canyon Creek	Headwaters to confluence with unnamed tributary at 32°21'59"/110°46'46" 32°22'33"/110°45'31"		A&Wc				FBC			FC		
SC	Palisade Canyon Creek	Below unnamed tributary 32°22'33"/110°45'31" to unnamed tributary of confluence with Sabino Canyon Creek			A&Ww			FBC			FC		
SC	Pantano Wash	Headwaters to confluence with Tanque Verde Creek				A&We			PBC				

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
SC	Parker Canyon Creek	Headwaters to confluence with unnamed tributary at 31°24'17"/110°28'47"	A&Wc					FBC			FC		
SC	Parker Canyon Creek	Below unnamed tributary to U.S./Mexico border			A&Ww			FBC			FC		
SC	Parker Canyon Lake	31°25'35"/110°27'15"	Deep	A&Wc				FBC			FC	AgI	AgL
SC	Patagonia Lake	31°29'56"/110°50'49"	Deep		A&Ww			FBC			FC	AgI	AgL
SC	Peña Blanca Lake	31°24'15"/111°05'12"	Igneous		A&Ww			FBC			FC	AgI	AgL
SC	Potrero Creek	Headwaters to Interstate 19				A&We			PBC				AgL
SC	Potrero Creek	Below Interstate 19 to confluence with Santa Cruz River			A&Ww			FBC			FC		AgL
SC	Puertocito Wash	Headwaters to confluence with Altar Wash				A&We			PBC				
SC	Quitobaquito Spring	(Pond and Springs) 31°56'39"/113°01'06"			A&Ww			FBC			FC		AgL
SC	Redrock Canyon Creek	Headwaters to confluence with Harshaw Creek			A&Ww			FBC			FC		
SC	Rillito Creek	Headwaters to confluence with the Santa Cruz River				A&We			PBC				AgL
SC	Romero Canyon Creek	Headwaters to confluence with unnamed tributary at 32°24'29"/110°50'39"		A&Wc				FBC			FC		
SC	Romero Canyon Creek	Below unnamed tributary to confluence with Sutherland Wash			A&Ww			FBC			FC		
SC	Rose Canyon Creek	Headwaters to <del>Rose Canyon Lake</del> confluence with <u>Sycamore Canyon</u>		A&Wc				FBC			FC		
SC	Rose Canyon Lake	32°23'13"/110°42'38"	Igneous	A&Wc				FBC			FC		AgL
SC	Ruby Lakes	31°26'29"/111°14'22"	Igneous		A&Ww			FBC			FC		AgL
SC	Sabino Canyon Creek	Headwaters to <del>confluence with unnamed tributary at 32°23'28"/110°47'03"</del> 32°23'20"/110°47'06"		A&Wc				FBC		DWS	FC	AgI	
SC	Sabino Canyon Creek	Below unnamed tributary 32°23'20"/110°47'06" to confluence with Tanque Verde River			A&Ww			FBC		DWS	FC	AgI	
SC	Salero Ranch Tank	31°35'43"/110°53'25"			A&Ww			FBC			FC		AgL
SC	Santa Cruz River	Headwaters to the at U.S./Mexico border			A&Ww			FBC			FC	AgI	AgL
SC	Santa Cruz River	U.S./Mexico border to the Nogales International WWTP outfall at 31°27'25"/110°58'04"			A&Ww			FBC		DWS	FC	AgI	AgL
SC	Santa Cruz River (EDW)	Nogales International WWTP outfall to the <del>Tubae Bridge</del> <u>Josephine Canyon</u>					A&Wedw		PBC				AgL
SC	Santa Cruz River	<del>Tubae Bridge</del> <u>Josephine Canyon</u> to Agua Nueva WRF outfall at 32°17'04"/111°01'45"				A&We			PBC				AgL
SC	Santa Cruz River (EDW)	Agua Nueva WRF outfall to Baumgartner Road					A&Wedw		PBC				
SC	Santa Cruz River, West Branch	Headwaters to the confluence with Santa Cruz River				A&We			PBC				AgL
SC	Santa Cruz Wash River	Baumgartner Road to the Ak Chin Indian Reservation boundary				A&We			PBC				AgL
SC	Santa Cruz Wash, North Branch	Headwaters to City of Casa Grande WRF outfall at 32°54'57"/111°47'13"				A&We			PBC				
SC	Santa Cruz Wash, North Branch (EDW)	City of Casa Grande WRF outfall to 1 km downstream					A&Wedw		PBC				
SC	Santa Rosa Wash	Below Tohono O'odham Indian Reservation to the Ak Chin Indian Reservation				A&We			PBC				
SC	Santa Rosa Wash (EDW)	Palo Verde Utilities <del>WWTP</del> <u>CO-WRF</u> outfall at 33°04'20"/ 112°01'47" to the <del>Gila River</del> <u>Chin Indian Reservation</u>					A&Wedw		PBC				
SC	<del>Soldier Lake Tank</del>	32°25'34"/110°44'43"		A&Wc				FBC			FC		AgL
SC	Sonoita Creek	Headwaters to the Town of Patagonia WWTP outfall at 31°32'25"/110°45'31"				A&We			PBC				AgL
SC	Sonoita Creek (EDW)	Town of Patagonia WWTP outfall to permanent groundwater upwelling point approximately 1600 feet downstream of outfall					A&Wedw		PBC				AgL
SC	Sonoita Creek	Below 1600 feet downstream of Town of Patagonia WWTP outfall groundwater upwelling point to confluence with the Santa Cruz River			A&Ww			FBC			FC	AgI	AgL
SC	Split Tank	31°28'11"/111°05'12"			A&Ww			FBC			FC		AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health				Agricultural		
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
SC	Sutherland Wash	Headwaters to confluence with Cañada del Oro			A&Ww			FBC			FC		
SC	Sycamore Canyon	Headwaters to 32°21'60" / 110°44'48"		A&Wc				FBC			FC		
SC	Sycamore Canyon	From 32°21'60" / 110°44'48" to Sycamore Reservoir			A&Ww			FBC			FC		
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
SC	Sycamore Canyon Creek	Headwaters to the U.S./Mexico border			A&Ww			FBC			FC		AgL
SC	Sycamore Reservoir	32°20'57"/110°47'38"		A&Wc				FBC			FC		AgL
SC	Tanque Verde Creek	Headwaters to Houghton Road			A&Ww			FBC			FC		AgL
SC	Tanque Verde Creek	Below Houghton Road to confluence with Rillito Creek				A&We			PBC				AgL
SC	Three R Canyon	Headwaters to Unnamed Trib to Three R Canyon at 31°28'26"/110°46'04"				A&We			PBC				AgL
SC	Three R Canyon	From 31°28'26"/110°46'04" to 31°28'28"/110°47'15" (Cox Gulch)			A&Ww			FBC			FC		AgL
SC	Three R Canyon	From (Cox Gulch) 31°28'28"/110°47'15" to confluence with Sonoita Creek				A&We			PBC				AgL
SC	Tinaja Wash	Headwaters to confluence with the Santa Cruz River				A&We			PBC				AgL
SC	Unnamed Wash (EDW)	Oracle Sanitary District WWTP outfall at 32°36'54"/ 110°48'02" to 5 km downstream					A&Wedw		PBC				
SC	Unnamed Wash (EDW)	Arizona City Sanitary District WWTP outfall at 32°45'43"/111°44'24" to confluence with Santa Cruz Wash					A&Wedw		PBC				
SC	Unnamed Wash (EDW)	Saddlebrook WWTP outfall at 32°32'00"/110°53'01" to confluence with Cañada del Oro					A&Wedw		PBC				
SC	Vekol Wash	Headwater to Santa Cruz Wash; Those reaches not located on the Ak-Chin, Tohono O'odham and Gila River Indian Reservations				A&We			PBC				
SC	Wakefield Canyon	Headwaters to confluence with unnamed tributary at 31°52'48"/110°26'27"		A&Wc				FBC			FC		AgL
SC	Wakefield Canyon	Below confluence with unnamed tributary to confluence with Cienega Creek			A&Ww			FBC			FC		AgL
SC	Wild Burro Canyon	Headwaters to confluence with unnamed tributary at 32°27'43"/111°05'47"			A&Ww			FBC			FC		AgL
SC	Wild Burro Canyon	Below confluence with unnamed tributary to confluence with Santa Cruz River				A&We			PBC				AgL
SC	Williams Ranch Tanks	31°55'14"/110°25'31"			A&Ww			FBC			FC		AgL
SP	Abbot Canyon	Headwaters to confluence with Whitewater Draw			A&Ww			FBC			FC		AgL
SP	Aravaipa Creek	Headwaters to confluence with Stowe Gulch			A&Ww			FBC			FC		AgL
SP	Aravaipa Creek (OAW)	Stowe Gulch to downstream boundary of Aravaipa Canyon Wilderness Area			A&Ww			FBC			FC		AgL
SP	Aravaipa Creek	Below downstream boundary of Aravaipa Canyon Wilderness Area to confluence with the San Pedro River			A&Ww			FBC			FC		AgL
SP	Ash Creek	Headwaters to 31°50'28"/109°40'04"			A&Ww			FBC			FC	AgI	AgL
SP	Babocomari River	Headwaters to confluence with the San Pedro River			A&Ww			FBC			FC		AgL
SP	Bass Canyon Creek	Headwaters to confluence with unnamed tributary at 32°26'06"/110°13'22"		A&Wc				FBC			FC		AgL
SP	Bass Canyon Creek	Below confluence with unnamed tributary to confluence with Hot Springs Canyon Creek			A&Ww			FBC			FC		AgL
SP	Bass Canyon Tank	32°24'00"/110°13'00"			A&Ww			FBC			FC		AgL
SP	Bear Creek	Headwaters to U.S./Mexico border			A&Ww			FBC			FC		AgL
SP	Big Creek	Headwaters to confluence with Pitchfork Canyon		A&Wc				FBC			FC		AgL
SP	Blacktail Pond	Fort Huachuca Military Reservation at 31°24'12"/44°47'23" 31°31'04"/110°24'47", headwater lake in Blacktail Canyon			A&Ww			FBC			FC		
SP	Blackwater Draw	Headwaters to the U.S./Mexico border			A&Ww			FBC			FC		AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health				Agricultural		
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
SP	Booger Canyon Creek	Headwaters to confluence with Aravaipa Creek			A&Ww			FBC			FC		AgL
SP	Buck Canyon	Headwaters to confluence with Buck Creek Tank			A&Ww			FBC			FC		AgL
SP	Buck Canyon	Below Buck Creek Tank to confluence with Dry Creek				A&We			PBC				AgL
SP	Buehman Canyon Creek (OAW)	Headwaters to confluence with unnamed tributary at 32°24'54"/110°32'10"			A&Ww			FBC			FC		AgL
SP	Buehman Canyon Creek	Below confluence with unnamed tributary to confluence with San Pedro River			A&Ww			FBC			FC		AgL
SP	Bull Tank	32°31'13"/110°12'52"			A&Ww			FBC			FC		AgL
SP	Bullock Canyon	Headwaters to confluence with Buehman Canyon			A&Ww			FBC			FC		AgL
SP	Carr Canyon Creek	Headwaters to confluence with unnamed tributary at 31°27'01"/110°15'48"		A&Wc				FBC			FC		AgL
SP	Carr Canyon Creek	Below confluence with unnamed tributary to confluence with the San Pedro River			A&Ww			FBC			FC		AgL
SP	Copper Creek	Headwaters to confluence with Prospect Canyon			A&Ww			FBC			FC		AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
SP	Copper Creek	Below confluence with Prospect Canyon to confluence with the San Pedro River				A&We			PBC				AgL
SP	Deer Creek	Headwaters to confluence with unnamed tributary at 32°59'57"/110°20'11"		A&Wc				FBC			FC		AgL
SP	Deer Creek	Below confluence with unnamed tributary to confluence with Aravaipa Creek			A&Ww			FBC			FC		AgL
SP	Dixie Canyon	Headwaters to confluence with Mexican Canyon			A&Ww			FBC			FC		AgL
SP	Double R Canyon Creek	Headwaters to confluence with Bass Canyon			A&Ww			FBC			FC		
SP	Dry Canyon	Headwaters to confluence with <u>Abbot Canyon Whitewater draw</u>			A&Ww			FBC			FC		AgL
SP	East Gravel Pit Pond	Fort Huachuca Military Reservation at 31°30'54"/110°19'44"	Sedimentary		A&Ww			FBC			FC		
SP	Espiritu Canyon Creek	Headwaters to confluence with Soza Wash			A&Ww			FBC			FC		AgL
SP	Fly Pond	Fort Huachuca Military Reservation at 31°32'53"/110°21'16"			A&Ww			FBC			FC		
SP	Fourmile Canyon Creek	Headwaters to confluence with Aravaipa Creek			A&Ww			FBC			FC		AgL
SP	Fourmile Canyon, Left Prong	Headwaters to confluence with unnamed tributary at 32°43'15"/110°23'46"		A&Wc				FBC			FC		AgL
SP	Fourmile Canyon, Left Prong	Below confluence with unnamed tributary to confluence with Fourmile Canyon Creek			A&Ww			FBC			FC		AgL
SP	Fourmile Canyon, Right Prong	Headwaters to confluence with Fourmile Canyon			A&Ww			FBC			FC		AgL
SP	Gadwell Canyon	Headwaters to confluence with Whitewater Draw			A&Ww			FBC			FC		AgL
SP	Garden Canyon Creek	Headwaters to confluence with unnamed tributary at 31°29'01"/110°19'44"		A&Wc				FBC		DWS	FC	AgI	
SP	Garden Canyon Creek	Below confluence with unnamed tributary to confluence with the San Pedro River			A&Ww			FBC		DWS	FC	AgI	
SP	Glance Creek	Headwaters to confluence with Whitewater Draw			A&Ww			FBC			FC		AgL
SP	Gold Gulch	Headwaters to U.S./Mexico border			A&Ww			FBC			FC		AgL
SP	<u>Golf Course Pond</u>	Fort Huachuca Military Reservation at 31°32'14"/110°18'52"	Sedimentary		A&Ww				PBC		FC		
SP	Goudy Canyon Creek Wash	Headwaters to confluence with Grant Creek		A&Wc				FBC			FC		AgL
SP	Grant Creek	Headwaters to confluence with unnamed tributary at 32°38'10"/109°56'37"		A&Wc				FBC		DWS	FC		AgL
SP	Grant Creek	Below confluence with unnamed tributary to terminus near Willcox Playa			A&Ww			FBC			FC		AgL
SP	Gravel Pit Pond	Fort Huachuca Military Reservation at 31°30'52"/110°19'49"	Sedimentary		A&Ww			FBC			FC		

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural		
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL	
SP	<del>Greenbrush</del> Greenbrush Draw	From U.S./Mexico border to confluence with San Pedro River				A&We				PBC				
SP	Hidden Pond	Fort Huachuca Military Reservation at 32°30'30"/109°22'17"			A&Ww				FBC			FC		
SP	High Creek	Headwaters to confluence with unnamed tributary at 32°33'08"/110°14'42"		A&Wc					FBC			FC		AgL
SP	High Creek	Below confluence with unnamed tributary to terminus near Willcox Playa			A&Ww				FBC			FC		AgL
SP	Horse Camp Canyon Creek	Headwaters to confluence with Aravaipa Creek			A&Ww				FBC			FC		AgL
SP	Hot Springs Canyon Creek	Headwaters to confluence with the San Pedro River			A&Ww				FBC			FC		AgL
SP	Johnson Canyon	Headwaters to Whitewater Draw at 31°32'46"/109°43'32"			A&Ww				FBC			FC		AgL
SP	Lake Cochise (EDW)	South of Twin Lakes Municipal Golf Course at 32°13'50"/109°49'27"	EDW				A&Wedw			PBC				
SP	Leslie Canyon Creek	Headwaters to confluence with Whitewater Draw			A&Ww				FBC			FC		AgL
SP	Lower Garden Canyon Pond	Fort Huachuca Military Reservation at 31°29'39"/110°18'34"			A&Ww				FBC			FC		
SP	Mexican Canyon	Headwaters to confluence with Dixie Canyon			A&Ww				FBC			FC		AgL
SP	Miller Canyon Creek	Headwaters to Broken Arrow Ranch Road at 31°25'35"/110°15'04"		A&Wc					FBC		DWS	FC		AgL
SP	Miller Canyon Creek	Below Broken Arrow Ranch Road to confluence with the San Pedro River			A&Ww				FBC		DWS	FC		AgL
SP	Moonshine Creek	Headwaters to confluence with Post Creek		A&Wc					FBC			FC		AgL
SP	Mountain View Golf Course Pond	Fort Huachuca Military Reservation at 31°32'14"/110°18'52"	Sedimentary		A&Ww					PBC		FC		
SP	Mule Gulch	Headwaters to the Lavender Pit at 31°26'11"/109°54'02"			A&Ww					PBC		FC		
SP	Mule Gulch	The Lavender Pit to the Highway 80 bridge at 31°26'30"/109°49'28"				A&We				PBC				
SP	Mule Gulch	Below the Highway 80 bridge to confluence with Whitewater Draw				A&We				PBC				AgL
SP	Oak Grove Canyon	Headwaters to confluence with Turkey Creek			A&Ww				FBC			FC		AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>								
SP	Officers Club Pond	Fort Huachuca Military Reservation at 31°32'51"/110°21'37"	Sedimentary		A&Ww					PBC		FC		
SP	Paige Canyon Creek	Headwaters to confluence with the San Pedro River			A&Ww				FBC			FC		AgL
SP	Parsons Canyon Creek	Headwaters to confluence with Aravaipa Creek			A&Ww				FBC			FC		AgL
SP	Pinery Creek	Headwaters to State Highway 181		A&Wc					FBC		DWS	FC		AgL
SP	Pinery Creek	Below State Highway 181 to terminus near Willcox Playa			A&Ww				FBC		DWS	FC		AgL
SP	Post Creek	Headwaters to confluence with Grant Creek		A&Wc					FBC			FC	AgI	AgL
SP	Ramsey Canyon Creek	Headwaters to Forest Service Road #110 at 31°27'44"/110°17'30"		A&Wc					FBC			FC	AgI	AgL
SP	Ramsey Canyon Creek	Below Forest Service Road #110 to confluence with Carr Wash			A&Ww				FBC			FC	AgI	AgL
SP	Rattlesnake Canyon Creek	Headwaters to confluence with Brush Canyon		A&Wc					FBC			FC		AgL
SP	Rattlesnake Canyon Creek	Below confluence with Brush Canyon to confluence with Aravaipa Creek			A&Ww				FBC			FC		AgL
SP	Redfield Canyon Creek	Headwaters to confluence with unnamed tributary at 32°33'40"/110°18'42"		A&Wc					FBC			FC		AgL
SP	Redfield Canyon Creek	Below confluence with unnamed tributary to confluence with the San Pedro River			A&Ww				FBC			FC		AgL
SP	Riggs Lake	32°42'28"/109°57'53"	Igneous	A&Wc					FBC			FC	AgI	AgL
SP	Rock Creek	Headwaters to confluence with Turkey Creek Alc							FBC			FC		AgL
SP	Rucker Canyon Creek	Headwaters to confluence with Whitewater Draw		A&Wc					FBC			FC		AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
SP	Rucker Canyon Lake	31°46'46"/109°18'30"	Shallow	A&Wc				FBC			FC		AgL
SP	San Pedro River	U.S./ Mexico Border to <u>Redington Buehman Canyon</u>			A&Ww			FBC			FC	AgI	AgL
SP	San Pedro River	From <u>Redington Buehman canyon</u> to confluence with the Gila River			A&Ww			FBC			FC		AgL
SP	Snow Flat Lake	32°39'10"/109°51'54"	Igneous	A&Wc				FBC			FC	AgI	AgL
SP	Soldier Creek	Headwaters to confluence with Post Creek at 32°40'50"/109°54'41"		A&Wc				FBC			FC		AgL
SP	Soto Canyon	Headwaters to confluence with Dixie Canyon			A&Ww			FBC			FC		AgL
SP	Swamp Springs Canyon Creek	Headwaters to confluence with Redfield Canyon			A&Ww			FBC			FC		AgL
SP	Sycamore Pond I	Fort Huachuca Military Reservation at 31°35'12"/110°26'11"	Sedimentary		A&Ww			FBC			FC		
SP	Sycamore Pond II	Fort Huachuca Military Reservation at 31°34'39"/110°26'10"	Sedimentary		A&Ww			FBC			FC		
SP	Turkey Creek	Headwaters to confluence with Aravaipa Creek			A&Ww			FBC			FC		AgL
SP	Turkey Creek	Headwaters to confluence with Rock Creek		A&Wc				FBC			FC	AgI	AgL
SP	Turkey Creek	Below confluence with Rock Creek to terminus near Willcox Playa			A&Ww			FBC			FC	AgI	AgL
SP	Unnamed Wash (EDW)	Mt. Lemmon WWTP outfall at 32°26'51"/110°45'08" to 0.25 km downstream					A&Wedw		PBC				
SP	Virgus Canyon Creek	Headwaters to confluence with Aravaipa Creek			A&Ww			FBC			FC		AgL
SP	Walnut Gulch	Headwaters to Tombstone WWTP outfall at 31°43'47"/110°04'06"				A&We			PBC				
SP	Walnut Gulch (EDW)	Tombstone WWTP outfall to the confluence with Tombstone Wash					A&Wedw		PBC				
SP	Walnut Gulch	Tombstone Wash to confluence with San Pedro River				A&We			PBC				
SP	Ward Canyon Creek	Headwaters to confluence with Turkey Creek		A&Wc				FBC			FC		AgL
SP	Whitewater Draw	Headwaters to confluence with unnamed tributary at 31°20'36"/109°43'48"				A&We			PBC				AgL
SP	Whitewater Draw	Below confluence with unnamed tributary to U.S./ Mexico border			A&Ww			FBC			FC		AgL
SP	Willcox Playa	From 32°08'19"/109°50'59" in the Sulphur Springs Valley	Sedimentary		A&Ww			FBC			FC		AgL
SP	Woodcutters Pond	Fort Huachuca Military Reservation at 31°30'09"/110°20'12"	Igneous		A&Ww			FBC			FC		
SR	Ackre Lake	33°37'01"/109°20'40"		A&Wc				FBC			FC	AgI	AgL
SR	Apache Lake	33°37'23"/111°12'26"	Deep		A&Ww			FBC		DWS	FC	AgI	AgL
SR	Barnhardt Creek	Headwaters to confluence with unnamed tributary at 34°05'37"/111°26'40"		A&Wc				FBC			FC		AgL
SR	Barnhardt Creek	Below confluence with unnamed tributary to confluence with Rye Creek			A&Ww			FBC			FC		AgL
SR	Basin Lake	33°55'00"/109°26'09"	Igneous		A&Ww			FBC			FC		AgL
SR	Bear Creek	Headwaters to confluence with the Black River		A&Wc				FBC			FC	AgI	AgL
SR	Bear Wallow Creek (OAW)	Headwaters to confluence with the Black River		A&Wc				FBC			FC		AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
SR	Bear Wallow Creek, North Fork (OAW)	Headwaters to confluence with Bear Wallow Creek		A&Wc				FBC			FC		AgL
SR	Bear Wallow Creek, South Fork (OAW)	Headwaters to confluence with Bear Wallow Creek		A&Wc				FBC			FC		AgL
SR	Beaver Creek	Headwaters to confluence with Black River		A&Wc				FBC			FC	AgI	AgL
SR	Big Lake	33°52'36"/109°25'33"	Igneous	A&Wc				FBC		DWS	FC	AgI	AgL
SR	Black River	Headwaters to confluence with Salt River		A&Wc				FBC		DWS	FC	AgI	AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
SR	Black River, East Fork	From 33°51'19"/109°18'54" to confluence with the Black River		A&Wc				FBC		DWS	FC	AgI	AgL
SR	Black River, North Fork of East Fork	Headwaters to confluence with Black River, East Fork Boneyard Creek		A&Wc				FBC		DWS	FC	AgI	AgL
SR	Black River, West Fork	Headwaters to confluence with the Black River		A&Wc				FBC		DWS	FC	AgI	AgL
SR	Bloody Tanks Wash	Headwaters to Schultze Ranch Road				A&We			PBC				AgL
SR	Bloody Tanks Wash	Schultze Ranch Road to confluence with Miami Wash				A&We			PBC				
SR	Boggy Creek	Headwaters to confluence with Centerfire Creek		A&Wc				FBC			FC	AgI	AgL
SR	Boneyard Creek	Headwaters to confluence with Black River, East Fork		A&Wc				FBC			FC	AgI	AgL
SR	Boulder Creek	Headwaters to confluence with LaBarge Creek			A&Ww			FBC			FC		
SR	Campaign Creek	Headwaters to Roosevelt Lake			A&Ww			FBC			FC		AgL
SR	Canyon Creek	Headwaters to the White Mountain Apache Reservation boundary		A&Wc				FBC		DWS	FC	AgI	AgL
SR	Canyon Lake	33°32'44"/111°26'19"	Deep		A&Ww			FBC		DWS	FC	AgI	AgL
SR	Centerfire Creek	Headwaters to confluence with the Black River		A&Wc				FBC			FC	AgI	AgL
SR	Chambers Draw Creek	Headwaters to confluence with the North Fork of the East Fork of Black River		A&Wc				FBC			FC		AgL
SR	Cherry Creek	Headwaters to confluence with unnamed tributary at 34°05'09"/110°56'07"		A&Wc				FBC			FC	AgI	AgL
SR	Cherry Creek	Below unnamed tributary to confluence with the Salt River			A&Ww			FBC			FC	AgI	AgL
SR	Christopher Creek	Headwaters to confluence with Tonto Creek		A&Wc				FBC			FC	AgI	AgL
SR	Cold Spring Canyon Creek	Headwaters to confluence with unnamed tributary at 33°49'50"/110°52'58"		A&Wc				FBC			FC		AgL
SR	Cold Spring Canyon Creek	Below confluence with unnamed tributary to confluence with Cherry Creek			A&Ww			FBC			FC		AgL
SR	Conklin Creek	Headwaters to confluence with the Black River		A&Wc				FBC			FC	AgI	AgL
SR	Coon Creek	Headwaters to confluence with unnamed tributary at 33°46'41"/110°54'26"		A&Wc				FBC			FC		AgL
SR	Coon Creek	Below confluence with unnamed tributary to confluence with Salt River			A&Ww			FBC			FC		AgL
SR	Corduroy Creek	Headwaters to confluence with Fish Creek		A&Wc				FBC			FC	AgI	AgL
SR	Coyote Creek	Headwaters to confluence with the Black River, East Fork		A&Wc				FBC			FC	AgI	AgL
SR	Crescent Lake	33°54'38"/109°25'18"	Shallow	A&Wc				FBC			FC	AgI	AgL
SR	Deer Creek	Headwaters to confluence with the Black River, East Fork		A&Wc				FBC			FC		AgL
SR	Del Shay Creek	Headwaters to confluence with Gun Creek			A&Ww			FBC			FC		AgL
SR	Devils Chasm Creek	Headwaters to confluence with unnamed tributary at 33°48'46"/110°52'35"		A&Wc				FBC			FC		AgL
SR	Devils Chasm Creek	Below confluence with unnamed tributary to confluence with Cherry Creek			A&Ww			FBC			FC		AgL
SR	Dipping Vat Reservoir	33°55'47"/109°25'31"	Igneous		A&Ww			FBC			FC		AgL
SR	Double Cienega Creek	Headwaters to confluence with Fish Creek		A&Wc				FBC			FC		AgL
SR	Fish Creek	Headwaters to confluence with the Black River		A&Wc				FBC			FC	AgI	AgL
SR	Fish Creek	Headwaters to confluence with the Salt River			A&Ww			FBC			FC		
SR	Gold Creek	Headwaters to confluence with unnamed tributary at 33°59'47"/111°25'10"		A&Wc				FBC			FC		AgL
SR	Gold Creek	Below confluence with unnamed tributary to confluence with Tonto Creek			A&Ww			FBC			FC		AgL
SR	Gordon Canyon Creek	Headwaters to confluence with Hog Canyon		A&Wc				FBC			FC		AgL
SR	Gordon Canyon Creek	Below confluence with Hog Canyon to confluence with Haigler Creek			A&Ww			FBC			FC		AgL
SR	Greenback Creek	Headwaters to confluence with Tonto Creek			A&Ww			FBC			FC		AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health				Agricultural		
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
SR	Haigler Creek	Headwaters to confluence with unnamed tributary at 34°12'23"/111°00'15"		A&Wc				FBC			FC	AgI	AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
SR	Haigler Creek	Below confluence with unnamed tributary to confluence with Tonto Creek			A&Ww			FBC			FC	AgI	AgL
SR	Hannagan Creek	Headwaters to confluence with Beaver Creek		A&Wc				FBC			FC		AgL
SR	Hay Creek (OAW)	Headwaters to confluence with the Black River, West Fork		A&Wc				FBC			FC		AgL
SR	Home Creek	Headwaters to confluence with the Black River, West Fork		A&Wc				FBC			FC		AgL
SR	Horse Creek	Headwaters to confluence with the Black River, West Fork		A&Wc				FBC			FC		AgL
SR	Horse Camp Creek	Headwaters to confluence with unnamed tributary at 33°54'00"/110°50'07"		A&Wc				FBC			FC		AgL
SR	Horse Camp Creek	Below confluence with unnamed tributary to confluence with Cherry Creek			A&Ww			FBC			FC		AgL
SR	Horton Creek	Headwaters to confluence with Tonto Creek		A&Wc				FBC			FC	AgI	AgL
SR	Houston Creek	Headwaters to confluence with Tonto Creek			A&Ww			FBC			FC		AgL
SR	Hunter Creek	Headwaters to confluence with Christopher Creek		A&Wc				FBC			FC		AgL
SR	LaBarge Creek	Headwaters to Canyon Lake			A&Ww			FBC			FC		
SR	Lake Sierra Blanca	33°52'25"/109°16'05"		A&Wc				FBC			FC	AgI	AgL
SR	Miami Wash	Headwaters to confluence with Pinal Creek				A&We			PBC				
SR	Mule Creek	Headwaters to confluence with Canyon Creek		A&Wc				FBC		DWS	FC	AgI	AgL
SR	Open Draw Creek	Headwaters to confluence with the East Fork of Black River		A&Wc				FBC			FC		AgL
SR	P B Creek	Headwaters to Forest Service Road #203 at 33°57'08"/110°56'12"		A&Wc				FBC			FC		AgL
SR	P B Creek	Below Forest Service Road #203 to Cherry Creek			A&Ww			FBC			FC		AgL
SR	Pinal Creek	Headwaters to confluence with unnamed EDW wash (Globe WWTP) at 33°25'29"/110°48'20"				A&We			PBC				AgL
SR	Pinal Creek (EDW)	Confluence with unnamed EDW wash (Globe WWTP) to 33°26'55"/110°49'25"					A&Wedw		PBC				
SR	Pinal Creek	From 33°26'55"/110°49'25" to Lower Pinal Creek water treatment plant outfall #001 at 33°31'04"/110°51'55"				A&We			PBC				AgL
SR	Pinal Creek	From Lower Pinal Creek WTP outfall # to See Ranch Crossing at 33°32'25"/110°52'28"					A&Wedw		PBC				
SR	Pinal Creek	From See Ranch Crossing to confluence with unnamed tributary at 33°35'28"/110°54'31"			A&Ww			FBC					
SR	Pinal Creek	From unnamed tributary to confluence with Salt River			A&Ww			FBC			FC		
SR	Pine Creek	Headwaters to confluence with the Salt River			A&Ww			FBC			FC		
SR	Pinto Creek	Headwaters to confluence with unnamed tributary at 33°19'27"/110°54'58"		A&Wc				FBC			FC	AgI	AgL
SR	Pinto Creek	Below confluence with unnamed tributary to Roosevelt Lake			A&Ww			FBC			FC	AgI	AgL
SR	<del>Pool Pole</del> Corral Lake	33°30'38"/110°00'15"	Igneous		A&Ww			FBC			FC	AgI	AgL
SR	Pueblo Canyon Creek	Headwaters to confluence with unnamed tributary at 33°50'23"/110°51'37"		A&Wc				FBC			FC		AgL
SR	Pueblo Canyon Creek	Below confluence with unnamed tributary to confluence with Cherry Creek			A&Ww			FBC			FC		AgL
SR	Reevis Creek	Headwaters to confluence with Pine Creek			A&Ww			FBC			FC		
SR	Reservation Creek	Headwaters to confluence with the Black River		A&Wc				FBC			FC		AgL
SR	Reynolds Creek	Headwaters to confluence with Workman Creek		A&Wc				FBC			FC		AgL
SR	Roosevelt Lake	33°52'17"/111°00'17"	Deep		A&Ww			FBC		DWS	FC	AgI	AgL
SR	Russell Gulch	From Headwaters to confluence with Miami Wash				A&We			PBC				
SR	Rye Creek	Headwaters to confluence with Tonto Creek			A&Ww			FBC			FC		AgL
SR	Saguaro Lake	33°33'44"/111°30'55"	Deep		A&Ww			FBC		DWS	FC	AgI	AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health				Agricultural		
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
SR	Salome Creek	Headwaters to confluence with the Salt River			A&Ww			FBC			FC	AgI	AgL
SR	Salt House Lake	33°57'04"/109°20'11"	Igneous		A&Ww			FBC			FC		AgL
SR	Salt River	White Mountain Apache Reservation Boundary at 33°48'52"/110°31'33" to Roosevelt Lake			A&Ww			FBC			FC		AgL
SR	Salt River	Theodore Roosevelt Dam to 2 km below Granite Reef Dam			A&Ww			FBC		DWS	FC	AgI	AgL
SR	Slate Creek	Headwaters to confluence with Tonto Creek			A&Ww			FBC			FC		AgL
SR	Snake Creek (OAW)	Headwaters to confluence with the Black River		A&Wc				FBC			FC		AgL
SR	Spring Creek	Headwaters to confluence with Tonto Creek			A&Ww			FBC			FC		AgL
SR	Stinky Creek (OAW)	Headwaters to confluence with the Black River, West Fork		A&Wc				FBC			FC		AgL
SR	Thomas Creek	Headwaters to confluence with Beaver Creek		A&Wc				FBC			FC		AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
SR	Thompson Creek	Headwaters to confluence with the West Fork of the Black River		A&Wc				FBC			FC		AgL
SR	Tonto Creek	Headwaters to confluence with unnamed tributary at 34°18'11"/111°04'18"		A&Wc				FBC			FC	AgI	AgL
SR	Tonto Creek	Below confluence with unnamed tributary to Roosevelt Lake			A&Ww			FBC			FC	AgI	AgL
SR	Turkey Creek	Headwaters to confluence with Rock Creek		A&Wc				FBC			FC		
SR	Wildcat Creek	Headwaters to confluence with Centerfire Creek		A&Wc				FBC			FC		AgL
SR	Willow Creek	Headwaters to confluence with Beaver Creek		A&Wc				FBC			FC		AgL
SR	Workman Creek	Headwaters to confluence with Reynolds Creek		A&Wc				FBC			FC	AgI	AgL
SR	Workman Creek	Below confluence with Reynolds Creek to confluence with Salome Creek			A&Ww			FBC			FC	AgI	AgL
UG	Apache Creek	Headwaters to confluence with the Gila River			A&Ww			FBC			FC		AgL
UG	Ash Creek	Headwaters to confluence with unnamed tributary at 32°46'15"/109°51'45"		A&Wc				FBC			FC		AgL
UG	Ash Creek	Below confluence with unnamed tributary to confluence with the Gila River			A&Ww			FBC			FC		AgL
UG	Bennett Wash	Headwaters to the Gila River				A&We			PBC				
UG	Bitter Creek	Headwaters to confluence with the Gila River			A&Ww			FBC			FC		
UG	Blue River	Headwaters to confluence with Strayhorse Creek at 33°29'02"/109°12'14"		A&Wc				FBC			FC	AgI	AgL
UG	Blue River	Below confluence with Strayhorse Creek to confluence with San Francisco River			A&Ww			FBC			FC	AgI	AgL
UG	Bonita Creek (OAW)	San Carlos Indian Reservation boundary to confluence with the Gila River			A&Ww			FBC		DWS	FC		AgL
UG	<del>Buckelou</del> Buckelew Creek	Headwaters to confluence with Castle Creek		A&Wc				FBC			FC		AgL
UG	Campbell Blue Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		AgL
UG	Castle Creek	Headwaters to confluence with Campbell Blue Creek		A&Wc				FBC			FC		AgL
UG	Cave Creek (OAW)	Headwaters to confluence with South Fork Cave Creek		A&Wc				FBC			FC	AgI	AgL
UG	Cave Creek (OAW)	Below confluence with South Fork Cave Creek to Coronado National Forest boundary			A&Ww			FBC			FC	AgI	AgL
UG	Cave Creek	Below Coronado National Forest boundary to New Mexico border			A&Ww			FBC			FC	AgI	AgL
UG	Cave Creek, South Fork	Headwaters to confluence with Cave Creek		A&Wc				FBC			FC	AgI	AgL
UG	Chase Creek	Headwaters to the Phelps-Dodge Morenci Mine			A&Ww			FBC			FC		AgL
UG	Chase Creek	Below the Phelps-Dodge Morenci Mine to confluence with San Francisco River				A&We			PBC				
UG	Chitty Canyon Creek	Headwaters to confluence with Salt House Creek		A&Wc				FBC			FC		AgL
UG	Cima Creek	Headwaters to confluence with Cave Creek		A&Wc				FBC			FC		AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
UG	Cluff Ranch Pond Reservoir #1	32°48'55"/109°50'46"	Sedimentary		A&Ww			FBC			FC	AgI	AgL
UG	Cluff Ranch Pond Reservoir #3	32°48'21"/109°51'46"	Sedimentary		A&Ww			FBC			FC	AgI	AgL
UG	Coleman Creek	Headwaters to confluence with Campbell Blue Creek		A&Wc				FBC			FC		AgL
UG	Dankworth Lake	32°43'13"/109°42'17"	Sedimentary	A&Wc				FBC			FC		
UG	Deadman Canyon Creek	Headwaters to confluence with unnamed tributary at 32°43'50"/109°49'03"		A&Wc				FBC		DWS	FC		AgL
UG	Deadman Canyon Creek	Below confluence with unnamed tributary to confluence with Graveyard Wash			A&Ww			FBC		DWS	FC		AgL
UG	Eagle Creek	Headwaters to confluence with unnamed tributary at 33°22'32"/109°29'43"		A&Wc				FBC		DWS	FC	AgI	AgL
UG	Eagle Creek	Below confluence with unnamed tributary to confluence with the Gila River			A&Ww			FBC		DWS	FC	AgI	AgL
UG	East Eagle Creek	Headwaters to confluence with Eagle Creek		A&Wc				FBC			FC		AgL
UG	East Turkey Creek	Headwaters to confluence with unnamed tributary at 31°58'22"/109°12'20"		A&Wc				FBC			FC		AgL
UG	East Turkey Creek	Below confluence with unnamed tributary to terminus near San Simon River			A&Ww			FBC			FC		AgL
UG	East Whitetail	Headwaters to terminus near San Simon River			A&Ww			FBC			FC		AgL
UG	Emigrant Canyon	Headwaters to terminus near San Simon River			A&Ww			FBC			FC		AgL
UG	Evans Pond #1	32°49'19"/109°51'12"	Sedimentary		A&Ww			FBC			FC	AgI	AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
UG	Evans Pond #2	32°49'14"/109°51'09"	Sedimentary		A&Ww			FBC			FC	AgI	AgL
UG	Fishhook Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		AgL
UG	Foote Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		AgL
UG	Frye Canyon Creek	Headwaters to Frye Mesa Reservoir		A&Wc				FBC		DWS	FC		AgL
UG	Frye Canyon Creek	Highline Canal Headwaters to terminus near San Simon River Frye Mesa reservoir to terminus at Highline Canal.			A&Ww			FBC			FC		AgL
UG	Frye Mesa Reservoir	32°45'14"/109°50'02"	Igneous	A&Wc				FBC		DWS	FC		
UG	Gibson Creek	Headwaters to confluence with Marijilda Creek		A&Wc				FBC			FC		AgL
UG	Gila River	New Mexico border to the San Carlos Indian Reservation boundary			A&Ww			FBC			FC	AgI	AgL
UG	Grant Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		AgL
UG	Judd Lake	33°51'15"/109°09'35"	Sedimentary	A&Wc				FBC			FC		
UG	K P Creek (OAW)	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		AgL
UG	Lanphier Canyon Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		AgL
UG	Little Blue Creek	Headwaters to confluence with Dutch Blue Creek		A&Wc				FBC			FC		AgL
UG	Little Blue Creek	Below confluence with Dutch Blue Creek to confluence with Blue Creek			A&Ww			FBC			FC		AgL
UG	Little Creek	Headwaters to confluence with the San Francisco River		A&Wc				FBC			FC		
UG	Lower George's Reservoir Tank	33°51'24"/109°08'30"	Sedimentary	A&Wc				FBC			FC		AgL
UG	Luna Lake	33°49'50"/109°05'06"	Sedimentary	A&Wc				FBC			FC		AgL
UG	Marijilda Creek	Headwaters to confluence with Gibson Creek		A&Wc				FBC			FC		AgL
UG	Marijilda Creek	Below confluence with Gibson Creek to confluence with Stockton Wash			A&Ww			FBC			FC	AgI	AgL
UG	Markham Creek	Headwaters to confluence with the Gila River			A&Ww			FBC			FC		AgL
UG	Pigeon Creek	Headwaters to confluence with the Blue River			A&Ww			FBC			FC		AgL
UG	Raspberry Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
UG	Roper Lake	32°45'23"/109°42'14"	Sedimentary		A&Ww			FBC			FC		
UG	San Francisco River	Headwaters to the New Mexico border		A&Wc				FBC			FC	AgI	AgL
UG	San Francisco River	New Mexico border to confluence with the Gila River			A&Ww			FBC			FC	AgI	AgL
UG	San Simon River	Headwaters to confluence with the Gila River				A&We			PBC				AgL
UG	Sheep Tank	32°46'14"/109°48'09"	Sedimentary		A&Ww			FBC			FC		AgL
UG	Smith Pond	32°49'15"/109°50'36"	Sedimentary		A&Ww			FBC			FC		
UG	Squaw Creek	Headwaters to confluence with Thomas Creek		A&Wc				FBC			FC		AgL
UG	Stone Creek	Headwaters to confluence with the San Francisco River		A&Wc				FBC			FC	AgI	AgL
UG	Strayhorse Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		
UG	Thomas Creek	Headwaters to confluence with Rousensock Creek		A&Wc				FBC			FC		AgL
UG	Thomas Creek	Below confluence with Rousensock Creek to confluence with Blue River			A&Ww			FBC			FC		AgL
UG	Tinny Pond	33°47'49"/109°04'27"	Sedimentary		A&Ww			FBC			FC		AgL
UG	Turkey Creek	Headwaters to confluence with Campbell Blue Creek		A&Wc				FBC			FC		AgL
VR	American Gulch	Headwaters to the Northern Gila County Sanitary District WWTP outfall at 34°14'02"/111°22'14"			A&Ww			FBC			FC	AgI	AgL
VR	American Gulch (EDW)	Below Northern Gila County Sanitary District WWTP outfall to confluence with the East Verde River					A&Wedw		PBC				
VR	Apache Creek	Headwaters to confluence with Walnut Creek			A&Ww			FBC			FC		AgL
VR	Ashbrook Wash	Headwaters to the Fort McDowell Indian Reservation boundary				A&We			PBC				
VR	Aspen Creek	Headwaters to confluence with Granite Creek			A&Ww			FBC			FC		
VR	Bar Cross Tank	35°00'41"/112°05'39"			A&Ww			FBC			FC		AgL
VR	Barrata Tank	35°02'43"/112°24'21"			A&Ww			FBC			FC		AgL
VR	Bartlett Lake	33°49'52"/111°37'44"	Deep		A&Ww			FBC		DWS	FC	AgI	AgL
VR	Beaver Creek	Headwaters to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Big Chino Wash	Headwaters to confluence with Sullivan Lake				A&We			PBC				AgL
VR	Bitter Creek	Headwaters to the Jerome WWTP outfall at 34°45'12"/112°06'24"				A&We			PBC				AgL
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
VR	Bitter Creek (EDW)	Jerome WWTP outfall to the Yavapai Apache Indian Reservation boundary					A&Wedw		PBC				AgL
VR	Bitter Creek	Below the Yavapai Apache Indian Reservation boundary to confluence with the Verde River			A&Ww			FBC			FC	AgI	AgL
VR	Black Canyon Creek	Headwaters to confluence with unnamed tributary at 34°39'20"/112°05'06"		A&Wc				FBC			FC		AgL
VR	Black Canyon Creek	Below confluence with unnamed tributary to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Bonita Creek	Headwaters to confluence with Ellison Creek		A&Wc				FBC			FC		
VR	Bray Creek	Headwaters to confluence with Webber Creek		A&Wc				FBC			FC		AgL
VR	Camp Creek	Headwaters to confluence with the Verde River Sycamore Creek			A&Ww			FBC			FC		AgL
VR	Cereus Wash	Headwaters to the Fort McDowell Indian Reservation boundary				A&We			PBC				
VR	Chase Creek	Headwaters to confluence with the East Verde River		A&Wc				FBC		DWS	FC		
VR	Clover Creek	Headwaters to confluence with Headwaters of West Clear Creek		A&Wc				FBC			FC		AgL
VR	Coffee Creek	Headwaters to confluence with Spring Creek			A&Ww			FBC			FC		AgL
VR	Colony Wash	Headwaters to the Fort McDowell Indian Reservation boundary				A&We			PBC				

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
VR	Dead Horse Lake	34°45'08"/112°00'42"	Shallow		A&Ww			FBC			FC		
VR	Deadman Creek	Headwaters to Horseshoe Reservoir			A&Ww			FBC			FC		AgL
VR	Del Monte Wash Gulch	Headwaters to confluence with City of Cottonwood WWTP outfall 002 at 34°43'57"/112°02'46"				A&We			PBC				
VR	Del Monte Wash Gulch (EDW)	City of Cottonwood WWTP outfall 002 at 34°43'57"/112°02'46" to confluence with Verde River Blowout Creek					A&Wedw		PBC				
VR	Del Rio Dam Lake	34°48'55"/112°28'03"	Sedimentary		A&Ww			FBC			FC		AgL
VR	Dry Beaver Creek	Headwaters to confluence with Beaver Creek			A&Ww			FBC			FC	AgI	AgL
VR	Dry Creek (EDW)	Sedona Ventures WWTP outfall at 34°50'02"/111°52'17" to 34°48'12"/111°52'48"					A&Wedw		PBC				
VR	Dude Creek	Headwaters to confluence with the East Verde River		A&Wc				FBC			FC	AgI	AgL
VR	East Verde River	Headwaters to confluence with Ellison Creek		A&Wc				FBC		DWS	FC	AgI	AgL
VR	East Verde River	Below confluence with Ellison Creek to confluence with the Verde River			A&Ww			FBC		DWS	FC	AgI	AgL
VR	Ellison Creek	Headwaters to confluence with the East Verde River		A&Wc				FBC			FC		AgL
VR	Fossil Creek (OAW)	Headwaters to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Fossil Springs (OAW)	34°25'24"/111°34'27"			A&Ww			FBC		DWS	FC		
VR	Foxboro Lake	34°53'42"/111°39'55"			A&Ww			FBC			FC		AgL
VR	Fry Lake	35°03'45"/111°48'04"			A&Ww			FBC			FC		AgL
VR	Gap Creek	Headwaters to confluence with Government Spring		A&Wc				FBC			FC		AgL
VR	Gap Creek	Below Government Spring to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Garrett Tank	35°18'57"/112°42'20"			A&Ww			FBC			FC		AgL
VR	Goldwater Lake, Lower	34°29'56"/112°27'17"	Sedimentary	A&Wc				FBC		DWS	FC		
VR	Goldwater Lake, Upper	34°29'52"/112°26'59"	Igneous	A&Wc				FBC		DWS	FC		
VR	Granite Basin Lake	34°37'01"/112°32'58"	Igneous	A&Wc				FBC			FC	AgI	AgL
VR	Granite Creek	Headwaters to Watson Lake		A&Wc				FBC			FC	AgI	AgL
VR	Granite Creek	Below Watson Lake to confluence with the Verde River			A&Ww			FBC			FC	AgI	AgL
VR	Green Valley Lake (EDW)	34°13'54"/111°20'45"	Urban				A&Wedw		PBC		FC		
VR	Heifer Tank	35°20'27"/112°32'59"			A&Ww			FBC			FC		AgL
VR	Hell Hells Canyon Tank	35°04'59"/112°24'07"	Igneous		A&Ww			FBC			FC		AgL
VR	Homestead Tank	35°21'24"/112°41'36"	Igneous		A&Ww			FBC			FC		AgL
VR	Horse Park Tank	34°58'15"/111°36'32"			A&Ww			FBC			FC		AgL
VR	Horseshoe Reservoir	34°00'25"/111°43'36"	Sedimentary		A&Ww			FBC			FC	AgI	AgL
VR	Houston Creek	Headwaters to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Huffer Tank	34°27'46"/111°23'11"			A&Ww			FBC			FC		AgL
VR	J.D. Dam Lake	35°04'02"/112°01'48"	Shallow	A&Wc				FBC			FC	AgI	AgL
VR	Jacks Canyon Wash	Headwaters to Big Park WWTP outfall at 34°45'46"/111°45'51"				A&We			PBC				
VR	Jacks Canyon Wash (EDW)	Below Big Park WWTP outfall to confluence with Dry Beaver Creek					A&Wedw		PBC				
<b>Watershed</b>	<b>Surface Waters</b>	<b>Segment Description and Location (Latitude and Longitudes are in NAD 83)</b>	<b>Lake Category</b>	<b>Aquatic and Wildlife</b>	<b>Human Health</b>	<b>Agricultural</b>							
VR	Lime Creek	Headwaters to Horseshoe Reservoir			A&Ww			FBC			FC		AgL
VR	Masonry Number 2 Reservoir	35°13'32"/112°24'10"		A&Wc				FBC			FC	AgI	AgL
VR	McLellan Reservoir	35°13'09"/112°17'06"	Igneous		A&Ww			FBC			FC	AgI	AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural	
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
VR	Meath Dam Tank	35°07'52"/112°27'35"			A&Ww			FBC			FC		AgL
VR	Mullican Place Tank	34°44'16"/111°36'10"	Igneous		A&Ww			FBC			FC		AgL
VR	Oak Creek (OAW)	Headwaters to confluence with unnamed tributary at 34°59'15"/111°44'47"		A&Wc				FBC		DWS	FC	AgI	AgL
VR	Oak Creek (OAW)	Below confluence with unnamed tributary to confluence with Verde River			A&Ww			FBC		DWS	FC	AgI	AgL
VR	Oak Creek, West Fork (OAW)	Headwaters to confluence with Oak Creek		A&Wc				FBC			FC		AgL
VR	Odell Lake	34°56'5"/111°37'53"	Igneous	A&Wc				FBC			FC		
VR	Peck's Lake	34°46'51"/112°02'01"	Shallow		A&Ww			FBC			FC	AgI	AgL
VR	Perkins Tank	35°06'42"/112°04'12"	Shallow	A&Wc				FBC			FC		AgL
VR	Pine Creek	Headwaters to confluence with unnamed tributary at 34°21'51"/111°26'49"		A&Wc				FBC		DWS	FC	AgI	AgL
VR	Pine Creek	Below confluence with unnamed tributary to confluence with East Verde River			A&Ww			FBC		DWS	FC	AgI	AgL
VR	Red Creek	Headwaters to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Reservoir #1	35°13'5"/111°50'09"	Igneous		A&Ww			FBC			FC		
VR	Reservoir #2	35°13'17"/111°50'39"	Igneous		A&Ww			FBC			FC		
VR	Roundtree Canyon Creek	Headwaters to confluence with Tangle Creek			A&Ww			FBC			FC		AgL
VR	Scholze Lake	35°11'53"/112°00'37"	Igneous	A&Wc				FBC			FC		AgL
VR	Spring Creek	Headwaters to confluence with unnamed tributary at 34°57'23"/111°57'21"		A&Wc				FBC			FC	AgI	AgL
VR	Spring Creek	Below confluence with unnamed tributary to confluence with Oak Creek			A&Ww			FBC			FC	AgI	AgL
VR	Steel Dam Lake	35°13'36"/112°24'54"	Igneous	A&Wc				FBC			FC		AgL
VR	Stehr Lake	34°22'01"/111°40'02"	Sedimentary		A&Ww			FBC			FC		AgL
VR	Stone Dam Lake	35°13'32"/112°24'40"		A&We				FBC			FC	AgI	AgL
VR	Stoneman Lake	34°46'47"/111°31'14"	Shallow	A&Wc				FBC			FC	AgI	AgL
VR	Sullivan Lake	34°51'42"/112°27'51"			A&Ww			FBC			FC	AgI	AgL
VR	Sycamore Creek	Headwaters to confluence with unnamed tributary at 35°03'41"/111°57'31"		A&Wc				FBC			FC	AgI	AgL
VR	Sycamore Creek	Below confluence with unnamed tributary to confluence with Verde River			A&Ww			FBC			FC	AgI	AgL
VR	Sycamore Creek	Headwaters to confluence with Verde River at 33°37'55"/111°39'58"			A&Ww			FBC			FC	AgI	AgL
VR	Sycamore Creek	Headwaters to confluence with Verde River at 34°04'42"/111°42'14"			A&Ww			FBC			FC		AgL
VR	Tangle Creek	Headwaters to confluence with Verde River			A&Ww			FBC			FC	AgI	AgL
VR	Trinity Tank	35°27'44"/112°48'01"			A&Ww			FBC			FC		AgL
VR	Unnamed Wash	Flagstaff Meadows WWTP outfall at 35°13'59"/111°48'35" to Volunteer Wash					A&Wedw		PBC				
VR	Verde River	From confluence of Chino Wash and Granite Creek to Bartlett Lake Dam From headwaters at confluence of Chino Wash and Granite Creek to Bartlett Lake Dam			A&Ww			FBC			FC	AgI	AgL
VR	Verde River	Below Bartlett Lake Dam to Salt River			A&Ww			FBC		DWS	FC	AgI	AgL
VR	Walnut Creek	Headwaters to confluence with Big Chino Wash			A&Ww			FBC			FC		AgL
VR	Watson Lake	34°34'58"/112°25'26"	Igneous		A&Ww			FBC			FC	AgI	AgL
VR	Webber Creek	Headwaters to confluence with the East Verde River		A&Wc				FBC			FC		AgL
VR	West Clear Creek	Headwaters to confluence with Meadow Canyon			A&Wc			FBC			FC		AgL
VR	West Clear Creek	Below confluence with Meadow Canyon to confluence with the Verde River			A&Ww			FBC			FC	AgI	AgL
VR	Wet Beaver Creek	Headwaters to unnamed springs at 34°41'17"/111°34'34"			A&Wc			FBC			FC	AgI	AgL
VR	Wet Beaver Creek	Below unnamed springs to confluence with Dry Beaver Creek			A&Ww			FBC			FC	AgI	AgL
VR	Whitehorse Lake	35°06'59"/112°00'48"	Igneous	A&Wc				FBC		DWS	FC	AgI	AgL

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health				Agricultural		
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL	
VR	Williamson Valley Wash	Headwaters to confluence with Mint Wash				A&We				PBC				AgL
VR	Williamson Valley Wash	From confluence of Mint Wash to 10.5 km downstream			A&Ww			FBC				FC		AgL
VR	Williamson Valley Wash	From 10.5 km downstream of Mint Wash confluence to confluence with Big Chino Wash				A&We				PBC				AgL
VR	Williscraft Tank	35°11'22"/112°35'40"			A&Ww			FBC				FC		AgL
VR	Willow Creek	Above Willow Creek Reservoir		A&Wc				FBC				FC		AgL
VR	Willow Creek	Below Willow Creek Reservoir to confluence with Granite Creek			A&Ww			FBC				FC		AgL
VR	Willow Creek Reservoir	34°36'17"/112°26'19"	Shallow		A&Ww			FBC				FC	AgI	AgL
VR	Willow Valley Lake	34°41'08"/111°20'02"	Sedimentary		A&Ww			FBC				FC		AgL

**Watersheds**

BW = Bill Williams

CG = Colorado - Grand Canyon

CL = Colorado - Lower Gila

LC = Little Colorado

MG = Middle Gila

SC = Santa Cruz - Rio Magdalena - Rio Sonoyta

SP = San Pedro - Willcox Playa - Rio Yaqui

SR = Salt River

UG = Upper Gila

VR = Verde River

**Other Abbreviations**

WWTP = Wastewater Treatment Plant

Km = kilometers

**Appendix C. Site-Specific Standards**

Watershed	Surface Water	Surface Water Description & Location	Parameter	Site-Specific Criterion
LC	Rio de Flag (EDW)	Flagstaff WWTP outfall to the confluence with San Francisco Wash at 35°14'04"/111°28'02.5"	Copper (D)	36 µg/L (A&Wedw)
CL	Yuma East Wetlands	From inlet culvert from Colorado River into restored channel to Ocean Bridge	Selenium (T)	2.2 mg/L µg/L (A&Ww chronic)
			Total residual chlorine	33 µg/L (A&Ww acute)
				20 µg/L (A&Ww chronic)
SR	Pinto Creek	From confluence of Ellis Ranch tributary at 33°19'26.7"/110°54'57.5" to the confluence of	Copper (D)	34 µg/L (A&Ww acute for

Watershed	Surface Water	Surface Water Description & Location	Parameter	Site-Specific Criterion
		West Fork of Pinto Creek at 33°27'32.3"/111°00'19.7"		hardness values below 268 mg/L
CG	Bright Angel Wash	South Rim Grand Canyon National Park WWTP at 36°02'59"/112°09'02" to Coconino Wash	Copper (D)	34 µg/L (A&Ww chronic)
CG	Transept Canyon	North Rim Grand Canyon WWTP at 36°12'20"/112°03'35" to 1km downstream	Copper (D)	42.5 µg/L (A&W edw)

# ECONOMIC, SMALL BUSINESS, AND CONSUMER IMPACT STATEMENT

## TITLE 18. ENVIRONMENTAL QUALITY

### CHAPTER 11. DEPARTMENT OF ENVIRONMENTAL QUALITY

#### WATER QUALITY STANDARDS

This Economic, Small Business, and Consumer Impact Statement has been prepared to meet the requirements of A.R.S. § 41-1055.

#### **1. An identification of the rulemaking:**

The rulemaking addressed by this Economic, Small Business, and Consumer Impact Statement (EIS) consists of amendments made by the Arizona Department of Environmental Quality (ADEQ) to 18 A.A.C. 11, Article 1, in order to adopt and revise Surface Water Quality Standards (SWQS) within the State of Arizona as required under Section 303(c) of the Clean Water Act (CWA).

A.R.S. § 49-222 authorizes ADEQ to adopt surface water quality standards to prevent harm to public health and the environment from polluted water. These revised standards are to assure attainable water quality; provide for protecting the public health and welfare; enhance the quality of water in Arizona; and take into consideration the use and value of water for public water supplies, the propagation of fish and wildlife, and recreational, agricultural, industrial, and other purposes, including navigation. ADEQ is required to adopt surface water standards that establish numeric limits on the concentrations of each of the 126 toxic pollutants listed by the Environmental Protection Agency (EPA) in 40 CFR Part 423, Appendix A under CWA § 307. Fish, wildlife, tourism, drinking water supplies, and other uses of water would be adversely affected if Arizona's surface water is polluted. To ensure protection of these uses, section 303(c) of the CWA requires ADEQ to review its water quality standards at least once every three years and to modify or adopt those standards as appropriate. This rulemaking is, therefore, needed to improve clarity, correct errors, better align the SWQS with recent changes to EPA standards, and to comply with federal and state law.

Importantly, if EPA determines that ADEQ's SWQS do not meet the requirements of the CWA, EPA will disapprove these standards and promulgate federal standards. 40 C.F.R. § 131.5(b). ADEQ has, therefore, developed the proposed SWQS to comply with federal and state law, and to avoid federally promulgated SWQS. In many cases, ADEQ's standards are developed based on EPA sources. For example, in 2013, the EPA issued a new aquatic and wildlife criteria document for ammonia, which recommended more stringent ammonia standards in some cases. EPA Office of Water, *Aquatic Life Ambient Water Quality Criteria for Ammonia – Freshwater* (2013). As such, the costs from stricter ammonia criteria under the revised state standards would likely also accrue if the EPA were to promulgate ammonia standards for Arizona. Likewise, other criteria made more stringent in this rulemaking are also based on EPA documents, and costs related to those revised state standards could also accrue under revised federal standards. As such, ADEQ's position is that the benefits of this rulemaking outweigh the costs, and that similar costs could still likely accrue under federally-promulgated standards. Additionally, water quality criteria must be based on sound scientific rationale to protect the designated use, and not economic considerations. *See* 40 C.F.R. § 131.11(a). In light of the foregoing, ADEQ is not aware of any less intrusive or less costly alternative that would meet ADEQ's legal obligations.

#### **2. A brief summary of the EIS:**

ADEQ, Arizona pollutant discharge elimination systems (AZPDES) permit holders, and the general public will benefit directly and indirectly from this rulemaking. This rulemaking's clarifications and correction of errors should benefit everyone, but particularly AZPDES permit holders, who read and apply the rules. This rulemaking also lessens some standards, providing relief to some dischargers while still protecting designated uses. Additionally, this rulemaking ensures that clean water will be available as a source for drinking water, bathing, cooking, and washing clothes, as well as meet safety standards for swimming,

fishing, boating, wading, or other water-based recreation. All of these uses provide substantial social and economic benefits within the State.

The primary economic costs of this rulemaking will be borne by AZPDES permit holders, specifically wastewater treatment plants (WWTPs), and laboratories. While most WWTPs will not see serious negative effects, a small number will see moderate to substantial costs associated with one-time structural and process upgrades due to stricter ammonia standards. Additionally, laboratories that test for permit compliance will likely see moderate cost increases due to process development and one-time equipment upgrades to allow these facilities to test at some of the more stringent levels set by this rulemaking. However, ADEQ has estimated this range as moderate to substantial to account for uncertainties in estimating these costs expressed by some stakeholders. These costs could likely be passed on to customers. Because most AZPDES permit holders will not see serious negative costs because of this rulemaking, the cost increases should be relatively minor, and worth the substantial benefits of this rulemaking overall.

Additionally, as stated above, ADEQ is required to review and revise its SWQS under the CWA. Revised water quality criteria must be based on sound scientific rationale to protect the designated use, and not economic considerations. Were ADEQ to propose standards that did not comport with this or any other requirement of the CWA, EPA would reject those standards and promulgate federal standards which could carry similar costs to the present rulemaking.

**3. Identification of the persons who will be directly affected by, bear the costs of, or directly benefit from the rules:**

This rulemaking will affect ADEQ, political subdivisions, public and private entities operating under AZPDES general permits, AZPDES individual permit holders, and public and private laboratories that test for permit compliance. It will also create health, social, and economic benefits to the general public from access to clean water and protection of fish and wildlife.

SWQS are implemented by ADEQ through various general and individual permits under the AZPDES permitting program. Individual permit holders include public and private WWTPs, publically owned treatment works (POTW), fish hatcheries, power plants, mines, truck stops, drinking water plants, marinas, and Water Quality Assurance Revolving Fund (WQARF) remediation projects. Because this rulemaking's effects will be concentrated among WWTPs and POTWs, and are not likely to significantly affect other individual permit holders, ADEQ will divide its analysis between WWTP and non-WWTP individual permit holders. Entities operating under a general permit include a wide range of persons and industries. Because these entities are not likely to be significantly affected by this rulemaking, ADEQ addresses this group as a whole within this EIS.

Based on the information above, ADEQ has identified the following list of affected persons

State and local government agencies

- a. ADEQ
- b. Political subdivisions  
*Political subdivisions generally, public WWTPs, POTWs, public laboratories*
- c. Non-WWTP government entities operating under AZPDES individual permits
- d. Non-WWTP government entities operating under AZPDES general permits

Privately-Owned Businesses

- e. Private entities operating under general permits
- f. Private, non-WWTP individual permit holders
- g. Private WWTPs

h. Private laboratories

General Public

**4. Cost/benefit analysis:**

**a. Part I - Cost/Benefit Stakeholder Matrix:**

Estimates indicate the costs or benefits to individual entities unless otherwise indicated.

Minimal	Moderate	Substantial	Significant
\$10,000 or less	\$10,001 to \$1,000,000	\$1,000,001 or more	Cost/Burden cannot be calculated, but the Department expects it to be important to the analysis.

Description of Affected Groups	Description of Effect	Increased Cost/Decreased Revenue	Decreased Cost/Increased Revenue
<b>A. State and Local Government Agencies</b>			
ADEQ	<p>Possible increase in number of surface waters identified as impaired and corresponding changes in 303(d) listings and TMDLs.</p> <p>Possible cost to ADEQ of rulemaking process before issuing variances, as required by federal regulations.</p> <p>Improved implementation and enforcement of the SWQS.</p> <p>Predictability, reduced transaction costs, and responsiveness to stakeholders from avoiding federally-promulgated SWQS.</p> <p>Compliance with state and federal law.</p> <p>Support of ADEQ's mission to protect and enhance public health and the environment.</p>	<p>Minimal</p> <p>Potentially moderate</p>	<p>Significant</p> <p>Significant</p> <p>Significant</p> <p>Significant</p>
Political subdivisions generally	Tax revenues and indirect benefits of clean water dependent industries (including outdoor recreation, tourism, etc.).		Cumulatively substantial
Public WWTP and/or POTW	<p>Increased monitoring costs.</p> <p>Evaluation of compliance with new standards</p> <p>Cost of compliance with stricter SWQS.</p>	<p>Significant</p> <p>Minimal to moderate</p>	

Description of Affected Groups	Description of Effect	Increased Cost/Decreased Revenue	Decreased Cost/Increased Revenue
Public laboratories	<p>Improved implementation and enforcement of water quality standards by political subdivisions with pretreatment programs.</p> <p>Greater flexibility in mixing zones.</p> <p>Potential delays in issuing future variances.</p> <p>Cost savings due to less stringent standards.</p> <p>Clarification and correction of errors.</p> <p>Testing for stricter SWQS with accompanying costs.</p> <p>Clarification and correction of errors.</p>	<p>Moderate to substantial for a few permit holders</p> <p>Could be significant in the future for some permit holders</p> <p>Moderate to substantial</p>	<p>Significant</p> <p>Significant</p> <p>Significant</p> <p>Significant</p> <p>Significant</p>
Non-WWTP Government entities (individual permits)	<p>Clarification and correction of errors.</p> <p>Cost savings due to less stringent standards.</p> <p>Greater flexibility in mixing zones.</p> <p>Potential delays in issuing future variances.</p> <p>Increased monitoring costs.</p> <p>Cost of compliance with stricter SWQS.</p>	<p>Could be significant in the future for some permit holders</p> <p>Minimal if any</p> <p>Minimal, if any</p>	<p>Significant</p> <p>Significant</p> <p>Significant</p>
Non-WWTP Government entities (general permits)	<p>Clarification and correction of errors.</p> <p>Cost of compliance with stricter SWQS.</p> <p>Cost savings due to less stringent standards.</p>	<p>Minimal, if any</p>	<p>Significant</p> <p>Significant</p>
<b>B. Privately Owned Businesses</b>			

Description of Affected Groups	Description of Effect	Increased Cost/Decreased Revenue	Decreased Cost/Increased Revenue
Private entities operating under general permits	Clarification and correction of errors. Cost of compliance with stricter SWQS. Cost savings due to less stringent standards.	Minimal, if any	Significant  Significant
Non-WWTP individual permit holders (Power Plants, Mines, Marinas, etc.)	Clarification and correction of errors. Cost savings due to less stringent standards. Greater flexibility in mixing zones.  Potential delays in issuing future variances.  Increased monitoring costs. Cost of compliance with stricter SWQS. Cost savings due to less stringent standards.	    Could be significant in the future  Minimal if any  Minimal, if any	Significant Significant Significant         Significant
Private WWTP	Clarification and correction of errors. Cost savings due to less stringent standards. Greater flexibility in mixing zones. Potential delays in issuing future variances.  Increased monitoring costs. Cost of compliance with stricter SWQS Cost savings due to less stringent standards.	    Could be significant in the future for some permit holders  Significant  Moderate to substantial for a few permit holders	Significant Significant Significant       Significant
Laboratories	Clarification and correction of errors.  Testing for stricter SWQS with accompanying costs.	  Moderate to substantial	Significant
General Public	Economic and social benefits of clean water		Cumulatively substantial

**b. Part II - Individual Stakeholder Summaries/Calculations:**

This section outlines ADEQ’s analyses of the estimated costs and benefits of this rulemaking, made after consultation with ADEQ staff, knowledgeable individuals in the area of wastewater treatment and monitoring, and examination of relevant records and reports.

**ADEQ**

ADEQ may incur minimal to moderate costs in implementing this rulemaking. It is possible that this rulemaking may lead to a change in the number of surface waters that are identified as impaired waters. This may result in corresponding changes in the number of 303(d) listings for impaired waters and Total Maximum Daily Load (TMDLs) that ADEQ would be required to complete under the CWA. ADEQ estimates that any costs associated with an increase in the number of surface waters identified as impaired, and corresponding changes in 303(d) listings and TMDLs, would be minimal. Due to EPA changes to its regulations, however, all new variances must be in rule and will be required to go through the public rulemaking process. This rulemaking reflects this requirement. As this rulemaking process would require staff time for technical review, rule composition, and public input, the ADEQ could incur potentially moderate costs.

This rulemaking will likely create significant benefits to ADEQ because of improved clarity, corrected errors, and better alignment of the SWQS with recent EPA standards changes. As a result, ADEQ’s responsibility for implementing and enforcing the SWQS will correspondingly improve. Additionally, ADEQ recognizes a significant benefit from the greater predictability, reduced transaction costs, and responsiveness to stakeholders from administering its own SWQS and avoiding federally-promulgated standards. By conducting this rulemaking, ADEQ complies with state and federal law, and promotes its mission to protect and enhance public health and the environment, all of which ADEQ recognizes as significant benefits of this rulemaking.

**The Number of New, Full-Time Employees Necessary to Implement and Enforce the Proposed Rule**

None

**Political Subdivisions**

Political subdivisions could likely receive cumulatively substantial benefits because of this rulemaking. However, some may also incur individual costs if they own or operate a WWTP or POTW, or operate their own laboratory. Analyses of the effects of this rulemaking on WWTPs and laboratories are included below. Based on those analyses, ADEQ estimates that some public WWTPs and public laboratories could see moderate to substantial costs.

As this rulemaking will better protect water quality, many political subdivisions may receive benefits in the form of tax revenues tied to the use of clean water. A recent technical report on the economic contributions in Arizona for water-based outdoor recreation alone indicates that those benefits could be substantial. For example, state and local tax contributions from water-based outdoor recreation ranged among Arizona counties from approximately \$3 million to \$323.6 million. The Audubon Society, *The Economic Impact of Arizona’s Rivers, Lakes, and Streams* (2019), available at: <https://www.audubon.org/economic-impact-arizonas-rivers-lakes-and-streams>. Notably, these numbers do not address other benefits of clean water, which include water-based outdoor recreation jobs, money spent on supporting industries, corresponding gross domestic product (GDP), and related taxation revenues. The Tempe Town Lake is another significant example of how clean water can serve as a significant economic driver. In 2017 alone, the Tempe Office of Tourism estimates that visitors to the Tempe Town Lake spent \$19.8 million in relation to events where participants were either in or on the lake. Data supplied by the Tempe Office of Tourism, on file with ADEQ. While the benefits from this rulemaking will not accrue

equally across political subdivisions, the aggregated direct and indirect benefits of the SWQS to political subdivisions will likely be substantial.

There may be additional costs and benefits for some political subdivisions that have a pretreatment program under the CWA. The pretreatment program requires political subdivisions to control industrial wastewater discharged to the sanitary sewer before it is mingled with domestic wastewater and discharged at the treatment facility. These facilities, called POTWs, have the authority to establish water quality standards and issue permits to industrial facilities that discharge pollutants to the sanitary sewer to control industrial wastewater and ensure that water quality standards are met. Currently, 21 Arizona municipalities have pretreatment programs. POTWs may see significant benefits associated with improved implementation and enforcement of water quality standards and significant benefits from potential cost savings due to less stringent standards. However, they may also incur minimal to moderate costs in reviewing this rulemaking to ensure their own compliance and to evaluate the need to change limits and controls on local industrial wastewater to ensure compliance under their AZPDES permit. If changes are necessary, a POTW would make necessary changes to its future permits issued to industrial facilities or through its local regulations.

If a POTW or publically owned WWTP must incur costs to achieve compliance with these rules, then options exist for financial assistance. The Water Infrastructure Finance Authority (WIFA) is an independent agency in Arizona and is authorized to finance the construction, rehabilitation, and/or improvement of drinking water, wastewater, wastewater reclamation, and other water quality facilities and projects. Generally, WIFA offers borrowers below market interest rates on loans for 100 percent of eligible project costs. As a “bond bank,” WIFA is able to issue water quality bonds on behalf of communities for basic water infrastructure, providing significant savings due to lower interest rates and shared/reduced closing costs.

#### **Non-WWTP Government Entities Operating under AZPDES permits**

Other government entities function under AZPDES permits in addition to political subdivisions with WWTPs and/or POTWs. For example, some fish hatcheries owned by the Arizona Game and Fish Department operate under individual AZPDES permits, and the Department of Transportation as well as individual counties conduct certain activities under general permits. Because the effects of this rulemaking will not be significantly different for these government entities as compared to other permit holders, an analysis of the costs and benefits to these entities is found in the sections regarding AZPDES non-WWTP individual permit holders and general permit holders. ADEQ estimates that some could see significant benefits from clarification and correction of errors, potential cost savings due to less stringent standards, and greater flexibility in mixing zones. Furthermore, costs from compliance with stricter SWQS and increased monitoring costs to these entities should be minimal, if there are any costs at all. As with other non-WWTP facilities, there is the possibility that some entities could experience some costs associated with delays in issuing future variances.

#### **Private Entities Operating Under AZPDES General Permits**

ADEQ estimates that private entities operating under AZPDES general permits could see significant benefits from clarifications and correction of errors in this rulemaking, and that the cost of compliance with more stringent standards will be minimal, if there is any cost at all.

Surface water quality standards are implemented, in part, through various general and individual permits under the AZPDES permitting program. General permits are best suited for regulation of numerous, similar facilities that pose little environmental risk, while individual permits are required of facilities and sources that have a potentially significant environmental impact. Below are the numbers of authorizations for the current five-year AZPDES general permits. Most of these permits are held by businesses:

<b>AZPDES GENERAL PERMITS</b>
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<b>General Permit Category</b>	<b># Per Category</b>
Multi-Sector General Permit (MSGP)	791
Construction General Permit (CGP)	3416
Municipal Separate Storm Sewer System (MS4) (Phase I permits)	8
Municipal Separate Storm Sewer System (MS4) (Phase II permits)	48
De Minimis General Permit	128

**Clarification and Correction of Errors**

This rulemaking clarifies standards and corrects errors that existed in previous SWQS. While it is difficult to quantify a numeric value for such changes, ADEQ believes the clarifications and corrections represent a significant benefit to entities operating under general permits.

**Cost of Compliance with More Stringent Standards and Costs Savings from Less Stringent Standards**

There are potential impacts to entities operating under general permits; however, ADEQ does not expect these rule changes to affect significantly large numbers of permittees. The De Minimis permit regulates minor discharges resulting from specified activities and is generally restricted to discharges containing minimum pollutant amounts. The other four general permits regulate stormwater discharges primarily by requiring the use of best management practices (BMPs) to lessen pollutants. This rulemaking could impact a permit holder if a numeric standard becomes stricter, or if a water is listed as impaired under the new SWQS. Conversely, if standards become less stringent, permittees could see cost savings. A project located near an impaired water that seeks general permit coverage, especially the CGP and De Minimis, could see increased monitoring requirements or additional BMPs being required to protect water quality. For example, a small or medium MS4 is not typically required to monitor under the current general permit. This would change if the MS4 had to determine the source of a pollutant if its stormwater discharge contributed to an exceedance of a new water quality standard. Any facility permitted under a general permit with discharges that are above a new water quality standard could lose eligibility under the general permit and be required to seek an individual permit with more specific requirements. However, after consultation with ADEQ permitting staff, ADEQ expects only minimal, if any, impact to each permittee discharging under general permits. Additionally, these entities could see significant benefits from costs savings due to less stringent standards.

**AZPDES Non-WWTP Individual Permit Holders**

ADEQ anticipates that non-WWTP individual permit holders will see significant benefits from the clarification and correction of errors, cost savings due to less stringent standards, and greater flexibility in mixing zones. Furthermore, ADEQ anticipates that the cost of compliance with more stringent standards will be minimal, if there is any cost at all. ADEQ recognizes that potential costs could result from delays in issuing future variances.

Facilities and sources that do not qualify to operate under a general permit are required to obtain an individual permit. The table below shows the number of existing AZPDES individual permits, broken down by category type.

<b>AZPDES INDIVIDUAL Permits</b>	
<b>By Flow Regime</b>	<b># of Permits</b>

Ephemerals (EDW), canals, industrial	122
Perennial	19
<b>By Industry</b>	<b># of Permits</b>
Drinking water treatment plants & well discharges	7
Power Generation	7
Mining	6
WQARF/Remediation projects	4
Fish hatcheries	4
Truck Stops	2
Marinas	1
Industrial (other)	5
Waste Water Treatment Plants (WWTP)	105

Cost of Compliance with More Stringent Standards

ADEQ believes that the changes in these rules will affect a relatively small number of existing AZPDES individual permit holders. ADEQ made this assessment after consultation with ADEQ staff and analysis of discharge monitoring reports (DMR). Based on the foregoing, ADEQ estimates that the only significantly affected permit holders will likely be WWTPs. Other individual permit holders that do not operate a WWTP such as mines, power generation facilities, etc., are not anticipated to sustain significant costs. As such, ADEQ anticipates that the costs of compliance with the new SWQS amendments will be minimal, if they exist at all, for all individual permit holders except those who operate WWTPs.

In the event that a permit holder’s discharges would exceed the SWQS, options to delay, defray, or minimize the costs of coming into compliance are offered in the existing rules. Permit conditions are reviewed and revised as applicable when permit holders apply for renewal, usually every five years. These permit holders would incur costs if their discharge contains pollutants in a concentration that results in an exceedance of a new surface water quality standard. A permit holder may request a compliance schedule in a permit when a facility cannot meet a new water quality standard. This allows the facility time to evaluate, design and construct treatment or other means of meeting the new standard. Permit holders may also apply for mixing zones and variances.

Clarification and Correction of Errors

This rulemaking clarifies standards and corrects errors that existed in previous SWQS. While it is difficult to quantify a numeric value for such changes, ADEQ believes the clarifications and corrections represent a significant benefit to AZPDES individual permit holders.

Costs Savings Due to Less Stringent Standards

ADEQ has made a number of water quality criteria less stringent under this rulemaking. In some instances, depending on the designated use of a waterbody, ADEQ has raised criteria for certain parameters significantly. In cases where a permit holder is required to treat for such parameters, the less stringent standards could translate to reduced costs. Such reduced costs will necessarily vary based on the individual circumstances of permit holders, and ADEQ does not have data that would quantify the scope of those reduced costs. However, a cost benefit analysis would not be complete without accounting for such

benefits. ADEQ, therefore, estimates cost savings due to less stringent standards as a potentially significant benefit to some permit holders.

#### Greater Flexibility in Mixing Zones:

Occasionally, due to design and economic constraints, permit holders may need to discharge certain pollutants at concentrations that exceed SWQS, using dilution by the receiving water to ameliorate toxicity. ADEQ has made changes to the mixing zone provisions in the SWQS that more accurately define the conditions of the mixing zone and allow dischargers greater flexibility in the design of the mixing zone while still protecting the environment. This may benefit dischargers that need time to come into compliance with the SWQS while stipulating that there will be no acute toxicity to aquatic organisms due to the issuance of the mixing zone. While valuation of the benefits of mixing zones is case-specific and difficult to estimate, greater flexibility in mixing zones represents a significant benefit to permit holders directly affected by this rulemaking.

#### Potential Delays in Issuing Variances:

Due to changes in EPA regulations on the issuance of variances to water quality standards, all new variances must be in rule and will be required to go through the public rulemaking process. This rulemaking reflects this requirement. This may have the effect of delaying the issuance of a variance, which could create some costs to the discharger. However, a variance would ultimately allow time for upgrades to meet the SWQS. Currently, no facilities are operating with a variance. While it is difficult to quantify the costs of the changes to the variances rule, ADEQ does not anticipate any immediate costs. However, ADEQ recognizes that the requirement could potentially create a significant cost to some future dischargers.

#### Increased Monitoring Costs

ADEQ estimates that the cost of increased monitoring for non-WWTP individual permit holders will be minimal, if there is any cost at all. The SWQS will require some permit holders to monitor at more stringent levels for some pollutants which will increase monitoring costs in some cases. The cost of increased monitoring will vary based on individual circumstances of different facilities. After analysis of DMR data, ADEQ does not expect that non-WWTP facilities will see increased monitoring costs associated with the SWQS. To be sure, it is possible that non-WWTP could see indirect cost increases if laboratories pass on costs of testing for lower detection limits to all customers. However, ADEQ estimates that increased monitoring costs for non-WWTP individual permit holders will be minimal, if there are any costs at all.

#### WWTPs

As is the case with non-WWTP individual permit holders, ADEQ anticipates that WWTPs will realize significant benefits from the clarification and correction of errors, cost savings due to less stringent standards, and greater flexibility in mixing zones. However, ADEQ anticipates that some WWTPs could see increased monitoring costs and moderate to significant costs of compliance with more stringent standards. ADEQ also recognizes that there is potential for some costs due to delays in issuing future variances.

#### Increased Monitoring Costs

The SWQS will require some WWTPs to monitor at more stringent levels for some pollutants which will likely require increased monitoring costs in some cases. The cost of increased monitoring will vary based on individual circumstances of facilities and laboratories. For example, the size of a system and the frequency of monitoring will directly influence the cost, with larger systems or systems who monitor more frequently spending more. Additionally, if laboratories are required to purchase new instrumentation to test at more stringent standards, then those laboratories may increase monitoring prices for WWTPs to offset those costs. Smaller laboratories may be more likely to raise prices where larger ones may be less likely.

As such, it is very difficult to estimate how monitoring prices may increase. ADEQ has been unable to quantify these costs, but estimates that they could be significant.

Cost of Compliance with More Stringent Standards

Compliance costs for a typical WWTP can be difficult to estimate because of the various contributing factors. Depending on the interplay of these factors, costs of this rulemaking could range from moderate to substantial for some WWTPs.

ADEQ recognizes that changes in some rules will have more direct impact on WWTPs than other rule changes. The new standard with the highest probability to affect WWTPs is that for ammonia. These new numeric water quality standards for ammonia in surface waters may result in new water quality-based discharge limitations in AZPDES permits for WWTPs discharging to existing perennial waters, with accompanying costs. Of Arizona’s 141 AZPDES individual discharge permits, 122 will not be adversely affected by the new ammonia standards, and of those, 61 will have less stringent ammonia standards. Of the 19 permits that will receive stricter ammonia standards, an analysis of DMR data indicates that only four may have issues treating to the new standard. Of those four, ADEQ estimates that only one will have significant difficulties meeting the standard.

Ammonia, a regulated pollutant, is a component of total nitrogen. Total nitrogen in wastewater is typically composed of ammonia, nitrate, organic nitrogen, and soluble organic nitrogen. Nitrogen in the form of ammonia is highly toxic to aquatic life. For wastewater treatment plants that have no other management options to achieve compliance with the ammonia standard, the most cost-effective method of ammonia removal is accomplished through the advanced treatment of biological nutrient removal (BNR) processes. The biological processes that remove the various forms of nitrogen from wastewater are called nitrification and denitrification.

A 2006 EPA report provided costs for BNR upgrades to existing WWTPs in Connecticut and Maryland. EPA, *Biological Nutrient Removal Processes and Costs* (2006), available at: [https://www.epa.gov/sites/production/files/documents/criteria\\_nutrient\\_bioremoval.pdf](https://www.epa.gov/sites/production/files/documents/criteria_nutrient_bioremoval.pdf). The total costs of BNR retrofits in Connecticut ranged from \$649,320 to \$22,074,225 (2006 dollars, \$810,722 to \$27,561,246 adjusted for inflation). This report demonstrated that site-specific factors such as existing treatment system layout and space availability may cause costs to vary significantly between treatment plants with the same design capacities that are implementing the same type of BNR treatment upgrade. In general, the study showed that despite this variability in costs, the unit cost per mgd generally decreased as the size of the WWTP increased due to economies of scale. EPA calculated the average unit capital costs for BNR upgrades at the Maryland and Connecticut WWTPs as follows:

<b>Average Unit Capital Costs for BNR Upgrades at MD and CT Wastewater Treatment Plants</b>		
<b>Flow (in mgd)</b>	<b>Cost / mgd (in \$2006)</b>	<b>Cost/ mgd adjusted for inflation</b>
> 0.1 – 1.0	\$6,972,000	\$8,705,000
> 1.0 – 10.0	\$1,742,000	\$2,175,000
> 10.0	\$588,000	\$734,000

Another, more recent study indicated that, for 15 WWTPs in Massachusetts, New Hampshire and Vermont, the predicted costs of installing low-cost biological nitrogen removal retrofits and associated operational changes could range, from \$88,514 to \$745,033 (\$95,333 to \$802,431 adjusted for inflation). JJ Environmental, *Final Report - Low Cost Retrofits for Nitrogen Removal at Wastewater Treatment*

*Plants in the Upper Long Island Sound Watershed* (2015), available at: <http://longislandsoundstudy.net/wp-content/uploads/2015/05/LIS-Low-Cost-Retrofit-Final-Report-March-2015-revised.pdf>. In light of these reports, ADEQ anticipates that the costs for wastewater treatment upgrades to provide ammonia and nitrate removal for facilities in need of such upgrades could range from moderate to substantial, depending on the circumstances of those facilities.

### **Laboratories**

Outreach by ADEQ to knowledgeable persons in the laboratory industry indicates that this rulemaking could create moderate to substantial costs to Arizona-based laboratories. Many of these laboratories do not currently have equipment capable of testing at some of the levels set in this rulemaking. This is not an issue in cases where the Limit of Quantitation (LOQ) is higher than the applicable standard. In those cases, the analytical method with the lowest LOQ would be used. Additionally, not all labs test for all criteria in the SWQS. However, where current analytical methods are capable of testing for a new standard, laboratories that test for that criteria would be required to meet the new standard. One local laboratory indicates that, in cases where new equipment could allow laboratories to test at certain more stringent levels, costs could begin at around \$150,000 per instrument, with multiple instruments needed. Another local laboratory roughly estimated its costs of investing in new technology at \$200,000. Hiring new staff could also be required. Additionally, some of the changes to the SWQS would require new method development by labs to test at the more stringent levels, which could raise the cost of monitoring. Notably, however, not all of the standards identified as presenting large costs to laboratories have changed in this rulemaking. For example, the pollutant Aldrin was identified as potentially costing thousands to meet the standard for fish consumption, However, that standard was not modified in this rulemaking. Indeed, this rulemaking raised the Aldrin full body contact standard. Regardless, in those cases where this rulemaking does create costs due to more stringent standards, costs will vary based on the size of the facility. In light of the foregoing, ADEQ, expects moderate costs to some to laboratories. However, in recognition of the difficulty in estimating these costs, and the uncertainty expressed by some stakeholders, ADEQ has conservatively estimated these costs as moderate to substantial.

In cases where a small laboratory is unable to invest in new equipment, small laboratories may contract with other laboratories who are able to test certain parameters at the more stringent levels required by the SWQS. These contract laboratories would likely be large, well-established national firms. However, in other cases, small laboratories that cannot test at more stringent standards may potentially lose business to, or in the extreme case, be bought out by larger, more capable firms.

### **5. A general description of the probable impact on private and public employment in business agencies, and political subdivisions of this state directly affected by the rulemaking:**

ADEQ estimates that, for the most part, this rulemaking will not have an impact on public or private employment. However, some facilities may be required to hire additional staff or contract with professionals to install and maintain new equipment when additional equipment is required to comply with this rulemaking, which would represent a positive impact on employment. ADEQ also recognizes the fact that employment could be negatively impacted in a case where an employer's costs would reduce funds available to pay employees and contractors. For example, if a small laboratory is unable to test at the levels required by this rulemaking and loses business to a large firm, there could be a resulting negative impact on employment. However, should that lab be bought out by a larger firm, any negative effect on employment could be negligible if the larger firm keeps on former employees.

### **6. A statement of the probable impact of the rules on small business:**

In this EIS, ADEQ uses the term "small business" consistent with A.R.S. § 41-1001(21), which defines a "small business" as a concern, including its affiliates, which is independently owned and operated, which is not dominant in its field and which employs fewer than one hundred full-time employees or which had gross annual receipts of less than four million dollars in its last fiscal year.

**a. An identification of the small business subject to the rules:**

Among the stakeholders listed above, many meet the definition of small business as set forth in A.R.S. § 41-1001(21). For example, ADEQ estimates that all of the 24 privately owned WWTPs, a significant number of general permit holders, most small laboratories in the state, and others are small businesses. However, as a group, not all small businesses will be equally affected by this rulemaking, and ADEQ estimates that most will not be affected at all. ADEQ estimates that the small businesses that will be negatively affected by this rulemaking will be privately owned WWTPs and small laboratories. However, as set forth above, other small businesses may see benefits from this rulemaking associated with clarification and correction of errors, cost savings due to less stringent standards, and greater flexibility in mixing zones.

**b. The administrative and other costs required for compliance with the rules:**

Compliance costs associated with this rulemaking will vary based on the stakeholder involved. ADEQ's examination of compliance costs for private WWTPs and small laboratories is addressed in the cost benefit analysis above.

**c. A description of the methods that the agency may use to reduce the impact on small businesses, as required in A.R.S. § 41-1035:**

1. *Establishing less stringent compliance or reporting requirements in the rule for small businesses:*

Under the CWA, economic considerations may not be considered when choosing data and deriving aquatic and wildlife criteria values for toxic pollutants. The rules, however, allow the application of measures such as schedules of compliance, variances, water effects ratio studies, mixing zones and site specific standards to address specific chemical exceedances that cannot be successfully managed by the permit holder, including small businesses.

2. *Establishing less stringent schedules or deadlines in the rule for compliance or reporting requirements for small businesses:*

The SWQS do not set compliance or reporting requirements. However, schedules of compliance and variances may be used by dischargers, including small businesses, to extend the time needed to come into compliance with new water quality standards.

3. *Consolidating or simplifying the rule's compliance or reporting requirements for small businesses:*

The SWQS do not set compliance or reporting requirements. However, the State has developed an online permitting and compliance reporting portal called MyDEQ. MyDEQ offers the regulated community, including small businesses, a digital solution to better assist them in meeting their environmental priorities and responsibilities with an easy online tool, that is available at all times to meet business needs.

4. *Establishing performance standards for small businesses to replace design or operational standards in the rule:*

The proposed SWQS do not establish design or operational standards for permit holders.

5. *Exempting small businesses from any or all requirements of the law:*

The Clean Water Act makes no allowances for exemptions to water quality standards due to the size of the business. ADEQ has no authority to exempt small businesses from the requirement to comply with surface water quality standards. However, as previously stated, the rules provide other methods for reducing the immediate impact for dischargers, including small businesses.

**d. The probable costs and benefits to private persons and consumers who are directly affected by the rules:**

While some consumers and private persons may see higher utility bills in some cases, ADEQ anticipates the negative impact will be small because, for the greatest part, the amendments will not substantially increase existing AZPDES compliance costs. AZPDES permittees affected by a change of standard may apply for compliance schedules, mixing zones, variances or low-cost WIFA loans to address any increased cost, alleviating or amortizing any cost to the consumer. However, overall, ADEQ estimates that the SWQS will provide substantial benefits across the State.

Consumers and the public may have to pay higher utility bills for sewer services in communities where WWTP upgrades are required to comply with new or revised water quality standards. In particular, customers served by wastewater treatment plants that discharge to perennial waters may be affected by the proposed adoption of numeric water quality standards that will limit discharges of ammonia.

ADEQ estimates that this rulemaking could provide substantial benefits to private persons and consumers within the State. Clean and safe water serves as an economic driver within the State for industries that rely on it to provide jobs, income, and pay state and local taxes. For example, the 2018 economic output of retail spending related to Arizona outdoor recreation along waterways and related multiplier effects has been estimated at approximately \$13.5 billion. The Audubon Society, *The Economic Impact of Arizona's Rivers, Lakes, and Streams* (2019), available at: <https://www.audubon.org/economic-impact-arizonas-rivers-lakes-and-streams>. Additionally, water-based recreation was estimated to support 114,000 jobs, and to have provided \$4.5 billion in household income and \$1.8 billion in tax revenues. *Id.* SWQS also support agricultural productivity by protecting water quality for agricultural irrigation and livestock watering. A 2014 economic analysis of Arizona agriculture reported that agribusiness in the state contributed \$17.5 billion to state output, and supported more than 88,000 jobs. Kerna and Frisvold, *Agriculture in Arizona's Economy: an Economic Contribution Analysis* (2014), available at: <https://cals.arizona.edu/arec/sites/cals.arizona.edu/arec/files/publications/aginazeconomy2014%2012-9-14spreads.pdf>. Additional economic benefits from clean water are realized in property values as illustrated by property development surrounding Tempe Town Lake, which is reported to have generated nearly \$2 billion in economic impact since its opening. City of Tempe Website, *Economic Impact* (accessed April 16, 2019), available at: <https://www.tempe.gov/government/community-services/tempe-town-lake/town-lake-financial-and-regulatory-information/economic-impact>. Good water quality that meets water quality standards is essential to maintaining and enhancing the economic values realized in the state through water-based outdoor recreation, agriculture, and property values. Additionally, this calculation does not account for the social value that the public places on clean water. Therefore, ADEQ estimates that the cumulative benefits of this rulemaking to private persons and consumers could be substantial.

**7. A statement of the probable effect on state revenues:**

This rulemaking should not result in a significant decrease in state revenues. As the proposed rule requires that variances must be made through formal rulemaking in order to comply with state and federal law, this rulemaking could create a moderate cost to ADEQ. Other increased and decreased costs to ADEQ are expected to be minimal, as explained above in the analysis of costs and benefits to ADEQ. Because most AZPDES permit holders will not be affected by this rulemaking, ADEQ does not anticipate a significant decrease in business activity in the state or a corresponding loss of state tax revenues.

**8. A description of any less intrusive or less costly alternative methods of achieving the purpose of the rulemaking:**

Under Section 303(c) of the CWA and implementing regulations, ADEQ must review and revise its SWQS. These standards must protect public health or welfare, enhance the quality of water, and serve the purposes of the CWA. This means that SWQS should, wherever attainable, provide water quality for the protection and propagation of fish, shellfish and wildlife and for recreation in and on the water and take

into consideration the use and value of water for public water supplies, recreation in and on the water, and agricultural, industrial, and other purposes including navigation. 40 C.F.R § 131.2. State law imposes similar requirements of SWQS as well. A.R.S. § 49-222. EPA will review ADEQ's SWQS to determine if they are consistent with the requirements of the CWA. 40 C.F.R. § 131.5. If EPA determines that ADEQ's SWQS do not meet the requirements of the CWA, EPA will disapprove ADEQ's SWQS and promulgate federal standards. *Id.* at (b). ADEQ has, therefore, developed the proposed SWQS to comply with federal and state law, and to avoid federally promulgated SWQS. Thus costs related to this rulemaking will likely accrue within Arizona under either state or federal standards. Additionally, water quality criteria must be based on sound scientific rationale to protect the designated use, and not economic considerations. *See* 40 C.F.R. § 131.11(a). In light of the foregoing, ADEQ is not aware of any less intrusive or less costly alternative methods that would meet ADEQ's legal obligations.

**9. A description of any data on which the rule is based with a detailed explanation of how the data was obtained and why the data is acceptable data:**

**Mixing Zone Rule Modifications**

ADEQ established definitions for critical flow conditions for discharges and receiving waters and modified its mixing zone requirements based on Arizona Mixing Zone Water Quality Standards (Jun. 2018) (on file with ADEQ and available at: [http://static.azdeq.gov/wqd/tri\\_rev\\_mixing\\_memo.pdf](http://static.azdeq.gov/wqd/tri_rev_mixing_memo.pdf)), EPA's Technical Support Document for Water Quality-based Toxics Control (1991), available at <https://www3.epa.gov/npdes/pubs/owm0264.pdf>, EPA's Water Quality Standards Handbook, Chapter 5 (Sept. 2014), available at: <https://www.epa.gov/sites/production/files/2014-09/documents/handbook-chapter5.pdf>, EPA's NPDES Permit Writers' Manual (Sept. 2010), available at [https://www.epa.gov/sites/production/files/2015-09/documents/pwm\\_2010.pdf](https://www.epa.gov/sites/production/files/2015-09/documents/pwm_2010.pdf), Mixing Zone Guidance for Chronic Toxicity and Zones of Initial Dilution (2nd Rev., May 1992), available at: <https://www.epa.gov/sites/production/files/2014-12/documents/wiwqs-mixing-zone.pdf>, recommendations from a technical memorandum prepared for ADEQ by PG Environmental, available at: [http://static.azdeq.gov/wqd/tri\\_rev\\_mixing\\_memo.pdf](http://static.azdeq.gov/wqd/tri_rev_mixing_memo.pdf), conversations with PG Environmental staff, as well as ADEQ's expertise and training.

Data provided in EPA Water Quality Standards, handbooks, manuals, technical support, and other guidance are developed and published by EPA to reflect accurate scientific and technical knowledge regarding the establishment and implementation of water quality standards. PG Environmental provides technical expertise in the water sector to state and federal agencies and prepared its technical memorandum for ADEQ based on a comparative analysis of common mixing zone approaches used in other states and on PG Environmental's experience implementing mixing zones in National Pollutant Discharge Elimination System permits. ADEQ staff are experts in their fields with significant educational and practical experience.

**Modifications to Numeric Water Quality Standards**

ADEQ uses a hierarchical approach when considering data for use in the derivation of human health water quality standards. Many of the Clean Water Act Toxic and Priority Pollutants have no reference doses (RfDs) or cancer potency slope factors (CPSFs) published in the EPA's Integrated Risk Information System (IRIS) database. Because of this, ADEQ uses the following ordered list of peer reviewed toxicological data when IRIS RfDs and CPSFs are not available:

1. Provisional Peer-Reviewed Toxicity Values (PPRTV) used in EPA's Superfund Program.
2. Minimal Risk Levels by the Agency for Toxic Substances and Disease Registry (ATSDR).
3. California Environmental Protection Agency (CalEPA) values.

While these toxicity values are not expressly developed for the derivation of water quality standards for EPA listed Toxic and Priority Pollutants, they provide valuable, peer reviewed benchmarks which allowed

ADEQ to derive water quality standards for the protection of human health where otherwise there would be none.

ADEQ is very careful when selecting surrogate toxicity values to use in the derivation of water quality standards. All data used in the derivation, and the toxicity values themselves must undergo rigorous peer review, including independent external peer review. The EPA IRIS database is always the first choice for toxicity values when they are available. If an RfD or CPSF is listed in the IRIS database, the data are considered adequate and have undergone internal and independent peer review. IRIS values are intended to be used by all EPA programs and are only listed after undergoing cross programmatic evaluation.

Provisional Peer-Reviewed Toxicity Values (PPRTV) are developed according to EPA Standard Operating Procedures (SOPs) and are derived after a review of the relevant scientific literature using the same methods, sources of data, and Agency guidance generally used by the EPA IRIS Program in the development of RfDs and CPSFs. All provisional toxicity values receive internal review by EPA scientists and external peer review by independently selected scientific experts. Minimal Risk Levels are developed as a part of ATSDR's Congressional mandate to produce toxicological profiles (TPs) for hazardous substances found at National Priorities List (NPL) sites. The studies utilized in the development of these TPs are held to the highest standards of data collection, and the peer-review process validates that they are scientifically accurate and reflect current scientific or laboratory best practice with consistent, factual results. The proposed MRLs derived as a part of the TP development undergo a rigorous review process. They are reviewed by ATSDR's toxicologists, a panel of external peer reviewers, an interagency MRL workgroup, with participation from other federal agencies, including NCEH (CDC's National Center for Environmental Health), ATSDR, NTP (National Toxicology Program), NIOSH (National Institute of Occupational Safety and Health), and EPA; and are then submitted for public comment.

The California Environmental Protection Agency (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA) is statutorily mandated by the State of California to carry out human health risk assessments on commercially available pesticides and other toxicants. OEHHA follows EPA risk assessment methodology closely through the Standards and Criteria Work Group (SCWG), a Cal/EPA Intra-agency group. All studies go through both an internal (OEHHA) and external peer review process pursuant to Health and Safety Code Section 116365(c)(3)(D).

Because Arizona separates the fish and water consumption uses in the Surface Water Quality Standards, ADEQ must calculate water quality standards for Fish Consumption using bioconcentration factors (BCF) from EPA documents or from the technical literature. Arizona has more than 27 different species of sport fish that can be taken and consumed by Arizona anglers. Each of those species occupies a different locus in the aquatic food web, depending on the community composition of each individual waterbody. Because of this variability in species, community composition and food web structure, the BCF value is, by necessity, a broad estimate.

If EPA data are not available, data is gathered from peer reviewed journals, the Extension Toxicology Network (EXTOXNET) and the U.S. National Library of Medicine among other sources. If multiple studies are available or a range given, a rounded mean is calculated for use in deriving standards.



## **Replacement Check List**

For rules filed within the  
4th Quarter  
October 1 – December 31, 2016

# THE ARIZONA ADMINISTRATIVE CODE

Within the stated calendar quarter, this Chapter contains all rules made, amended, repealed, renumbered, and recodified; or rules that have expired or were terminated due to an agency being eliminated under sunset law. These rules were either certified by the Governor's Regulatory Review Council or the Attorney General's Office; or exempt from the rulemaking process, and filed with the Office of the Secretary of State. Refer to the historical notes for more information. Please note that some rules you are about to remove may still be in effect after the publication date of this Supplement. Therefore, all superseded material should be retained in a separate binder and archived for future reference.

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## **Title 18. Environmental Quality**

### **Chapter 11. Department of Environmental Quality - Water Quality Standards Supplement 16-4**

#### **Sections, Parts, Exhibits, Tables or Appendices modified**

R18-11-106, R18-11-109, R18-11-110, R18-11-112, R18-11-115, R18-11-121, Appendix A, B and C

REMOVE Supp. 08-4  
Pages: 1 - 77

REPLACE with Supp. 16-4  
Pages: 1 - 63

*The agency's contact person who can answer questions about rules in Supp. 16-4:*

Agency: Department of Environmental Quality, Water Quality Division  
Address: 1110 W. Washington St., Phoenix, AZ 85007  
Telephone: (602) 771-4836 (Toll-free number in Arizona: (800) 234-5677  
Fax: (602) 771-4834

*Disclaimer: Please be advised the person listed is the contact of record as submitted in the rulemaking package for this supplement. The contact and other information may change and is provided as a public courtesy.*

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**PUBLISHER**  
**Arizona Department of State**  
**Office of the Secretary of State, Public Services Division**

## PREFACE

Under Arizona law, the Department of State, Office of the Secretary of State (Office), accepts state agency rule filings and is the publisher of Arizona rules. The Office of the Secretary of State does not interpret or enforce rules in the Administrative Code. Questions about rules should be directed to the state agency responsible for the promulgation of the rule.

Scott Cancelosi, Director  
PUBLIC SERVICES DIVISION  
December 31, 2016

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### **RULES**

A.R.S. § 41-1001(17) states: “‘Rule’ means an agency statement of general applicability that implements, interprets, or prescribes law or policy, or describes the procedures or practice requirements of an agency.”

### **THE ADMINISTRATIVE CODE**

The Arizona Administrative Code is where the official rules of the state of Arizona are published. The Code is the official codification of rules that govern state agencies, boards, and commissions. Virtually everything in your life is affected in some way by rules published in the Arizona Administrative Code, from the quality of air you breathe to the licensing of your dentist. This chapter is one of more than 230 in the Code compiled in 21 Titles.

### **ADMINISTRATIVE CODE SUPPLEMENTS**

Rules filed by an agency to be published in the Administrative Code are updated quarterly. Supplement release dates are printed on the footers of each chapter:

First Quarter: January 1 - March 31  
Second Quarter: April 1 - June 30  
Third Quarter: July 1 - September 30  
Fourth Quarter: October 1 - December 31

For example, the first supplement for the first quarter of 2016 is cited as Supp. 16-1.

### **HOW TO USE THE CODE**

Rules may be in effect before a supplement is released by the Office. Therefore, the user should refer to issues of the Arizona Administrative Register for recent updates to rule Sections.

### **ARTICLES AND SECTIONS**

Rules in chapters are divided into Articles, then Sections. The “R” stands for “rule” with a sequential numbering and lettering system separated into subsections.

### **HISTORICAL NOTES AND EFFECTIVE DATES**

Historical notes inform the user when the last time a Section was updated in the Administrative Code. Be aware, since the Office publishes each quarter by entire chapters, not all Sections are updated by an agency in a supplement release. Many times just one Section or a few Sections may be updated in the entire chapter.

### **ARIZONA REVISED STATUTE REFERENCES**

The Arizona Revised Statutes (A.R.S.) are available online at the Legislature’s website, [www.azleg.gov](http://www.azleg.gov). An agency’s authority note to make rules is often included at the beginning of a chapter. Other Arizona statutes may be referenced in rule under the A.R.S. acronym.

### **SESSION LAW REFERENCES**

Arizona Session Law references in the introduction of a chapter can be found at the Secretary of State’s website, [www.azsos.gov/services/legislative-filings](http://www.azsos.gov/services/legislative-filings).

### **EXEMPTIONS FROM THE APA**

It is not uncommon for an agency to be exempt from the steps outlined in the rulemaking process as specified in the Arizona Administrative Procedures Act, also known as the APA (Arizona Revised Statutes, Title 41, Chapter 6, Articles 1 through 10). Other agencies may be given an exemption to certain provisions of the Act.

An agency’s exemption is written in law by the Arizona State Legislature or under a referendum or initiative passed into law by Arizona voters.

When an agency files an exempt rulemaking package with our Office it specifies the law exemption in what is called the preamble of rulemaking. The preamble is published in the Arizona Administrative Register online at [www.azsos.gov/rules](http://www.azsos.gov/rules), click on the Administrative Register link.

In the Administrative Code the Office includes editor’s notes at the beginning of a chapter indicating that certain rulemaking Sections were made by exempt rulemaking. Exempt rulemaking notes are also included in the historical note at the end of a rulemaking Section.

The Office makes a distinction to certain exemptions because some rules are made without receiving input from stakeholders or the public. Other exemptions may require an agency to propose exempt rules at a public hearing.

### **EXEMPTIONS AND PAPER COLOR**

If you are researching rules and come across rescinded chapters on a different paper color, this is because the agency filed a Notice of Exempt Rulemaking. At one time the office published exempt rules on either blue or green paper. Blue meant the authority of the exemption was given by the Legislature; green meant the authority was determined by a court order. In 2001 the Office discontinued publishing rules using these paper colors.

### **PERSONAL USE/COMMERCIAL USE**

This chapter is posted as a public courtesy online, and is for private use only. Those who wish to use the contents for resale or profit should contact the Office about Commercial Use fees. For information on commercial use fees review A.R.S. § 39-121.03 and 1 A.A.C. 1, R1-1-113.

*Public Services managing rules editor, Rhonda Paschal, assisted with the editing of this chapter.*

**TITLE 18. ENVIRONMENTAL QUALITY**

**CHAPTER 11. DEPARTMENT OF ENVIRONMENTAL QUALITY - WATER QUALITY STANDARDS**

**ARTICLE 1. WATER QUALITY STANDARDS FOR SURFACE WATERS**

*Tables in Article 1, Appendix A have been updated and now include historical notes (Supp. 16-4).*

*Article 1, consisting of Appendices A through C, repealed April 24, 1996 (Supp. 96-2).*

*Article 1, consisting of Section R18-11-103, reserved effective April 24, 1996 (Supp. 96-2).*

*Article 1, consisting of Sections R18-11-105 and R18-11-106, and Appendices A and B, adopted April 24, 1996 (Supp. 96-2).*

*Article 1, consisting of Sections R18-11-101 and R18-11-102, R18-11-104, R18-11-107 through R18-11-109, R18-11-111 through R18-11-113, R18-11-115, R18-11-117 and R18-11-118, R18-11-120 and R18-11-121, amended effective April 24, 1996 (Supp. 96-2).*

*Article 1, consisting of Sections R18-11-101 through R18-11-121 and Appendices A through C, adopted effective February 18, 1992 (Supp. 92-1).*

*Article 1, consisting of Section R18-11-101, repealed effective February 18, 1992 (Supp. 92-1).*

*Article 1 consisting of Section R9-21-101 renumbered as Article 1, Section R18-11-101 (Supp. 87-3).*

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*Article 2, consisting of Sections R18-11-201 through R18-11-205, adopted effective February 18, 1992 (Supp. 92-1).*

*Article 2, consisting of Sections R18-11-201 through R18-11-214 and Appendices A and B, repealed effective February 18, 1992 (Supp. 92-1).*

*Article 2 consisting of Sections R9-21-201 through R9-21-214 and Appendices A and B renumbered as Article 2, Sections R18-11-201 through R18-11-214 and Appendices A and B (Supp. 87-3).*

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Article 3, consisting of Sections R18-11-301 through R18-11-309 and Table A, adopted by final rulemaking at 7 A.A.R. 870, effective January 22, 2001 (Supp. 01-1).

Article 3 heading repealed effective April 24, 1996 (Supp. 96-2).

Article 3, consisting of Sections R18-11-301 through R18-11-304 repealed effective February 18, 1992 (Supp. 92-1).

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## ARTICLE 1. WATER QUALITY STANDARDS FOR SURFACE WATERS

### R18-11-101. Definitions

The following terms apply to this Article:

1. “Acute toxicity” means toxicity involving a stimulus severe enough to induce a rapid response. In aquatic toxicity tests, an effect observed in 96 hours or less is considered acute.
2. “Agricultural irrigation (AgI)” means the use of a surface water for crop irrigation.
3. “Agricultural livestock watering (AgL)” means the use of a surface water as a water supply for consumption by livestock.
4. “Annual mean” is the arithmetic mean of monthly values determined over a consecutive 12-month period, provided that monthly values are determined for at least three months. A monthly value is the arithmetic mean of all values determined in a calendar month.
5. “Aquatic and wildlife (cold water) (A&Wc)” means the use of a surface water by animals, plants, or other cold-water organisms, generally occurring at an elevation greater than 5000 feet, for habitation, growth, or propagation.
6. “Aquatic and wildlife (effluent-dependent water) (A&Wedw)” means the use of an effluent-dependent water by animals, plants, or other organisms for habitation, growth, or propagation.
7. “Aquatic and wildlife (ephemeral) (A&We)” means the use of an ephemeral water by animals, plants, or other organisms, excluding fish, for habitation, growth, or propagation.
8. “Aquatic and wildlife (warm water) (A&Ww)” means the use of a surface water by animals, plants, or other warm-water organisms, generally occurring at an elevation less than 5000 feet, for habitation, growth, or propagation.
9. “Arizona Pollutant Discharge Elimination System (AZPDES)” means the point source discharge permitting program established under 18 A.A.C. 9, Article 9.
10. “Assimilative capacity” means the difference between the baseline water quality concentration for a pollutant and the most stringent applicable water quality criterion for that pollutant.
11. “Clean Water Act” means the Federal Water Pollution Control Act [33 U.S.C. 1251 to 1387].
12. “Criteria” means elements of water quality standards that are expressed as pollutant concentrations, levels, or narrative statements representing a water quality that supports a designated use.
13. “Critical flow condition” means the lowest flow over seven consecutive days that has a probability of occurring once in 10 years (7 Q 10).
14. “Deep lake” means a lake or reservoir with an average depth of more than 6 meters.
15. “Designated use” means a use specified in Appendix B of this Article for a surface water.
16. “Domestic water source (DWS)” means the use of a surface water as a source of potable water. Treatment of a surface water may be necessary to yield a finished water suitable for human consumption.
17. “Effluent-dependent water (EDW)” means a surface water, classified under R18-11-113, that consists of a point source discharge of wastewater. An effluent-dependent water is a surface water that, without the point source discharge of wastewater, would be an ephemeral water.
18. “Ephemeral water” means a surface water that has a channel that is at all times above the water table and flows only in direct response to precipitation.
19. “Existing use” means a use attained in the waterbody on or after November 28, 1975, whether or not it is included in the water quality standards.
20. “Fish consumption (FC)” means the use of a surface water by humans for harvesting aquatic organisms for consumption. Harvestable aquatic organisms include, but are not limited to, fish, clams, turtles, crayfish, and frogs.
21. “Full-body contact (FBC)” means the use of a surface water for swimming or other recreational activity that causes the human body to come into direct contact with the water to the point of complete submergence. The use is such that ingestion of the water is likely and sensitive body organs, such as the eyes, ears, or nose, may be exposed to direct contact with the water.
22. “Geometric mean” means the  $n$ th root of the product of  $n$  items or values. The geometric mean is calculated using the following formula:
 
$$GM_Y = \sqrt[n]{(Y_1)(Y_2)(Y_3)\dots(Y_n)}$$
23. “Hardness” means the sum of the calcium and magnesium concentrations, expressed as calcium carbonate (CaCO<sub>3</sub>) in milligrams per liter.
24. “Igneous lake” means a lake located in volcanic, basaltic, or granite geology and soils.
25. “Intermittent water” means a stream or reach that flows continuously only at certain times of the year, as when it receives water from a spring or from another surface source, such as melting snow.
26. “Mixing zone” means an area or volume of a surface water that is contiguous to a point source discharge where dilution of the discharge takes place.
27. “Oil” means petroleum in any form, including crude oil, gasoline, fuel oil, diesel oil, lubricating oil, or sludge.
28. “Outstanding Arizona water (OAW)” means a surface water that is classified as an outstanding state resource water by the Director under R18-11-112.
29. “Partial-body contact (PBC)” means the recreational use of a surface water that may cause the human body to come into direct contact with the water, but normally not to the point of complete submergence (for example, wading or boating). The use is such that ingestion of the water is not likely and sensitive body organs, such as the eyes, ears, or nose, will not normally be exposed to direct contact with the water.
30. “Perennial water” means a surface water that flows continuously throughout the year.
31. “Pollutant” means fluids, contaminants, toxic wastes, toxic pollutants, dredged spoil, solid waste, substances and chemicals, pesticides, herbicides, fertilizers and other agricultural chemicals, incinerator residue, sewage, garbage, sewage sludge, munitions, petroleum products, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and mining, industrial, municipal, and agricultural wastes or any other liquid, solid, gaseous, or hazardous substance. A.R.S § 49-201(29)
32. “Practical quantitation limit” means the lowest level of quantitative measurement that can be reliably achieved during a routine laboratory operation.
33. “Reference condition” means a set of ecological measurements from a population of relatively undisturbed waterbodies within a region that establish a basis for making comparisons of biological condition among samples.

34. “Regional Administrator” means the Regional Administrator of Region IX of the U.S. Environmental Protection Agency.
35. “Regulated discharge” means a point-source discharge regulated under an AZPDES permit, a discharge regulated by a § 404 permit, and any discharge authorized by a federal permit or license that is subject to state water quality certification under § 401 of the Clean Water Act.
36. “Riffle habitat” means a stream segment where moderate water velocity and substrate roughness produce moderately turbulent conditions that break the surface tension of the water and may produce breaking wavelets that turn the surface water into white water.
37. “Run habitat” means a stream segment where there is moderate water velocity that does not break the surface tension of the water and does not produce breaking wavelets that turn the surface water into white water.
38. “Sedimentary lake” means a lake or reservoir in sedimentary or karst geology and soils.
39. “Shallow lake” means a lake or reservoir, excluding an urban lake, with a smaller, flatter morphology and an average depth of less than 3 meters and a maximum depth of less than 4 meters.
40. “Significant degradation” means:
- The consumption of 20 percent or more of the available assimilative capacity for a pollutant of concern at critical flow conditions, or
  - Any consumption of assimilative capacity beyond the cumulative cap of 50 percent of assimilative capacity.
41. “Surface water” means a water of the United States and includes the following:
- A water that is currently used, was used in the past, or may be susceptible to use in interstate or foreign commerce;
  - An interstate water, including an interstate wetland;
  - All other waters, such as an intrastate lake, reservoir, natural pond, river, stream (including an intermittent or ephemeral stream), creek, wash, draw, mudflat, sandflat, wetland, slough, backwater, prairie pot-hole, wet meadow, or playa lake, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce, including any such water:
    - That is or could be used by interstate or foreign travelers for recreational or other purposes;
    - From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    - That is used or could be used for industrial purposes by industries in interstate or foreign commerce;
  - An impoundment of a surface water as defined by this definition;
  - A tributary of a surface water identified in subsections (41)(a) through (d); and
  - A wetland adjacent to a surface water identified in subsections (41)(a) through (e).
42. “Total nitrogen” means the sum of the concentrations of ammonia (NH<sub>3</sub>), ammonium ion (NH<sub>4</sub><sup>+</sup>), nitrite (NO<sub>2</sub>), and nitrate (NO<sub>3</sub>), and dissolved and particulate organic nitrogen expressed as elemental nitrogen.
43. “Total phosphorus” means all of the phosphorus present in a sample, regardless of form, as measured by a persulfate digestion procedure.
44. “Toxic” means a pollutant or combination of pollutants, that after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism, either directly from the environment or indirectly by ingestion through food chains, may cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction), or physical deformations in the organism or its offspring.
45. “Urban lake” means a manmade lake within an urban landscape.
46. “Use attainability analysis” means a structured scientific assessment of the factors affecting the attainment of a designated use including physical, chemical, biological, and economic factors.
47. “Wadeable” means a surface water can be safely crossed on foot and sampled without a boat.
48. “Wastewater” does not mean:
- Stormwater,
  - Discharges authorized under the De Minimus General Permit,
  - Other allowable non-stormwater discharges permitted under the Construction General Permit or the Multi-sector General Permit, or
  - Stormwater discharges from a municipal storm sewer system (MS4) containing incidental amounts of non-stormwater that the MS4 is not required to prohibit.
49. “Wetland” means an area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. A wetland includes a swamp, marsh, bog, cienega, tinaja, and similar areas.
50. “Zone of passage” means a continuous water route of volume, cross-sectional area, and quality necessary to allow passage of free-swimming or drifting organisms with no acutely toxic effect produced on the organisms.

#### Historical Note

Former Section R9-21-101 repealed, new Section R9-21-101 adopted effective January 29, 1980 (Supp. 80-1).  
 Amended effective April 17, 1984 (Supp. 84-2).  
 Amended effective January 7, 1985 (Supp. 85-1).  
 Amended by adding subsection (C) effective August 12, 1986 (Supp. 86-4). Former Section R9-21-101 renumbered without change as Section R18-11-101 (Supp. 87-3). Former Section R18-11-101 repealed, new Section R18-11-101 adopted effective February 18, 1992 (Supp. 92-1). Amended effective April 24, 1996 (Supp. 96-2). Deleted first definition to R18-11-101(32) “Navigable Water”, previously printed in error (Supp. 96-3). Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

#### R18-11-102. Applicability

- The water quality standards prescribed in this Article apply to surface waters.
- The water quality standards prescribed in this Article do not apply to the following:
  - A waste treatment system, including an impoundment, pond, lagoon, or constructed wetland that is a part of the waste treatment system;

2. A man-made surface impoundment and any associated ditch and conveyance used in the extraction, beneficiation, or processing of metallic ores that is not a surface water or is located in an area that once was a surface water but is no longer a surface water because it has been and remains legally converted, including:
    - a. A pit,
    - b. Pregnant leach solution pond,
    - c. Raffinate pond,
    - d. Tailing impoundment,
    - e. Decant pond,
    - f. Pond or a sump in a mine pit associated with dewatering activity,
    - g. Pond holding water that has come into contact with a process or product and that is being held for recycling,
    - h. Spill or upset catchment pond, or
    - i. A pond used for onsite remediation;
  3. A man-made cooling pond that is neither created in a surface water nor results from the impoundment of a surface water; or
  4. A surface water located on tribal lands.
- Historical Note**  
 Adopted effective February 18, 1992 (Supp. 92-1).  
 Amended effective April 24, 1996 (Supp. 96-2).  
 Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-103. Repealed****Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
 Repealed effective April 24, 1996 (Supp. 96-2).

**R18-11-104. Designated Uses**

- A. The Director shall adopt or remove a designated use or subcategory of a designated use by rule.
- B. Designated uses of a surface water may include full-body contact, partial-body contact, domestic water source, fish consumption, aquatic and wildlife (cold water), aquatic and wildlife (warm water), aquatic and wildlife (ephemeral), aquatic and wildlife (effluent-dependent water), agricultural irrigation, and agricultural livestock watering. The designated uses for specific surface waters are listed in Appendix B of this Article.
- C. Numeric water quality criteria to maintain and protect water quality for the designated uses are prescribed in Appendix A, R18-11-109, R18-11-110, and R18-11-112. Narrative water quality standards to protect all surface waters are prescribed in R18-11-108.
- D. If a surface water has more than one designated use listed in Appendix B, the most stringent water quality criterion applies.
- E. The Director shall revise the designated uses of a surface water if water quality improvements result in a level of water quality that permits a use that is not currently listed as a designated use in Appendix B.
- F. In designating uses of a surface water and in establishing water quality criteria to protect the designated uses, the Director shall take into consideration the applicable water quality standards for downstream surface waters and shall ensure that the water quality standards that are established for an upstream surface water also provide for the attainment and maintenance of the water quality standards of downstream surface waters.
- G. A use attainability analysis shall be conducted prior to removal of a designated use or adoption of a subcategory of a designated use that requires less stringent water quality criteria.

- H. The Director may remove a designated use or adopt a subcategory of a designated use that requires less stringent water quality criteria, provided the designated use is not an existing use and it is demonstrated through a use attainability analysis that attaining the designated use is not feasible for any of the following reasons:
  1. A naturally-occurring pollutant concentration prevents the attainment of the use;
  2. A natural, ephemeral, intermittent, or low-flow condition or water level prevents the attainment of the use;
  3. A human-caused condition or source of pollution prevents the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place;
  4. A dam, diversion, or other type of hydrologic modification precludes the attainment of the use, and it is not feasible to restore the surface water to its original condition or to operate the modification in a way that would result in attainment of the use;
  5. A physical condition related to the natural features of the surface water, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, precludes attainment of an aquatic life designated use; or
  6. Controls more stringent than those required by § 301 (b) and § 306 of the Clean Water Act [33 U.S.C. § 1311 and § 1316] are necessary to attain the use and implementation of the controls would result in substantial and widespread economic and social impact.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
 Amended effective April 24, 1996 (Supp. 96-2).  
 Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1).

**R18-11-105. Tributaries; Designated Uses**

The following water quality standards apply to a surface water that is not listed in Appendix B but that is a tributary to a listed surface water.

1. The aquatic and wildlife (ephemeral) and partial-body contact standards apply to an unlisted tributary that is an ephemeral water.
2. The aquatic and wildlife (cold water), full-body contact, and fish consumption standards apply to an unlisted tributary that is a perennial or intermittent surface water and is above 5000 feet in elevation.
3. The aquatic and wildlife (warm water), full-body contact, and fish consumption standards apply to an unlisted tributary that is a perennial or intermittent surface water and is below 5000 feet in elevation.

**Historical Note**

Adopted effective April 24, 1996 (Supp. 96-2). Section heading amended per instructions of the Department of Environmental Quality, August 9, 1996 (Supp. 96-3).  
 Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1).

**R18-11-106. Net Ecological Benefit**

- A. The Director may, by rule, modify a water quality standard on the ground that there is a net ecological benefit associated with the discharge of effluent to support or create a riparian and aquatic habitat in an area where water resources are limited. The Director may modify a water quality standard for a pollutant if it is demonstrated that:
  1. The discharge of effluent creates or supports an ecologically valuable aquatic, wetland, or riparian ecosystem in an area where these resources are limited;

2. The ecological benefits associated with the discharge of effluent under a modified water quality standard exceed the environmental costs associated with the elimination of the discharge of effluent;
3. The cost of treatment to achieve compliance with a water quality standard is so high that it is more cost effective to eliminate the discharge of effluent to the surface water. The discharger shall demonstrate that it is feasible to eliminate the discharge of effluent that creates or supports the ecologically valuable aquatic, wetland, or riparian ecosystem;
4. The discharge of effluent to the surface water will not cause or contribute to a violation of a water quality standard that has been established for a downstream surface water;
5. All practicable point source discharge control programs, including local pretreatment, waste minimization, and source reduction programs are implemented; and
6. The discharge of effluent does not produce or contribute to the concentration of a pollutant in the tissues of aquatic organisms or wildlife that is likely to be harmful to humans or wildlife through food chain concentration.

- B.** The Director shall not modify a water quality criterion for a pollutant to be less stringent than a technology-based effluent limitation that applies to the discharge of that effluent. The discharge of effluent shall, at a minimum, comply with applicable technology-based effluent limitations.

**Historical Note**

Adopted effective April 24, 1996 (Supp. 96-2). Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**R18-11-107. Antidegradation**

- A.** The Director shall, using R18-11-107.01 and this Section, determine whether there is degradation of water quality in a surface water on a pollutant-by-pollutant basis.
- B.** Tier 1: The level of water quality necessary to support an existing use shall be maintained and protected. No degradation of existing water quality is permitted in a surface water where the existing water quality does not meet the applicable water quality standards.
- C.** Tier 2: Where existing water quality in a surface water is better than the applicable water quality standard the existing water quality shall be maintained and protected. The Director may allow degradation of existing water quality in the surface water, if the Director makes all of the following findings:
1. The water quality necessary for existing uses is fully protected and water quality is not lowered to a level that does not comply with applicable water quality standards,
  2. The highest statutory and regulatory requirements for new and existing point sources are achieved,
  3. All cost-effective and reasonable best management practices for nonpoint source pollution control are implemented, and
  4. Allowing lower water quality is necessary to accommodate important economic or social development in the area where the surface water is located.
- D.** Tier 3: Existing water quality shall be maintained and protected in a surface water that is classified as an OAW under R18-11-112. Degradation of an OAW under subsection (C) is prohibited.
- E.** The Director shall implement this Section in a manner consistent with § 316 of the Clean Water Act [33 U.S.C. 1326] if a potential water quality impairment associated with a thermal discharge is involved.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1). Amended effective April 24, 1996 (Supp. 96-2). Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-107.01. Antidegradation Criteria**

- A.** Tier 1 antidegradation protection.
1. Tier 1 antidegradation protection applies to the following surface waters:
    - a. A surface water listed on the 303(d) list for the pollutant that resulted in the listing,
    - b. An effluent dependent water,
    - c. An ephemeral water,
    - d. An intermittent water, and
    - e. A canal listed in Appendix B.
  2. A regulated discharge shall not cause a violation of a surface water quality standard or a wasteload allocation in a total maximum daily load approved by EPA.
  3. Except as provided in subsections (E) and (F), Tier 1 antidegradation review requirements are satisfied for a point-source discharge regulated under an individual AZPDES permit to an ephemeral water, effluent dependent water, intermittent water, or a canal listed in Appendix B, if water quality-based effluent limitations designed to achieve compliance with applicable surface water quality standards are established in the permit and technology-based requirements of the Clean Water Act for the point source discharge are met.
- B.** Tier 2 antidegradation protection.
1. Tier 2 antidegradation protection applies to a perennial water with existing water quality that is better than applicable water quality standards. A perennial water that is not listed in subsection (A)(1) nor classified as an OAW under A.A.C. R18-9-112(G) has Tier 2 antidegradation protection for all pollutants of concern.
  2. A regulated discharge that meets the following criteria, at critical flow conditions, does not cause significant degradation:
    - a. The regulated discharge consumes less than 20 percent of the available assimilative capacity for each pollutant of concern, and
    - b. At least 50 percent of the assimilative capacity for each pollutant of concern remains available in the surface water for each pollutant of concern.
  3. Antidegradation review. Any person proposing a new or expanded regulated discharge under an individual AZPDES permit that may cause significant degradation shall provide the Department with the following information:
    - a. Alternative analysis.
      - i. The person seeking authorization for the discharge shall prepare and submit a written analysis of alternatives to the discharge. The analysis shall provide information on all reasonable, cost-effective, less-degrading or non-degrading discharge alternatives. Alternatives may include wastewater treatment process changes or upgrades, pollution prevention measures, source reduction, water reclamation, alternative discharge locations, groundwater recharge, land application or treatment, local pretreatment programs, improved operation and maintenance of existing systems, seasonal or controlled discharge to avoid critical flow conditions, and zero discharge;

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- ii. The alternatives analysis shall include cost information on base pollution control measures associated with the regulated discharge and cost information for each alternative;
  - iii. The person shall implement the alternative that is cost-effective and reasonable, results in the least degradation, and is approved by the Director. An alternative is cost-effective and reasonable if treatment costs associated with the alternative are less than a 10 percent increase above the cost of base pollution control measures;
  - iv. For purposes of this subsection, “base pollution control measures” are water pollution control measures required to meet technology-based requirements of the Clean Water Act and water quality-based effluent limits designed to achieve compliance with applicable water quality standards;
- b. Social and economic justification. The person shall demonstrate to the Director that significant degradation is necessary to accommodate important economic or social development in the local area. The person seeking authorization for the discharge shall prepare a written social and economic justification that includes a description of the following:
- i. The geographic area where significant degradation of existing water quality will occur;
  - ii. The current baseline social and economic conditions in the local area;
  - iii. The net positive social and economic effects of development associated with the regulated discharge and allowing significant degradation;
  - iv. The negative social, environmental, and economic effects of allowing significant degradation of existing water quality; and
  - v. Alternatives to the regulated discharge that do not significantly degrade water quality yet may yield comparable social and economic benefits;
- c. Baseline characterization. A person seeking authorization to discharge under an individual AZPDES permit to a perennial water shall provide baseline water quality data on pollutants of concern where no data exist or there are insufficient data to characterize baseline water quality and to determine available assimilative capacity. A discharger shall characterize baseline water quality at a location upstream of the proposed discharge location; and
4. For purposes of this Section, the term “pollutant of concern” means a pollutant with either a numeric or narrative water quality standard.
5. Public participation. The Director shall provide public notice and an opportunity to comment on an antidegradation review under subsection (B)(3) and shall provide an opportunity for a public hearing under A.A.C. R18-9-A908(B).
- C. Tier 3 antidegradation protection.**
- 1. Tier 3 antidegradation protection applies only to an OAW listed in R18-11-112(G).
  - 2. A new or expanded point-source discharge directly to an OAW is prohibited.
  - 3. A person seeking authorization for a regulated discharge to a tributary to, or upstream of, an OAW shall demonstrate in a permit application or in other documentation submitted to the Department that the regulated discharge will not degrade existing water quality in the downstream OAW.
4. A discharge regulated under a § 404 permit that may affect existing water quality of an OAW requires an individual § 401 water quality certification to ensure that existing water quality is maintained and protected and any water quality impacts are temporary. Temporary water quality impacts are those impacts that occur for a period of six months or less.
- D. Antidegradation review of a § 404 permit.** The Director shall conduct the antidegradation review of any discharge authorized under a nationwide or regional § 404 permit as part of the § 401 water quality certification prior to issuance of the nationwide or regional permit. The Director shall conduct the antidegradation review of an individual § 404 permit if the discharge may degrade existing water quality in an OAW or a water listed on the 303(d) List of impaired waters. For regulated discharges that may degrade water quality in an OAW or a water that is on the 303(d) List of impaired waters, the Director shall conduct the antidegradation review as part of the § 401 water quality certification process.
- E. Antidegradation review of an AZPDES stormwater permit.** An individual stormwater permit for a municipal separate storm sewer system (MS4) meets antidegradation requirements if the permittee complies with the permit, including developing a stormwater management plan containing controls that reduce the level of pollutants in stormwater discharges to the maximum extent practicable.
- F. Antidegradation review of a general permit.** The Director shall conduct the antidegradation review of a regulated discharge authorized by a general permit at the time the general permit is issued or renewed. A person seeking authorization to discharge under a general permit is not required to undergo an individual antidegradation review at the time the Notice of Intent is submitted unless the discharge may degrade existing water quality in an OAW or a water listed on the 303(d) List of impaired waters.

**Historical Note**

New Section made by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-108. Narrative Water Quality Standards**

- A.** A surface water shall not contain pollutants in amounts or combinations that:
- 1. Settle to form bottom deposits that inhibit or prohibit the habitation, growth, or propagation of aquatic life;
  - 2. Cause objectionable odor in the area in which the surface water is located;
  - 3. Cause off-taste or odor in drinking water;
  - 4. Cause off-flavor in aquatic organisms;
  - 5. Are toxic to humans, animals, plants, or other organisms;
  - 6. Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth, or propagation of other aquatic life or that impair recreational uses;
  - 7. Cause or contribute to a violation of an aquifer water quality standard prescribed in R18-11-405 or R18-11-406; or
  - 8. Change the color of the surface water from natural background levels of color.
- B.** A surface water shall not contain oil, grease, or any other pollutant that floats as debris, foam, or scum; or that causes a film or iridescent appearance on the surface of the water; or that causes a deposit on a shoreline, bank, or aquatic vegetation. The discharge of lubricating oil or gasoline associated with the normal operation of a recreational watercraft is not a violation of this narrative standard.

- C. A surface water shall not contain a discharge of suspended solids in quantities or concentrations that interfere with the treatment processes at the nearest downstream potable water treatment plant or substantially increase the cost of handling solids produced at the nearest downstream potable water treatment plant.
- D. A surface water shall not contain solid waste such as refuse, rubbish, demolition or construction debris, trash, garbage, motor vehicles, appliances, or tires.
- E. A wadeable, perennial stream shall support and maintain a community of organisms having a taxa richness, species composition, tolerance, and functional organization comparable to that of a stream with reference conditions in Arizona.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
 Amended effective April 24, 1996 (Supp. 96-2).  
 Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-108.01. Narrative Biological Criteria for Wadeable, Perennial Streams**

- A. The narrative biological criteria in this Section apply to a wadeable, perennial stream with either an aquatic and wildlife (cold water) or an aquatic and wildlife (warm water) designated use.
- B. The biological standard in R18-11-108(E) is met when a bioassessment result, as measured by the Arizona Index of Biological Integrity (IBI), for cold or warm water is:
  - 1. Greater than or equal to the 25th percentile of reference condition, or
  - 2. Greater than the 10th percentile of reference condition and less than the 25th percentile of reference condition and a verification bioassessment result is greater than or equal to the 25th percentile of reference condition.
- C. Arizona Index of Biological Integrity (IBI) scores:

Bioassessment Result	Index of Biological Integrity Scores	
	A&Wc	A&Ww
Greater than or equal to the 25th percentile of reference condition	≥52	≥50
Greater than the 10th and less than the 25th percentile of reference condition	46 - 51	40 - 49

**Historical Note**

New Section made by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-108.02. Narrative Bottom Deposit Criteria for Wadeable, Perennial Streams**

- A. The narrative bottom deposit criteria in this Section apply to wadeable, perennial streams with an aquatic and wildlife (cold water) or an aquatic and wildlife (warm water) designated use.
- B. The narrative water quality standard for bottom deposits at R18-11-108(A)(1) is met when:

- 1. The percentage of fine sediments in the riffle habitats of a wadeable, perennial stream with an A&Wc designated use, as determined by a riffle pebble count, is less than or equal to 30 percent.
- 2. The percentage of fine sediments in all stream habitats of a wadeable, perennial stream with an A&Ww designated use, as determined by a reach level pebble count, is equal to or less than 50 percent.

**Historical Note**

New Section made by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-108.03. Narrative Nutrient Criteria for Lakes and Reservoirs**

- A. The narrative nutrient criteria in this Section apply to those lakes and reservoirs categorized in Appendix B.
- B. The narrative water quality standard for nutrients at R18-11-108(A)(6) is met when, based on a minimum of two lake sample events conducted during the peak season based on lake productivity, the results show an average chlorophyll-*a* value below the applicable threshold for designated use and lake and reservoir category in subsection (D).
  - 1. The mean chlorophyll-*a* concentration is less than the lower value in the target range chlorophyll-*a* for the lake and reservoir category, or
  - 2. The mean chlorophyll-*a* concentration is within the target range for the lake and reservoir category and:
    - a. The mean blue green algae count is at or below 20,000 per milliliter, and
    - b. The blue green algae count is less than 50 percent of the total algae count, and
    - c. There is no evidence of nutrient-related impairments such as:
      - i. An exceedance of dissolved oxygen or pH standards;
      - ii. A fish kill coincident with a dissolved oxygen or pH exceedance;
      - iii. A fish kill or other aquatic organism mortality coincident with algal toxicity;
      - iv. Secchi depth is less than the lower value prescribed for the lake and reservoir category;
      - v. A nuisance algal bloom is present in the limnetic portion of the lake or reservoir; or
      - vi. The concentration of total phosphorous, total nitrogen, or total Kjehldal nitrogen (TKN) is greater than the upper value in the range prescribed for the lake and reservoir category; or
  - 3. For a shallow lake. In addition to meeting the mean chlorophyll-*a* concentrations in subsections (B)(1) or (2), submerged aquatic vegetation covers 50 percent or less of the lake bottom and there is less than a 5 mg/L swing in diel-dissolved oxygen concentration measured within the photic zone.
- C. The following threshold ranges apply during the peak season for lake productivity:
  - 1. Warm water lakes peak season, April – October;
  - 2. Cold water lakes peak season, May – September.

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D. The following table lists the numeric targets for lakes and reservoirs.

NUMERIC TARGETS FOR LAKES AND RESERVOIRS										
Designated Use	Lake Category	Chl- <i>a</i> (µg/L)	Secchi Depth (m)	Total Phosphorus (µg/L)	Total Nitrogen (mg/L)	Total Kjehldal Nitrogen (TKN) (mg/L)	Blue-Green Algae (per ml)	Blue-Green Algae (% of total count)	Dissolved Oxygen (mg/L)	pH (SU)
FBC and PBC	Deep	10-15	1.5-2.5	70-90	1.2-1.4	1.0-1.1	20,000			6.5-9.0
	Shallow	10-15	1.5-2.0	70-90	1.2-1.4	1.0-1.1				
	Igneous	20-30	0.5-1.0	100-125	1.5-1.7	1.2-1.4				
	Sedimentary	20-30	1.5-2.0	100-125	1.5-1.7	1.2-1.4				
	Urban	20-30	0.5-1.0	100-125	1.5-1.7	1.2-1.4				
A&Wc	All	5-15	1.5-2.0	50-90	1.0-1.4	0.7-1.1		<50	7 (top m)	6.5-9.0
A&Ww	All (except urban lakes)	25-40	0.8-1.0	115-140	1.6-1.8	1.3-1.6			6 (top m)	
	Urban	30-50	0.7-1.0	125-160	1.7-1.9	1.4-1.7				
A&Wedw	All	30-50	0.7-1.0	125-160	1.7-1.9	1.4-1.7				6.5-9.0
DWS	All	10-20	0.5-1.5	70-100	1.2-1.5	1.0-1.2	20,000			5.0-9.0

**Historical Note**

New Section made by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-109. Numeric Water Quality Standards**

A. *E. coli* bacteria. The following water quality standards for *Escherichia coli* (*E. coli*) are expressed in colony forming units per 100 milliliters of water (cfu / 100 ml) or as a Most Probable Number (MPN):

<i>E. coli</i>	FBC	PBC
Geometric mean (minimum of four samples in 30 days)	126	126
Single sample maximum	235	575

B. pH. The following water quality standards for pH are expressed in standard units:

pH	DWS	FBC, PBC, A&W <sup>1</sup>	AgI	AgL
Maximum	9.0	9.0	9.0	9.0
Minimum	5.0	6.5	4.5	6.5

C. The maximum allowable increase in ambient water temperature, due to a thermal discharge is as follows:

A&Ww	A&Wedw	A&Wc
3.0° C	3.0° C	1.0° C

D. Suspended sediment concentration.

1. The following water quality standards for suspended sediment concentration, expressed in milligrams per liter (mg/L), are expressed as a median value determined from a minimum of four samples collected at least seven days apart:

A&Wc	A&Ww
25	80

2. The Director shall not use the results of a suspended sediment concentration sample collected during or within 48 hours after a local storm event to determine the median value.

E. Dissolved oxygen. A surface water meets the water quality standard for dissolved oxygen when either:

- The percent saturation of dissolved oxygen is equal to or greater than 90 percent, or
- The single sample minimum concentration for the designated use, as expressed in milligrams per liter (mg/L) is as follows:

Designated Use	Single sample minimum concentration in mg/L
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A&Ww 6.0

A&Wc 7.0

A&W edw for a sample taken from three hours after sunrise to sunset 3.0

A&W edw for a sample taken from sunset to three hours after sunrise 1.0

The single sample minimum concentration is the same for the designated use in a lake, but the sample must be taken from a depth no greater than one meter.

F. Nutrient criteria. The following are water quality standards for total phosphorus and total nitrogen (expressed in milligrams per liter (mg/L)) that apply to the surface waters listed below. A minimum of 10 samples, each taken at least 10 days apart in a consecutive 12-month period, are required to determine a 90th percentile. Not more than 10 percent of the samples may exceed the 90th percentile value listed below. The Director will apply these water quality standards for total phosphorus and total nitrogen to a surface water listed below, and to any source discharging to a tributary (ephemeral, intermittent, effluent dependent water or perennial) based on volume, frequency, magnitude and duration of the discharge and distance to the downstream surface water listed below:

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- Verde River and its perennial tributaries from the Verde headwaters to Bartlett Lake:

Surface Water	Annual Mean	90th Percentile	Single Sample Maximum
Total phosphorus	0.10	0.30	1.00
Total nitrogen	1.00	1.50	3.00

- Black River, Tonto Creek and their perennial tributaries for any segments that are not located on tribal lands:

Surface Water	Annual Mean	90th Percentile	Single Sample Maximum
Total phosphorus	0.10	0.20	0.80
Total nitrogen	0.50	1.00	2.00

- Salt River and its perennial tributaries above Roosevelt Lake for any segments that are not located on tribal lands:

Surface Water	Annual Mean	90th Percentile	Single Sample Maximum
Total phosphorus	0.12	0.30	1.00
Total nitrogen	0.60	1.20	2.00

- Salt River below Stewart Mountain Dam to its confluence with the Verde River:

Surface Water	Annual Mean	90th Percentile	Single Sample Maximum
Total phosphorus	0.05	–	0.20
Total nitrogen	0.60	–	3.00

- Little Colorado River and its perennial tributaries upstream from:

- The headwaters to River Reservoir,
- South Fork of Little Colorado River at 34°00'49"/109°24'18" to above South Fork Campground at 34°04'49"/109°24'18", and
- The headwaters of Water Canyon Creek to the Apache-Sitgreaves National Forest boundary:

Surface Water	Annual Mean	90th Percentile	Single Sample Maximum
Total phosphorus	0.08	0.10	0.75
Total nitrogen	0.60	0.75	1.10

- From the Little Colorado River and State Route 260 at 34°06'39"/109°18'55" to Lyman Lake:

Surface Water	Annual Mean	90th Percentile	Single Sample Maximum
Total phosphorus	0.20	0.30	0.75
Total nitrogen	0.70	1.20	1.50

- Colorado River at the Northern International Boundary near Morelos Dam:

Surface Water	Annual Mean	90th Percentile	Single Sample Maximum
Total phosphorus	–	0.33	–
Total nitrogen	–	2.50	–

- Oak Creek from its headwaters at 35°01'30"/111°44'12" to its confluence with the Verde River and the West Fork of Oak Creek from its headwaters at 35°02'44"/111°54'48" to its confluence with Oak Creek.

Surface Water	Annual Mean	90th Percentile	Single Sample Maximum
Total phosphorus	0.1	0.25	0.30
Total nitrogen	1.00	1.50	2.50

- No discharge of wastewater to Show Low Creek or its perennial tributaries upstream of and including Fools Hollow Lake shall exceed 0.16 mg/L total phosphates as P.

- No discharge of wastewater to the San Francisco River or its perennial tributaries upstream of Luna Lake Dam shall exceed 1.0 mg/L total phosphates as P.

G. Footnotes:

- "1" Includes A&Wc, A&Ww, A&Wedw, and A&We.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
 Amended effective April 24, 1996 (Supp. 96-2).  
 Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Amended by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**R18-11-110. Salinity Standards for the Colorado River**

- The flow-weighted average annual salinity in the lower main stem of the Colorado River shall not exceed the following criteria:

Location	Total Dissolved Solids
Below Hoover Dam	723 mg/L
Below Parker Dam	747 mg/L
At Imperial Dam	879 mg/L

- The plan of implementation contained in the "2014 Review, Water Quality Standards for Salinity, Colorado River System," approved October 2014, is incorporated by reference to preserve the basin-wide approach to salinity control developed by the Colorado River Basin Salinity Control Forum and to ensure compliance with the numeric criteria for salinity in subsection (A). This material does not include any later amendments or editions of the incorporated material. Copies of the incorporated material are available for inspection at the Arizona Department of Environmental Quality, 1110 West Washington Street, Phoenix, Arizona 85007 or may be obtained from the Colorado River Basin Salinity Control Forum, 106 West 500 South, Suite 101, Bountiful, Utah 84010-6232 or at <http://www.coloradoriversalinity.org/>.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
 Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Amended by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**R18-11-111. Analytical Methods**

- A person conducting an analysis of a sample taken to determine compliance with a water quality standard shall use an analytical method prescribed in A.A.C. R9-14-610, 40 CFR 136.3, or an alternative analytical method approved under A.A.C. R9-14-610(C).

- A test result from a sample taken to determine compliance with a water quality standard is valid only if the sample is analyzed by a laboratory that is licensed by the Arizona Department of Health Services, an out-of-state laboratory licensed under A.R.S. § 36-495.14, or a laboratory exempted under A.R.S. § 36-495.02, for the analysis performed.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
 Amended effective April 24, 1996 (Supp. 96-2).  
 Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final

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rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-112. Outstanding Arizona Waters**

- A.** The Director shall classify a surface water as an outstanding Arizona water (OAW) by rule.
- B.** The Director may adopt, under R18-11-115, a site-specific standard to maintain and protect existing water quality in an OAW.
- C.** Any person may nominate a surface water for classification as an OAW by filing a nomination with the Director. The nomination shall include:
1. A map and a description of the surface water;
  2. A written statement in support of the nomination, including specific reference to the applicable criteria for an OAW classification prescribed in subsection (D);
  3. Supporting evidence demonstrating that the criteria prescribed in subsection (D) are met; and
  4. Available water quality data relevant to establishing the baseline water quality of the proposed OAW.
- D.** The Director may classify a surface water as an OAW based upon the following criteria:
1. The surface water is a perennial or intermittent water;
  2. The surface water is in a free-flowing condition. For purposes of this subsection, “in a free-flowing condition” means that a surface water does not have an impoundment, diversion, channelization, rip-rapping or other bank armor, or another hydrological modification within the reach nominated for an OAW classification;
  3. The surface water has good water quality. For purposes of this subsection, “good water quality” means that the surface water has water quality that meets or is better than applicable surface water quality standards. A surface water that is listed as impaired under R18-11-604(E) is ineligible for OAW classification; and
  4. The surface water meets one or both of the following conditions:
    - a. The surface water is of exceptional recreational or ecological significance because of its unique attributes, such as the geology, flora and fauna, water quality, aesthetic value, or the wilderness characteristic of the surface water;
    - b. An endangered or threatened species is associated with the surface water and the existing water quality is essential to the species' maintenance and propagation or the surface water provides critical habitat for the threatened or endangered species. An endangered or threatened species is identified in “Endangered and Threatened Wildlife,” 50 CFR 17.11 (revised 2005), and “Endangered and Threatened Plants,” 50 CFR 17.12 (revised 2005). This material is incorporated by reference and does not include any later amendments or editions of the incorporated material. Copies of the incorporated material are available for inspection at the Arizona Department of Environmental Quality, 1110 West Washington Street, Phoenix, Arizona 85007 or may be obtained from the National Archives and Records Administration at <http://www.access.gpo.gov/nara/cfr/cfr-table-search.html#page1>.
- E.** The Director shall hold at least one public meeting in the local area of a surface water that is nominated for classification as an OAW to solicit public comment on the nomination.
- F.** The Director shall consider the following factors when deciding whether to classify a surface water as an OAW:
1. Whether there is the ability to manage the surface water and its watershed to maintain and protect existing water quality;
  2. The social and economic impact of Tier 3 antidegradation protection;
  3. The public comments in support of, or in opposition to, an OAW classification;
  4. The timing of the nomination relative to the triennial review of surface water quality standards;
  5. The consistency of an OAW classification with applicable water quality management plans; and
  6. Whether the nominated surface water is located within a national or state park, national monument, national recreation area, wilderness area, riparian conservation area, area of critical environmental concern, or it has another special use designation (for example, Wild and Scenic River).
- G.** The following surface waters are classified as OAWs:
1. The West Fork of the Little Colorado River, from its headwaters to Government Springs (approximately 9.1 river miles);
  2. Oak Creek, from its headwaters to its confluence with the Verde River (approximately 50.3 river miles);
  3. West Fork of Oak Creek, from its headwaters to its confluence with Oak Creek (approximately 15.8 river miles);
  4. Peeples Canyon Creek, from its headwaters to its confluence with the Santa Maria River (approximately 8.1 river miles);
  5. Burro Creek, from its headwaters to its confluence with Boulder Creek (approximately 29.5 miles);
  6. Francis Creek, from its headwaters to its confluence with Burro Creek (approximately 22.9 river miles);
  7. Bonita Creek, from its boundary of the San Carlos Indian Reservation to its confluence with the Gila River (approximately 14.7 river miles);
  8. Cienega Creek, from its confluence with Gardner Canyon to the USGS gaging station (#09484600) (approximately 28.3 river miles);
  9. Aravaipa Creek, from its confluence with Stowe Gulch to the downstream boundary of the Aravaipa Canyon Wilderness Area (approximately 15.5 river miles);
  10. Cave Creek, from its headwaters to the Coronado National Forest boundary (approximately 10.4 river miles);
  11. South Fork of Cave Creek, from its headwaters to its confluence with Cave Creek (approximately 8.6 river miles);
  12. Buehman Canyon Creek, from its headwaters to its confluence with unnamed tributary at 32°24'31"/110°32'08" (approximately 9.8 river miles);
  13. Lee Valley Creek, from its headwaters to Lee Valley Reservoir (approximately 1.6 river miles);
  14. Bear Wallow Creek, from its headwaters to the boundary of the San Carlos Indian Reservation (approximately 4.25 river miles);
  15. North Fork of Bear Wallow Creek, from its headwaters to its confluence with Bear Wallow Creek (approximately 3.8 river miles);
  16. South Fork of Bear Wallow Creek, from its headwaters to its confluence with Bear Wallow Creek (approximately 3.8 river miles);
  17. Snake Creek, from its headwaters to its confluence with the Black River (approximately 6.2 river miles);
  18. Hay Creek, from its headwaters to its confluence with the West Fork of the Black River (approximately 5.5 river miles);

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19. Stinky Creek, from the White Mountain Apache Indian Reservation boundary to its confluence with the West Fork of the Black River (approximately 3.0 river miles);
20. KP Creek, from its headwaters to its confluence with the Blue River (approximately 12.7 river miles);
21. Davidson Canyon, from the unnamed spring at 31°59'00"/110°38'49" to its confluence with Cienega Creek; and
22. Fossil Creek, from its headwaters at the confluence of Sandrook and Calf Pen Canyons above Fossil Springs to its confluence with the Verde River (approximately 17.2 river miles).

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1). Amended effective April 24, 1996 (Supp. 96-2). Added "water quality standards" to R18-11-112, previously omitted in error (Supp. 96-3). Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Amended by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**R18-11-113. Effluent-Dependent Waters**

- A. The Director shall classify a surface water as an effluent-dependent water by rule.
- B. The Director may adopt, under R18-11-115, a site-specific water quality standard for an effluent-dependent water.
- C. Any person may submit a petition for rule adoption requesting that the Director classify a surface water as an effluent-dependent water. The petition shall include:
  1. A map and a description of the surface water;
  2. Information that demonstrates that the surface water consists of a point source discharge of wastewater; and
  3. Information that demonstrates that, without a point source discharge of a wastewater, the receiving water is an ephemeral water.
- D. The Director shall use the water quality standards that apply to an effluent-dependent water to derive water quality-based effluent limits for a point source discharge of wastewater to an ephemeral water.
- E. The Director may use aquatic and wildlife (edw) acute standards only to derive water quality based effluent limits for a sporadic, infrequent, or emergency point source discharge to an ephemeral water or to an effluent-dependent water. The Director shall consider the following factors when deciding whether to apply A&Wedw (acute) standards:
  1. The amount, frequency, and duration of the discharge;
  2. The length of time water may be present in the receiving water;
  3. The distance to a downstream water with aquatic and wildlife chronic standards; and
  4. The likelihood of chronic exposure to pollutants.
- F. The Director may establish alternative water quality-based effluent limits in an AZPDES permit based on seasonal differences in the discharge.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1). Amended effective December 18, 1992 (Supp. 92-4). Amended effective April 24, 1996 (Supp. 96-2). Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-114. Mixing Zones**

- A. The Director may establish a mixing zone for a point source discharge to a surface water as a condition of an AZPDES per-

mit. A mixing zone is prohibited in an ephemeral water or where there is no water for dilution.

- B. The owner or operator of a point source seeking the establishment of a mixing zone shall submit a request to the Director for a mixing zone as part of an application for an AZPDES permit. The request shall include:
  1. An identification of the pollutant for which the mixing zone is requested;
  2. A proposed outfall design;
  3. A definition of the boundary of the proposed mixing zone. For purposes of this subsection, the boundary of a mixing zone means the location where the concentration of wastewater across a transect of the surface water differs by less than five percent; and
  4. A complete and detailed description of the existing physical, biological, and chemical conditions of the receiving water and the predicted impact of the proposed mixing zone on those conditions.
- C. The Director shall review the request for a mixing zone to determine whether the written request is complete. If the request is incomplete, the Director shall provide the applicant with a list of the additional information required.
- D. The Director shall consider the following factors when deciding whether to grant or deny a request for a mixing zone:
  1. The assimilative capacity of the receiving water;
  2. The likelihood of adverse human health effects;
  3. The location of drinking water plant intakes and public swimming areas;
  4. The predicted exposure of biota and the likelihood that resident biota will be adversely affected;
  5. Bioaccumulation;
  6. Whether there will be acute toxicity in the mixing zone, and, if so, the size of the zone of initial dilution;
  7. The known or predicted safe exposure levels for the pollutant for which the mixing zone is requested;
  8. The size of the mixing zone;
  9. The location of the mixing zone relative to biologically sensitive areas in the surface water;
  10. The concentration gradient of the pollutant within the mixing zone;
  11. Sediment deposition;
  12. The potential for attracting aquatic life to the mixing zone; and
  13. The cumulative impacts of other mixing zones and other discharges to the surface water.
- E. Director determination.
  1. The Director shall deny a request to establish a mixing zone if a water quality standard will be violated outside the boundaries of the proposed mixing zone. The Director shall notify the owner or operator of the denial in writing and shall state the reason for the denial.
  2. If the Director approves the request to establish a mixing zone, the Director shall establish the mixing zone as a condition of an AZPDES permit. The Director shall include any mixing zone condition in the AZPDES permit that is necessary to protect human health and the designated uses of the surface water.
- F. Any person who is adversely affected by the Director's decision to grant or deny a request for a mixing zone may appeal the decision under A.R.S. § 49-321 et seq. and A.R.S. § 41-1092 et seq.
- G. The Director shall reevaluate a mixing zone upon issuance, reissuance, or modification of the AZPDES permit for the point source or a modification of the outfall structure.
- H. Mixing zone requirements.

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1. The length of a mixing zone shall not exceed 500 meters in a stream.
  2. The total horizontal area allocated to all mixing zones on a lake shall not exceed 10 percent of the surface area of the lake.
  3. Adjacent mixing zones in a lake shall not overlap or be located closer together than the greatest horizontal dimension of the largest mixing zone.
  4. A mixing zone shall provide for a zone of passage of not less than 50 percent of the cross-sectional area of a river or stream.
  5. The design of any discharge outfall shall maximize initial dilution of the wastewater in a surface water.
  6. The size of the zone of initial dilution in a mixing zone shall prevent lethality to organisms passing through the zone of initial dilution.
- I.** The Director shall not establish a mixing zone in an AZPDES permit for the following persistent, bioaccumulative pollutants:
1. Chlordane,
  2. DDT and its metabolites (DDD and DDE),
  3. Dieldrin,
  4. Dioxin,
  5. Endrin,
  6. Endrin aldehyde,
  7. Heptachlor,
  8. Heptachlor epoxide,
  9. Lindane,
  10. Mercury,
  11. Polychlorinated biphenyls (PCBs), and
  12. Toxaphene.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
 Amended effective April 24, 1996 (Supp. 96-2).  
 Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-115. Site-Specific Standards**

- A.** The Director shall adopt a site-specific standard by rule.
- B.** The Director may adopt a site-specific standard based upon a request or upon the Director's initiative for any of the following reasons:
1. Local physical, chemical, or hydrological conditions of a surface water such as pH, hardness, fate and transport, or temperature alters the biological availability or toxicity of a pollutant;
  2. The sensitivity of resident aquatic organisms that occur in a surface water to a pollutant differs from the sensitivity of the species used to derive the numeric water quality standards to protect aquatic life in Appendix A;
  3. Resident aquatic organisms that occur in a surface water represent a narrower mix of species than those in the dataset used by the Department to derive numeric water quality standards to protect aquatic life in Appendix A;
  4. The natural background concentration of a pollutant is greater than the numeric water quality standard to protect aquatic life prescribed in Appendix A. "Natural background" means the concentration of a pollutant in a surface water due only to non-anthropogenic sources.
  5. Natural adaptive processes have enabled a viable, balanced population of aquatic life to exist in a surface water where the level of a pollutant is greater than the numeric water quality standard to protect aquatic life prescribed in Appendix A; or

6. Other factors or combination of factors that upon review by the Director warrant changing a numeric water quality standard for a surface water.

**C.** Site-specific standard by request. To request that the Director adopt a site-specific standard, a person must conduct a study to support the development of a site-specific standard using a scientifically-defensible procedure.

1. Before conducting the study, a person shall submit a study outline to the Director for approval that contains the following elements:
  - a. Identifies the pollutant;
  - b. Describes the reach's boundaries;
  - c. Uses one of the following procedures, as defined by the most recent EPA guidance documents:
    - i. The recalculation procedure,
    - ii. The water effects ratio for metals,
    - iii. The streamlined water effects ratio, or
    - iv. The Biotic ligand model.
  - d. Demonstrates that all designated uses are protected.
2. Alternatively, a study outline submitted for the Director's approval must contain the following elements:
  - a. Identifies the pollutant;
  - b. Describes the reach's boundaries;
  - c. Describes the hydrologic regime of the waterbody;
  - d. Describes the scientifically-defensible procedure, which can include relevant aquatic life studies, ecological studies, laboratory tests, biological translators, fate and transport models, and risk analyses;
  - e. Describes and compares the taxonomic composition, distribution and density of the aquatic biota within the reach to a reference reach and describes the basis of any major taxonomic differences;
  - f. Describes the pollutant's effect on the affected species or appropriate surrogate species and on the other designated uses listed for the reach;
  - g. Demonstrates that all designated uses are protected; and
  - h. A person seeking to develop a site-specific standard based on natural background may use statistical or modeling approaches to determine natural background concentration. Modeling approaches include Better Assessment Science Integrating Source and Nonpoint Sources (Basins), Hydrologic Simulation Program-Fortran (HSPF), and Hydrologic Engineering Center (HEC) programs developed by the U.S. Army Corps of Engineers.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
 Amended effective April 24, 1996 (Supp. 96-2). Section repealed by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). New Section made by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Amended by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**R18-11-116. Resource Management Agencies**

Nothing in this Article prohibits fisheries management activities by the Arizona Game and Fish Department or the U.S. Fish and Wildlife Service. This Article does not exempt fish hatcheries from AZPDES permit requirements.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
 Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-117. Canals and Urban Park Lakes**

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- A. Nothing in this Article prevents the routine physical or mechanical maintenance of canals, drains, and the urban lakes identified in Appendix B. Physical or mechanical maintenance includes dewatering, lining, dredging, and the physical, biological, or chemical control of weeds and algae. Increases in turbidity that result from physical or mechanical maintenance activities are permitted in canals, drains, and the urban lakes identified in Appendix B.
- B. The discharge of lubricating oil associated with the start-up of well pumps that discharge to canals is not a violation of R18-11-108(B).

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
Amended effective April 24, 1996 (Supp. 96-2).  
Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-118. Dams and Flood Control Structures**

Increases in turbidity that result from the routine physical or mechanical maintenance of a dam or flood control structure are not violations of this Article. Nothing in this Article requires the release of water from a dam or a flood control structure.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
Amended effective April 24, 1996 (Supp. 96-2).  
Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-119. Natural background**

Where the concentration of a pollutant exceeds a water quality standard and the exceedance is not caused by human activity but is due solely to naturally-occurring conditions, the exceedance shall not be considered a violation of the water quality standard.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).

**R18-11-120. Enforcement**

- A. Any person who causes a violation of a water quality standard or any provision of this Article is subject to the enforcement provisions in A.R.S. Title 49, Chapter 2, Article 4.
- B. The Department may establish a numeric water quality standard at a concentration that is below the practical quantitation limit. In such cases, the water quality standard is enforceable at the practical quantitation limit.
- C. The Department shall determine compliance with acute aquatic and wildlife criteria from the analytical result of a grab sample. Compliance with chronic aquatic and wildlife criteria shall be determined from the geometric mean of the analytical results of the last four samples taken at least 24 hours apart.
- D. A person is not subject to penalties for violation of a water quality standard provided that the person is in compliance with the provisions of a compliance schedule issued under R18-11-121.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
Amended effective April 24, 1996 (Supp. 96-2).  
Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1).

**R18-11-121. Schedules of Compliance**

A compliance schedule in an AZPDES permit shall require the permittee to comply with a discharge limitation based upon a new or revised water quality standard as soon as possible to achieve compliance. The permittee shall demonstrate that all requirements under § 301(b) and § 306 of the Clean Water Act [33 U.S.C. 1311(b) and 1316] are achieved and that the point source cannot

comply with a discharge limitation based upon the new or revised water quality standard through the application of existing water pollution control technology, operational changes, or source reduction. In establishing a compliance schedule, the Director shall consider:

1. How much time the permittee has already had to meet any effluent limitations under a prior permit;
2. The extent to which the permittee has made good faith efforts to comply with the effluent limitations and other requirements in a prior permit;
3. Whether treatment facilities, operations, or measures must be modified to meet the effluent limitations;
4. How long any necessary modifications would take to implement; and
5. Whether the permittee would be expected to use the same treatment facilities, operations or other measures to meet the effluent limitations as it would have used to meet the effluent limitations in a prior permit.

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1).  
Amended effective April 24, 1996 (Supp. 96-2).  
Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Amended by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**R18-11-122. Variances**

- A. The Director shall consider a variance from a water quality standard for a point source discharge if the discharger demonstrates that treatment more advanced than that required to comply with technology-based effluent limitations is necessary to comply with the water quality standard and:
1. It is not technically feasible to achieve compliance within the next five years,
  2. The cost of the treatment would result in substantial and widespread economic and social impact, or
  3. Human-caused conditions or sources of pollution prevent attainment of the water quality standard and cannot be remedied within the next five years.
- B. If the Director grants a variance for a point source discharge:
1. The Director shall issue the variance for a fixed term not to exceed five years,
  2. The variance shall apply only on a pollutant-specific basis. The point source discharge shall meet all other applicable water quality standards for which a variance is not granted, and
  3. The variance shall not modify a water quality standard. Other point source discharges to the surface water shall meet applicable water quality standards.
- C. Upon expiration of a variance, a point source discharger shall either comply with the water quality standard or apply for renewal of the variance. To renew a variance, the applicant shall demonstrate reasonable progress towards compliance with the water quality standard during the term of the variance.
- D. The Director shall reevaluate a variance upon the issuance, reissuance, or modification of the AZPDES permit for the point source discharge.
- E. A person who seeks a variance from a water quality standard shall submit a written request for a variance to the Director. A request for a variance shall include the following information:
1. Identification of the specific pollutant and water quality standard for which a variance is sought;
  2. Identification of the receiving surface water;
  3. For an existing point source discharge, a detailed description of the existing discharge control technologies that are used to achieve compliance with applicable water quality standards. For a new point source discharge, a detailed

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- description of the proposed discharge control technologies that will be used to achieve compliance with applicable water quality standards;
4. Documentation that the existing or proposed discharge control technologies will comply with applicable technology-based effluent limitations and that more advanced treatment technology is necessary to achieve compliance with the water quality standard for which a variance is sought;
  5. A detailed discussion of the reasons why compliance with the water quality standard cannot be achieved;
  6. A detailed discussion of the discharge control technologies that are available for achieving compliance with the water quality standard for which a variance is sought;
  7. Documentation of one of the following:
    - a. That it is not technically feasible to install and operate any of the available discharge control technologies to achieve compliance with the water quality standard for which a variance is sought,
    - b. That installation and operation of each of the available discharge technologies to achieve compliance with the water quality standard would result in substantial and widespread economic and social impact, or
    - c. That human-caused conditions or sources of pollution prevent the attainment of the water quality standard for which the variance is sought and it is not possible to remedy the conditions or sources of pollution within the next five years,
  8. Documentation that the point source discharger has reduced, to the maximum extent practicable, the discharge of the pollutant for which a variance is sought through implementation of a local pretreatment, source reduction, or waste minimization program; and
  9. A detailed description of proposed interim discharge limitations that represent the highest level of treatment achievable by the point source discharger during the term of the variance.
- F.** The Director shall consider the following factors when deciding whether to grant or deny a variance request:
1. Bioaccumulation,
  2. The predicted exposure of biota and the likelihood that resident biota will be adversely affected,
  3. The known or predicted safe exposure levels for the pollutant for which the variance is requested, and
  4. The likelihood of adverse human health effects.
- G.** The Director shall issue a public notice and provide an opportunity for a public hearing on whether the request for a variance should be granted or denied under A.A.C. R18-9-A907 and A.A.C. R18-9-A908. An interested party may request a public hearing on a variance under A.A.C. R18-9-A908(B).
- H.** Any variance granted by the Director is subject to review and approval by the Regional Administrator.
- I.** Any person who is adversely affected by a decision of the Director to grant or deny a variance and who has exercised any right to comment on the decision may appeal the decision under A.R.S. § 49-321 et seq. and A.R.S. § 41-1092 et seq.
- J.** The Director shall not grant a variance for a point source discharge to an OAW listed in R18-11-112(G).

**Historical Note**

Adopted effective April 24, 1996 (Supp. 96-2). Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

**R18-11-123. Discharge Prohibitions**

- A.** The discharge of wastewater to the following surface waters is prohibited:
1. Sabino Canyon Creek;
  2. Vekol Wash, upstream of the Ak-Chin Indian Reservation; and
  3. Smith Wash, upstream of the Ak-Chin Indian Reservation.
- B.** The discharge to Lake Powell of human body wastes and the wastes from toilets and other receptacles intended to receive or retain wastes from a vessel is prohibited.

**Historical Note**

Adopted effective April 24, 1996 (Supp. 96-2). Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4).

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Appendix A. Numeric Water Quality Standards

Table 1. Water Quality Criteria By Designated Use (see f)

Parameter	CAS NUMBER	DWS (µg/L)	FC (µg/L)	FBC (µg/L)	PBC (µg/L)	A&Wc Acute (µg/L)	A&Wc Chronic (µg/L)	A&Ww Acute (µg/L)	A&Ww Chronic (µg/L)	A&Wedw Acute (µg/L)	A&Wedw Chronic (µg/L)	A&We Acute (µg/L)	AgI (µg/L)	AgL (µg/L)
Acenaphthene	83329	420	198	56,000	56,000	850	550	850	550	850	550			
Acrolein	107028	3.5	1.9	467	467	34	30	34	30	34	30			
Acrylonitrile	107131	0.06	0.2	3	37,333	3,800	250	3,800	250	3,800	250			
Alachlor	15972608	2		9,333	9,333	2,500	170	2,500	170	2,500	170			
Aldrin	309002	0.002	0.00005	0.08	28	3		3		3		4.5	0.003	See (b)
Alpha Particles (Gross Radioactivity)		15 pCi/L See (h)												
Ammonia	7664417					See (e) & Table 11	See (e) & Table 12	See (e) & Table 11	See (e) & Table 12	See (e) & Table 11	See (e) & Table 12			
Anthracene	120127	2,100	74	280,000	280,000									
Antimony	7440360	6 T	640 T	747 T	747 T	88 D	30 D	88 D	30 D	1,000 D	600 D			
Arsenic	7440382	10 T	80 T	30 T	280 T	340 D	150 D	340 D	150 D	340 D	150 D	440 D	2,000 T	200 T
Asbestos	1332214	See (a)												
Atrazine	1912249	3		32,667	32,667									
Barium	7440393	2,000 T		98,000 T	98,000 T									
Benz(a)anthracene	56553	0.005	0.02	0.2	0.2									
Benzene	71432	5	140	93	3,733	2,700	180	2,700	180	8,800	560			
3, 4 Benzofluoranthene	205992	0.005	0.02	1.9	1.9									
Benzidine	92875	0.0002	0.0002	0.01	2,800	1,300	89	1,300	89	1,300	89	10,000	0.01	0.01
Benzo(a)pyrene	50328	0.2	0.02	0.2	0.2									
Benzo(k)fluoranthene	207089	0.005	0.02	1.9	1.9									
Beryllium	7440417	4 T	84 T	1,867 T	1,867 T	65 D	5.3 D	65 D	5.3 D	65 D	5.3 D			
Beta particles and photon emitters		4 millirems /year See (i)												
Bis(2-chloroethyl) ether	111444	0.03	0.5	1	1	120,000	6,700	120,000	6,700	120,000	6,700			
Bis(2-chloroisopropyl) ether	108601	280	3,441	37,333	37,333									
Boron	7440428	1,400 T		186,667 T	186,667 T								1,000 T	
Bromodichloromethane	75274	TTHM See (g)	17	TTHM	18,667									
p-Bromodiphenyl ether	101553					180	14	180	14	180	14			
Bromoform	75252	TTHM See (g)	133	180	18,667	15,000	10,000	15,000	10,000	15,000	10,000			
Bromomethane	74839	9.8	299	1,307	1,307	5,500	360	5,500	360	5,500	360			
Butyl benzyl phthalate	85687	1,400	386	186,667	186,667	1,700	130	1,700	130	1,700	130			
Cadmium	7440439	5 T	84 T	700 T	700 T	See (d) & Table 2	See (d) & Table 3	See (d) & Table 2	See (d) & Table 3	See (d) & Table 2	See (d) & Table 3	See (d) & Table 2	50	50
Carbofuran	1563662	40		4,667	4,667	650	50	650	50	650	50			
Carbon tetrachloride	56235	5	2	11	980	18,000	1,100	18,000	1,100	18,000	1,100			
Chlordane	57749	2	0.0008	4	467	2.4	0.004	2.4	0.2	2.4	0.2	3.2		
Chlorine (total residual)	7782505	4,000		4,000	4,000	19	11	19	11	19	11			
Chlorobenzene	108907	100	1,553	18,667	18,667	3,800	260	3,800	260	3,800	260			
2-Chloroethyl vinyl ether	110758					180,000	9,800	180,000	9,800	180,000	9,800			
Chloroform	67663	TTHM See (g)	470	230	9,333	14,000	900	14,000	900	14,000	900			
p-Chloro-m-cresol	59507					15	4.7	15	4.7	15	4.7	48,000		
Chloromethane	74873					270,000	15,000	270,000	15,000	270,000	15,000			
2-Chloronaphthalene	91587	560	317	74,667	74,667									
2-Chlorophenol	95578	35	30	4,667	4,667	2,200	150	2,200	150	2,200	150			
Chloropyrifos	2921882	21		2,800	2,800	0.08	0.04	0.08	0.04	0.08	0.04			
Chromium III	16065831		75,000 T	1,400,000 T	1,400,000 T	See (d) & Table 4	See (d) & Table 4	See (d) & Table 4	See (d) & Table 4	See (d) & Table 4	See (d) & Table 4	See (d) & Table 4		
Chromium VI	18540299	21 T	150 T	2,800 T	2,800 T	16 D	11 D	16 D	11 D	16 D	11 D	34 D		
Chromium (Total)	7440473	100 T											1,000	1,000
Chrysene	218019	0.005	0.02	19	19									
Copper	7440508	1,300 T		1,300 T	1,300 T	See (d) & Table 5	See (d) & Table 5	See (d) & Table 5	See (d) & Table 5	See (d) & Table 5	See (d) & Table 5	See (d) & Table 5	5,000 T	500 T
Cyanide (as free cyanide)	57125	200 T	16,000 T	18,667 T	18,667 T	22 T	5.2 T	41 T	9.7 T	41 T	9.7 T	84 T		200 T
Dalapon	75990	200	8,000	28,000	28,000									
Dibenz (ah) anthracene	53703	0.005	0.02	1.9	1.9									
Dibromochloromethane	124481	TTHM See (g)	13	TTHM	18,667									
1,2-Dibromo-3-chloropropane	96128	0.2		2,800	2,800									
1,2-Dibromoethane	106934	0.05		8,400	8,400									
Dibutyl phthalate	84742	700	899	93,333	93,333	470	35	470	35	470	35	1,100		
1,2-Dichlorobenzene	95501	600	205	84,000	84,000	790	300	1,200	470	1,200	470	5,900		
1,3-Dichlorobenzene	541731					2,500	970	2,500	970	2,500	970			
1,4-Dichlorobenzene	106467	75	5,755	373,333	373,333	560	210	2,000	780	2,000	780	6,500		
3,3'-Dichlorobenzidine	91941	0.08	0.03	3	3									
p,p'-Dichlorodiphenyltrichloroethane (DDT) and metabolites (DDD) and (DDE)	50293	0.1	0.0002	4	467	1.1	0.001	1.1	0.001	1.1	0.001	1.1	0.001	0.001
1,2-Dichloroethane	107062	5	37	15	186,667	59,000	41,000	59,000	41,000	59,000	41,000			
1,1-Dichloroethylene	75354	7	7,143	46,667	46,667	15,000	950	15,000	950	15,000	950			
1,2-cis-Dichloroethylene	156592	70		70										
1,2-trans-Dichloroethylene	156605	100	10,127	18,667	18,667	68,000	3,900	68,000	3,900	68,000	3,900			

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Parameter	CAS NUMBER	DWS (µg/L)	FC (µg/L)	FBC (µg/L)	PBC (µg/L)	A&Wc Acute (µg/L)	A&Wc Chronic (µg/L)	A&Ww Acute (µg/L)	A&Ww Chronic (µg/L)	A&Wedw Acute (µg/L)	A&Wedw Chronic (µg/L)	A&We Acute (µg/L)	AgI (µg/L)	AgL (µg/L)
Dichloromethane	75092	5	593	190	56,000	97,000	5,500	97,000	5,500	97,000	5,500			
2,4-Dichlorophenol	120832	21	59	2,800	2,800	1,000	88	1,000	88	1,000	88			
2,4-Dichlorophenoxyacetic acid (2,4-D)	94757	70		9,333	9,333									
1,2-Dichloropropane	78875	5	17,518	84,000	84,000	26,000	9,200	26,000	9,200	26,000	9,200			
1,3-Dichloropropene	542756	0.7	42	420	28,000	3,000	1,100	3,000	1,100	3,000	1,100			
Dieldrin	60571	0.002	0.00005	0.09	47	0.2	0.06	0.2	0.06	0.2	0.06	4	0.003	See (b)
Diethyl phthalate	84662	5,600	8,767	746,667	746,667	26,000	1,600	26,000	1,600	26,000	1,600			
Di (2-ethylhexyl) adipate	103231	400		560,000	560,000									
Di (2-ethylhexyl) phthalate	117817	6	3	100	18,667	400	360	400	360	400	360	3,100		
2,4-Dimethylphenol	105679	140	171	18,667	18,667	1,000	310	1,000	310	1,000	310	150,000		
Dimethyl phthalate	131113					17,000	1,000	17,000	1,000	17,000	1,000			
4,6-Dinitro-o-cresol	534521	28	582	3,733	3,733	310	24	310	24	310	24			
2,4-Dinitrophenol	51285	14	1,067	1,867	1,867	110	9.2	110	9.2	110	9.2			
2,4-Dinitrotoluene	121142	14	421	1,867	1,867	14,000	860	14,000	860	14,000	860			
2,6-Dinitrotoluene	606202	0.05		2	3,733									
Di-n-octyl phthalate	117840	2,800		373,333	373,333									
Dinoseb	88857	7		933	933									
1,2-Diphenylhydrazine	122667	0.04	0.2	1.8	1.8	130	11	130	11	130	11			
Diquat	85007	20		2,053	2,053									
Endosulfan sulfate	1031078	42	18	5,600	5,600	0.2	0.06	0.2	0.06	0.2	0.06	3		
Endosulfan (Total)	115297	42	18	5,600	5,600	0.2	0.06	0.2	0.06	0.2	0.06	3		
Endothall	145733	100		18,667	18,667									
Endrin	72208	2	0.06	280	280	0.09	0.04	0.09	0.04	0.09	0.04	0.7	0.004	0.004
Endrin aldehyde	7421933					0.09	0.04	0.09	0.04	0.09	0.04	0.7		
Ethylbenzene	100414	700	2,133	93,333	93,333	23,000	1,400	23,000	1,400	23,000	1,400			
Fluoranthene	206440	280	28	37,333	37,333	2,000	1,600	2,000	1,600	2,000	1,600			
Fluorene	86737	280	1,067	37,333	37,333									
Fluoride	7782414	4,000		140,000	140,000									
Glyphosate	1071836	700	266,667	93,333	93,333									
Guthion	86500					0.01		0.01			0.01			
Heptachlor	76448	0.4	0.00008	0.4	467	0.5	0.004	0.5	0.004	0.6	0.01	0.9		
Heptachlor epoxide	1024573	0.2	0.00004	0.2	12	0.5	0.004	0.5	0.004	0.6	0.01	0.9		
Hexachlorobenzene	118741	1	0.0003	1	747	6	3.7	6	3.7	6	3.7			
Hexachlorobutadiene	87683	0.4	18	18	187	45	8.2	45	8.2	45	8.2			
Hexachlorocyclohexane alpha	319846	0.006	0.005	0.22	7,467	1,600	130	1,600	130	1,600	130	1,600		
Hexachlorocyclohexane beta	319857	0.02	0.02	0.78	560	1,600	130	1,600	130	1,600	130	1,600		
Hexachlorocyclohexane delta	319868					1,600	130	1,600	130	1,600	130	1,600		
Hexachlorocyclohexane gamma (lindane)	58899	0.2	1.8	280	280	1	0.08	1	0.28	1	0.61	11		
Hexachlorocyclopentadiene	77474	50	580	9,800	9,800	3.5	0.3	3.5	0.3	3.5	0.3			
Hexachloroethane	67721	2.5	3.3	100	933	490	350	490	350	490	350	850		
Hydrogen sulfide	7783064						2 See (c)		2 See (c)			2 See (c)		
Indeno (1,2,3-cd) pyrene	193395	0.05	0.49	1.9	1.9									
Iron	7439896						1,000 D		1,000 D			1,000 D		
Isophorone	78591	37	961	1,500	186,667	59,000	43,000	59,000	43,000	59,000	43,000			
Lead	7439971	15 T		15 T	15 T	See (d) & Table 6	10,000 T	100 T						
Malathion	121755	140		18,667	18,667		0.1		0.1		0.1			
Manganese	7439965	980		130,667	130,667								10,000	
Mercury	7439976	2 T		280 T	280 T	2.4 D	0.01 D	2.4 D	0.01 D	2.4 D	0.01 D	5 D		10 T
Methoxychlor	72435	40		4,667	4,667		0.03		0.03		0.03			
Methylmercury			0.3 mg/kg											
Mirex	2385855	1		187	187		0.001		0.001		0.001			
Naphthalene	91203	140	1,524	18,667	18,667	1,100	210	3,200	580	3,200	580			
Nickel	7440020	140 T	4,600 T	28,000 T	28,000 T	See (d) & Table 7								
Nitrate	14797558	10,000		3,733,333	3,733,333									
Nitrite	14797650	1,000		233,333	233,333									
Nitrate + Nitrite		10,000												
Nitrobenzene	98953	3.5	138	467	467	1,300	850	1,300	850	1,300	850			
p-Nitrophenol	100027					4,100	3,000	4,100	3,000	4,100	3,000			
N-nitrosodimethylamine	62759	0.001	3	0.03	0.03									
N-nitrosodi-n-phenylamine	86306	7.1	6	290	290	2,900	200	2,900	200	2,900	200			
N-nitrosodi-n-propylamine	621647	0.005	0.5	0.2	88,667									
Oxamyl	23135220	200		23,333	23,333									
Parathion	56382					0.07	0.01	0.07	0.01	0.07	0.01			
Paraquat	1910425	32		4,200	4,200	100	54	100	54	100	54			
Pentachlorophenol	87865	1	1,000	12	28,000	See (e), (j) & Table 10								
Permethrin	52645531	350		46,667	46,667	0.3	0.2	0.3	0.2	0.3	0.2			

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Parameter	CAS NUMBER	DWS (µg/L)	FC (µg/L)	FBC (µg/L)	PBC (µg/L)	A&Wc Acute (µg/L)	A&Wc Chronic (µg/L)	A&Ww Acute (µg/L)	A&Ww Chronic (µg/L)	A&Wedw Acute (µg/L)	A&Wedw Chronic (µg/L)	A&We Acute (µg/L)	AgI (µg/L)	AgL (µg/L)
Phenanthrene	85018					30	6.3	30	6.3	30	6.3			
Phenol	108952	2,100	37	280,000	280,000	5,100	730	7,000	1,000	7,000	1,000	180,000		
Picloram	1918021	500	2,710	65,333	65,333									
Polychlorinatedbiphenyls (PCBs)	1336363	0.5	0.00006	19	19	2	0.01	2	0.02	2	0.02	11	0.001	0.001
Pyrene	129000	210	800	28,000	28,000									
Radium 226 + Radium 228		5 pCi/L												
Selenium	7782492	50 T	667 T	4,667 T	4,667 T		2 T		2 T		2 T	33 T	20 T	50 T
Silver	7440224	35 T	8,000 T	4,667 T	4,667 T	See (d) & Table 8		See (d) & Table 8		See (d) & Table 8		See (d) & Table 8		
Simazine	112349	4		4,667	4,667									
Strontium		8 pCi/L												
Styrene	100425	100		186,667	186,667	5,600	370	5,600	370	5,600	370			
Sulfides												100		
2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	1746016	0.00003	5x10-9	0.00003	0.0009	0.01	0.005	0.01	0.005	0.01	0.005	0.1		
1,1,2,2-Tetrachloroethane	79345	0.2	4	7	56,000	4,700	3,200	4,700	3,200	4,700	3,200			
Tetrachloroethylene	127184	5	261	9,333	9,333	2,600	280	6,500	680	6,500	680	15,000		
Thallium	7440280	2 T	7.2 T	75 T	75 T	700 D	150 D	700 D	150 D	700 D	150 D			
Toluene	108883	1,000	201,000	280,000	280,000	8,700	180	8,700	180	8,700	180			
Toxaphene	8001352	3	0.0003	1.3	933	0.7	0.0002	0.7	0.0002	0.7	0.0002	11	0.005	0.005
Tributyltin						0.5	0.07	0.5	0.07	0.5	0.07			
1,2,4-Trichlorobenzene	120821	70	70	9,333	9,333	750	130	1,700	300	1,700	300			
1,1,1-Trichloroethane	71556	200	428,571	1,866,667	1,866,667	2,600	1,600	2,600	1,600	2,600	1,600	1,000		
1,1,2-Trichloroethane	79005	5	16	25	3,733	18,000	12,000	18,000	12,000	18,000	12,000			
Trichloroethylene	79016	5	29	280,000	280	20,000	1,300	20,000	1,300	20,000	1,300			
2,4,6-Trichlorophenol	88062	3.2	2	130	130	160	25	160	25	160	25	3,000		
2,4,5-Trichlorophenoxypropionic acid (2,4,5-TP)	93721	50		7,467	7,467									
Trihalomethanes (T)		80												
Tritium		20,000 pCi/L												
Uranium	7440611	30 D		2,800	2,800									
Vinyl chloride	75014	2	5	2	2,800									
Xylenes (T)	1330207	10,000		186,667	186,667									
Zinc	7440666	2,100 T	5,106 T	280,000 T	280,000 T	See (d) & Table 9	See (d) & Table 9	See (d) & Table 9	See (d) & Table 9	See (d) & Table 9	See (d) & Table 9	See (d) & Table 9	10,000 T	25,000 T

Footnotes

- a. The asbestos standard is 7 million fibers (longer than 10 micrometers) per liter.
- b. The aldrin/dieldrin standard is exceeded when the sum of the two compounds exceeds 0.003 µg/L.
- c. In lakes, the acute criteria for hydrogen sulfide apply only to water samples taken from the epilimnion, or the upper layer of a lake or reservoir.
- d. Hardness, expressed as mg/L CaCO<sub>3</sub>, is determined according to the following criteria:
  - i. If the receiving water body has an A&Wc or A&Ww designated use, then hardness is based on the hardness of the receiving water body from a sample taken at the same time that the sample for the metal is taken, except that the hardness may not exceed 400 mg/L CaCO<sub>3</sub>.
  - ii. If the receiving water has an A&Wedw or A&We designated use, then the hardness is based on the hardness of the effluent from a sample taken at the same time that the sample for the metal is taken, except that the hardness may not exceed 400 mg/L CaCO<sub>3</sub>.
  - iii. The mathematical equations for the hardness-dependent parameter represent the water quality standards. Examples of criteria for the hardness-dependent parameters have been calculated and are presented in separate tables at the end of Appendix A for the convenience of the user.
- e. pH is determined according to the following criteria:
  - i. If the receiving water has an A&Wc or A&Ww designated use, then pH is based on the pH of the receiving water body from a sample taken at the same time that the sample for pentachlorophenol or ammonia is taken.
  - ii. If the receiving water body has an A&Wedw or A&We designated use, then the pH is based on the pH of the effluent from a sample taken at the same time that the sample for pentachlorophenol or ammonia is taken.
  - iii. The mathematical equations for ammonia represent the water quality standards. Examples of criteria for ammonia have been calculated and are presented in separate tables at the end of Appendix A for the convenience of the user.
- f. Table 1 abbreviations.
  - i. µg/L = micrograms per liter,
  - ii. mg/kg = milligrams per kilogram,
  - iii. pCi/L = picocuries per liter,
  - iv. D = dissolved,
  - v. T = total recoverable,
  - vi. TTHM indicates that the chemical is a trihalomethane.

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- g. The total trihalomethane (TTHM) standard is exceeded when the sum of these four compounds exceeds 80 µg/L, as a rolling annual average.
- h. The concentration of gross alpha particle activity includes radium-226, but excludes radon and uranium.
- i. The average annual concentration of beta particle activity and photon emitters from manmade radionuclides shall not produce an annual dose equivalent to the total body or any internal organ greater than four millirems per year.
- j. The mathematical equations for the pH-dependent parameters represent the water quality standards. Examples of criteria for the pH-dependent parameters have been calculated and are presented in separate tables at the end of Appendix A for the convenience of the user.
- k. Abbreviations for the mathematical equations are as follows:  
 e = the base of the natural logarithm and is a mathematical constant equal to 2.71828  
 LN = is the natural logarithm  
 CMC = Criterion Maximum Concentration (acute)  
 CCC= Criterion Continuous Concentration (chronic)

**Historical Note**

Appendix A repealed; new Appendix A, Table 1 adopted effective April 24, 1996 (Supp. 96-2). Appendix A, Table 1 amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 1 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 1 repealed; new Appendix A, Table 1 made by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 1 amended by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 2. Acute Water Quality Standards for Dissolved Cadmium**

Aquatic and Wildlife coldwater		Aquatic and Wildlife warmwater, and edw		Aquatic and Wildlife ephemeral	
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	0.42	20	0.74	20	11.3
100	2.0	100	4.3	100	64.6
400	7.7	400	19.1	400	290
$e^{(1.0166*LN(Hardness)-3.924)}*(1.136672-LN(Hardness))*0.041838$		$e^{(1.128*LN(Hardness)-3.6867)*0.041838}$		$e^{(1.128*LN(Hardness)-0.9691)*0.041838}$	

**Historical Note**

Appendix A repealed; new Appendix A, Table 2 adopted effective April 24, 1996 (Supp. 96-2). Appendix A, Table 2 amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 2 amended to correct references to footnotes (Supp. 02-4). Appendix A, Table 2 footnotes amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 2 repealed; new Appendix A, Table 2 made by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 2 repealed; new Table 2 made by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 3. Chronic Water Quality Standards for Dissolved Cadmium**

Aquatic and Wildlife coldwater		Aquatic and Wildlife warmwater, and edw	
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	0.08	20	0.68
100	0.25	100	2.2
400	0.64	400	6.2
$e^{(0.7409*LN(Hardness)-4.719)}*(1.101672-LN(Hardness))*0.041838$		$e^{(0.7852*LN(Hardness)-2.715)}*(1.101672-LN(Hardness))*0.041838$	

**Historical Note**

Appendix A, Table 3 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 3 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 3 amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 3 repealed; new Table 3 made by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 4. Water Quality Standards for Dissolved Chromium III**

Acute Aquatic and Wildlife coldwater, warmwater and edw		Chronic Aquatic and Wildlife coldwater, warmwater and edw		Acute Aquatic and Wildlife ephemeral	
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	152	20	19.8	20	512
100	570	100	74.1	100	1912
400	1773	400	231	400	5950
$e^{(0.819*LN(Hardness)+3.7256)}*(0.316)$		$e^{(0.819*LN(Hardness)+0.6848)}*(0.86)$		$e^{(0.819*LN(Hardness)+4.9361)}*(0.316)$	

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**Historical Note**

Appendix A, Table 4 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 4 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 4 amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 4 repealed; new Table 4 made by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 5. Water Quality Standards for Dissolved Copper**

Acute Aquatic and Wildlife coldwater, warmwater and edw		Chronic Aquatic and Wildlife coldwater, warmwater and edw		Acute Aquatic and Wildlife ephemeral	
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	2.9	20	2.3	20	5.1
100	13.4	100	9.0	100	23.3
400	49.6	400	29.3	400	85.9
$e^{(0.9422*LN(Hardness)-1.702)}*(0.96)$		$e^{(0.8545*LN(Hardness)-1.702)}*(0.96)$		$e^{(0.9422*LN(Hardness)-1.1514)}*(0.96)$	

**Historical Note**

Appendix A, Table 5 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 5 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 5 amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 5 repealed; new Table 5 made by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 6. Water Quality Standards for Dissolved Lead**

Acute Aquatic and Wildlife coldwater, warmwater and edw		Chronic Aquatic and Wildlife coldwater, warmwater and edw		Acute Aquatic and Wildlife ephemeral	
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	10.8	20	0.4	20	22.8
100	64.6	100	2.5	100	136.3
400	281	400	10.9	400	592.7
$e^{(1.273*LN(Hardness)-1.46)}*(1.46203-(LN(Hardness))*(0.145712))$		$e^{(1.273*LN(Hardness)-4.705)}*(1.46203-(LN(Hardness))*(0.145712))$		$e^{(1.273*(LN(Hardness))-0.7131)}*(1.46203-(LN(Hardness))*(0.145712))$	

**Historical Note**

Appendix A, Table 6 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 6 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 6 renumbered to Table 9; new Table 6 made by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 6 repealed; new Table 6 made by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 7. Water Quality Standards for Dissolved Nickel**

Acute Aquatic and Wildlife coldwater, warmwater and edw		Chronic Aquatic and Wildlife coldwater, warmwater and edw		Acute Aquatic and Wildlife ephemeral	
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	120.0	20	13.3	20	1066
100	468	100	52.0	100	4158
400	1513	400	168	400	13436
$e^{(0.846*LN(Hardness)+2.255)}*(0.998)$		$e^{(0.846*LN(Hardness)+0.0584)}*(0.997)$		$e^{(0.846*LN(Hardness)+4.4389)}*(0.998)$	

**Historical Note**

Appendix A, Table 7 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 7 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 7 amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 7 repealed; new Table 7 made by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 8. Water Quality Standards for Dissolved Silver**

Acute Aquatic and Wildlife coldwater, warmwater, edw, and ephemeral	
Hard. mg/L	Std. µg/L
20	0.20
100	3.2
400	34.9
$e^{(1.72*LN(Hardness)-6.59)}*(0.85)$	

**Historical Note**

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Appendix A, Table 8 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 8 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 8 amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 8 repealed; new Table 8 made by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 9. Water Quality Standards for Dissolved Zinc**

Acute and Chronic Aquatic and Wildlife coldwater, warmwater and edw		Acute Aquatic and Wildlife ephemeral	
Hard. mg/L	Std. µg/L	Hard. mg/L	Std. µg/L
20	30.0	20	284
100	117	100	1112
400	379	400	3599
$e^{(0.8473*LN(Hardness)+0.884)}*(0.978)$		$e^{(0.8473*LN(Hardness)+3.1342)}*(0.978)$	

**Historical Note**

Appendix A, Table 9 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 9 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 9 renumbered to Table 11; new Table 9 renumbered from Table 6 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 9 repealed; new Table 9 made by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 10. Water Quality Standards for Pentachlorophenol**

Acute Aquatic and Wildlife coldwater, warmwater and edw		Chronic Aquatic and Wildlife coldwater, warmwater and edw		Acute Aquatic and Wildlife ephemeral	
pH	µg/L	pH	µg/L	pH	µg/L
3	0.16	3	0.1	3	0.66
6	3.3	6	2.1	6	13.5
9	67.7	9	42.7	9	274
$e^{(1.005*(pH)-4.83)}$		$e^{(1.005*(pH)-5.29)}$		$e^{(1.005*(pH)-3.4306)}$	

**Historical Note**

Appendix A, Table 10 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 10 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 10 renumbered to Table 12; new Table 10 renumbered from Table 11 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 10 repealed; new Table 10 made by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 11. Acute Criteria for Total Ammonia (in mg/L as N) Aquatic and Wildlife coldwater, warmwater, and edw**

pH	A&Wc	A&Ww and A&W edw
6.5	32.6	48.8
6.6	31.3	46.8
6.7	29.8	44.6
6.8	28.1	42.0
6.9	26.2	39.1
7.0	24.1	36.1
7.1	22.0	32.8
7.2	19.7	29.5
7.3	17.5	26.2
7.4	15.4	23.0
7.5	13.3	19.9
7.6	11.4	17.0
7.7	9.7	14.4
7.8	8.1	12.1
7.9	6.8	10.1
8.0	5.6	8.4
8.1	4.6	7.0
8.2	3.8	5.7
8.3	3.2	4.7
8.4	2.6	3.9

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8.5	2.1				3.2					
8.6	1.8				2.7					
8.7	1.5				2.2					
8.8	1.2				1.8					
8.9	1.0				1.6					
9.0	0.9				1.3					
Formula:	CMC	=	$\frac{0.275}{1+10^{7.204-pH}}$	+	$\frac{39.0}{1+10^{pH-7.204}}$	CMC	=	$\frac{0.411}{1+10^{7.204-pH}}$	+	$\frac{58.4}{1+10^{pH-7.204}}$

**Historical Note**

Appendix A, Table 11 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 11 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 11 renumbered to Table 10; new Table 11 renumbered from Table 9 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 11 repealed; new Table 11 renumbered from Table 25 and amended by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 12. Chronic Criteria for Total Ammonia (mg/L as N) Aquatic and Wildlife coldwater, warmwater, and edw**

pH	Temperature, °C									
	0	14	16	18	20	22	24	26	28	30
6.5	6.7	6.7	6.1	5.3	4.7	4.1	3.6	3.2	2.8	2.5
6.6	6.6	6.6	6.0	5.3	4.6	4.1	3.6	3.1	2.8	2.4
6.7	6.4	6.4	5.9	5.2	4.5	4.0	3.5	3.1	2.7	2.4
6.8	6.3	6.3	5.7	5.0	4.4	3.9	3.4	3.0	2.6	2.3
6.9	6.1	6.1	5.6	4.9	4.3	3.8	3.3	2.9	2.6	2.3
7.0	5.9	5.9	5.4	4.7	4.2	3.6	3.2	2.8	2.5	2.2
7.1	5.7	5.7	5.2	4.5	4.0	3.5	3.1	2.7	2.4	2.1
7.2	5.4	5.4	4.9	4.3	3.8	3.3	2.9	2.6	2.3	2.0
7.3	5.1	5.1	4.6	4.1	3.6	3.1	2.8	2.4	2.1	1.9
7.4	4.7	4.7	4.3	3.8	3.3	2.9	2.6	2.3	2.0	1.7
7.5	4.4	4.4	4.0	3.5	3.1	2.7	2.4	2.1	1.8	1.6
7.6	4.0	4.0	3.6	3.2	2.8	2.5	2.2	1.9	1.7	1.5
7.7	3.6	3.6	3.3	2.9	2.5	2.2	1.9	1.7	1.5	1.3
7.8	3.1	3.2	2.9	2.5	2.2	2.0	1.7	1.5	1.3	1.2
7.9	2.8	2.8	2.5	2.2	2.0	1.7	1.5	1.3	1.2	1.0
8.0	2.4	2.4	2.2	1.9	1.7	1.5	1.3	1.2	1.0	0.90
8.1	2.1	2.1	1.9	1.7	1.5	1.3	1.1	1.0	0.88	0.77
8.2	1.8	1.8	1.6	1.4	1.3	1.1	0.97	0.86	0.75	0.66
8.3	1.5	1.5	1.4	1.2	1.1	0.94	0.83	0.73	0.64	0.56
8.4	1.3	1.3	1.2	1.0	0.91	0.80	0.70	0.62	0.54	0.48
8.5	1.1	1.1	1.0	0.90	0.77	0.67	0.59	0.52	0.46	0.40
8.6	0.92	0.92	0.84	0.74	0.65	0.57	0.50	0.44	0.37	0.34
8.7	0.78	0.78	0.71	0.62	0.55	0.48	0.42	0.37	0.33	0.29
8.8	0.66	0.66	0.60	0.53	0.46	0.41	0.36	0.32	0.28	0.24
8.9	0.57	0.57	0.51	0.45	0.40	0.35	0.31	0.27	0.24	0.21
9.0	0.49	0.49	0.44	0.39	0.34	0.30	0.26	0.23	0.20	0.18
$CCC = \left( \frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.204}} \right) - \text{MIN}(2.85, 1.45 \cdot 10^{0.028 \cdot (25-T)})$										

**Historical Note**

Appendix A, Table 12 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 12 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 12 renumbered to Table 18; new Table 12 renumbered from Table 10 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 12 repealed; new Table 12 renumbered from Table 26 and amended by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 13. Repealed**

**Historical Note**

Appendix A, Table 13 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1).

Appendix A, Table 13 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 13 renumbered to Table 15; new Table 13 renumbered from Table 14 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 13 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 14. Repealed****Historical Note**

Appendix A, Table 14 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 14 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 14 renumbered to Table 13; new Table 14 renumbered from Table 15 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 14 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 15. Repealed****Historical Note**

Appendix A, Table 15 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 15 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 15 renumbered to Table 14; new Table 15 renumbered from Table 13 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 15 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 16. Repealed****Historical Note**

Appendix A, Table 16 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 16 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 16 amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 16 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 17. Repealed****Historical Note**

Appendix A, Table 17 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 17 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 17 amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 17 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 18. Repealed****Historical Note**

Appendix A, Table 18 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 18 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 18 repealed; new Table 18 renumbered from Table 12 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix

A, Table 18 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 19. Repealed****Historical Note**

Appendix A, Table 19 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 19 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 19 renumbered to Table 21; new Table 19 made by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 19 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 20. Repealed****Historical Note**

Appendix A, Table 20 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 20 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 20 amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 20 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 21. Repealed****Historical Note**

Appendix A, Table 21 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 21 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 21 renumbered to Table 22; new Table 21 renumbered from Table 19 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 21 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 22. Repealed****Historical Note**

Appendix A, Table 22 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 22 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 22 renumbered to Table 23; new Table 22 renumbered from Table 21 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 22 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 23. Repealed****Historical Note**

Appendix A, Table 23 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 23 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 23 renumbered to Table 24; new Table 23 renumbered from Table 22 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 23 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 24. Repealed**

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**Historical Note**

Appendix A, Table 24 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Appendix A, Table 24 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 24 renumbered to Table 25; new Table 24 renumbered from Table 23 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 24 repealed by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 25. Renumbered**

**Historical Note**

Appendix A, Table 25 adopted by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1).

Appendix A, Table 25 amended by final rulemaking at 9 A.A.R. 716, effective April 8, 2003 (Supp. 03-1). Appendix A, Table 25 renumbered to Table 26; new Table 25 renumbered from Table 24 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 25 renumbered to Table 11 by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Table 26. Renumbered**

**Historical Note**

Appendix A, Table 26 renumbered from Table 25 and amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Appendix A, Table 26 renumbered to Table 12 by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Appendix B. Surface Waters and Designated Uses**

(Coordinates are from the North American Datum of 1983 (NAD83). All latitudes in Arizona are north and all longitudes are west, but the negative signs are not included in the Appendix B table. Some web-based mapping systems require a negative sign before the longitude values to indicate it is a west longitude.)

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health			Agricultural		
				A&Wc	A&Ww	A&We	A&Wedw	FBC	PBC	DWS	FC	AgI	AgL
BW	Alamo Lake	34°14'06"/113°35'00"	Deep		A&Ww			FBC			FC		AgL
BW	Big Sandy River	Headwaters to Alamo Lake			A&Ww			FBC			FC		AgL
BW	Bill Williams River	Alamo Lake to confluence with Colorado River			A&Ww			FBC			FC		AgL
BW	Blue Tank	34°40'14"/112°58'17"			A&Ww			FBC			FC		AgL
BW	Boulder Creek	Headwaters to confluence with unnamed tributary at 34°41'13"/113°03'37"		A&Wc				FBC			FC		AgL
BW	Boulder Creek	Below confluence with unnamed tributary to confluence with Burro Creek			A&Ww			FBC			FC		AgL
BW	Burro Creek (OAW)	Headwaters to confluence with Boulder Creek			A&Ww			FBC			FC		AgL
BW	Burro Creek	Below confluence with Boulder Creek to confluence with Big Sandy River			A&Ww			FBC			FC		AgL
BW	Carter Tank	34°52'27"/112°57'31"			A&Ww			FBC			FC		AgL
BW	Conger Creek	Headwaters to confluence with unnamed tributary at 34°45'15"/113°05'46"		A&Wc				FBC			FC		AgL
BW	Conger Creek	Below confluence with unnamed tributary to confluence with Burro Creek			A&Ww			FBC			FC		AgL
BW	Copper Basin Wash	Headwaters to confluence with unnamed tributary at 34°28'12"/112°35'33"		A&Wc				FBC			FC		AgL
BW	Copper Basin Wash	Below confluence with unnamed tributary to confluence with Skull Valley Wash				A&We			PBC				AgL
BW	Cottonwood Canyon	Headwaters to Bear Trap Spring		A&Wc				FBC			FC		AgL
BW	Cottonwood Canyon	Below Bear Trap Spring to confluence at Smith Canyon			A&Ww			FBC			FC		AgL
BW	Date Creek	Headwaters to confluence with Santa Maria River			A&Ww			FBC			FC		AgL
BW	Francis Creek (OAW)	Headwaters to confluence with Burro Creek			A&Ww			FBC		DWS	FC	AgI	AgL
BW	Kirkland Creek	Headwaters to confluence with Santa Maria River			A&Ww			FBC			FC	AgI	AgL
BW	Knight Creek	Headwaters to confluence with Big Sandy River			A&Ww			FBC			FC		AgL
BW	Peeples Canyon (OAW)	Headwaters to confluence with Santa Maria River			A&Ww			FBC			FC		AgL
BW	Red Lake	35°12'18"/113°03'57"	Sedimentary		A&Ww			FBC			FC		AgL
BW	Santa Maria River	Headwaters to Alamo Lake			A&Ww			FBC			FC	AgI	AgL
BW	Trout Creek	Headwaters to confluence with unnamed tributary at 35°06'47"/113°13'01"		A&Wc				FBC			FC		AgL
BW	Trout Creek	Below confluence with unnamed tributary to confluence with Knight Creek			A&Ww			FBC			FC		AgL
CG	Agate Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Beaver Dam Wash	Headwaters to confluence with the Virgin River			A&Ww			FBC			FC		AgL
CG	Big Springs Tank	36°36'08"/112°21'01"		A&Wc				FBC			FC		AgL
CG	Boucher Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Bright Angel Creek	Headwaters to confluence with Roaring Springs Creek		A&Wc				FBC			FC		
CG	Bright Angel Creek	Below Roaring Spring Springs Creek to confluence with Colorado River			A&Ww			FBC			FC		
CG	Bright Angel Wash	Headwaters to Grand Canyon National Park South Rim WWTP outfall at 36°02'59"/112°09'02"				A&We			PBC				
CG	Bright Angel Wash (EDW)	Grand Canyon National Park South Rim WWTP outfall to Coconino Wash					A&Wedw		PBC				AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural			
CG	Bulrush Canyon Wash	Headwaters to confluence with Kanab Creek				A&We			PBC				
CG	Cataract Creek	Headwaters to Santa Fe Reservoir		A&Wc				FBC		DWS	FC	AgI	AgL
CG	Cataract Creek	Santa Fe Reservoir to City of Williams WWTP outfall at 35°14'40"/112°11'18"		A&Wc				FBC			FC	AgI	AgL
CG	Cataract Creek (EDW)	City of Williams WWTP outfall to 1 km downstream				A&Wedw			PBC				
CG	Cataract Creek	Red Lake Wash to Havasupai Indian Reservation boundary				A&We			PBC				AgL
CG	Cataract Lake	35°15'04"/112°12'58"	Igneous	A&Wc				FBC		DWS	FC		AgL
CG	Chuar Creek	Headwaters to confluence with unnamed tributary at 36°11'35"/111°52'20"		A&Wc				FBC			FC		
CG	Chuar Creek	Below unnamed tributary to confluence with the Colorado River			A&Ww			FBC			FC		
CG	City Reservoir	35°13'57"/112°11'25"	Igneous	A&Wc				FBC		DWS	FC		
CG	Clear Creek	Headwaters to confluence with unnamed tributary at 36°07'33"/112°00'03"		A&Wc				FBC			FC		
CG	Clear Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww			FBC			FC		
CG	Coconino Wash (EDW)	South Grand Canyon Sanitary District Tusayan WRF outfall at 35°58'39"/112°08'25" to 1 km downstream				A&Wedw			PBC				
CG	Colorado River	Lake Powell to Lake Mead		A&Wc				FBC		DWS	FC	AgI	AgL
CG	Cottonwood Creek	Headwaters to confluence with unnamed tributary at 35°20'46"/113°35'31"		A&Wc				FBC			FC		AgL
CG	Cottonwood Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww			FBC			FC		AgL
CG	Crystal Creek	Headwaters to confluence with unnamed tributary at 36°13'41"/112°11'49"		A&Wc				FBC			FC		
CG	Crystal Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww			FBC			FC		
CG	Deer Creek	Headwaters to confluence with unnamed tributary at 36°26'15"/112°28'20"		A&Wc				FBC			FC		
CG	Deer Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww			FBC			FC		
CG	Detrital Wash	Headwaters to Lake Mead				A&We			PBC				
CG	Dogtown Reservoir	35°12'40"/112°07'54"	Igneous	A&Wc				FBC		DWS	FC	AgI	AgL
CG	Dragon Creek	Headwaters to confluence with Milk Creek		A&Wc				FBC			FC		
CG	Dragon Creek	Below confluence with Milk Creek to confluence with Crystal Creek			A&Ww			FBC			FC		
CG	Garden Creek	Headwaters to confluence with Pipe Creek			A&Ww			FBC			FC		
CG	Gonzalez Lake	35°15'26"/112°12'09"	Shallow	A&Ww				FBC			FC	AgI	AgL
CG	Grand Wash	Headwaters to Lake Mead				A&We			PBC				
CG	Grapevine Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Grapevine Wash	Headwaters to Lake Mead				A&We			PBC				
CG	Hakatai Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Hance Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Havasupai Canyon Creek	From the Havasupai Indian Reservation boundary to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Hermit Creek	Headwaters to Hermit Pack Trail crossing at 36°03'38"/112°14'00"		A&Wc				FBC			FC		
CG	Hermit Creek	Below Hermit Pack Trail crossing to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Horn Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Hualapai Wash	Headwaters to Lake Mead				A&We			PBC				
CG	Jacob Lake	36°42'27"/112°13'50"	Sedimentary	A&Wc				FBC			FC		
CG	Kaibab Lake	35°17'04"/112°09'32"	Igneous	A&Wc				FBC		DWS	FC	AgI	AgL
CG	Kanab Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC		DWS	FC		AgL
CG	Kwagunt Creek	Headwaters to confluence with unnamed tributary at 36°13'37"/111°54'50"		A&Wc				FBC			FC		
CG	Kwagunt Creek	Below confluence with unnamed tributary to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Lake Mead	36°06'18"/114°26'33"	Deep	A&Wc				FBC		DWS	FC	AgI	AgL
CG	Lake Powell	36°59'53"/111°08'17"	Deep	A&Wc				FBC		DWS	FC	AgI	AgL
CG	Lonetree Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Matkatamiba Creek	Below Havasupai Indian Reservation boundary to confluence with the Colorado River			A&Ww			FBC			FC		
CG	Monument Creek	Headwaters to confluence with the Colorado River			A&Ww			FBC			FC		

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural	
CG	Nankoweap Creek	Headwaters to confluence with unnamed tributary at 36°15'29"/111°57'26"		A&Wc			FBC			FC	
CG	Nankoweap Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww		FBC			FC	
CG	National Canyon Creek	Headwaters to Hualapai Indian Reservation boundary at 36°15'15"/112°52'34"			A&Ww		FBC			FC	
CG	North Canyon Creek	Headwaters to confluence with unnamed tributary at 36°33'58"/111°55'41"		A&Wc			FBC			FC	
CG	North Canyon Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww		FBC			FC	
CG	Olo Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Parashant Canyon	Headwaters to confluence with unnamed tributary at 36°21'02"/113°27'56"		A&Wc			FBC			FC	
CG	Parashant Canyon	Below confluence with unnamed tributary to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Paria River	Utah border to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Phantom Creek	Headwaters to confluence with unnamed tributary at 36°09'29"/112°08'13"		A&Wc			FBC			FC	
CG	Phantom Creek	Below confluence with unnamed tributary to confluence with Bright Angel Creek			A&Ww		FBC			FC	
CG	Pipe Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Red Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Red Lake	35°40'03"/114°04'07"			A&Ww		FBC			FC	AgL
CG	Roaring Springs	36°11'45"/112°02'06"		A&Wc			FBC		DWS	FC	
CG	Roaring Springs Creek	Headwaters to confluence with Bright Angel Creek		A&Wc			FBC			FC	
CG	Rock Canyon	Headwaters to confluence with Truxton Wash				A&We			PBC		
CG	Royal Arch Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Ruby Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Russell Tank	35°52'21"/111°52'45"		A&Wc			FBC			FC	AgL
CG	Saddle Canyon Creek	Headwaters to confluence with unnamed tributary at 36°21'36"/112°22'43"		A&Wc			FBC			FC	
CG	Saddle Canyon Creek	Below confluence with unnamed tributary to confluence with Colorado River			A&Ww		FBC			FC	
CG	Santa Fe Reservoir	35°14'31"/112°11'10"	Igneous	A&Wc			FBC		DWS	FC	
CG	Sapphire Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Serpentine Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Shinumo Creek	Headwaters to confluence with unnamed tributary at 36°18'18"/112°18'07"		A&Wc			FBC			FC	
CG	Shinumo Creek	Below confluence with unnamed tributary to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Short Creek	Headwaters to confluence with the Virgin River				A&We			PBC		
CG	Slate Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Spring Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Stone Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Tapeats Creek	Headwaters to confluence with the Colorado River		A&Wc			FBC			FC	
CG	Thunder River	Headwaters to confluence with Tapeats Creek		A&Wc			FBC			FC	
CG	Trail Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Transept Canyon	Headwaters to Grand Canyon National Park North Rim WWTP outfall at 36°12'20"/112°03'35"				A&We			PBC		
CG	Transept Canyon (EDW)	Grand Canyon National Park North Rim WWTP outfall to 1 km downstream					A&Wedw		PBC		
CG	Transept Canyon	From 1 km downstream of the Grand Canyon National Park North Rim WWTP outfall to confluence with Bright Angel Creek				A&We			PBC		
CG	Travertine Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Truxton Wash	Headwaters to Red Lake				A&We			PBC		
CG	Turquoise Canyon Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	
CG	Unkar Creek	Below confluence with unnamed tributary at 36°07'54"/111°54'06" to confluence with Colorado River			A&Ww		FBC			FC	
CG	Unnamed Wash (EDW)	Grand Canyon National Park Desert View WWTP outfall at 36°02'06"/111°49'13" to confluence with Cedar Canyon					A&Wedw		PBC		

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural		
CG	Unnamed Wash (EDW)	Valle Airpark WRF outfall at 35°38'34"/112°09'22" to confluence with Spring Valley Wash				A&Wedw		PBC				
CG	Vasey's Paradise	A spring at 36°29'52"/111°51'26"		A&Wc			FBC			FC		
CG	Virgin River	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC	AgI	AgL
CG	Vishnu Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC		
CG	Warm Springs Creek	Headwaters to confluence with the Colorado River			A&Ww		FBC			FC		
CG	West Cataract Creek	Headwaters to confluence with Cataract Creek		A&Wc			FBC			FC		AgL
CG	White Creek	Headwaters to confluence with unnamed tributary at 36°18'45"/112°21'03"		A&Wc			FBC			FC		
CG	White Creek	Below confluence with unnamed tributary to confluence with the Colorado River			A&Ww		FBC			FC		
CG	Wright Canyon Creek	Headwaters to confluence with unnamed tributary at 35°20'48"/113°30'40"		A&Wc			FBC			FC		AgL
CG	Wright Canyon Creek	Below confluence with unnamed tributary to confluence with Truxton Wash			A&Ww		FBC			FC		AgL
CL	A10 Backwater	33°31'45"/114°33'19"	Shallow		A&Ww		FBC			FC		
CL	A7 Backwater	33°34'27"/114°32'04"	Shallow		A&Ww		FBC			FC		
CL	Adobe Lake	33°02'36"/114°39'26"	Shallow		A&Ww		FBC			FC		
CL	Cibola Lake	33°14'01"/114°40'31"	Shallow		A&Ww		FBC			FC		
CL	Clear Lake	33°01'59"/114°31'19"	Shallow		A&Ww		FBC			FC		
CL	Columbus Wash	Headwaters to confluence with the Gila River				A&We		PBC				
CL	Colorado River	Lake Mead to Topock Marsh		A&Wc			FBC		DWS	FC	AgI	AgL
CL	Colorado River	Topock Marsh to Morelos Dam			A&Ww		FBC		DWS	FC	AgI	AgL
CL	Gila River	Painted Rock Dam to confluence with the Colorado River			A&Ww		FBC			FC	AgI	AgL
CL	Holy Moses Wash	Headwaters to City of Kingman Downtown WWTP outfall at 35°10'33"/114°03'46"				A&We		PBC				
CL	Holy Moses Wash (EDW)	City of Kingman Downtown WWTP outfall to 3 km downstream					A&Wedw	PBC				
CL	Holy Moses Wash	From 3 km downstream of City of Kingman Downtown WWTP outfall to confluence with Sawmill Wash				A&We		PBC				
CL	Hunter's Hole Backwater	' 32°31'13"/114°48'07"	Shallow		A&Ww		FBC			FC		AgL
CL	Imperial Reservoir	' 32°53'02"/114°27'54"	Shallow		A&Ww		FBC		DWS	FC	AgI	AgL
CL	Island Lake	' 33°01'44"/114°36'42"	Shallow		A&Ww		FBC			FC		
CL	Laguna Reservoir	32°51'35"/114°28'29"	Shallow		A&Ww		FBC		DWS	FC	AgI	AgL
CL	Lake Havasu	34°35'18"/114°25'47"	Deep		A&Ww		FBC		DWS	FC	AgI	AgL
CL	Lake Mohave	35°26'58"/114°38'30"	Deep	A&Wc			FBC		DWS	FC	AgI	AgL
CL	Martinez Lake	32°58'49"/114°28'09"	Shallow		A&Ww		FBC			FC	AgI	AgL
CL	Mittry Lake	32°49'17"/114°27'54"	Shallow		A&Ww		FBC			FC		
CL	Mohave Wash	Headwaters to Lake Havasu				A&We		PBC				
CL	Nortons Lake	33°02'30"/114°37'59"	Shallow		A&Ww		FBC			FC		
CL	Painted Rock (Borrow Pit) Lake	33°04'55"/113°01'17"	Sedimentary		A&Ww		FBC			FC	AgI	AgL
CL	Pretty Water Lake	33°19'51"/114°42'19"	Shallow		A&Ww		FBC			FC		
CL	Quigley Ponds	32°43'40"/113°57'44"	Shallow		A&Ww		FBC			FC		
CL	Redondo Lake	32°44'32"/114°29'03"	Shallow		A&Ww		FBC			FC		
CL	Sacramento Wash	Headwaters to Topock Marsh				A&We		PBC				
CL	Sawmill Canyon	Headwaters to abandoned gaging station at 35°09'45"/113°57'56"			A&Ww		FBC			FC		AgL
CL	Sawmill Canyon	Below abandoned gaging station to confluence with Holy Moses Wash				A&We		PBC				AgL
CL	Topock Marsh	34°43'27"/114°28'59"	Shallow		A&Ww		FBC		DWS	FC	AgI	AgL
CL	Tyson Wash (EDW)	Town of Quartzsite WWTP outfall at 33°42'39"/114°13'10" to 1 km downstream					A&Wedw	PBC				
CL	Wellton Canal	Wellton-Mohawk Irrigation District							DWS		AgI	AgL
CL	Wellton Ponds	32°40'32"/114°00'26"			A&Ww		FBC			FC		
CL	YPG Pond	32°50'58"/114°26'14"			A&Ww		FBC			FC		
CL	Yuma Area Canals	Above municipal water treatment plant intakes							DWS		AgI	AgL
CL	Yuma Area Canals	Below municipal water treatment plant intakes and all drains									AgI	AgL
LC	Als Lake	35°02'10"/111°25'17"	Igneous		A&Ww		FBC			FC		AgL
LC	Ashurst Lake	35°01'06"/111°24'18"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Atcheson Reservoir	33°59'59"/109°20'43"	Igneous		A&Ww		FBC			FC	AgI	AgL
LC	Auger Creek	Headwaters to confluence with Nutrioso Creek		A&Wc			FBC			FC		AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural		
LC	Barbershop Canyon Creek	Headwaters to confluence with East Clear Creek		A&Wc			FBC			FC		AgL
LC	Bear Canyon Creek	Headwaters to confluence with General Springs Canyon		A&Wc			FBC			FC		AgL
LC	Bear Canyon Creek	Headwaters to confluence with Willow Creek		A&Wc			FBC			FC		AgL
LC	Bear Canyon Lake	34°24'00"/111°00'06"	Sedimentary	A&Wc			FBC			FC	AgI	AgL
LC	Becker Lake	34°09'11"/109°18'23"	Shallow	A&Wc			FBC			FC		AgL
LC	Billy Creek	Headwaters to confluence with Show Low Creek		A&Wc			FBC			FC		AgL
LC	Black Canyon Creek	Headwaters to confluence with Chevelon Creek		A&Wc			FBC			FC	AgI	AgL
LC	Black Canyon Lake	34°20'32"/110°40'13"	Sedimentary	A&Wc			FBC		DWS	FC	AgI	AgL
LC	Blue Ridge Reservoir	34°32'40"/111°11'33"	Deep	A&Wc			FBC			FC	AgI	AgL
LC	Boot Lake	34°58'54"/111°20'11"	Igneous	A&Wc			FBC			FC		AgL
LC	Bow and Arrow Wash	Headwaters to confluence with Rio de Flag				A&We			PBC			
LC	Buck Springs Canyon Creek	Headwaters to confluence with Leonard Canyon Creek		A&Wc			FBC			FC		AgL
LC	Bunch Reservoir	34°02'20"/109°26'48"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Camillo Tank	34°55'03"/111°22'40"	Igneous		A&Ww		FBC			FC		AgL
LC	Carnero Lake	34°06'57"/109°31'42"	Shallow	A&Wc			FBC			FC		AgL
LC	Chevelon Canyon Lake	34°29'18"/110°49'30"	Sedimentary	A&Wc			FBC			FC	AgI	AgL
LC	Chevelon Creek	Headwaters to confluence with the Little Colorado River		A&Wc			FBC			FC	AgI	AgL
LC	Chevelon Creek, West Fork	Headwaters to confluence with Chevelon Creek		A&Wc			FBC			FC		AgL
LC	Chilson Tank	34°51'43"/111°22'54"	Igneous		A&Ww		FBC			FC		AgL
LC	Clear Creek	Headwaters to confluence with the Little Colorado River		A&Wc			FBC		DWS	FC		AgL
LC	Clear Creek Reservoir	34°57'09"/110°39'14"	Shallow	A&Wc			FBC		DWS	FC	AgI	AgL
LC	Coconino Reservoir	35°00'05"/111°24'10"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Colter Creek	Headwaters to confluence with Nutrioso Creek		A&Wc			FBC			FC		AgL
LC	Colter Reservoir	33°56'39"/109°28'53"	Shallow	A&Wc			FBC			FC		AgL
LC	Concho Creek	Headwaters to confluence with Carrizo Wash		A&Wc			FBC			FC		AgL
LC	Concho Lake	34°26'37"/109°37'40"	Shallow	A&Wc			FBC			FC	AgI	AgL
LC	Cow Lake	34°53'14"/111°18'51"	Igneous		A&Ww		FBC			FC		AgL
LC	Coyote Creek	Headwaters to confluence with the Little Colorado River		A&Wc			FBC			FC	AgI	AgL
LC	Crisis Lake (Snake Tank #2)	34°47'51"/111°17'32"			A&Ww		FBC			FC		AgL
LC	Dane Canyon Creek	Headwaters to confluence with Barbershop Canyon Creek		A&Wc			FBC			FC		AgL
LC	Daves Tank	34°44'22"/111°17'15"			A&Ww		FBC			FC		AgL
LC	Deep Lake	35°03'34"/111°25'00"	Igneous		A&Ww		FBC			FC		AgL
LC	Dry Lake (EDW)	34°38'02"/110°23'40"	EDW						PBC			
LC	Ducksnest Lake	34°59'14"/111°23'57"			A&Ww		FBC			FC		AgL
LC	East Clear Creek	Headwaters to confluence with Clear Creek		A&Wc			FBC			FC	AgI	AgL
LC	Ellis Wiltbank Reservoir	34°05'25"/109°28'25"	Igneous		A&Ww		FBC			FC	AgI	AgL
LC	Estates at Pine Canyon lakes (EDW)	35°09'32"/111°38'26"	EDW					A&Wedw	PBC			
LC	Fish Creek	Headwaters to confluence with the Little Colorado River		A&Wc			FBC			FC		AgL
LC	Fool's Hollow Lake	34°16'30"/110°03'43"	Igneous	A&Wc			FBC			FC		AgL
LC	General Springs Canyon Creek	Headwaters to confluence with East Clear Creek		A&Wc			FBC			FC		AgL
LC	Geneva Reservoir	34°01'45"/109°31'46"	Igneous		A&Ww		FBC			FC		AgL
LC	Hall Creek	Headwaters to confluence with the Little Colorado River		A&Wc			FBC			FC	AgI	AgL
LC	Hart Canyon Creek	Headwaters to confluence with Willow Creek		A&Wc			FBC			FC		AgL
LC	Hay Lake	34°00'11"/109°25'57"	Igneous	A&Wc			FBC			FC		AgL
LC	Hog Wallow Lake	33°58'57"/109°25'39"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Horse Lake	35°03'55"/111°27'50"			A&Ww		FBC			FC		AgL
LC	Hulsey Creek	Headwaters to confluence with Nutrioso Creek		A&Wc			FBC			FC		AgL
LC	Hulsey Lake	33°55'58"/109°09'40"	Sedimentary	A&Wc			FBC			FC		AgL
LC	Indian Lake	35°00'39"/111°22'41"			A&Ww		FBC			FC		AgL
LC	Jack's Canyon Creek	Headwaters to confluence with the Little Colorado River		A&Wc			FBC			FC	AgI	AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural		
LC	Jarvis Lake	33°58'59"/109°12'36"	Sedimentary		A&Ww		FBC			FC		AgL
LC	Kinnikinick Lake	34°53'53"/111°18'18"	Igneous	A&Wc			FBC			FC		AgL
LC	Knoll Lake	34°25'38"/111°05'13"	Sedimentary	A&Wc			FBC			FC		AgL
LC	Lake Humphreys (EDW)	35°11'51"/111°35'19"	EDW			A&Wedw		PBC				
LC	Lake Mary, Lower	35°06'21"/111°34'38"	Igneous	A&Wc			FBC		DWS	FC		AgL
LC	Lake Mary, Upper	35°03'23"/111°28'34"	Igneous	A&Wc			FBC		DWS	FC		AgL
LC	Lake of the Woods	34°09'40"/109°58'47"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Lee Valley Creek (OAW)	Headwaters to Lee Valley Reservoir		A&Wc			FBC			FC		
LC	Lee Valley Creek	From Lee Valley Reservoir to confluence with the East Fork of the Little Colorado River		A&Wc			FBC			FC		AgL
LC	Lee Valley Reservoir	33°56'29"/109°30'04"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Leonard Canyon Creek	Headwaters to confluence with Clear Creek		A&Wc			FBC			FC		AgL
LC	Leonard Canyon Creek, East Fork	Headwaters to confluence with Leonard Canyon Creek		A&Wc			FBC			FC		AgL
LC	Leonard Canyon Creek, Middle Fork	Headwaters to confluence with Leonard Canyon, West Fork		A&Wc			FBC			FC		AgL
LC	Leonard Canyon Creek, West Fork	Headwaters to confluence with Leonard Canyon, East Fork		A&Wc			FBC			FC		AgL
LC	Lily Creek	Headwaters to confluence with Coyote Creek		A&Wc			FBC			FC		AgL
LC	Little Colorado River	Headwaters to Lyman Reservoir		A&Wc			FBC			FC	AgI	AgL
LC	Little Colorado River	Below Lyman Reservoir to confluence with the Puerco River		A&Wc			FBC		DWS	FC	AgI	AgL
LC	Little Colorado River	Below confluence with the Puerco River to the Navajo Nation Reservation boundary			A&Ww		FBC		DWS	FC	AgI	AgL
LC	Little Colorado River, East Fork	Headwaters to confluence with the Little Colorado River		A&Wc			FBC			FC		AgL
LC	Little Colorado River, South Fork	Headwaters to confluence with the Little Colorado River		A&Wc			FBC			FC		AgL
LC	Little Colorado River, West Fork (OAW)	Headwaters to Government Springs		A&Wc			FBC			FC		
LC	Little Colorado River, West Fork	Below Government Springs to confluence with the Little Colorado River		A&Wc			FBC			FC		AgL
LC	Little George Reservoir	34°00'37"/109°19'15"	Igneous		A&Ww		FBC			FC	AgI	
LC	Little Mormon Lake	34°17'00"/109°58'06"	Igneous		A&Ww		FBC			FC	AgI	AgL
LC	Little Ortega Lake	34°22'47"/109°40'06"	Igneous	A&Wc			FBC			FC		
LC	Long Lake, Lower	34°47'16"/111°12'40"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Long Lake, Upper	35°00'08"/111°21'23"	Igneous	A&Wc			FBC			FC		AgL
LC	Long Tom Tank	34°20'35"/110°49'22"		A&Wc			FBC			FC		AgL
LC	Lower Walnut Canyon Lake (EDW)	35°12'04"/111°34'07"	EDW			A&Wedw		PBC				
LC	Lyman Reservoir	34°21'21"/109°21'35"	Deep	A&Wc			FBC			FC	AgI	AgL
LC	Mamie Creek	Headwaters to confluence with Coyote Creek		A&Wc			FBC			FC		AgL
LC	Marshall Lake	35°07'18"/111°32'07"	Igneous	A&Wc			FBC			FC		AgL
LC	McKay Reservoir	34°01'27"/109°13'48"		A&Wc			FBC			FC	AgI	AgL
LC	Merritt Draw Creek	Headwaters to confluence with Barbershop Canyon Creek		A&Wc			FBC			FC		AgL
LC	Mexican Hay Lake	34°01'58"/109°21'25"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Milk Creek	Headwaters to confluence with Hulsey Creek		A&Wc			FBC			FC		AgL
LC	Miller Canyon Creek	Headwaters to confluence with East Clear Creek		A&Wc			FBC			FC		AgL
LC	Miller Canyon Creek, East Fork	Headwaters to confluence with Miller Canyon Creek		A&Wc			FBC			FC		AgL
LC	Mineral Creek	Headwaters to Little Ortega Lake		A&Wc			FBC			FC	AgI	AgL
LC	Mormon Lake	34°56'38"/111°27'25"	Shallow	A&Wc			FBC		DWS	FC	AgI	AgL
LC	Morton Lake	34°53'37"/111°17'41"	Igneous	A&Wc			FBC			FC		AgL
LC	Mud Lake	34°55'19"/111°21'29"	Shallow		A&Ww		FBC			FC		AgL
LC	Ned Lake (EDW)	34°17'17"/110°03'22"	EDW			A&Wedw		PBC				
LC	Nelson Reservoir	34°02'52"/109°11'19"	Sedimentary	A&Wc			FBC			FC	AgI	AgL
LC	Norton Reservoir	34°03'57"/109°31'27"	Igneous		A&Ww		FBC			FC		AgL

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LC	Nutrisio Creek	Headwaters to confluence with the Little Colorado River		A&Wc			FBC			FC	AgI	AgL
LC	Paddy Creek	Headwaters to confluence with Nutrisio Creek		A&Wc			FBC			FC		AgL
LC	Phoenix Park Wash	Headwaters to Dry Lake			A&We			PBC				
LC	Pierce Seep	34°23'39"/110°31'17"		A&Wc				PBC				
LC	Pine Tank	34°46'49"/111°17'21"	Igneous		A&Ww		FBC			FC		AgL
LC	Pintail Lake (EDW)	34°18'05"/110°01'21"	EDW			A&Wedw		PBC				
LC	Porter Creek	Headwaters to confluence with Show Low Creek		A&Wc			FBC			FC		AgL
LC	Potato Lake	35°03'15"/111°24'13"	Igneous	A&Wc			FBC			FC		AgL
LC	Pratt Lake	34°01'32"/109°04'18"	Sedimentary	A&Wc			FBC			FC		
LC	Puerco River	Headwaters to confluence with the Little Colorado River			A&Ww		FBC		DWS	FC	AgI	AgL
LC	Puerco River (EDW)	Sanders Unified School District WWTP outfall at 35°12'52"/109°19'40" to 0.5 km downstream				A&Wedw		PBC				
LC	Rainbow Lake	34°09'00"/109°59'09"	Shallow Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Reagan Reservoir	34°02'09"/109°08'41"	Igneous		A&Ww		FBC			FC		AgL
LC	Rio de Flag	Headwaters to City of Flagstaff WWTP outfall at 35°12'21"/111°39'17"				A&We			PBC			
LC	Rio de Flag (EDW)	From City of Flagstaff WWTP outfall to the confluence with San Francisco Wash							A&Wedw	PBC		
LC	River Reservoir	34°02'01"/109°26'07"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Rogers Reservoir	33°56'30"/109°16'20"	Igneous		A&Ww		FBC			FC		AgL
LC	Rudd Creek	Headwaters to confluence with Nutrisio Creek		A&Wc			FBC			FC		AgL
LC	Russel Reservoir	33°59'29"/109°20'01"	Igneous		A&Ww		FBC			FC	AgI	AgL
LC	San Salvador Reservoir	33°58'51"/109°19'55"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Scott Reservoir	34°10'31"/109°57'31"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Show Low Creek	Headwaters to confluence with Silver Creek		A&Wc			FBC			FC	AgI	AgL
LC	Show Low Lake	34°11'36"/110°00'12"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Silver Creek	Headwaters to confluence with the Little Colorado River		A&Wc			FBC			FC	AgI	AgL
LC	Slade Reservoir	33°59'41"/109°20'26"	Igneous		A&Ww		FBC			FC	AgI	AgL
LC	Soldiers Annex Lake	34°47'15"/111°13'51"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Soldiers Lake	34°47'47"/111°14'04"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Spaulding Tank	34°30'17"/111°02'06"			A&Ww		FBC			FC		AgL
LC	Sponseller Lake	34°14'09"/109°50'45"	Igneous	A&Wc			FBC			FC		AgL
LC	St Johns Reservoir (Little Reservoir)	34°29'10"/109°22'06"	Igneous		A&Ww		FBC			FC	AgI	AgL
LC	Telephone Lake (EDW)	34°17'35"/110°02'42"	EDW			A&Wedw		PBC				
LC	Tremaine Lake	34°46'02"/111°13'51"	Igneous	A&Wc			FBC			FC		AgL
LC	Tunnel Reservoir	34°01'53"/109°26'34"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Turkey Draw (EDW)	High Country Pines II WWTP outfall at 33°25'35"/110°38'13" to confluence with Black Canyon Creek							A&Wedw	PBC		
LC	Unnamed Wash (EDW)	Bison Ranch WWTP outfall at 34°23'31"/110°31'29" to Pierce Seep							A&Wedw	PBC		
LC	Unnamed Wash (EDW)	Black Mesa Ranger Station WWTP outfall at 34°23'35"/110°33'36" to confluence of Oklahoma Flat Draw							A&Wedw	PBC		
LC	Vail Lake	35°05'23"/111°30'46"	Igneous	A&Wc			FBC			FC		AgL
LC	Walnut Creek	Headwaters to confluence with Billy Creek		A&Wc			FBC			FC		AgL
LC	Water Canyon Creek	Headwaters to confluence with the Little Colorado River		A&Wc			FBC			FC		AgL
LC	Water Canyon Reservoir	34°00'16"/109°20'05"	Igneous		A&Ww		FBC			FC	AgI	AgL
LC	Whale Lake (EDW)	35°11'13"/111°35'21"	EDW			A&Wedw		PBC				
LC	Whipple Lake	34°16'49"/109°58'29"	Igneous		A&Ww		FBC			FC		AgL
LC	White Mountain Lake	34°21'57"/109°59'21"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	White Mountain Reservoir	34°00'12"/109°30'39"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Willow Creek	Headwaters to confluence with Clear Creek		A&Wc			FBC			FC		AgL
LC	Willow Springs Canyon Creek	Headwaters to confluence with Chevelon Creek		A&Wc			FBC			FC		AgL
LC	Willow Springs Lake	34°18'13"/110°52'16"	Sedimentary	A&Wc			FBC			FC	AgI	AgL

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LC	Woodland Reservoir	34°07'35"/109°57'01"	Igneous	A&Wc			FBC			FC	AgI	AgL
LC	Woods Canyon Creek	Headwaters to confluence with Chevelon Creek		A&Wc			FBC			FC		AgL
LC	Woods Canyon Lake	34°20'09"/110°56'45"	Sedimentary	A&Wc			FBC			FC	AgI	AgL
LC	Zuni River	Headwaters to confluence with the Little Colorado River		A&Wc			FBC			FC	AgI	AgL
MG	Agua Fria River	Headwaters to confluence with unnamed tributary at 34°35'14"/112°16'18"				A&We			PBC			AgL
MG	Agua Fria River (EDW)	Below confluence with unnamed tributary to State Route 169					A&Wedw		PBC			AgL
MG	Agua Fria River	From State Route 169 to Lake Pleasant				A&Ww		FBC		DWS	FC	AgI
MG	Agua Fria River	Below Lake Pleasant to the City of El Mirage WWTP at 33°34'20"/112°18'32"				A&We			PBC			AgL
MG	Agua Fria River (EDW)	From City of El Mirage WWTP outfall to 2 km downstream					A&Wedw		PBC			
MG	Agua Fria River	Below 2 km downstream of the City of El Mirage WWTP to City of Avondale WWTP outfall at 33°23'55"/112°21'16"				A&We			PBC			
MG	Agua Fria River	From City of Avondale WWTP outfall to confluence with Gila River					A&Wedw		PBC			
MG	Alvord Park Lake	35th Avenue & Baseline Road, Phoenix at 33°22'23"/112°08'20"	Urban			A&Ww			PBC		FC	
MG	Andorra Wash	Headwaters to confluence with Cave Creek Wash				A&We			PBC			
MG	Antelope Creek	Headwaters to confluence with Martinez Creek				A&Ww		FBC			FC	AgL
MG	Arlington Canal	From Gila River at 33°20'54"/112°35'39" to Gila River at 33°13'44"/112°46'15"										AgL
MG	Ash Creek	Headwaters to confluence with Tex Canyon				A&Wc		FBC			FC	AgI
MG	Ash Creek	Below confluence with Tex Canyon to confluence with Agua Fria River				A&Ww		FBC			FC	AgI
MG	Beehive Tank	32°52'37"/111°02'20"				A&Ww		FBC			FC	AgL
MG	Big Bug Creek	Headwaters to confluence with Eugene Gulch				A&Wc		FBC			FC	AgI
MG	Big Bug Creek	Below confluence with Eugene Gulch to confluence with Agua Fria River				A&Ww		FBC			FC	AgI
MG	Black Canyon Creek	Headwaters to confluence with the Agua Fria River				A&Ww		FBC			FC	AgL
MG	Blind Indian Creek	Headwaters to confluence with the Hassayampa River				A&Ww		FBC			FC	AgL
MG	Bonsall Park Lake	59th Avenue & Bethany Home Road, Phoenix at 33°31'24"/112°11'08"	Urban			A&Ww			PBC		FC	
MG	Canal Park Lake	College Avenue & Curry Road, Tempe at 33°26'54"/111°56'19"	Urban			A&Ww			PBC		FC	
MG	Cave Creek	Headwaters to the Cave Creek Dam				A&Ww		FBC			FC	AgL
MG	Cave Creek	Cave Creek Dam to the Arizona Canal					A&We		PBC			
MG	Centennial Wash	Headwaters to confluence with the Gila River at 33°16'32"/112°48'08"					A&We		PBC			AgL
MG	Centennial Wash Ponds	33°54'52"/113°23'47"				A&Ww		FBC			FC	AgL
MG	Chaparral Park Lake	Hayden Road & Chaparral Road, Scottsdale at 33°30'40"/111°54'27"	Urban			A&Ww			PBC		FC	AgI
MG	Cortez Park Lake	35th Avenue & Dunlap, Glendale at 33°34'13"/112°07'52"	Urban			A&Ww			PBC		FC	AgI
MG	Desert Breeze Lake	Galaxy Drive, West Chandler at 33°18'47"/111°55'10"	Urban			A&Ww			PBC		FC	
MG	Devils Canyon	Headwaters to confluence with Mineral Creek				A&Ww			FBC		FC	AgL
MG	Dobson Lake	Dobson Road & Los Lagos Vista Avenue, Mesa at 33°22'48"/111°52'35"	Urban			A&Ww			PBC		FC	
MG	East Maricopa Floodway	From Brown and Greenfield Rds to the Gila River Indian Reservation Boundary				A&We			PBS			AgL
MG	Eldorado Park Lake	Miller Road & Oak Street, Tempe at 33°28'25"/111°54'53"	Urban			A&Ww			PBC		FC	
MG	Encanto Park Lake	15th Avenue & Encanto Blvd., Phoenix at 33°28'28"/112°05'18"	Urban			A&Ww			PBC		FC	AgI
MG	Fain Lake	Town of Prescott Valley Park Lake 34°34'29"/112°21'06"	Urban			A&Ww			PBC		FC	
MG	French Gulch	Headwaters to confluence with Hassayampa River				A&Ww			PBC			AgL
MG	Galena Gulch	Headwaters to confluence with the Agua Fria River					A&We		PBC			AgL
MG	Galloway Wash (EDW)	Town of Cave Creek WWTP outfall at 33°50'15"/111°57'35" to confluence with Cave Creek					A&Wedw		PBC			

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural		
MG	Gila River	San Carlos Indian Reservation boundary to the Ashurst-Hayden Dam		A&Ww			FBC			FC	AgI	AgL
MG	Gila River	Ashurst-Hayden Dam to the Town of Florence WWTP outfall at 33°02'20"/111°24'19"			A&We			PBC				AgL
MG	Gila River (EDW)	Town of Florence WWTP outfall to Felix Road				A&Wedw		PBC				
MG	Gila River	Felix Road to the Gila River Indian Reservation boundary			A&We			PBC				AgL
MG	Gila River (EDW)	From the confluence with the Salt River to Gillespie Dam				A&Wedw		PBC		FC	AgI	AgL
MG	Gila River	Gillespie Dam to confluence with Painted Rock Dam		A&Ww			FBC			FC	AgI	AgL
MG	Granada Park Lake	6505 North 20th Street, Phoenix at 33°31'56"/112°02'16"	Urban	A&Ww				PBC		FC		
MG	Groom Creek	Headwaters to confluence with the Hassayampa River		A&Wc			FBC		DWS	FC		AgL
MG	Lower Lake Pleasant	33°50'32"/112°16'03"			A&Ww		FBC			FC	AgI	AgL
MG	Hassayampa Lake	34°25'45"/112°25'33"	Igneous	A&Wc			FBC		DWS	FC		
MG	Hassayampa River	Headwaters to confluence with unnamed tributary at 34°26'09"/112°30'32"		A&Wc			FBC			FC	AgI	AgL
MG	Hassayampa River	Below confluence with unnamed tributary to confluence with unnamed tributary at 33°51'52"/112°39'56"			A&Ww		FBC			FC	AgI	AgL
MG	Hassayampa River	Below unnamed tributary to the Buckeye Irrigation Company Canal			A&We			PBC				AgL
MG	Hassayampa River	Below Buckeye Irrigation Company canal to the Gila River			A&Ww		FBC			FC		AgL
MG	Horsethief Lake	34°09'42"/112°17'57"	Igneous	A&Wc			FBC		DWS	FC		AgL
MG	Indian Bend Wash	Headwaters to confluence with the Salt River				A&We		PBC				
MG	Indian Bend Wash Lakes	Scottsdale at 33°30'32"/111°54'24"	Urban	A&Ww				PBC		FC		
MG	Indian School Park Lake	Indian School Road & Hayden Road, Scottsdale at 33°29'39"/111°54'37"	Urban	A&Ww				PBC		FC		
MG	Kiwanis Park Lake	6000 South Mill Avenue, Tempe at 33°22'27"/111°56'22"	Urban	A&Ww				PBC		FC	AgI	
MG	Lake Pleasant	33°53'46"/112°16'29"	Deep		A&Ww		FBC		DWS	FC	AgI	AgL
MG	The Lake Tank	32°54'14"/111°04'15"			A&Ww		FBC			FC		AgL
MG	Lion Canyon	Headwaters to confluence with Weaver Creek			A&Ww		FBC			FC		AgL
MG	Little Ash Creek	Headwaters to confluence with Ash Creek at			A&Ww		FBC			FC		AgL
MG	Lynx Creek	Headwaters to confluence with unnamed tributary at 34°34'29"/112°21'07"		A&Wc			FBC			FC		AgL
MG	Lynx Creek	Below confluence with unnamed tributary to confluence with Agua Fria River			A&Ww		FBC			FC		AgL
MG	Lynx Lake	34°31'07"/112°23'07"	Deep	A&Wc			FBC		DWS	FC	AgI	AgL
MG	Maricopa Park Lake	33°35'28"/112°18'15"	Urban		A&Ww			PBC		FC		
MG	Martinez Canyon	Headwaters to confluence with Box Canyon			A&Ww		FBC			FC		AgL
MG	Martinez Creek	Headwaters to confluence with the Hassayampa River			A&Ww		FBC			FC	AgI	AgL
MG	McKellips Park Lake	Miller Road & McKellips Road, Scottsdale at 33°27'14"/111°54'49"	Urban		A&Ww			PBC		FC	AgI	
MG	McMicken Wash (EDW)	City of Peoria Jomax WWTP outfall at 33°43'31"/112°20'15" to confluence with Agua Fria River				A&Wedw		PBC				
MG	Mineral Creek	Headwaters to 33°12'34"/110°59'58"			A&Ww		FBC			FC		AgL
MG	Mineral Creek (diversion tunnel and lined channel)	33°12'24"/110°59'58" to 33°07'56"/110°58'34"					FBC					
MG	Mineral Creek	End of diversion channel to confluence with Gila River			A&Ww		FBC			FC		AgL
MG	Minnehaha Creek	Headwaters to confluence with the Hassayampa River			A&Ww		FBC			FC		AgL
MG	Mountain Valley Park Ponds (EDW)	Town of Prescott Valley WWTP outfall 002 at 34°36'07"/112°18'48" to Navajo Wash	EDW				A&Wedw		PBC			
MG	New River	Headwaters to Interstate 17			A&Ww		FBC			FC	AgI	AgL
MG	New River	Below Interstate 17 to confluence with Agua Fria River				A&We		PBC				AgL
MG	Painted Rock Reservoir	33°04'23"/113°00'38"	Sedimentary		A&Ww		FBC			FC	AgI	AgL
MG	Papago Park Ponds	Galvin Parkway, Phoenix at 33°27'15"/111°56'45"	Urban		A&Ww			PBC		FC		
MG	Papago Park South Pond	Curry Road, Tempe 33°26'22"/111°55'55"	Urban		A&Ww			PBC		FC		
MG	Perry Mesa Tank	34°11'03"/112°02'01"			A&Ww		FBC			FC		AgL
MG	Phoenix Area Canals	Granite Reef Dam to all municipal WTP intakes							DWS		AgI	AgL
MG	Phoenix Area Canals	Below municipal WTP intakes and all other locations									AgI	AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural			
MG	Picacho Reservoir	32°51'10"/111°28'25"	Shallow		A&Ww			FBC			FC	AgI	AgL
MG	Poland Creek	Headwaters to confluence with Lorena Gulch			A&Wc			FBC			FC		AgL
MG	Poland Creek	Below confluence with Lorena Gulch to confluence with Black Canyon Creek			A&Ww			FBC			FC		AgL
MG	Queen Creek	Headwaters to the Town of Superior WWTP outfall at 33°16'33"/111°07'44"			A&Ww				PBC				AgL
MG	Queen Creek (EDW)	Below Town of Superior WWTP outfall to confluence with Potts Canyon					A&Wedw		PBC				
MG	Queen Creek	Below Potts Canyon to ' Whitlow Dam			A&Ww			FBC			FC		AgL
MG	Queen Creek	Below Whitlow Dam to confluence with Gila River				A&We			PBC				
MG	Riverview Park Lake	Dobson Road & 8th Street, Mesa at 33°25'50"/111°52'29"	Urban		A&Ww				PBC		FC		
MG	Roadrunner Park Lake	36th Street & Cactus, Phoenix at 33°35'56"/112°00'21"	Urban		A&Ww				PBC		FC		
MG	Salt River	Verde River to 2 km below Granite Reef Dam			A&Ww			FBC		DWS	FC	AgI	AgL
MG	Salt River	2 km below Granite Reef Dam to City of Mesa NW WRF outfall at 33°26'22"/111°53'14"				A&We			PBC				
MG	Salt River (EDW)	City of Mesa NW WRF outfall to Tempe Town Lake					A&Wedw		PBC				
MG	Salt River	Below Tempe Town Lake to Interstate 10 bridge				A&We			PBC				
MG	Salt River	Below Interstate 10 bridge to the City of Phoenix 23rd Avenue WWTP outfall at . 33°24'44"/112°07'59"			A&Ww				PBC		FC		
MG	Salt River (EDW)	From City of Phoenix 23rd Avenue WWTP outfall to confluence with Gila River					A&Wedw		PBC		FC	AgI	AgL
MG	Siphon Draw (EDW)	Superstition Mountains CFD WWTP outfall at 33°21'40"/111°33'30" to 6 km downstream					A&Wedw		PBC				
MG	Sycamore Creek	Headwaters to confluence with Tank Canyon			A&Wc			FBC			FC		AgL
MG	Sycamore Creek	Below confluence with Tank Canyon to confluence with Agua Fria River			A&Ww			FBC			FC		AgL
MG	Tempe Town Lake	At Mill Avenue Bridge at 33°26'00"/111°56'26"	Urban		A&Ww			FBC			FC		
MG	Tule Creek	Headwaters to confluence with the Agua Fria River			A&Ww			FBC			FC		AgL
MG	Turkey Creek	Headwaters to confluence with unnamed tributary at 34°19'28"/112°21'33"			A&Wc			FBC			FC	AgI	AgL
MG	Turkey Creek	Below confluence with unnamed tributary to confluence with Poland Creek			A&Ww			FBC			FC	AgI	AgL
MG	Unnamed Wash (EDW)	Gila Bend WWTP outfall to confluence with the Gila River					A&Wedw		PBC				
MG	Unnamed Wash (EDW)	Luke Air Force Base WWTP outfall at 33°32'00"/112°19'03" to confluence with the Agua Fria River					A&Wedw		PBC				
MG	Unnamed Wash (EDW)	North Florence WWTP outfall at 33°03'50"/111°23'13" to confluence with Gila River					A&Wedw		PBC				
MG	Unnamed Wash (EDW)	Town of Prescott Valley WWTP outfall at 34°35'16"/112°16'18" to confluence with the Agua Fria River					A&Wedw		PBC				
MG	Unnamed Wash (EDW)	Town of Cave Creek WRF outfall at 33°48'02"/111°59'22" to confluence with Cave Creek					A&Wedw		PBC				
MG	Wagner Wash (EDW)	City of Buckeye Festival Ranch WRF outfall at 33°39'14"/112°40'18" to 2 km downstream					A&Wedw		PBC				
MG	Vista Del Camino Park North	7700 East Roosevelt Street, Scottsdale at 33°27'33"/111°54'52"	Urban		A&Ww				PBC		FC		
MG	Walnut Canyon Creek	Headwaters to confluence with the Gila River			A&Ww			FBC			FC		AgL
MG	Weaver Creek	Headwaters to confluence with Antelope Creek			A&Ww			FBC			FC		AgL
MG	White Canyon Creek	Headwaters to confluence with Walnut Canyon Creek			A&Ww			FBC			FC		AgL
SC	Agua Caliente Lake	12325 East Roger Road, Tucson 32°16'51"/110°43'52"	Urban		A&Ww				PBC		FC		
SC	Agua Caliente Wash	Headwaters to confluence with Soldier Trail			A&Ww			FBC			FC		AgL
SC	Agua Caliente Wash	Below Soldier Trail to confluence with Tanque Verde Creek				A&We			PBC				AgL
SC	Aguirre Wash	From the Tohono O'odham Indian Reservation boundary to 32°28'38"/111°46'51"				A&We			PBC				
SC	Alambre Wash	Headwaters to confluence with Brawley Wash				A&We			PBC				
SC	Alamo Wash	Headwaters to confluence with Rillito Creek				A&We			PBC				
SC	Altar Wash	Headwaters to confluence with Brawley Wash				A&We			PBC				
SC	Alum Gulch	Headwaters to 31°28'20"/110°43'51"				A&We			PBC				AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural	
SC	Alum Gulch	From 31°28'20"/110°43'51" to 31°29'17"/110°44'25"			A&Ww			FBC		FC	AgL
SC	Alum Gulch	Below 31°29'17"/110°44'25" to confluence with Sonoita Creek			A&We			PBC			AgL
SC	Arivaca Creek	Headwaters to confluence with Altar Wash			A&Ww			FBC		FC	AgL
SC	Arivaca Lake	31°31'52"/111°15'06"	Igneous		A&Ww			FBC		FC	AgL
SC	Atterbury Wash	Headwaters to confluence with Pantano Wash			A&We			PBC			AgL
SC	Bear Grass Tank	31°33'01"/111°11'03"			A&Ww			FBC		FC	AgL
SC	Big Wash	Headwaters to confluence with Cañada del Oro			A&We			PBC			
SC	Black Wash (EDW)	Pima County WWM D Avra Valley WWTP outfall at 32°09'58"/111°11'17" to confluence with Brawley Wash				A&Wedw		PBC			
SC	Bog Hole Tank	31°28'36"/110°37'09"			A&Ww			FBC		FC	AgL
SC	Brawley Wash	Headwaters to confluence with Los Robles Wash			A&We			PBC			AgL
SC	California Gulch	Headwaters To U.S./Mexico border			A&Ww			FBC		FC	AgL
SC	Cañada del Oro	Headwaters to State Route 77			A&Ww			FBC		FC	AgL
SC	Cañada del Oro	Below State Route 77 to confluence with the Santa Cruz River			A&We			PBC			AgL
SC	Cienega Creek	Headwaters to confluence with Gardner Canyon			A&Ww			FBC		FC	AgL
SC	Cienega Creek (OAW)	From confluence with Gardner Canyon to USGS gaging station (#09484600)			A&Ww			FBC		FC	AgL
SC	Davidson Canyon	Headwaters to unnamed spring at 31°59'00"/110°38'49"			A&We			PBC			AgL
SC	Davidson Canyon (OAW)	From unnamed Spring to confluence with unnamed tributary at 31°59'09"/110°38'44"			A&Ww			FBC		FC	AgL
SC	Davidson Canyon (OAW)	Below confluence with unnamed tributary to unnamed spring at 32°00'40"/110°38'36"			A&We			PBC			AgL
SC	Davidson Canyon (OAW)	From unnamed spring to confluence with Cienega Creek			A&Ww			FBC		FC	AgL
SC	Empire Gulch	Headwaters to unnamed spring at 31°47'18"/110°38'17"			A&We			PBC			
SC	Empire Gulch	From 31°47'18"/110°38'17" to 31°47'03"/110°37'35"			A&Ww			FBC		FC	
SC	Empire Gulch	From 31°47'03"/110°37'35" to 31°47'05"/110°36'58"			A&We			PBC			AgL
SC	Empire Gulch	From 31°47'05"/110°36'58" to confluence with Cienega Creek			A&Ww			FBC		FC	
SC	Flux Canyon	Headwaters to confluence with Alum Canyon			A&We			PBC			AgL
SC	Gardner Canyon Creek	Headwaters to confluence with Sawmill Canyon		A&Wc				FBC		FC	
SC	Gardner Canyon Creek	Below Sawmill Canyon to confluence with Cienega Creek			A&Ww			FBC		FC	
SC	Greene Wash	Greene Reservoir at 32°37'09"/111°41'12" to the Tohono O'odham Indian Reservation boundary			A&We			PBC			
SC	Greene Wash	Tohono O'odham Indian Reservation boundary to confluence with Santa Rosa Wash at 32°53'52"/111°56'48"			A&We			PBC			
SC	Harshaw Creek	Headwaters to confluence with Sonoita Creek at			A&We			PBC			AgL
SC	Hit Tank	32°43'57"/111°03'18"			A&Ww			FBC		FC	AgL
SC	Holden Canyon Creek	Headwaters to U.S./Mexico border			A&Ww			FBC		FC	
SC	Huachuca Tank	31°21'11"/110°30'18"			A&Ww			FBC		FC	AgL
SC	Julian Wash	Headwaters to confluence with the Santa Cruz River			A&We			PBC			
SC	Kennedy Lake	Mission Road & Ajo Road, Tucson at 32°10'49"/111°00'27"	Urban		A&Ww			PBC		FC	
SC	Lakeside Lake	8300 East Stella Road, Tucson at 32°11'11"/110°49'00"	Urban		A&Ww			PBC		FC	
SC	Lemmon Canyon Creek	Headwaters to confluence with unnamed tributary at 32°23'48"/110°47'49"		A&Wc				FBC		FC	
SC	Lemmon Canyon Creek	Below unnamed tributary to confluence with Sabino Canyon Creek			A&Ww			FBC		FC	
SC	Los Robles Wash	Headwaters to confluence with the Santa Cruz River			A&We			PBC			
SC	Madera Canyon Creek	Headwaters to confluence with unnamed tributary at 31°43'42"/110°52'51"		A&Wc				FBC		FC	AgL
SC	Madera Canyon Creek	Below unnamed tributary to confluence with the Santa Cruz River			A&Ww			FBC		FC	AgL
SC	Mattie Canyon	Headwaters to confluence with Cienega Creek "			A&Ww			FBC		FC	AgL
SC	Nogales Wash	Headwaters to confluence with Potrero Creek			A&Ww			PBC		FC	
SC	Oak Tree Canyon	Headwaters to confluence with Cienega Creek			A&We			PBC			

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural		
SC	Palisade Canyon Creek	Headwaters to confluence with unnamed tributary at 32°21'59"/110°46'16"		A&Wc			FBC			FC		
SC	Palisade Canyon Creek	Below unnamed tributary to confluence with Sabino Canyon Creek			A&Ww		FBC			FC		
SC	Pantano Wash	Headwaters to confluence with Tanque Verde Creek				A&We		PBC				
SC	Parker Canyon Creek	Headwaters to confluence with unnamed tributary at 31°24'17"/110°28'47"		A&Wc			FBC			FC		
SC	Parker Canyon Creek	Below unnamed tributary to U.S./Mexico border			A&Ww		FBC			FC		
SC	Parker Canyon Lake	31°25'35"/110°27'15"	Deep	A&Wc			FBC			FC	AgI	AgL
SC	Patagonia Lake	31°29'56"/110°50'49"	Deep		A&Ww		FBC			FC	AgI	AgL
SC	Peña Blanca Lake	31°24'15"/111°05'12"	Igneous		A&Ww		FBC			FC	AgI	AgL
SC	Potrero Creek	Headwaters to Interstate 19				A&We		PBC				AgL
SC	Potrero Creek	Below Interstate 19 to confluence with Santa Cruz River			A&Ww		FBC			FC		AgL
SC	Puertocito Wash	Headwaters to confluence with Altar Wash				A&We		PBC				
SC	Quitobaquito Spring	(Pond and Springs) 31°56'39"/113°01'06"			A&Ww		FBC			FC		AgL
SC	Redrock Canyon Creek	Headwaters to confluence with Harshaw Creek			A&Ww		FBC			FC		
SC	Rillito Creek	Headwaters to confluence with the Santa Cruz River				A&We		PBC				AgL
SC	Romero Canyon Creek	Headwaters to confluence with unnamed tributary at 32°24'29"/110°50'39"		A&Wc			FBC			FC		
SC	Romero Canyon Creek	Below unnamed tributary to confluence with Sutherland Wash			A&Ww		FBC			FC		
SC	Rose Canyon Creek	Headwaters to Rose Canyon Lake		A&Wc			FBC			FC		
SC	Rose Canyon Lake	32°23'13"/110°42'38"	Igneous	A&Wc			FBC			FC		AgL
SC	Ruby Lakes	31°26'29"/111°14'22"	Igneous		A&Ww		FBC			FC		AgL
SC	Sabino Canyon Creek	Headwaters to confluence with unnamed tributary at 32°23'28"/110°47'03"		A&Wc			FBC		DWS	FC	AgI	
SC	Sabino Canyon Creek	Below unnamed tributary to confluence with Tanque Verde River			A&Ww		FBC		DWS	FC	AgI	
SC	Salero Ranch Tank	31°35'43"/110°53'25"			A&Ww		FBC			FC		AgL
SC	Santa Cruz River	Headwaters to the at U.S./Mexico border			A&Ww		FBC			FC	AgI	AgL
SC	Santa Cruz River	U.S./Mexico border to the Nogales International WWTP outfall at 31°27'25"/110°58'04"			A&Ww		FBC		DWS	FC	AgI	AgL
SC	Santa Cruz River (EDW)	Nogales International WWTP outfall to the Tubac Bridge				A&Wedw		PBC				AgL
SC	Santa Cruz River	Tubac Bridge to Agua Nueva WRF outfall at 32°17'04"/111°01'45"			A&We			PBC				AgL
SC	Santa Cruz River (EDW)	Agua Nueva WRF outfall to Baumgartner Road				A&Wedw		PBC				
SC	Santa Cruz River, West Branch	Headwaters to the confluence with Santa Cruz River			A&We			PBC				AgL
SC	Santa Cruz Wash	Baumgartner Road to the Ak Chin Indian Reservation boundary			A&We			PBC				AgL
SC	Santa Cruz Wash, North Branch	Headwaters to City of Casa Grande WRF outfall at 32°54'57"/111°47'13"			A&We			PBC				
SC	Santa Cruz Wash, North Branch (EDW)	City of Casa Grande WRF outfall to 1 km downstream				A&Wedw		PBC				
SC	Santa Rosa Wash	Below Tohono O'odham Indian Reservation to the Ak Chin Indian Reservation			A&We			PBC				
SC	Santa Rosa Wash (EDW)	Palo Verde Utilities WWTP outfall at 33°04'20"/112°01'47" to the Gila River Indian Reservation				A&Wedw		PBC				
SC	Soldier Lake	32°25'34"/110°44'43"		A&Wc			FBC			FC		AgL
SC	Sonoita Creek	Headwaters to the Town of Patagonia WWTP outfall at 31°32'25"/110°45'31"				A&We		PBC				AgL
SC	Sonoita Creek (EDW)	Town of Patagonia WWTP outfall to permanent groundwater upwelling point approximately 1600 feet downstream of outfall				A&Wedw		PBC				AgL
SC	Sonoita Creek	Below groundwater upwelling point to confluence with the Santa Cruz River			A&Ww		FBC			FC	AgI	AgL
SC	Split Tank	31°28'11"/111°05'12"			A&Ww		FBC			FC		AgL
SC	Sutherland Wash	Headwaters to confluence with Cañada del Oro			A&Ww		FBC			FC		
SC	Sycamore Canyon	Headwaters to 32°21'60" / 110°44'48"		A&Wc			FBC			FC		
SC	Sycamore Canyon	From 32°21'60" / 110°44'48" to Sycamore Reservoir			A&Ww		FBC			FC		

Department of Environmental Quality – Water Quality Standards

Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife				Human Health			Agricultural		
SC	Sycamore Canyon Creek	Headwaters to the U.S./Mexico border			A&Ww			FBC			FC		AgL
SC	Sycamore Reservoir	32°20'57"/110°47'38"		A&Wc				FBC			FC		AgL
SC	Tanque Verde Creek	Headwaters to Houghton Road			A&Ww			FBC			FC		AgL
SC	Tanque Verde Creek	Below Houghton Road to confluence with Rillito Creek				A&We			PBC				AgL
SC	Three R Canyon	Headwaters to 31°28'26"/110°46'04"				A&We			PBC				AgL
SC	Three R Canyon	From 31°28'26"/110°46'04" to 31°28'28"/110°47'15"			A&Ww			FBC			FC		AgL
SC	Three R Canyon	From 31°28'28"/110°47'15" to confluence with Sonoita Creek				A&We			PBC				AgL
SC	Tinaja Wash	Headwaters to confluence with the Santa Cruz River				A&We			PBC				AgL
SC	Unnamed Wash (EDW)	Oracle Sanitary District WWTP outfall at 32°36'54"/110°48'02" to 5 km downstream					A&Wedw		PBC				
SC	Unnamed Wash (EDW)	Arizona City Sanitary District WWTP outfall at 32°45'43"/111°44'24" to confluence with Santa Cruz Wash					A&Wedw		PBC				
SC	Unnamed Wash (EDW)	Saddlebrook WWTP outfall at 32°32'00"/110°53'01" to confluence with Cañada del Oro					A&Wedw		PBC				
SC	Vekol Wash	Those reaches not located on the Ak-Chin, Tohono O'odham and Gila River Indian Reservations				A&We			PBC				
SC	Wakefield Canyon	Headwaters to confluence with unnamed tributary at 31°52'48"/110°26'27"		A&Wc				FBC			FC		AgL
SC	Wakefield Canyon	Below confluence with unnamed tributary to confluence with Cienega Creek			A&Ww			FBC			FC		AgL
SC	Wild Burro Canyon	Headwaters to confluence with unnamed tributary at 32°27'43"/111°05'47"			A&Ww			FBC			FC		AgL
SC	Wild Burro Canyon	Below confluence with unnamed tributary to confluence with Santa Cruz River				A&We			PBC				AgL
SC	Williams Ranch Tanks	31°55'14"/110°25'31"			A&Ww			FBC			FC		AgL
SP	Abbot Canyon	Headwaters to confluence with Whitewater Draw			A&Ww			FBC			FC		AgL
SP	Aravaipa Creek	Headwaters to confluence with Stowe Gulch			A&Ww			FBC			FC		AgL
SP	Aravaipa Creek (OAW)	Stowe Gulch to downstream boundary of Aravaipa Canyon Wilderness Area			A&Ww			FBC			FC		AgL
SP	Aravaipa Creek	Below downstream boundary of Aravaipa Canyon Wilderness Area to confluence with the San Pedro River			A&Ww			FBC			FC		AgL
SP	Ash Creek	Headwaters to 31°50'28"/109°40'04"			A&Ww			FBC			FC	AgI	AgL
SP	Babocomari River	Headwaters to confluence with the San Pedro River			A&Ww			FBC			FC		AgL
SP	Bass Canyon Creek	Headwaters to confluence with unnamed tributary at 32°26'06"/110°13'22"		A&Wc				FBC			FC		AgL
SP	Bass Canyon Creek	Below confluence with unnamed tributary to confluence with Hot Springs Canyon Creek			A&Ww			FBC			FC		AgL
SP	Bass Canyon Tank	32°24'00"/110°13'00"			A&Ww			FBC			FC		AgL
SP	Bear Creek	Headwaters to U.S./Mexico border			A&Ww			FBC			FC		AgL
SP	Big Creek	Headwaters to confluence with Pitchfork Canyon		A&Wc				FBC			FC		AgL
SP	Blacktail Pond	Fort Huachuca Military Reservation at 31°24'13"/110°17'23"			A&Ww			FBC			FC		
SP	Blackwater Draw	Headwaters to the U.S./Mexico border			A&Ww			FBC			FC		AgL
SP	Booger Canyon Creek	Headwaters to confluence with Aravaipa Creek			A&Ww			FBC			FC		AgL
SP	Buck Canyon	Headwaters to confluence with Buck Creek Tank			A&Ww			FBC			FC		AgL
SP	Buck Canyon	Below Buck Creek Tank to confluence with Dry Creek				A&We			PBC				AgL
SP	Buehman Canyon Creek (OAW)	Headwaters to confluence with unnamed tributary at 32°24'54"/110°32'10"			A&Ww			FBC			FC		AgL
SP	Buehman Canyon Creek	Below confluence with unnamed tributary to confluence with San Pedro River			A&Ww			FBC			FC		AgL
SP	Bull Tank	32°31'13"/110°12'52"			A&Ww			FBC			FC		AgL
SP	Bullock Canyon	Headwaters to confluence with Buehman Canyon			A&Ww			FBC			FC		AgL
SP	Carr Canyon Creek	Headwaters to confluence with unnamed tributary at 31°27'01"/110°15'48"		A&Wc				FBC			FC		AgL
SP	Carr Canyon Creek	Below confluence with unnamed tributary to confluence with the San Pedro River			A&Ww			FBC			FC		AgL
SP	Copper Creek	Headwaters to confluence with Prospect Canyon			A&Ww			FBC			FC		AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural	
						A&We		PBC		FC	AgL
SP	Copper Creek	Below confluence with Prospect Canyon to confluence with the San Pedro River				A&We		PBC			AgL
SP	Deer Creek	Headwaters to confluence with unnamed tributary at 32°59'57"/110°20'11"		A&Wc			FBC			FC	AgL
SP	Deer Creek	Below confluence with unnamed tributary to confluence with Aravaipa Creek			A&Ww		FBC			FC	AgL
SP	Dixie Canyon	Headwaters to confluence with Mexican Canyon			A&Ww		FBC			FC	AgL
SP	Double R Canyon Creek	Headwaters to confluence with Bass Canyon			A&Ww		FBC			FC	
SP	Dry Canyon	Headwaters to confluence with Abbot Canyon			A&Ww		FBC			FC	AgL
SP	East Gravel Pit Pond	Fort Huachuca Military Reservation at 31°30'54"/110°19'44"	Sedimentary		A&Ww		FBC			FC	
SP	Espiritu Canyon Creek	Headwaters to confluence with Soza Wash			A&Ww		FBC			FC	AgL
SP	Fly Pond	Fort Huachuca Military Reservation at 31°32'53"/110°21'16"			A&Ww		FBC			FC	
SP	Fourmile Canyon Creek	Headwaters to confluence with Aravaipa Creek			A&Ww		FBC			FC	AgL
SP	Fourmile Canyon, Left Prong	Headwaters to confluence with unnamed tributary at 32°43'15"/110°23'46"		A&Wc			FBC			FC	AgL
SP	Fourmile Canyon, Left Prong	Below confluence with unnamed tributary to confluence with Fourmile Canyon Creek			A&Ww		FBC			FC	AgL
SP	Fourmile Canyon, Right Prong	Headwaters to confluence with Fourmile Canyon			A&Ww		FBC			FC	AgL
SP	Gadwell Canyon	Headwaters to confluence with Whitewater Draw			A&Ww		FBC			FC	AgL
SP	Garden Canyon Creek	Headwaters to confluence with unnamed tributary at 31°29'01"/110°19'44"		A&Wc			FBC		DWS	FC	AgL
SP	Garden Canyon Creek	Below confluence with unnamed tributary to confluence with the San Pedro River			A&Ww		FBC		DWS	FC	AgL
SP	Glance Creek	Headwaters to confluence with Whitewater Draw			A&Ww		FBC			FC	AgL
SP	Gold Gulch	Headwaters to U.S./Mexico border			A&Ww		FBC			FC	AgL
SP	Golf Course Pond	Fort Huachuca Military Reservation at 31°32'14"/110°18'52"	Sedimentary		A&Ww			PBC		FC	
SP	Goudy Canyon Creek	Headwaters to confluence with Grant Creek		A&Wc			FBC			FC	AgL
SP	Grant Creek	Headwaters to confluence with unnamed tributary at 32°38'10"/109°56'37"		A&Wc			FBC		DWS	FC	AgL
SP	Grant Creek	Below confluence with unnamed tributary to terminus near Willcox Playa			A&Ww		FBC			FC	AgL
SP	Gravel Pit Pond	Fort Huachuca Military Reservation at 31°30'52"/110°19'49"	Sedimentary		A&Ww		FBC			FC	
SP	Greenbrush Draw	From U.S./Mexico border to confluence with San Pedro River				A&We		PBC			
SP	Hidden Pond	Fort Huachuca Military Reservation at 32°30'30"/109°22'17"			A&Ww		FBC			FC	
SP	High Creek	Headwaters to confluence with unnamed tributary at 32°33'08"/110°14'42"		A&Wc			FBC			FC	AgL
SP	High Creek	Below confluence with unnamed tributary to terminus near Willcox Playa			A&Ww		FBC			FC	AgL
SP	Horse Camp Canyon Creek	Headwaters to confluence with Aravaipa Creek			A&Ww		FBC			FC	AgL
SP	Hot Springs Canyon Creek	Headwaters to confluence with the San Pedro River			A&Ww		FBC			FC	AgL
SP	Johnson Canyon	Headwaters to Whitewater Draw at 31°32'46"/109°43'32"			A&Ww		FBC			FC	AgL
SP	Lake Cochise (EDW)	South of Twin Lakes Municipal Golf Course at 32°13'50"/109°49'27"	EDW			A&Wedw		PBC			
SP	Leslie Canyon Creek	Headwaters to confluence with Whitewater Draw			A&Ww		FBC			FC	AgL
SP	Lower Garden Canyon Pond	Fort Huachuca Military Reservation at 31°29'39"/110°18'34"			A&Ww		FBC			FC	
SP	Mexican Canyon	Headwaters to confluence with Dixie Canyon			A&Ww		FBC			FC	AgL
SP	Miller Canyon Creek	Headwaters to Broken Arrow Ranch Road at 31°25'35"/110°15'04"		A&Wc			FBC		DWS	FC	AgL
SP	Miller Canyon Creek	Below Broken Arrow Ranch Road to confluence with the San Pedro River			A&Ww		FBC		DWS	FC	AgL
SP	Moonshine Creek	Headwaters to confluence with Post Creek		A&Wc			FBC			FC	AgL
SP	Mule Gulch	Headwaters to the Lavender Pit at 31°26'11"/109°54'02"			A&Ww			PBC		FC	
SP	Mule Gulch	The Lavender Pit to the Highway 80 bridge at 31°26'30"/109°49'28"				A&We		PBC			
SP	Mule Gulch	Below the Highway 80 bridge to confluence with Whitewater Draw				A&We		PBC			AgL
SP	Oak Grove Canyon	Headwaters to confluence with Turkey Creek			A&Ww		FBC			FC	AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural	
SP	Officers Club Pond	Fort Huachuca Military Reservation at 31°32'51"/110°21'37"	Sedimentary		A&Ww			PBC		FC	
SP	Paige Canyon Creek	Headwaters to confluence with the San Pedro River			A&Ww			FBC		FC	AgL
SP	Parsons Canyon Creek	Headwaters to confluence with Aravaipa Creek			A&Ww			FBC		FC	AgL
SP	Pinery Creek	Headwaters to State Highway 181		A&Wc				FBC	DWS	FC	AgL
SP	Pinery Creek	Below State Highway 181 to terminus near Willcox Playa			A&Ww			FBC	DWS	FC	AgL
SP	Post Creek	Headwaters to confluence with Grant Creek		A&Wc				FBC		FC	AgL
SP	Ramsey Canyon Creek	Headwaters to Forest Service Road #110 at 31°27'44"/110°17'30"		A&Wc				FBC		FC	AgL
SP	Ramsey Canyon Creek	Below Forest Service Road #110 to confluence with Carr Wash			A&Ww			FBC		FC	AgL
SP	Rattlesnake Canyon	Headwaters to confluence with Brush Canyon		A&Wc				FBC		FC	AgL
SP	Rattlesnake Canyon	Below confluence with Brush Canyon to confluence with Aravaipa Creek			A&Ww			FBC		FC	AgL
SP	Redfield Canyon Creek	Headwaters to confluence with unnamed tributary at 32°33'40"/110°18'42"		A&Wc				FBC		FC	AgL
SP	Redfield Canyon Creek	Below confluence with unnamed tributary to confluence with the San Pedro River			A&Ww			FBC		FC	AgL
SP	Riggs Lake	32°42'28"/109°57'53"	Igneous	A&Wc				FBC		FC	AgL
SP	Rock Creek	Headwaters to confluence with Turkey Creek A/c						FBC		FC	AgL
SP	Rucker Canyon Creek	Headwaters to confluence with Whitewater Draw		A&Wc				FBC		FC	AgL
SP	Rucker Canyon Lake	31°46'46"/109°18'30"	Shallow	A&Wc				FBC		FC	AgL
SP	San Pedro River	U.S./ Mexico Border to Redington			A&Ww			FBC		FC	AgL
SP	San Pedro River	From Redington to confluence with the Gila River			A&Ww			FBC		FC	AgL
SP	Snow Flat Lake	32°39'10"/109°51'54"	Igneous	A&Wc				FBC		FC	AgL
SP	Soldier Creek	Headwaters to confluence with Post Creek at 32°40'50"/109°54'41"			A&Wc			FBC		FC	AgL
SP	Soto Canyon	Headwaters to confluence with Dixie Canyon			A&Ww			FBC		FC	AgL
SP	Swamp Springs Canyon Creek	Headwaters to confluence with Redfield Canyon			A&Ww			FBC		FC	AgL
SP	Sycamore Pond I	Fort Huachuca Military Reservation at 31°35'12"/110°26'11"	Sedimentary		A&Ww			FBC		FC	
SP	Sycamore Pond II	Fort Huachuca Military Reservation at 31°34'39"/110°26'10"	Sedimentary		A&Ww			FBC		FC	
SP	Turkey Creek	Headwaters to confluence with Aravaipa Creek			A&Ww			FBC		FC	AgL
SP	Turkey Creek	Headwaters to confluence with Rock Creek		A&Wc				FBC		FC	AgL
SP	Turkey Creek	Below confluence with Rock Creek to terminus near Willcox Playa			A&Ww			FBC		FC	AgL
SP	Unnamed Wash (EDW)	Mt. Lemmon WWTP outfall at 32°26'51"/110°45'08" to 0.25 km downstream				A&Wedw		PBC			
SP	Virgus Canyon Creek	Headwaters to confluence with Aravaipa Creek			A&Ww			FBC		FC	AgL
SP	Walnut Gulch	Headwaters to Tombstone WWTP outfall at 31°43'47"/110°04'06"				A&We		PBC			
SP	Walnut Gulch (EDW)	Tombstone WWTP outfall to the confluence with Tombstone Wash					A&Wedw	PBC			
SP	Walnut Gulch	Tombstone Wash to confluence with San Pedro River				A&We		PBC			
SP	Ward Canyon Creek	Headwaters to confluence with Turkey Creek		A&Wc				FBC		FC	AgL
SP	Whitewater Draw	Headwaters to confluence with unnamed tributary at 31°20'36"/109°43'48"				A&We		PBC			AgL
SP	Whitewater Draw	Below confluence with unnamed tributary to U.S./ Mexico border			A&Ww			FBC		FC	AgL
SP	Willcox Playa	From 32°08'19"/109°50'59" in the Sulphur Springs Valley	Sedimentary		A&Ww			FBC		FC	AgL
SP	Woodcutters Pond	Fort Huachuca Military Reservation at 31°30'09"/110°20'12"	Igneous		A&Ww			FBC		FC	
SR	Ackre Lake	33°37'01"/109°20'40"		A&Wc				FBC		FC	AgL
SR	Apache Lake	33°37'23"/111°12'26"	Deep		A&Ww			FBC	DWS	FC	AgL
SR	Barnhardt Creek	Headwaters to confluence with unnamed tributary at 34°05'37"/111°26'40"		A&Wc				FBC		FC	AgL
SR	Barnhardt Creek	Below confluence with unnamed tributary to confluence with Rye Creek			A&Ww			FBC		FC	AgL
SR	Basin Lake	33°55'00"/109°26'09"	Igneous		A&Ww			FBC		FC	AgL
SR	Bear Creek	Headwaters to confluence with the Black River		A&Wc				FBC		FC	AgL
SR	Bear Wallow Creek (OAW)	Headwaters to confluence with the Black River		A&Wc				FBC		FC	AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural		
SR	Bear Wallow Creek, North Fork (OAW)	Headwaters to confluence with Bear Wallow Creek		A&Wc			FBC			FC		AgL
SR	Bear Wallow Creek, South Fork (OAW)	Headwaters to confluence with Bear Wallow Creek		A&Wc			FBC			FC		AgL
SR	Beaver Creek	Headwaters to confluence with Black River		A&Wc			FBC			FC	AgI	AgL
SR	Big Lake	33°52'36"/109°25'33"	Igneous	A&Wc			FBC		DWS	FC	AgI	AgL
SR	Black River	Headwaters to confluence with Salt River		A&Wc			FBC		DWS	FC	AgI	AgL
SR	Black River, East Fork	From 33°51'19"/109°18'54" to confluence with the Black River		A&Wc			FBC		DWS	FC	AgI	AgL
SR	Black River, North Fork of East Fork	Headwaters to confluence with Black River, East Fork		A&Wc			FBC		DWS	FC	AgI	AgL
SR	Black River, West Fork	Headwaters to confluence with the Black River		A&Wc			FBC		DWS	FC	AgI	AgL
SR	Bloody Tanks Wash	Headwaters to Schultze Ranch Road				A&We			PBC			AgL
SR	Bloody Tanks Wash	Schultze Ranch Road to confluence with Miami Wash				A&We			PBC			
SR	Boggy Creek	Headwaters to confluence with Centerfire Creek		A&Wc			FBC			FC	AgI	AgL
SR	Boneyard Creek	Headwaters to confluence with Black River, East Fork		A&Wc			FBC			FC	AgI	AgL
SR	Boulder Creek	Headwaters to confluence with LaBarge Creek				A&Ww	FBC			FC		
SR	Campaign Creek	Headwaters to Roosevelt Lake				A&Ww	FBC			FC		AgL
SR	Canyon Creek	Headwaters to the White Mountain Apache Reservation boundary		A&Wc			FBC		DWS	FC	AgI	AgL
SR	Canyon Lake	33°32'44"/111°26'19"	Deep			A&Ww	FBC		DWS	FC	AgI	AgL
SR	Centerfire Creek	Headwaters to confluence with the Black River		A&Wc			FBC			FC	AgI	AgL
SR	Chambers Draw Creek	Headwaters to confluence with the North Fork of the East Fork of Black River		A&Wc			FBC			FC		AgL
SR	Cherry Creek	Headwaters to confluence with unnamed tributary at 34°05'09"/110°56'07"		A&Wc			FBC			FC	AgI	AgL
SR	Cherry Creek	Below unnamed tributary to confluence with the Salt River				A&Ww	FBC			FC	AgI	AgL
SR	Christopher Creek	Headwaters to confluence with Tonto Creek		A&Wc			FBC			FC	AgI	AgL
SR	Cold Spring Canyon Creek	Headwaters to confluence with unnamed tributary at 33°49'50"/110°52'58"		A&Wc			FBC			FC		AgL
SR	Cold Spring Canyon Creek	Below confluence with unnamed tributary to confluence with Cherry Creek				A&Ww	FBC			FC		AgL
SR	Conklin Creek	Headwaters to confluence with the Black River		A&Wc			FBC			FC	AgI	AgL
SR	Coon Creek	Headwaters to confluence with unnamed tributary at 33°46'41"/110°54'26"		A&Wc			FBC			FC		AgL
SR	Coon Creek	Below confluence with unnamed tributary to confluence with Salt River				A&Ww	FBC			FC		AgL
SR	Corduoy Creek	Headwaters to confluence with Fish Creek		A&Wc			FBC			FC	AgI	AgL
SR	Coyote Creek	Headwaters to confluence with the Black River, East Fork		A&Wc			FBC			FC	AgI	AgL
SR	Crescent Lake	33°54'38"/109°25'18"	Shallow	A&Wc			FBC			FC	AgI	AgL
SR	Deer Creek	Headwaters to confluence with the Black River, East Fork		A&Wc			FBC			FC		AgL
SR	Del Shay Creek	Headwaters to confluence with Gun Creek				A&Ww	FBC			FC		AgL
SR	Devils Chasm Creek	Headwaters to confluence with unnamed tributary at 33°48'46"/110°52'35"		A&Wc			FBC			FC		AgL
SR	Devils Chasm Creek	Below confluence with unnamed tributary to confluence with Cherry Creek				A&Ww	FBC			FC		AgL
SR	Dipping Vat Reservoir	33°55'47"/109°25'31"	Igneous			A&Ww	FBC			FC		AgL
SR	Double Cienega Creek	Headwaters to confluence with Fish Creek		A&Wc			FBC			FC		AgL
SR	Fish Creek	Headwaters to confluence with the Black River		A&Wc			FBC			FC	AgI	AgL
SR	Fish Creek	Headwaters to confluence with the Salt River				A&Ww	FBC			FC		
SR	Gold Creek	Headwaters to confluence with unnamed tributary at 33°59'47"/111°25'10"		A&Wc			FBC			FC		AgL
SR	Gold Creek	Below confluence with unnamed tributary to confluence with Tonto Creek				A&Ww	FBC			FC		AgL
SR	Gordon Canyon Creek	Headwaters to confluence with Hog Canyon		A&Wc			FBC			FC		AgL
SR	Gordon Canyon Creek	Below confluence with Hog Canyon to confluence with Haigler Creek				A&Ww	FBC			FC		AgL
SR	Greenback Creek	Headwaters to confluence with Tonto Creek				A&Ww	FBC			FC		AgL
SR	Haigler Creek	Headwaters to confluence with unnamed tributary at 34°12'23"/111°00'15"		A&Wc			FBC			FC	AgI	AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural		
SR	Haigler Creek	Below confluence with unnamed tributary to confluence with Tonto Creek		A&Ww			FBC			FC	AgI	AgL
SR	Hannagan Creek	Headwaters to confluence with Beaver Creek		A&Wc			FBC			FC		AgL
SR	Hay Creek (OAW)	Headwaters to confluence with the Black River, West Fork		A&Wc			FBC			FC		AgL
SR	Home Creek	Headwaters to confluence with the Black River, West Fork		A&Wc			FBC			FC		AgL
SR	Horse Creek	Headwaters to confluence with the Black River, West Fork		A&Wc			FBC			FC		AgL
SR	Horse Camp Creek	Headwaters to confluence with unnamed tributary at 33°54'00"/110°50'07"		A&Wc			FBC			FC		AgL
SR	Horse Camp Creek	Below confluence with unnamed tributary to confluence with Cherry Creek		A&Ww			FBC			FC		AgL
SR	Horton Creek	Headwaters to confluence with Tonto Creek		A&Wc			FBC			FC	AgI	AgL
SR	Houston Creek	Headwaters to confluence with Tonto Creek		A&Ww			FBC			FC		AgL
SR	Hunter Creek	Headwaters to confluence with Christopher Creek		A&Wc			FBC			FC		AgL
SR	LaBarge Creek	Headwaters to Canyon Lake		A&Ww			FBC			FC		
SR	Lake Sierra Blanca	33°52'25"/109°16'05"		A&Wc			FBC			FC	AgI	AgL
SR	Miami Wash	Headwaters to confluence with Pinal Creek			A&We			PBC				
SR	Mule Creek	Headwaters to confluence with Canyon Creek		A&Wc			FBC		DWS	FC	AgI	AgL
SR	Open Draw Creek	Headwaters to confluence with the East Fork of Black River		A&Wc			FBC			FC		AgL
SR	P B Creek	Headwaters to Forest Service Road #203 at 33°57'08"/110°56'12"		A&Wc			FBC			FC		AgL
SR	P B Creek	Below Forest Service Road #203 to Cherry Creek		A&Ww			FBC			FC		AgL
SR	Pinal Creek	Headwaters to confluence with unnamed EDW wash (Globe WWTP) at 33°25'29"/110°48'20"			A&We			PBC				AgL
SR	Pinal Creek (EDW)	Confluence with unnamed EDW wash (Globe WWTP) to 33°26'55"/110°49' 25"				A&Wedw		PBC				
SR	Pinal Creek	From 33°26'55"/110°49'25" to Lower Pinal Creek water treatment plant outfall #001 at 33°31'04"/110°51'55"			A&We			PBC				AgL
SR	Pinal Creek	From Lower Pinal Creek WTP outfall # to See Ranch Crossing at 33°32'25"/110°52'28"				A&Wedw		PBC				
SR	Pinal Creek	From See Ranch Crossing to confluence with unnamed tributary at 33°35'28"/110°54'31"		A&Ww			FBC					
SR	Pinal Creek	From unnamed tributary to confluence with Salt River		A&Ww			FBC			FC		
SR	Pine Creek	Headwaters to confluence with the Salt River		A&Ww			FBC			FC		
SR	Pinto Creek	Headwaters to confluence with unnamed tributary at 33°19'27"/110°54'58"		A&Wc			FBC			FC	AgI	AgL
SR	Pinto Creek	Below confluence with unnamed tributary to Roosevelt Lake		A&Ww			FBC			FC	AgI	AgL
SR	Pool Corral Lake	33°30'38"/110°00'15"	Igneous	A&Ww			FBC			FC	AgI	AgL
SR	Pueblo Canyon Creek	Headwaters to confluence with unnamed tributary at 33°50'23"/110°51'37"		A&Wc			FBC			FC		AgL
SR	Pueblo Canyon Creek	Below confluence with unnamed tributary to confluence with Cherry Creek		A&Ww			FBC			FC		AgL
SR	Reevis Creek	Headwaters to confluence with Pine Creek		A&Ww			FBC			FC		
SR	Reservation Creek	Headwaters to confluence with the Black River		A&Wc			FBC			FC		AgL
SR	Reynolds Creek	Headwaters to confluence with Workman Creek		A&Wc			FBC			FC		AgL
SR	Roosevelt Lake	33°52'17"/111°00'17"	Deep	A&Ww			FBC		DWS	FC	AgI	AgL
SR	Russell Gulch	FromHeadwaters to confluence with Miami Wash			A&We			PBC				
SR	Rye Creek	Headwaters to confluence with Tonto Creek		A&Ww			FBC			FC		AgL
SR	Saguaro Lake	33°33'44"/111°30'55"	Deep	A&Ww			FBC		DWS	FC	AgI	AgL
SR	Salome Creek	Headwaters to confluence with the Salt River		A&Ww			FBC			FC	AgI	AgL
SR	Salt House Lake	33°57'04"/109°20'11"	Igneous	A&Ww			FBC			FC		AgL
SR	Salt River	Theodore Roosevelt Dam to 2 km below Granite Reef Dam		A&Ww			FBC		DWS	FC	AgI	AgL
SR	Slate Creek	Headwaters to confluence with Tonto Creek		A&Ww			FBC			FC		AgL
SR	Snake Creek (OAW)	Headwaters to confluence with the Black River		A&Wc			FBC			FC		AgL
SR	Spring Creek	Headwaters to confluence with Tonto Creek		A&Ww			FBC			FC		AgL
SR	Stinky Creek (OAW)	Headwaters to confluence with the Black River, West Fork		A&Wc			FBC			FC		AgL
SR	Thomas Creek	Headwaters to confluence with Beaver Creek		A&Wc			FBC			FC		AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural		
SR	Thompson Creek	Headwaters to confluence with the West Fork of the Black River		A&Wc			FBC			FC		AgL
SR	Tonto Creek	Headwaters to confluence with unnamed tributary at 34°18'11"/111°04'18"		A&Wc			FBC			FC	AgI	AgL
SR	Tonto Creek	Below confluence with unnamed tributary to Roosevelt Lake			A&Ww		FBC			FC	AgI	AgL
SR	Turkey Creek	Headwaters to confluence with Rock Creek		A&Wc			FBC			FC		
SR	Wildcat Creek	Headwaters to confluence with Centerfire Creek		A&Wc			FBC			FC		AgL
SR	Willow Creek	Headwaters to confluence with Beaver Creek		A&Wc			FBC			FC		AgL
SR	Workman Creek	Headwaters to confluence with Reynolds Creek		A&Wc			FBC			FC	AgI	AgL
SR	Workman Creek	Below confluence with Reynolds Creek to confluence with Salome Creek			A&Ww		FBC			FC	AgI	AgL
UG	Apache Creek	Headwaters to confluence with the Gila River			A&Ww		FBC			FC		AgL
UG	Ash Creek	Headwaters to confluence with unnamed tributary at 32°46'15"/109°51'45"		A&Wc			FBC			FC		AgL
UG	Ash Creek	Below confluence with unnamed tributary to confluence with the Gila River			A&Ww		FBC			FC		AgL
UG	Bennett Wash	Headwaters to the Gila River				A&We		PBC				
UG	Bitter Creek	Headwaters to confluence with the Gila River			A&Ww		FBC			FC		
UG	Blue River	Headwaters to confluence with Strayhorse Creek at 33°29'02"/109°12'14"		A&Wc			FBC			FC	AgI	AgL
UG	Blue River	Below confluence with Strayhorse Creek to confluence with San Francisco River			A&Ww		FBC			FC	AgI	AgL
UG	Bonita Creek (OAW)	San Carlos Indian Reservation boundary to confluence with the Gila River			A&Ww		FBC		DWS	FC		AgL
UG	Buckalou Creek	Headwaters to confluence with Castle Creek		A&Wc			FBC			FC		AgL
UG	Campbell Blue Creek	Headwaters to confluence with the Blue River		A&Wc			FBC			FC		AgL
UG	Castle Creek	Headwaters to confluence with Campbell Blue Creek		A&Wc			FBC			FC		AgL
UG	Cave Creek (OAW)	Headwaters to confluence with South Fork Cave Creek		A&Wc			FBC			FC	AgI	AgL
UG	Cave Creek (OAW)	Below confluence with South Fork Cave Creek to Coronado National Forest boundary			A&Ww		FBC			FC	AgI	AgL
UG	Cave Creek	Below Coronado National Forest boundary to New Mexico border			A&Ww		FBC			FC	AgI	AgL
UG	Cave Creek, South Fork	Headwaters to confluence with Cave Creek		A&Wc			FBC			FC	AgI	AgL
UG	Chase Creek	Headwaters to the Phelps-Dodge Morenci Mine			A&Ww		FBC			FC		AgL
UG	Chase Creek	Below the Phelps-Dodge Morenci Mine to confluence with San Francisco River				A&We		PBC				
UG	Chitty Canyon Creek	Headwaters to confluence with Salt House Creek		A&Wc			FBC			FC		AgL
UG	Cima Creek	Headwaters to confluence with Cave Creek		A&Wc			FBC			FC		AgL
UG	Cluff Ranch Pond #1	32°48'55"/109°50'46"	Sedimentary		A&Ww		FBC			FC	AgI	AgL
UG	Cluff Ranch Pond #3	32°48'21"/109°51'46"	Sedimentary		A&Ww		FBC			FC	AgI	AgL
UG	Coleman Creek	Headwaters to confluence with Campbell Blue Creek		A&Wc			FBC			FC		AgL
UG	Dankworth Lake	32°43'13"/109°42'17"	Sedimentary		A&Wc		FBC			FC		
UG	Deadman Canyon Creek	Headwaters to confluence with unnamed tributary at 32°43'50"/109°49'03"		A&Wc			FBC		DWS	FC		AgL
UG	Deadman Canyon Creek	Below confluence with unnamed tributary to confluence with Graveyard Wash			A&Ww		FBC		DWS	FC		AgL
UG	Eagle Creek	Headwaters to confluence with unnamed tributary at 33°22'32"/109°29'43"		A&Wc			FBC		DWS	FC	AgI	AgL
UG	Eagle Creek	Below confluence with unnamed tributary to confluence with the Gila River			A&Ww		FBC		DWS	FC	AgI	AgL
UG	East Eagle Creek	Headwaters to confluence with Eagle Creek		A&Wc			FBC			FC		AgL
UG	East Turkey Creek	Headwaters to confluence with unnamed tributary at 31°58'22"/109°12'20"		A&Wc			FBC			FC		AgL
UG	East Turkey Creek	Below confluence with unnamed tributary to terminus near San Simon River			A&Ww		FBC			FC		AgL
UG	East Whitetail	Headwaters to terminus near San Simon River			A&Ww		FBC			FC		AgL
UG	Emigrant Canyon	Headwaters to terminus near San Simon River			A&Ww		FBC			FC		AgL
UG	Evans Pond #1	32°49'19"/109°51'12"	Sedimentary		A&Ww		FBC			FC	AgI	AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural			
UG	Evans Pond #2	32°49'14"/109°51'09"	Sedimentary		A&Ww			FBC			FC	AgI	AgL
UG	Fishhook Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		AgL
UG	Foote Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		AgL
UG	Frye Canyon Creek	Headwaters to Frye Mesa Reservoir		A&Wc				FBC		DWS	FC		AgL
UG	Frye Canyon Creek	Highline CanalHeadwaters to terminus near San Simon River			A&Ww			FBC			FC		AgL
UG	Frye Mesa Reservoir	32°45'14"/109°50'02"	Igneous	A&Wc				FBC		DWS	FC		
UG	Gibson Creek	Headwaters to confluence with Marijilda Creek		A&Wc				FBC			FC		AgL
UG	Gila River	New Mexico border to the San Carlos Indian Reservation boundary			A&Ww			FBC			FC	AgI	AgL
UG	Grant Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		AgL
UG	Judd Lake	33°51'15"/109°09'35"	Sedimentary	A&Wc				FBC			FC		
UG	K P Creek (OAW)	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		AgL
UG	Lanphier Canyon Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		AgL
UG	Little Blue Creek	Headwaters to confluence with Dutch Blue Creek		A&Wc				FBC			FC		AgL
UG	Little Blue Creek	Below confluence with Dutch Blue Creek to confluence with Blue Creek			A&Ww			FBC			FC		AgL
UG	Little Creek	Headwaters to confluence with the San Francisco River		A&Wc				FBC			FC		
UG	Lower George's Reservoir	33°51'24"/109°08'30"	Sedimentary	A&Wc				FBC			FC		AgL
UG	Luna Lake	33°49'50"/109°05'06"	Sedimentary	A&Wc				FBC			FC		AgL
UG	Marijilda Creek	Headwaters to confluence with Gibson Creek		A&Wc				FBC			FC		AgL
UG	Marijilda Creek	Below confluence with Gibson Creek to confluence with Stockton Wash			A&Ww			FBC			FC	AgI	AgL
UG	Markham Creek	Headwaters to confluence with the Gila River			A&Ww			FBC			FC		AgL
UG	Pigeon Creek	Headwaters to confluence with the Blue River			A&Ww			FBC			FC		AgL
UG	Raspberry Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		
UG	Roper Lake	32°45'23"/109°42'14"	Sedimentary		A&Ww			FBC			FC		
UG	San Francisco River	Headwaters to the New Mexico border		A&Wc				FBC			FC	AgI	AgL
UG	San Francisco River	New Mexico border to confluence with the Gila River			A&Ww			FBC			FC	AgI	AgL
UG	San Simon River	Headwaters to confluence with the Gila River				A&We			PBC				AgL
UG	Sheep Tank	32°46'14"/109°48'09"	Sedimentary		A&Ww			FBC			FC		AgL
UG	Smith Pond	32°49'15"/109°50'36"	Sedimentary		A&Ww			FBC			FC		
UG	Squaw Creek	Headwaters to confluence with Thomas Creek		A&Wc				FBC			FC		AgL
UG	Stone Creek	Headwaters to confluence with the San Francisco River		A&Wc				FBC			FC	AgI	AgL
UG	Strayhorse Creek	Headwaters to confluence with the Blue River		A&Wc				FBC			FC		
UG	Thomas Creek	Headwaters to confluence with Rousensock Creek		A&Wc				FBC			FC		AgL
UG	Thomas Creek	Below confluence with Rousensock Creek to confluence with Blue River			A&Ww			FBC			FC		AgL
UG	Tinny Pond	33°47'49"/109°04'27"	Sedimentary		A&Ww			FBC			FC		AgL
UG	Turkey Creek	Headwaters to confluence with Campbell Blue Creek		A&Wc				FBC			FC		AgL
VR	American Gulch	Headwaters to the Northern Gila County Sanitary District WWTP outfall at 34°14'02"/111°22'14"			A&Ww			FBC			FC	AgI	AgL
VR	American Gulch (EDW)	Below Northern Gila County Sanitary District WWTP outfall to confluence with the East Verde River					A&Wedw		PBC				
VR	Apache Creek	Headwaters to confluence with Walnut Creek			A&Ww			FBC			FC		AgL
VR	Ashbrook Wash	Headwaters to the Fort McDowell Indian Reservation boundary				A&We			PBC				
VR	Aspen Creek	Headwaters to confluence with Granite Creek			A&Ww			FBC			FC		
VR	Bar Cross Tank	35°00'41"/112°05'39"			A&Ww			FBC			FC		AgL
VR	Barrata Tank	35°02'43"/112°24'21"			A&Ww			FBC			FC		AgL
VR	Bartlett Lake	33°49'52"/111°37'44"	Deep		A&Ww			FBC		DWS	FC	AgI	AgL
VR	Beaver Creek	Headwaters to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Big Chino Wash	Headwaters to confluence with Sullivan Lake				A&We			PBC				AgL
VR	Bitter Creek	Headwaters to the Jerome WWTP outfall at 34°45'12"/112°06'24"				A&We			PBC				AgL

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural			
VR	Bitter Creek (EDW)	Jerome WWTP outfall to the Yavapai Apache Indian Reservation boundary				A&Wedw		PBC				AgL	
VR	Bitter Creek	Below the Yavapai Apache Indian Reservation boundary to confluence with the Verde River			A&Ww			FBC			FC	AgI	AgL
VR	Black Canyon Creek	Headwaters to confluence with unnamed tributary at 34°39'20"/112°05'06"			A&Wc			FBC			FC		AgL
VR	Black Canyon Creek	Below confluence with unnamed tributary to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Bonita Creek	Headwaters to confluence with Ellison Creek			A&Wc			FBC			FC		
VR	Bray Creek	Headwaters to confluence with Webber Creek			A&Wc			FBC			FC		AgL
VR	Camp Creek	Headwaters to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Cereus Wash	Headwaters to the Fort McDowell Indian Reservation boundary				A&We			PBC				
VR	Chase Creek	Headwaters to confluence with the East Verde River			A&Wc			FBC		DWS	FC		
VR	Clover Creek	Headwaters to confluence with Headwaters of West Clear Creek			A&Wc			FBC			FC		AgL
VR	Coffee Creek	Headwaters to confluence with Spring Creek			A&Ww			FBC			FC		AgL
VR	Colony Wash	Headwaters to the Fort McDowell Indian Reservation boundary				A&We			PBC				
VR	Dead Horse Lake	34°45'08"/112°00'42"	Shallow		A&Ww			FBC			FC		
VR	Deadman Creek	Headwaters to Horseshoe Reservoir			A&Ww			FBC			FC		AgL
VR	Del Monte Wash	Headwaters to confluence with City of Cottonwood WWTP outfall 002 at 34°43'57"/112°02'46"				A&We			PBC				
VR	Del Monte Wash (EDW)	City of Cottonwood WWTP outfall 002 at 34°43'57"/112°02'46" to confluence with Verde River					A&Wedw		PBC				
VR	Del Rio Dam Lake	34°48'55"/112°28'03"	Sedimentary		A&Ww			FBC			FC		AgL
VR	Dry Beaver Creek	Headwaters to confluence with Beaver Creek			A&Ww			FBC			FC	AgI	AgL
VR	Dry Creek (EDW)	Sedona Ventures WWTP outfall at 34°50'02"/111°52'17" to 34°48'12"/111°52'48"					A&Wedw		PBC				
VR	Dude Creek	Headwaters to confluence with the East Verde River			A&Wc			FBC			FC	AgI	AgL
VR	East Verde River	Headwaters to confluence with Ellison Creek			A&Wc			FBC		DWS	FC	AgI	AgL
VR	East Verde River	Below confluence with Ellison Creek to confluence with the Verde River			A&Ww			FBC		DWS	FC	AgI	AgL
VR	Ellison Creek	Headwaters to confluence with the East Verde River			A&Wc			FBC			FC		AgL
VR	Fossil Creek (OAW)	Headwaters to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Fossil Springs (OAW)	34°25'24"/111°34'27"			A&Ww			FBC		DWS	FC		
VR	Foxboro Lake	34°53'42"/111°39'55"			A&Ww			FBC			FC		AgL
VR	Fry Lake	35°03'45"/111°48'04"			A&Ww			FBC			FC		AgL
VR	Gap Creek	Headwaters to confluence with Government Spring			A&Wc			FBC			FC		AgL
VR	Gap Creek	Below Government Spring to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Garrett Tank	35°18'57"/112°42'20"			A&Ww			FBC			FC		AgL
VR	Goldwater Lake, Lower	34°29'56"/112°27'17"	Sedimentary	A&Wc				FBC		DWS	FC		
VR	Goldwater Lake, Upper	34°29'52"/112°26'59"	Igneous	A&Wc				FBC		DWS	FC		
VR	Granite Basin Lake	34°37'01"/112°32'58"	Igneous	A&Wc				FBC			FC	AgI	AgL
VR	Granite Creek	Headwaters to Watson Lake			A&Wc			FBC			FC	AgI	AgL
VR	Granite Creek	Below Watson Lake to confluence with the Verde River			A&Ww			FBC			FC	AgI	AgL
VR	Green Valley Lake (EDW)	34°13'54"/111°20'45"	Urban				A&Wedw		PBC		FC		
VR	Heifer Tank	35°20'27"/112°32'59"			A&Ww			FBC			FC		AgL
VR	Hell Canyon Tank	35°04'59"/112°24'07"	Igneous	A&Ww				FBC			FC		AgL
VR	Homestead Tank	35°21'24"/112°41'36"	Igneous	A&Ww				FBC			FC		AgL
VR	Horse Park Tank	34°58'15"/111°36'32"			A&Ww			FBC			FC		AgL
VR	Horseshoe Reservoir	34°00'25"/111°43'36"	Sedimentary	A&Ww				FBC			FC	AgI	AgL
VR	Houston Creek	Headwaters to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Huffer Tank	34°27'46"/111°23'11"			A&Ww			FBC			FC		AgL
VR	J.D. Dam Lake	35°04'02"/112°01'48"	Shallow	A&Wc				FBC			FC	AgI	AgL
VR	Jacks Canyon Wash	Headwaters to Big Park WWTP outfall at 34°45'46"/111°43'51"				A&We			PBC				
VR	Jacks Canyon Wash (EDW)	Below Big Park WWTP outfall to confluence with Dry Beaver Creek					A&Wedw		PBC				

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Watershed	Surface Waters	Segment Description and Location (Latitude and Longitudes are in NAD 83)	Lake Category	Aquatic and Wildlife			Human Health			Agricultural			
VR	Lime Creek	Headwaters to Horseshoe Reservoir			A&Ww			FBC		FC		AgL	
VR	McLellan Reservoir	35°13'09"/112°17'06"	Igneous		A&Ww			FBC		FC	AgI	AgL	
VR	Meath Dam Tank	35°07'52"/112°27'35"			A&Ww			FBC		FC		AgL	
VR	Mullican Place Tank	34°44'16"/111°36'10"	Igneous		A&Ww			FBC		FC		AgL	
VR	Oak Creek (OAW)	Headwaters to confluence with unnamed tributary at 34°59'15"/111°44'47"		A&Wc				FBC		DWS	FC	AgI	AgL
VR	Oak Creek (OAW)	Below confluence with unnamed tributary to confluence with Verde River			A&Ww			FBC		DWS	FC	AgI	AgL
VR	Oak Creek, West Fork (OAW)	Headwaters to confluence with Oak Creek		A&Wc				FBC			FC		AgL
VR	Odell Lake	34°56'5"/111°37'53"	Igneous	A&Wc				FBC			FC		
VR	Peck's Lake	34°46'51"/112°02'01"	Shallow		A&Ww			FBC			FC	AgI	AgL
VR	Perkins Tank	35°06'42"/112°04'12"	Shallow		A&Wc			FBC			FC		AgL
VR	Pine Creek	Headwaters to confluence with unnamed tributary at 34°21'51"/111°26'49"		A&Wc				FBC		DWS	FC	AgI	AgL
VR	Pine Creek	Below confluence with unnamed tributary to confluence with East Verde River			A&Ww			FBC		DWS	FC	AgI	AgL
VR	Red Creek	Headwaters to confluence with the Verde River			A&Ww			FBC			FC		AgL
VR	Reservoir #1	35°13'5"/111°50'09"	Igneous		A&Ww			FBC			FC		
VR	Reservoir #2	35°13'17"/111°50'39"	Igneous		A&Ww			FBC			FC		
VR	Roundtree Canyon Creek	Headwaters to confluence with Tangle Creek			A&Ww			FBC			FC		AgL
VR	Scholze Lake	35°11'53"/112°00'37"	Igneous	A&Wc				FBC			FC		AgL
VR	Spring Creek	Headwaters to confluence with unnamed tributary at 34°57'23"/111°57'21"			A&Wc			FBC			FC	AgI	AgL
VR	Spring Creek	Below confluence with unnamed tributary to confluence with Oak Creek			A&Ww			FBC			FC	AgI	AgL
VR	Steel Dam Lake	35°13'36"/112°24'54"	Igneous	A&Wc				FBC			FC		AgL
VR	Stehr Lake	34°22'01"/111°40'02"	Sedimentary		A&Ww			FBC			FC		AgL
VR	Stone Dam Lake	35°13'32"/112°24'10"			A&Wc			FBC			FC	AgI	AgL
VR	Stoneman Lake	34°46'47"/111°31'14"	Shallow		A&Wc			FBC			FC	AgI	AgL
VR	Sullivan Lake	34°51'42"/112°27'51"			A&Ww			FBC			FC	AgI	AgL
VR	Sycamore Creek	Headwaters to confluence with unnamed tributary at 35°03'41"/111°57'31"		A&Wc				FBC			FC	AgI	AgL
VR	Sycamore Creek	Below confluence with unnamed tributary to confluence with Verde River			A&Ww			FBC			FC	AgI	AgL
VR	Sycamore Creek	Headwaters to confluence with Verde River at 33°37'55"/111°39'58"			A&Ww			FBC			FC	AgI	AgL
VR	Sycamore Creek	Headwaters to confluence with Verde River			A&Ww			FBC			FC		AgL
VR	Tangle Creek	Headwaters to confluence with Verde River			A&Ww			FBC			FC	AgI	AgL
VR	Trinity Tank	35°27'44"/112°48'01"			A&Ww			FBC			FC		AgL
VR	Unnamed Wash	Flagstaff Meadows WWTP outfall at '35°13'59"/111°48'35" to Volunteer Wash					A&Wedw		PBC				
VR	Verde River	From confluence of Chino Wash and Granite Creek to Bartlett Lake Dam			A&Ww			FBC			FC	AgI	AgL
VR	Verde River	Below Bartlett Lake Dam to Salt River			A&Ww			FBC		DWS	FC	AgI	AgL
VR	Walnut Creek	Headwaters to confluence with Big Chino Wash			A&Ww			FBC			FC		AgL
VR	Watson Lake	34°34'58"/112°25'26"	Igneous		A&Ww			FBC			FC	AgI	AgL
VR	Webber Creek	Headwaters to confluence with the East Verde River		A&Wc				FBC			FC		AgL
VR	West Clear Creek	Headwaters to confluence with Meadow Canyon			A&Wc			FBC			FC		AgL
VR	West Clear Creek	Below confluence with Meadow Canyon to confluence with the Verde River			A&Ww			FBC			FC	AgI	AgL
VR	Wet Beaver Creek	Headwaters to unnamed springs at 34°41'17"/111°34'34"			A&Wc			FBC			FC	AgI	AgL
VR	Wet Beaver Creek	Below unnamed springs to confluence with Dry Beaver Creek			A&Ww			FBC			FC	AgI	AgL
VR	Whitehorse Lake	35°06'59"/112°00'48"	Igneous	A&Wc				FBC		DWS	FC	AgI	AgL
VR	Williamson Valley Wash	Headwaters to confluence with Mint Wash				A&We			PBC				AgL
VR	Williamson Valley Wash	From confluence of Mint Wash to 10.5 km downstream			A&Ww			FBC			FC		AgL
VR	Williamson Valley Wash	From 10.5 km downstream of Mint Wash confluence to confluence with Big Chino Wash				A&We			PBC				AgL
VR	Williscraft Tank	35°11'22"/112°35'40"			A&Ww			FBC			FC		AgL
VR	Willow Creek	Above Willow Creek Reservoir			A&Wc			FBC			FC		AgL
VR	Willow Creek	Below Willow Creek Reservoir to confluence with Granite Creek			A&Ww			FBC			FC		AgL
VR	Willow Creek Reservoir	34°36'17"/112°26'19"	Shallow		A&Ww			FBC			FC	AgI	AgL
VR	Willow Valley Lake	34°41'08"/111°20'02"	Sedimentary		A&Ww			FBC			FC		AgL

**Watersheds**

- BW = Bill Williams
- CG = Colorado – Grand Canyon
- CL = Colorado – Lower Gila
- LC = Little Colorado
- MG = Middle Gila
- SC = Santa Cruz – Rio Magdalena – Rio Sonoyta
- SP = San Pedro – Willcox Playa – Rio Yaqui
- SR = Salt River
- UG = Upper Gila
- VR = Verde River

**Other Abbreviations**

- WWTP = Wastewater Treatment Plant
- Km = kilometers

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1). Appendix B repealed, new Appendix B adopted effective April 24, 1996 (Supp. 96-2). Amended by final rulemaking at 8 A.A.R. 1264, effective March 8, 2002 (Supp. 02-1). Amended by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Amended by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**Appendix C. Site-Specific Standards**

Watershed	Surface Water	Surface Water Description & Location	Parameter	Site-Specific Criterion
LC	Rio de Flag (EDW)	Flagstaff WWTP outfall to the confluence with San Francisco Wash at 35°14'04"/111°28'02.5"	Copper (D)	36 µg/L (A&Wedw)
CL	Yuma East Wetlands	From inlet culvert from Colorado River into restored channel to Ocean Bridge	Selenium (T)	2.2 mg/L (A&Ww chronic)
			Total residual chlorine	33 µg/L (A&Ww acute)
				20 µg/L (A&Ww chronic)
SR	Pinto Creek	From confluence of Ellis Ranch tributary at 33°19'26.7"/110°54'57.5" to the confluence of West Fork of Pinto Creek at 33°27'32.3"/111°00'19.7"	Copper (D)	34 µg/L (A&Ww acute for hardness values below 268 mg/L)
				34 µg/L (A&Ww chronic)
CG	Bright Angel Wash	South Rim Grand Canyon National Park WWTP at 36°02'59"/112°09'02" to Coconino Wash	Copper (D)	42.5 µg/L (A&W edw)
CG	Transept Canyon	North Rim Grand Canyon WWTP at 36°12'20"/112°03'35" to 1km downstream	Copper (D)	42.5 µg/L (A&W edw)

**Historical Note**

Adopted effective February 18, 1992 (Supp. 92-1). Appendix C repealed effective April 24, 1996 (Supp. 96-2). New Appendix C made by final rulemaking at 14 A.A.R. 4708, effective January 31, 2009 (Supp. 08-4). Amended by final rulemaking at 22 A.A.R. 2328, effective August 2, 2016 (Supp. 16-4).

**ARTICLE 2. REPEALED**

**R18-11-201. Repealed**

**Historical Note**

Amended effective January 29, 1980 (Supp. 80-1). Amended subsection A. effective April 17, 1984 (Supp. 84-2). Former Section R9-21-201 repealed, former Section R9-21-203 renumbered as Section R9-21-201 and amended effective January 7, 1985 (Supp. 85-1). Amended effective August 12, 1986 (Supp. 86-4). Former Section R9-21-201 renumbered without change as Section R18-11-201 (Supp. 87-3). Amended effective December 1, 1988 (Supp. 88-4). Section repealed effective February 18, 1992 (Supp. 92-1).

**R18-11-202. Repealed**

**Historical Note**

Former Section R9-21-202 repealed, former Section R9-21-102 renumbered as Section R9-21-202 and amended effective January 7, 1985 (Supp. 85-1). Amended

subsections (B), (D), and (E) effective August 12, 1986 (Supp. 86-4). Former Section R9-21-202 renumbered without change as Section R18-11-202 (Supp. 87-3). Section repealed, new Section adopted effective February 18, 1992 (Supp. 92-1). Section repealed effective April 24, 1996 (Supp. 96-2).

**R18-11-203. Repealed**

**Historical Note**

Amended effective January 29, 1980 (Supp. 80-1). Amended subsection (B) by adding paragraphs (27) and (28) effective October 14, 1981 (Supp. 81-5). Former Section R9-21-203 renumbered as Section R9-21-201, former Section R9-21-204 renumbered as Section R9-21-203 and amended effective January 7, 1985 (Supp. 85-1). Former Section R9-21-203 renumbered and amended as Section R9-21-204, new Section R9-21-203 adopted effective August 12, 1986 (Supp. 86-4). Former Section R9-21-203 renumbered without change as Section R18-11-203 (Supp. 87-3). Amended subsection

(B) effective December 1, 1988 (Supp. 88-4). Section repealed, new Section adopted effective February 18, 1992 (Supp. 92-1). Section repealed effective April 24, 1996 (Supp. 96-2).

**R18-11-204. Repealed**

**Historical Note**

Former Section R9-21-204 renumbered and amended as Section R9-21-207, former Section R9-21-206 renumbered and amended as Section R9-21-204 effective January 29, 1980 (Supp. 80-1). Former Section R9-21-204 renumbered as Section R9-21-203, former Section R9-21-205 renumbered as Section R9-21-204 and amended effective January 7, 1985 (Supp. 85-1). Former Section R9-21-204 renumbered and amended as Section R9-21-205, former Section R9-21-203 renumbered and amended as Section R9-21-204 effective August 12, 1986 (Supp. 86-4). Former Section R9-21-204 renumbered without change as Section R18-11-204 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1).

**R18-11-205. Repealed**

**Historical Note**

Former Section R9-21-205 repealed, new Section R9-21-205 adopted effective January 29, 1980 (Supp. 80-1). Former Section R9-21-205 renumbered as Section R9-21-204, former Section R9-21-206 renumbered as Section R9-21-205 and amended effective January 7, 1985 (Supp. 85-1). Former Section R9-21-205 renumbered and amended as Section R9-21-206, former Section R9-21-204 renumbered and amended as Section R9-21-205 effective August 12, 1986 (Supp. 86-4). Former Section R9-21-205 renumbered without change as Section R18-11-205 (Supp. 87-3). Section repealed, new Section adopted effective February 18, 1992 (Supp. 92-1). Section repealed April 24, 1996 (Supp. 96-2).

**R18-11-206. Repealed**

**Historical Note**

Former Section R9-21-206 renumbered and amended as Section R9-21-204, new Section R9-21-206 adopted effective January 29, 1980 (Supp. 80-1). Amended by adding subsection (B) effective October 14, 1981 (Supp. 81-5). Amended subsection (B) and Table 1 effective January 29, 1982 (Supp. 82-1). Amended subsection (B) and Table 1 effective August 13, 1982 (Supp. 82-4). Former Section R9-21-206 renumbered as Section R9-21-205, former Section R9-21-207 renumbered as Section R9-21-206 and amended effective January 7, 1985 (Supp. 85-1). Former Section R9-21-206 renumbered and amended as Section R9-21-207, former Section R9-21-205 renumbered and amended as R9-21-206 effective August 12, 1986 (Supp. 86-4). Former Section R9-21-206 renumbered without change as Section R18-11-206 (Supp. 87-3).

**R18-11-207. Repealed**

**Historical Note**

Former Section R9-21-207 repealed, former Section R9-21-204 renumbered and amended as Section R9-21-207 effective January 29, 1980 (Supp. 80-1). Former Section R9-21-207 renumbered as Section R9-21-206, former Section R9-21-208 renumbered as Section R9-21-207 and amended effective January 7,

1985 (Supp. 85-1). Former Section R9-21-207 renumbered without change as Section R9-21-208, former Section R9-21-206 renumbered and amended as Section R9-21-207 effective August 12, 1986 (Supp. 86-4). Former Section R9-21-207 renumbered without change as Section R18-11-207 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1).

**R18-11-208. Repealed**

**Historical Note**

Former Section R9-21-208 repealed, new Section R9-21-208 adopted effective January 29, 1980 (Supp. 80-1). Former Section R9-21-208 renumbered as Section R9-21-207, Appendices 1 through 9 amended as Appendix A (now shown following R9-21-213), former Section R9-21-209 renumbered as R9-21-208 and amended effective January 7, 1985 (Supp. 85-1). Former Section R9-21-208 renumbered and amended as Section R9-21-209, former Section R9-21-207 renumbered without change as Section R9-21-208 effective August 12, 1986 (Supp. 86-4). Former Section R9-21-208 renumbered without change as Section R18-11-208 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1).

**R18-11-209. Repealed**

**Historical Note**

Former Section R9-21-209 renumbered and amended as Section R9-21-210, new Section R9-21-209 adopted effective January 29, 1980 (Supp. 80-1). Former Section R9-21-209 renumbered as Section R9-21-208, Tables I and II amended as Appendix B (now shown following R9-21-213 and Appendix A), former Section R9-21-210 renumbered as Section R9-21-209 and amended effective January 7, 1985 (Supp. 85-1). Former Section R9-21-209 renumbered and amended as Section R9-21-210, former Section R9-21-208 renumbered and amended as Section R9-21-209 effective August 12, 1986 (Supp. 86-4). Former Section R9-21-209 renumbered without change as Section R18-11-209 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1).

**R18-11-210. Repealed**

**Historical Note**

Former Section R9-21-210 renumbered and amended as Section R9-21-211, former Section R9-21-209 renumbered and amended as Section R9-21-210 effective January 29, 1980 (Supp. 80-1). Amended subsection (A) effective April 17, 1984 (Supp. 84-2). Former Section R9-21-210 renumbered as Section R9-21-209, former Section R9-21-211 renumbered as Section R9-21-210 and amended effective January 7, 1985 (Supp. 85-1). Former Section R9-21-210 renumbered and amended as Section R9-21-211, former Section R9-21-209 renumbered and amended as Section R9-21-210 effective August 12, 1986 (Supp. 86-4). Former Section R9-21-210 renumbered without change as Section R18-11-210 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1).

**R18-11-211. Repealed**

**Historical Note**

Former Section R9-21-210 renumbered and amended as Section R9-21-211 effective January 29, 1980 (Supp. 80-1). Amended subsections (D), (G) three (I), and added (J)

effective October 14, 1981 (Supp. 81-5). Former Section R9-21-211 renumbered as Section R9-21-210, former Section R9-21-212 renumbered as Section R9-21-211 and amended effective January 7, 1985 (Supp. 85-1). Former Section R9-21-211 renumbered and amended as Section R9-21-212, former Section R9-21-210 renumbered and amended as Section R9-21-211 effective August 12, 1986 (Supp. 86-4). Former Section R9-21-211 renumbered without change as Section R18-11-211 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1).

#### **R18-11-212. Repealed**

##### **Historical Note**

Adopted effective January 29, 1980 (Supp. 80-1). Former Section R9-21-212 renumbered as Section R9-21-211, former Section R9-21-213 renumbered as Section R9-21-212 and amended effective January 7, 1985 (Supp. 85-1). Former Section R9-21-212 repealed, former Section R9-21-211 renumbered and amended as Section R9-21-212 effective August 12, 1986 (Supp. 86-4). Former Section R9-21-212 renumbered without change as Section R18-11-212 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1).

#### **R18-11-213. Repealed**

##### **Historical Note**

Adopted effective January 29, 1980 (Supp. 80-1). Amended effective April 17, 1984 (Supp. 84-2). Former Section R9-21-213 renumbered as Section R9-21-212, former Section R9-21-103 renumbered as Section R9-21-213 and amended effective January 7, 1985 (Supp. 85-1). Former Section R9-21-213 renumbered without change as Section R9-21-214, new Section R9-21-213 adopted effective August 12, 1986 (Supp. 86-4). Former Section R9-21-213 renumbered without change as Section R18-11-213 (Supp. 87-3). Amended effective December 1, 1988 (Supp. 88-4). Section repealed effective February 18, 1992 (Supp. 92-1).

#### **R18-11-214. Repealed**

##### **Historical Note**

Former Section R9-21-213 renumbered without change as Section R9-21-214 effective August 12, 1986 (Supp. 86-4). Former Section R9-21-214 renumbered without change as Section R18-11-214 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1).

#### **Appendix A. Repealed**

##### **Historical Note**

Former Section R9-21-208, Appendices 1 through 9 renumbered and amended as new Appendix A adopted effective January 7, 1985 (Supp. 85-1). Amended effective August 12, 1986 (Supp. 86-4). Appendix repealed effective February 18, 1992 (Supp. 92-1).

#### **Appendix B. Repealed**

##### **Historical Note**

Former R9-21-209, Table 1 and Table 2 renumbered and amended as Appendix B adopted effective January 7, 1985 (Supp. 85-1). Amended effective August 12, 1986 (Supp. 86-4). Appendix repealed effective February 18, 1992 (Supp. 92-1).

### **ARTICLE 3. RECLAIMED WATER QUALITY STANDARDS**

#### **R18-11-301. Definitions**

The terms in this Article have the following meanings:

“Direct reuse” has the meaning prescribed in R18-9-701(1).

“Disinfection” means a treatment process that uses oxidants, ultraviolet light, or other agents to kill or inactivate pathogenic organisms in wastewater.

“Filtration” means a treatment process that removes particulate matter from wastewater by passage through porous media.

“Gray water” means wastewater, collected separately from a sewage flow, that originates from a clothes washer, bathtub, shower, or sink, but it does not include wastewater from a kitchen sink, dishwasher, or a toilet.

“Industrial wastewater” means wastewater generated from an industrial process.

“Landscape impoundment” means a manmade lake, pond, or impoundment of reclaimed water where swimming, wading, boating, fishing, and other water-based recreational activities are prohibited. A landscape impoundment is created for storage, landscaping, or for aesthetic purposes only.

“NTU” means nephelometric turbidity unit.

“On-site wastewater treatment facility” has the meaning prescribed in A.R.S. § 49-201(24).

“Open access” means that access to reclaimed water by the general public is uncontrolled.

“Reclaimed water” has the meaning prescribed in A.R.S. § 49-201(31).

“Recreational impoundment” means a manmade lake, pond, or impoundment of reclaimed water where boating or fishing is an intended use of the impoundment. Swimming and other full-body recreation activities (for example, water-skiing) are prohibited in a recreational impoundment.

“Restricted access” means that access to reclaimed water by the general public is controlled.

“Secondary treatment” means a biological treatment process that achieves the minimum level of effluent quality defined by the federal secondary treatment regulation at 40 CFR § 133.102.

“Sewage” means untreated wastes from toilets, baths, sinks, lavatories, laundries, and other plumbing fixtures in places of human habitation, employment, or recreation.

##### **Historical Note**

Adopted effective July 9, 1981 (Supp. 81-4). Former Section R9-21-301 renumbered without change as Section R18-11-301 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1). New Section adopted by final rulemaking at 7 A.A.R. 870, effective January 22, 2001 (Supp. 01-1).

#### **R18-11-302. Applicability**

This Article applies to the direct reuse of reclaimed water, except for:

1. The direct reuse of gray water, or
2. The direct reuse of reclaimed water from an onsite wastewater treatment facility regulated by a general Aquifer Protection Permit under 18 A.A.C. 9, Article 3.

##### **Historical Note**

Adopted effective June 8, 1981 (Supp. 81-3). Amended effective January 7, 1985 (Supp. 85-1). Former Section

R9-21-302 renumbered without change as Section R18-11-302 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1). New Section adopted by final rulemaking at 7 A.A.R. 870, effective January 22, 2001 (Supp. 01-1).

**R18-11-303. Class A+ Reclaimed Water**

- A.** Class A+ reclaimed water is wastewater that has undergone secondary treatment, filtration, nitrogen removal treatment, and disinfection. Chemical feed facilities to add coagulants or polymers are required to ensure that filtered effluent before disinfection complies with the 24-hour average turbidity criterion prescribed in subsection (B)(1). Chemical feed facilities may remain idle if the 24-hour average turbidity criterion in (B)(1) is achieved without chemical addition.
- B.** An owner of a facility shall ensure that:
1. The turbidity of Class A+ reclaimed water at a point in the wastewater treatment process after filtration and immediately before disinfection complies with the following:
    - a. The 24-hour average turbidity of filtered effluent is two NTUs or less, and
    - b. The turbidity of filtered effluent does not exceed five NTUs at any time.
  2. Class A+ reclaimed water meets the following criteria after disinfection treatment and before discharge to a reclaimed water distribution system:
    - a. There are no detectable fecal coliform organisms in four of the last seven daily reclaimed water samples taken, and
    - b. The single sample maximum concentration of fecal coliform organisms in a reclaimed water sample is less than 23 / 100 ml.
    - c. If alternative treatment processes or alternative turbidity criteria are used, or reclaimed water is blended with other water to produce Class A+ reclaimed water under subsection (C), there are no detectable enteric virus in four of the last seven monthly reclaimed water samples taken.
  3. The 5-sample geometric mean concentration of total nitrogen in a reclaimed water sample is less than 10 mg / L.
- C.** An owner of a facility may use alternative treatment methods other than those required by subsection (A), or comply with alternative turbidity criteria other than those required by subsection (B)(1), or blend reclaimed water with other water to produce Class A+ reclaimed water provided the owner demonstrates through pilot plant testing, existing water quality data, or other means that the alternative treatment methods, alternative turbidity criteria, or blending reliably produces a reclaimed water that meets the disinfection criteria in subsection (B)(2) and the total nitrogen criteria in subsection (B)(3) before discharge to a reclaimed water distribution system.
- D.** Class A+ reclaimed water is not required for any type of direct reuse. A person may use Class A+ reclaimed water for any type of direct reuse listed in Table A.

**Historical Note**

Adopted effective January 7, 1985 (Supp. 85-1).  
Amended effective August 12, 1986 (Supp. 86-4).  
Former Section R9-21-303 renumbered without change as Section R18-11-303 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1). New Section adopted by final rulemaking at 7 A.A.R. 870, effective January 22, 2001 (Supp. 01-1).

**R18-11-304. Class A Reclaimed Water**

- A.** Class A reclaimed water is wastewater that has undergone secondary treatment, filtration, and disinfection. Chemical feed facilities to add coagulants or polymers are required to ensure that filtered effluent before disinfection complies with the 24-hour average turbidity criterion prescribed in subsection (B)(1). Chemical feed facilities may remain idle if the 24-hour average turbidity criterion in subsection (B)(1) is achieved without chemical addition.
- B.** An owner of a facility shall ensure that:
1. The turbidity of Class A reclaimed water at a point in the wastewater treatment process after filtration and immediately before disinfection complies with the following:
    - a. The 24-hour average turbidity of filtered effluent is two NTUs or less, and
    - b. The turbidity of filtered effluent does not exceed five NTUs at any time.
  2. Class A reclaimed water meets the following criteria after disinfection treatment and before discharge to a reclaimed water distribution system:
    - a. There are no detectable fecal coliform organisms in four of the last seven daily reclaimed water samples taken, and
    - b. The single sample maximum concentration of fecal coliform organisms in a reclaimed water sample is less than 23 / 100 ml.
    - c. If alternative treatment processes or alternative turbidity criteria are used, or reclaimed water is blended with other water to produce Class A reclaimed water under subsection (C), there are no detectable enteric virus in four of the last seven monthly reclaimed water samples taken.
- C.** An owner of a facility may use alternative treatment methods other than those required by subsection (A), or comply with alternative turbidity criteria other than those required by subsection (B)(1), or blend reclaimed water with other water to produce Class A reclaimed water provided the owner demonstrates through pilot plant testing, existing water quality data, or other means that the alternative treatment methods, alternative turbidity criteria, or blending reliably produces a reclaimed water that meets the disinfection criteria in subsection (B)(2) before discharge to a reclaimed water distribution system.
- D.** A person shall use Class A reclaimed water for a type of direct reuse listed as Class A in Table A. A person may use Class A reclaimed water for a type of direct reuse listed as Class B or Class C in Table A.

**Historical Note**

Adopted effective January 7, 1985 (Supp. 85-1).  
Amended effective August 12, 1986 (Supp. 86-4).  
Former Section R9-21-304 renumbered without change as Section R18-11-304 (Supp. 87-3). Section repealed effective February 18, 1992 (Supp. 92-1). New Section adopted by final rulemaking at 7 A.A.R. 870, effective January 22, 2001 (Supp. 01-1).

**R18-11-305. Class B+ Reclaimed Water**

- A.** Class B+ reclaimed water is wastewater that has undergone secondary treatment, nitrogen removal treatment, and disinfection.
- B.** An owner of a facility shall ensure that:
1. Class B+ reclaimed water meets the following criteria after disinfection treatment and before discharge to a reclaimed water distribution system:
    - a. The concentration of fecal coliform organisms in four of the last seven daily reclaimed water samples is less than 200 / 100 ml.

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- b. The single sample maximum concentration of fecal coliform organisms in a reclaimed water sample is less than 800 / 100 ml.
- 2. The 5-sample geometric mean concentration of total nitrogen in a reclaimed water sample is less than 10 mg / L.
- C. Class B+ reclaimed water is not required for a type of direct reuse. A person may use Class B+ reclaimed water for a type of direct reuse listed as Class B or Class C in Table A. A person shall not use Class B+ reclaimed water for a type of direct reuse listed as Class A in Table A.

**Historical Note**

New Section adopted by final rulemaking at 7 A.A.R. 870, effective January 22, 2001 (Supp. 01-1).

**R18-11-306. Class B Reclaimed Water**

- A. Class B reclaimed water is wastewater that has undergone secondary treatment and disinfection.
- B. An owner of a facility shall ensure that Class B reclaimed water meets the following criteria after disinfection treatment and before discharge to a reclaimed water distribution system:
  - 1. The concentration of fecal coliform organisms in four of the last seven daily reclaimed water samples is less than 200 / 100 ml.
  - 2. The single sample maximum concentration of fecal coliform organisms in a reclaimed water sample is less than 800 / 100 ml.
- C. A person shall use a minimum of Class B reclaimed water for a type of direct reuse listed as Class B in Table A. A person may use Class B reclaimed water for a type of direct reuse listed as Class C in Table A. A person shall not use Class B reclaimed water for a type of direct reuse listed as Class A in Table A.

**Historical Note**

New Section adopted by final rulemaking at 7 A.A.R. 870, effective January 22, 2001 (Supp. 01-1).

**R18-11-307. Class C Reclaimed Water**

- A. Class C reclaimed water is wastewater that has undergone secondary treatment in a series of wastewater stabilization ponds, including aeration, with or without disinfection.
- B. The owner of a facility shall ensure that:
  - 1. The total retention time of Class C reclaimed water in wastewater stabilization ponds is at least 20 days.
  - 2. Class C reclaimed water meets the following criteria after treatment and before discharge to a reclaimed water distribution system:
    - a. The concentration of fecal coliform organisms in four of the last seven reclaimed water samples taken is less than 1000 / 100 ml.
    - b. The single sample maximum concentration of fecal coliform organisms in a reclaimed water sample is less than 4000 / 100 ml.
- C. A person shall use a minimum of Class C reclaimed water for a type of direct reuse listed as Class C in Table A. A person shall not use Class C reclaimed water for a type of direct reuse listed as Class A or Class B in Table A.

**Historical Note**

New Section adopted by final rulemaking at 7 A.A.R. 870, effective January 22, 2001 (Supp. 01-1).

**R18-11-308. Industrial Reuse**

- A. The reclaimed water quality requirements for the following direct reuse applications are industry-specific and shall be determined by the Department on a case-by-case basis in a

reclaimed water permit issued by the Department under 18 A.A.C. 9, Article 7:

- 1. Direct reuse of industrial wastewater containing sewage.
- 2. Direct reuse of industrial wastewater for the production or processing of any crop used as human or animal food.
- B. The Department shall use best professional judgment to determine the reclaimed water quality requirements needed to protect public health and the environment for a type of direct reuse specified in subsection (A).

**Historical Note**

New Section adopted by final rulemaking at 7 A.A.R. 870, effective January 22, 2001 (Supp. 01-1).

**R18-11-309. Reclaimed Water Quality Standards for an Unlisted Type of Direct Reuse**

- A. The Department may prescribe in an individual reclaimed water permit issued under 18 A.A.C. 9, Article 7, reclaimed water quality requirements for a type of direct reuse not listed in Table A. Before permitting a direct reuse of reclaimed water not listed in Table A, the Department shall, using its best professional judgment, determine and require compliance with reclaimed water quality requirements needed to protect public health and the environment.
- B. Department may determine that Class A+, A, B+, B, or C reclaimed water is appropriate for a new type of direct reuse.
- C. The Department shall consider the following factors when prescribing reclaimed water quality requirements for a new type of direct reuse:
  - 1. The risk to public health;
  - 2. The degree of public access to the site where the reclaimed water is reused and human exposure to the reclaimed water;
  - 3. The level of treatment necessary to ensure that the reclaimed water is aesthetically acceptable;
  - 4. The level of treatment necessary to prevent nuisance conditions;
  - 5. Specific water quality requirements for the intended type of direct reuse;
  - 6. The means of application of the reclaimed water;
  - 7. The degree of treatment necessary to avoid a violation of surface water quality standards or aquifer water quality standards;
  - 8. The potential for improper or unintended use of the reclaimed water;
  - 9. The reuse guidelines, criteria, or standards adopted or recommended by the U.S. Environmental Protection Agency or other federal or state agencies that apply to the new type of direct reuse; and
  - 10. Similar wastewater reclamation experience of reclaimed water providers in the United States.

**Historical Note**

New Section adopted by final rulemaking at 7 A.A.R. 870, effective January 22, 2001 (Supp. 01-1).

**Table A. Minimum Reclaimed Water Quality Requirements for Direct Reuse**

Type of Direct Reuse	Minimum Class of Reclaimed Water Required
Irrigation of food crops	A
Recreational impoundments	A
Residential landscape irrigation	A
Schoolground landscape irrigation	A

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Open access landscape irrigation	A
Toilet and urinal flushing	A
Fire protection systems	A
Spray irrigation of an orchard or vineyard	A
Commercial closed loop air conditioning systems	A
Vehicle and equipment washing (does not include self-service vehicle washes)	A
Snowmaking	A
Surface irrigation of an orchard or vineyard	B
Golf course irrigation	B
Restricted access landscape irrigation	B
Landscape impoundment	B
Dust control	B
Soil compaction and similar construction activities	B
Pasture for milking animals	B
Livestock watering (dairy animals)	B
Concrete and cement mixing	B
Materials washing and sieving	B
Street cleaning	B
Pasture for non-dairy animals	C
Livestock watering (non-dairy animals)	C
Irrigation of sod farms	C
Irrigation of fiber, seed, forage, and similar crops	C
Silviculture	C

Note: Nothing in this Article prevents a wastewater treatment plant from using a higher quality reclaimed water for a type of direct reuse than the minimum class of reclaimed water listed in Table A. For example, a wastewater treatment plant may provide Class A reclaimed water for a type of direct reuse where Class B or Class C reclaimed water is acceptable.

**Historical Note**

New Table adopted by final rulemaking at 7 A.A.R. 870, effective January 22, 2001 (Supp. 01-1).

**ARTICLE 4. AQUIFER WATER QUALITY STANDARDS****R18-11-401. Definitions**

In addition to the definitions contained in A.R.S. §§ 49-101 and 49-201, the terms of this Article shall have the following meanings:

1. “Beta particle and photon radioactivity from man-made radionuclides” means all radionuclides emitting beta particles or photons, except Thorium-232, Uranium-235, Uranium-238 and their progeny.
2. “Dose equivalent” means the product of the absorbed dose from ionizing radiation and such factors as account for differences in biological effectiveness due to the type of radiation and its distribution in the body as specified by the International Commission on Radiological Units and Measurements.
3. “Drinking water protected use” means the protection and maintenance of aquifer water quality for human consumption.
4. “Gross alpha particle activity” means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

5. “Mg/l” means milligrams per liter.
6. “Millirem” means 1/1000 of a rem. A rem means the unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system.
7. “Non-drinking water protected use” means the protection and maintenance of aquifer water quality for a use other than for human consumption.
8. “pCi” means picocurie, or the quantity of radioactive material producing 2.22 nuclear transformations per minute.
9. “Total trihalomethanes” means the sum of the concentrations of the following trihalomethane compounds: trichloromethane (chloroform), dibromo-chloromethane, bromodichloromethane and tribromo-methane (bromoform).

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Amended effective August 14, 1992 (Supp. 92-3).

**R18-11-402. Repealed****Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Repealed effective August 14, 1992 (Supp. 92-3).

**R18-11-403. Analytical Methods**

Analysis of a sample to determine compliance with an aquifer water quality standard shall be in accordance with an analytical method specified in A.A.C. Title 9, Chapter 14, Article 6 or an alternative analytical method that is approved by the Director of the Arizona Department of Health Services pursuant to A.A.C. R9-14-607(B).

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Amended effective August 14, 1992 (Supp. 92-3).

**R18-11-404. Laboratories**

A test result from a sample taken to determine compliance with an aquifer water quality standard shall be valid only if the sample has been analyzed by a laboratory that is licensed by the Arizona Department of Health Services for the analysis performed.

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Amended effective August 14, 1992 (Supp. 92-3).

**R18-11-405. Narrative Aquifer Water Quality Standards**

- A. A discharge shall not cause a pollutant to be present in an aquifer classified for a drinking water protected use in a concentration which endangers human health.
- B. A discharge shall not cause or contribute to a violation of a water quality standard established for a navigable water of the state.
- C. A discharge shall not cause a pollutant to be present in an aquifer which impairs existing or reasonably foreseeable uses of water in an aquifer.

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Amended effective August 14, 1992 (Supp. 92-3).

**R18-11-406. Numeric Aquifer Water Quality Standards: Drinking Water Protected Use**

- A. The aquifer water quality standards in this Section apply to aquifers that are classified for drinking water protected use.

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**B.** The following are the aquifer water quality standards for inorganic chemicals:

Pollutant	mg/L
Antimony	0.006
Arsenic	0.05
Asbestos	7 million fibers/liter (longer than 10 mm)
Barium	2
Beryllium	0.004
Cadmium	0.005
Chromium	0.1
Cyanide (As Free Cyanide)	0.2
Fluoride	4.0
Lead	0.05
Mercury	0.002
Nickel	0.1
Nitrate (as N)	10
Nitrite (as N)	1
Nitrate and nitrite (as N)	10
Selenium	0.05
Thallium	0.002

**C.** The following are the aquifer water quality standards for organic chemicals:

Pollutant	(mg/L)
Benzene	0.005
Benzo (a) pyrene	0.0002
Carbon Tetrachloride	0.005
o-Dichlorobenzene	0.6
para-Dichlorobenzene	0.075
1,2-Dichloroethane	0.005
1,1-Dichloroethylene	0.007
cis-1,2-Dichloroethylene	0.07
trans-1,2-Dichloroethylene	0.1
1,2-Dichloropropane	0.005
Dichloromethane	0.005
Di (2-ethylhexyl) adipate	0.4
Di (2-ethylhexyl) pthalate	0.006
Ethylbenzene	0.7
Hexachlorobenzene	0.001
Hexachlorocyclopentadiene	0.05
Monochlorobenzene	0.1
Pentachlorophenol	0.001
Styrene	0.1
2,3,7,8-TCDD (Dioxin)	0.00000003
Tetrachloroethylene	0.005
Toluene	1
Trihalomethanes (Total)	0.10
1,2,4-Trichlorobenzene	0.07
1,1,1-Trichloroethane	0.20
1,1,2-Trichloroethane	0.005
Trichloroethylene	0.005
Vinyl Chloride	0.002
Xylenes (Total)	10

**D.** The following are the aquifer water quality standards for pesticides and polychlorinated biphenyls (PCBs):

Pollutant	(mg/L)
Alachlor	0.002
Atrazine	0.003
Carbofuran	0.04
Chlordane	0.002
Dalapon	0.2
1,2-Dibromo-3-Chloropropane (DBCP)	0.0002
2,4,-Dichlorophenoxyacetic Acid(2,4-D)	0.07
Dinoseb	0.007
Diquat	0.02
Endothall	0.1
Endrin	0.002
Ethylene Dibromide (EDB)	0.00005
Glyphosate	0.7
Heptachlor	0.0004
Heptachlor Epoxide	0.0002
Lindane	0.0002
Methoxychlor	0.04
Oxamyl	0.2
Picloram	0.5
Polychlorinated Biphenols (PCBs)	0.0005
Simazine	0.004
Toxaphene	0.003
2,4,5-Trichlorophenoxypropionic Acid (2,4,5-TP or Silvex)	0.05

**E.** The following are the aquifer water quality standards for radionuclides:

1. The maximum concentration for gross alpha particle activity, including Radium-226 but excluding radon and uranium, shall not exceed 15 pCi/l.
2. The maximum concentration for combined Radium-226 and Radium-228 shall not exceed 5 pCi/l.
3. The average annual concentration of beta particle and photon radioactivity from man-made radionuclides shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirem/year.
4. Except for the radionuclides listed in this subsection, the concentration of man-made radionuclides causing 4 millirem total body or organ dose equivalents shall be calculated on the basis of a 2-liter-per-day drinking water intake using the 168-hour data listed in "Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure," National Bureau of Standards Handbook 69, National Bureau of Commerce, as amended August 1963 (and no future editions), incorporated herein by reference and on file with the Office of the Secretary of State and with the Department. If two or more radionuclides are present, the sum of their annual dose equivalent to the total body or to any organ shall not exceed 4 millirem/year. The following average annual concentrations are assumed to produce a total body or organ dose of 4 millirem/year:
 

Radionuclide	Critical Organ	pCi/l
Tritium	Total body	20,000
Strontium-90	Bone Marrow	8

**F.** The aquifer water quality standard for microbiological contaminants is based upon the presence or absence of total coli-

forms in a 100-milliliter sample. If a sample is total coliform-positive, a 100-milliliter repeat sample shall be taken within two weeks of the time the sample results are reported. Any total coliform-positive repeat sample following a total coliform-positive sample constitutes a violation of the aquifer water quality standard for microbiological contaminants.

- G.** The following are the aquifer water quality standards for turbidity:
1. One nephelometric turbidity unit as determined by a monthly average except that five or fewer nephelometric turbidity units may be allowed if it can be determined that the higher turbidity does not interfere with disinfection, prevent maintenance of effective disinfectant agents in water supply distribution systems, or interfere with microbiological determinations.
  2. Five nephelometric turbidity units based on an average of two consecutive days.

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Amended effective August 14, 1992 (Supp. 92-3).  
Amended effective May 26, 1994 (Supp. 94-2).

**R18-11-407. Aquifer Water Quality Standards in Reclassified Aquifers**

- A.** All aquifers in the state are classified for drinking water protected use except for aquifers which are reclassified to a non-drinking water protected use pursuant to A.R.S. § 49-224 and A.A.C. R18-11-503.
- B.** Aquifer water quality standards for drinking water protected use apply to reclassified aquifers except where expressly superseded by aquifer water quality standards adopted pursuant to subsection (C) of this Section.
- C.** The Director shall adopt, by rule, aquifer water quality standards for reclassified aquifers within one year of the date of the order reclassifying the aquifer to a nondrinking water protected use. The Director shall adopt aquifer water quality standards for reclassified aquifers only for pollutants that are specifically identified in a petition for reclassification as prescribed by A.R.S. § 49-223(D) and A.A.C. R18-11-503(B). Aquifer water quality standards for reclassified aquifers shall be sufficient to protect the use of the reclassified aquifer.

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Amended effective August 14, 1992 (Supp. 92-3).

**R18-11-408. Petition for Adoption of a Numeric Aquifer Water Quality Standard**

- A.** Any person may petition the Director to adopt, by rule, a numeric aquifer water quality standard for a pollutant for which no numeric aquifer water quality standard exists.
- B.** Petitions for adoption of a numeric aquifer water quality standard shall be filed with the Department and shall comply with the requirements applicable to petitions for rule adoption as provided by A.R.S. § 41-1033 and A.A.C. R18-1-302, except as otherwise provided by A.R.S. § 49-223 or this Section.
- C.** In addition to the requirements of A.A.C. R18-1-302, a petition for rule adoption to establish a numeric aquifer water quality standard shall include specific reference to:
1. Technical information that the pollutant is a toxic pollutant.
  2. Technical information upon which the Director reasonably may base the establishment of a numeric aquifer water quality standard.
  3. Evidence that the pollutant that is the subject of the petition is or may in the future be present in an aquifer or part of an aquifer that is classified for drinking water pro-

TECTED use. Evidence may include, but is not limited to, any of the following:

- a. A laboratory analysis of a water sample by a laboratory licensed by the Arizona Department of Health Services which indicates the presence of the pollutant in the aquifer.
  - b. A hydrogeological study which demonstrates that the pollutant that is the subject of the petition may be present in an aquifer in the future. The hydrogeological study shall include the following:
    - i. A description of the use that results in a discharge of the pollutant that is the subject of the petition.
    - ii. A description of the mobility of the pollutant in the vadose zone and in the aquifer.
    - iii. A description of the persistence of the pollutant in the vadose zone and in the aquifer.
- D.** Within 180 calendar days of the receipt of a complete petition for rule adoption to establish a numeric aquifer water quality standard, the Director shall make a written determination of whether the petition should be granted or denied. The Director shall give written notice by regular mail of the determination to the petitioner.
- E.** If the petition for rule adoption is granted, the Director shall initiate rulemaking proceedings to adopt a numeric aquifer water quality standard. The Director shall, within one year of the date that the petition for adoption of a numeric aquifer water quality standard is granted, either adopt a rule establishing a numeric aquifer water quality standard or publish a notice of termination of rulemaking in the Arizona Administrative Register.
- F.** If the petition for rule adoption is denied, the Director shall issue a denial letter to the petitioner which explains the reasons for the denial. The denial of a petition for rule adoption to establish a numeric aquifer water quality standard is not subject to judicial review.

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).

**Appendix 1. Repealed**

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Repealed effective August 14, 1992 (Supp. 92-3).

**Appendix 2. Repealed**

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Repealed effective August 14, 1992 (Supp. 92-3).

**Appendix 3. Repealed**

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Repealed effective August 14, 1992 (Supp. 92-3).

**Appendix 4. Repealed**

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Repealed effective August 14, 1992 (Supp. 92-3).

**Appendix 5. Repealed**

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Repealed effective August 14, 1992 (Supp. 92-3).

**Appendix 6. Repealed**

**Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Repealed effective August 14, 1992 (Supp. 92-3).

**Appendix 7. Repealed****Historical Note**

Adopted effective January 4, 1990 (Supp. 90-1).  
Repealed effective August 14, 1992 (Supp. 92-3).

**ARTICLE 5. AQUIFER BOUNDARY AND PROTECTED USE CLASSIFICATION****R18-11-501. Definitions**

In addition to the definitions contained in A.R.S. § 49-201, the words and phrases of this Article shall have the following meaning:

1. "Drinking water protected use" means the protection and maintenance of aquifer water quality for human consumption.
2. "Hardrock areas containing little or no water" means areas of igneous or metamorphic rock which do not yield usable quantities of water.
3. "Nondrinking water protected use" means the protection and maintenance of aquifer water quality for a use other than human consumption.
4. "Usable quantities" means five gallons of water per day.

**Historical Note**

Adopted effective October 22, 1987 (Supp. 87-4).

**R18-11-502. Aquifer boundaries**

- A. Except as provided in subsection (B) of this rule, aquifer boundaries for the aquifers in this state are identified and defined as being identical to the hydrologic basin and subbasin boundaries, as found by the Director of the Department of Water Resources, Findings and Order In The Matter of The Designation of Groundwater Basins and Subbasins In The State of Arizona (dated June 21, 1984), pursuant to A.R.S. §§ 45-403 and 45-404, which is incorporated herein by reference and on file with the Department of Environmental Quality and the Office of the Secretary of State.
- B. Excluded from the boundaries of the aquifers are hard rock areas which contain little or no water, as identified in Plate 1 of the Department of Water Resources, Water Resource Hydrologic Map Series Report Number 2 (dated January 1981) and as further identified in the Bureau of Mines, University of Arizona County Geologic Map Series (individual county maps dated 1957 through 1960), which are incorporated herein by reference and on file with the Department of Environmental Quality and the Office of the Secretary of State.
- C. The Director may, by rule, modify or add an aquifer boundary provided that one or more of the following applies:
  1. The Department of Water Resources modifies the boundaries of its basins or subbasins.
  2. The Director is made aware of new technical information or data which supports refinement of an aquifer boundary.
- D. Facilities located outside of the boundaries defined in these rules shall be subject to A.R.S. § 49-241 except as provided therein.

**Historical Note**

Adopted effective October 22, 1987 (Supp. 87-4).

**R18-11-503. Petition for reclassification**

- A. Any person may petition the Director to reclassify an aquifer from a drinking water protected use to a nondrinking water protected use pursuant to A.R.S. § 49-224(C).
- B. A written petition for reclassification pursuant to A.R.S. § 49-224(C) or A.R.S. § 49-224(D) shall be filed with the Department

and shall include the following categories of information:

1. The proposed protected use for which the reclassification is being requested.
2. The pollutant and affected aquifer water quality standards for which the reclassification is being requested.
3. A hydrogeologic report which demonstrates that the aquifer proposed for reclassification is or will be hydrologically isolated, to the extent described in A.R.S. § 49-224(C)(1). This report and demonstration of hydrologic isolation for the area containing such aquifer, and immediate adjacent geologic units, shall include at least the following:
  - a. Hydrogeologic area maps and cross sections.
  - b. An analysis of subsurface geology, including geologic and hydrologic separation.
  - c. Water level elevation or piezometric level contour maps.
  - d. Analysis of hydrologic characteristics of the aquifer and the immediate adjacent geologic units.
  - e. Description of existing water quality and analysis of water chemistry.
  - f. Projected annual quantity of water to be withdrawn.
  - g. Identification of pumping centers, cones of depression and areas of recharge.
  - h. A water balance.
  - i. Existing flow direction and evaluation of the effects of seasonal and future pumping on flow.
  - j. An evaluation as to whether the reclassification will contribute to or cause a violation of aquifer water quality standards in other aquifers, or in parts of the aquifer not being proposed for reclassification.
4. Documentation demonstrating that water from the aquifer or part of the aquifer for which reclassification is proposed is not being used as drinking water. This documentation shall include at least the following:
  - a. A list of all wells or springs including their location, ownership and use within the aquifer or part of the aquifer being proposed for reclassification.
  - b. Identification of groundwater withdrawal rights, on file with the Department of Water Resources, within the aquifer or part of the aquifer being proposed for reclassification.
  - c. A comprehensive list of agencies, persons and other information sources consulted for aquifer use documentation.
5. A cost-benefit analysis developed pursuant to the requirements of A.R.S. § 49-224(C)(3), except for petitions submitted pursuant to A.R.S. § 49-224(D). This analysis shall identify potential future uses of the aquifer being proposed for reclassification, as well as other opportunity costs associated with reclassification, and shall contain a description of the cost-benefit methodology used, including all assumptions, data, data sources and criteria considered and all supporting statistical analyses.

**Historical Note**

Adopted effective October 22, 1987 (Supp. 87-4).

**R18-11-504. Agency action on petition**

- A. Upon receipt of a petition for reclassification, the Director shall review the petition for compliance with the requirements of R18-11-503. If additional information is necessary, the petitioner shall be notified of specific deficiencies in writing within 30 calendar days of receipt of the petition.
- B. Within 120 calendar days after receipt of a complete petition, and after consultation with the appropriate advisory council

pursuant to A.R.S. §§ 49-224(C) and 49-204, the Director shall make a final decision to grant or deny the petition and shall notify the petitioner of such decision and the reason for such determination in writing.

- C. Upon a decision to grant a petition for aquifer reclassification, the Director shall initiate proceedings for promulgation of aquifer water quality standards and, if applicable, for aquifer boundary designation for the reclassified aquifers.

#### Historical Note

Adopted effective October 22, 1987 (Supp. 87-4).

#### R18-11-505. Public participation

- A. Within 30 days of receipt of a complete petition for reclassification filed pursuant to A.R.S. § 49-224(D), or if the Director deems it necessary to consider a reclassification under A.R.S. § 49-224(C), the Director shall give public notice of the proposed reclassification pursuant to A.A.C. R18-1-401.
- B. The Director shall hold at least one public hearing at a location as near as practicable to the aquifer proposed for reclassification. The Director shall give notice of each public hearing and conduct the public hearing in accordance with the provisions of A.A.C. R18-1-402.

#### Historical Note

Adopted effective June 29, 1989 (Supp. 89-2).

#### R18-11-506. Rescission of reclassification

The Director may, by rule, rescind an aquifer reclassification and return an aquifer to a drinking water protected use if he determines that any of the conditions under which the reclassification was granted are no longer valid. If the Director initiates a change under this Section, he shall consult with the appropriate advisory council pursuant to A.R.S. §§ 49-224(C) and 49-204.

#### Historical Note

Adopted effective October 22, 1987 (Supp. 87-4).

### ARTICLE 6. IMPAIRED WATER IDENTIFICATION

*Article 6, consisting of Sections R18-11-601 through R18-11-606, made by final rulemaking at 8 A.A.R. 3380, effective July 12, 2002 (Supp. 02-3).*

#### R18-11-601. Definitions

In addition to the definitions established in A.R.S. §§ 49-201 and 49-231, and A.A.C. R18-11-101, the following terms apply to this Article:

1. "303(d) List" means the list of surface waters or segments required under section 303(d) of the Clean Water Act and A.R.S. Title 49, Chapter 2, Article 2.1, for which TMDLs are developed and submitted to EPA for approval.
2. "Attaining" means there is sufficient, credible, and scientifically defensible data to assess a surface water or segment and the surface water or segment does not meet the definition of impaired or not attaining.
3. "AZPDES" means the Arizona Pollutant Elimination Discharge System.
4. "Credible and scientifically defensible data" means data submitted, collected, or analyzed using:
  - a. Quality assurance and quality control procedures under A.A.C. R18-11-602;
  - b. Samples or analyses representative of water quality conditions at the time the data were collected;
  - c. Data consisting of an adequate number of samples based on the nature of the water in question and the parameters being analyzed; and
  - d. Methods of sampling and analysis, including analytical, statistical, and modeling methods that are generally accepted and validated by the scientific

community as appropriate for use in assessing the condition of the water.

5. "Designated use" means those uses specified in 18 A.A.C. 11, Article 1 for each surface water or segment whether or not they are attaining.
6. "EPA" means the U.S. Environmental Protection Agency.
7. "Impaired water" means a Navigable water for which credible scientific data exists that satisfies the requirements of A.R.S. § 49-232 and that demonstrates that the water should be identified pursuant to 33 United States Code § 1313(d) and the regulations implementing that statute. A.R.S. § 49-231(1).
8. "Laboratory detection limit" means a "Method Reporting Limit" (MRL) or "Reporting Limit" (RL). These analogous terms describe the laboratory reported value, which is the lowest concentration level included on the calibration curve from the analysis of a pollutant that can be quantified in terms of precision and accuracy.
9. "Monitoring entity" means the Department or any person who collects physical, chemical, or biological data used for an impaired water identification or a TMDL decision.
10. "Naturally occurring condition" means the condition of a surface water or segment that would have occurred in the absence of pollutant loadings as a result of human activity.
11. "Not attaining" means a surface water is assessed as impaired, but is not placed on the 303(d) List because:
  - a. A TMDL is prepared and implemented for the surface water;
  - b. An action, which meets the requirements of R18-11-604(D)(2)(h), is occurring and is expected to bring the surface water to attaining before the next 303(d) List submission; or
  - c. The impairment of the surface water is due to pollution but not a pollutant, for which a TMDL load allocation cannot be developed.
12. "NPDES" means National Pollutant Discharge Elimination System.
13. "Planning List" means a list of surface waters and segments that the Department will review and evaluate to determine if the surface water or segment is impaired and whether a TMDL is necessary.
14. "Pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. 33 U.S.C. 1362(6). Characteristics of water, such as dissolved oxygen, pH, temperature, turbidity, and suspended sediment are considered pollutants if they result or may result in the non-attainment of a water quality standard.
15. "Pollution" means "the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water." 33 U.S.C. 1362(19).
16. "QAP" means a quality assurance plan detailing how environmental data operations are planned, implemented, and assessed for quality during the duration of a project.
17. "Sampling event" means one or more samples taken under consistent conditions on one or more days at a distinct station or location.
18. "SAP" means a site specific sampling and analysis plan that describes the specifics of sample collection to ensure that data quality objectives are met and that samples collected and analyzed are representative of surface water conditions at the time of sampling.

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19. “Spatially independent sample” means a sample that is collected at a distinct station or location. The sample is independent if the sample was collected:
  - a. More than 200 meters apart from other samples, or
  - b. Less than 200 meters apart, and collected to characterize the effect of an intervening tributary, outfall or other pollution source, or significant hydrographic or hydrologic change.
20. “Temporally independent sample” means a sample that is collected at the same station or location more than seven days apart from other samples.
21. “Threatened” means that a surface water or segment is currently attaining its designated use, however, trend analysis, based on credible and scientifically defensible data, indicates that the surface water or segment is likely to be impaired before the next listing cycle.
22. “TMDL” means total maximum daily load.
23. “TMDL decision” means a decision by the Department to:
  - a. Prioritize an impaired water for TMDL development,
  - b. Develop a TMDL for an impaired water, or
  - c. Develop a TMDL implementation plan.
24. “*Total maximum daily load*” means an estimation of the total amount of a pollutant from all sources that may be added to a water while still allowing the water to achieve and maintain applicable surface water quality standards. Each total maximum daily load shall include allocations for sources that contribute the pollutant to the water, as required by section 303(d) of the clean water act (33 United States Code section 1313(d)) and regulations implementing that statute to achieve applicable surface water quality standards. A.R.S. § 49-231(4).
25. “Water quality standard” means a standard composed of designated uses (classification of waters), the numerical and narrative criteria applied to the specific water uses or classification, the antidegradation policy, and moderating provisions, for example, mixing zones, site-specific alternative criteria, and exemptions, in A.A.C. Title 18, Chapter 11, Article 1.
26. “WQARF” means the water quality assurance revolving fund established under A.R.S. § 49-282.

**Historical Note**

New Section made by final rulemaking at 8 A.A.R. 3380, effective July 12, 2002 (Supp. 02-3).

**R18-11-602. Credible Data**

- A. Data are credible and relevant to an impaired water identification or a TMDL decision when:
  1. Quality Assurance Plan. A monitoring entity, which contribute data for an impaired water identification or a TMDL decision, provides the Department with a QAP that contains, at a minimum, the elements listed in subsections (A)(1)(a) through (A)(1)(f). The Department may accept a QAP containing less than the required elements if the Department determines that an element is not relevant to the sampling activity and that its omission will not impact the quality of the results based upon the type of pollutants to be sampled, the type of surface water, and the purpose of the sampling.
    - a. An approval page that includes the date of approval and the signatures of the approving officials, including the project manager and project quality assurance manager;
    - b. A project organization outline that identifies all key personnel, organizations, and laboratories involved in monitoring, including the specific roles and responsibilities of key personnel in carrying out the procedures identified in the QAP and SAP, if applicable;
  - c. Sampling design and monitoring data quality objectives or a SAP that meets the requirements of subsection (A)(2) to ensure that:
    - i. Samples are spatially and temporally representative of the surface water,
    - ii. Samples are representative of water quality conditions at the time of sampling, and
    - iii. The monitoring is reproducible;
  - d. The following field sampling information to assure that samples meet data quality objectives:
    - i. Sampling and field protocols for each parameter or parametric group, including the sampling methods, equipment and containers, sample preservation, holding times, and any analysis proposed for completion in the field or outside of a laboratory;
    - ii. Field and laboratory methods approved under subsection (A)(5);
    - iii. Handling procedures to identify samples and custody protocols used when samples are brought from the field to the laboratory for analysis;
    - iv. Quality control protocols that describe the number and type of field quality control samples for the project that includes, if appropriate for the type of sampling being conducted, field blanks, travel blanks, equipment blanks, method blanks, split samples, and duplicate samples;
    - v. Procedures for testing, inspecting, and maintaining field equipment;
    - vi. Field instrument calibration procedures that describe how and when field sampling and analytical instruments will be calibrated;
    - vii. Field notes and records that describe the conditions that require documentation in the field, such as weather, stream flow, transect information, distance from water edge, water and sample depth, equipment calibration measurements, field observations of watershed activities, and bank conditions. Indicate the procedures implemented for maintaining field notes and records and the process used for attaching pertinent information to monitoring results to assist in data interpretation;
    - viii. Minimum training and any specialized training necessary to do the monitoring, that includes the proper use and calibration of field equipment used to collect data, sampling protocols, quality assurance/quality control procedures, and how training will be achieved;
  - e. Laboratory analysis methods and quality assurance/quality control procedures that assure that samples meet data quality objectives, including:
    - i. Analytical methods and equipment necessary for analysis of each parameter, including identification of approved laboratory methods described in subsection (A)(5), and laboratory detection limits for each parameter;
    - ii. The name of the designated laboratory, its license number, if licensed by the Arizona Department of Health Services, and the name

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- of a laboratory contact person to assist the Department with quality assurance questions;
- iii. Quality controls that describe the number and type of laboratory quality control samples for the project, including, if appropriate for the type of sampling being conducted, field blanks, travel blanks, equipment blanks, method blanks, split samples, and duplicate samples;
  - iv. Procedures for testing, inspecting, and maintaining laboratory equipment and facilities;
  - v. A schedule for calibrating laboratory instruments, a description of calibration methods, and a description of how calibration records are maintained; and
  - vi. Sample equipment decontamination procedures that outline specific methods for sample collection and preparation of equipment, identify the frequency of decontamination, and describe the procedures used to verify decontamination;
- f. Data review, management, and use that includes the following:
- i. A description of the data handling process from field to laboratory, from laboratory to data review and validation, and from validation to data storage and use. Include the role and responsibility of each person for each step of the process, type of database or other storage used, and how laboratory and field data qualifiers are related to the laboratory result;
  - ii. Reports that describe the intended frequency, content, and distribution of final analysis reports and project status reports;
  - iii. Data review, validation, and verification that describes the procedure used to validate and verify data, the procedures used if errors are detected, and how data are accepted, rejected, or qualified; and
  - iv. Reconciliation with data quality objectives that describes the process used to determine whether the data collected meets the project objectives, which may include discarding data, setting limits on data use, or revising data quality objectives.
2. Sampling and analysis plan.
- a. A monitoring entity shall develop a SAP that contains, at a minimum, the following elements:
    - i. The experimental design of the project, the project goals and objectives, and evaluation criteria for data results;
    - ii. The background or historical perspective of the project;
    - iii. Identification of target conditions, including a discussion of whether any weather, seasonal variations, stream flow, lake level, or site access may affect the project and the consideration of these factors;
    - iv. The data quality objectives for measurement of data that describe in quantitative and qualitative terms how the data meet the project objectives of precision, accuracy, completeness, comparability, and representativeness;
    - v. The types of samples scheduled for collection;
    - vi. The sampling frequency;
    - vii. The sampling periods;
    - viii. The sampling locations and rationale for the site selection, how site locations are bench-
- marked, including scaled maps indicating approximate location of sites; and
- ix. A list of the field equipment, including tolerance range and any other manufacturer's specifications relating to accuracy and precision.
- b. The Department may accept a SAP containing less than the required elements if the Department determines that an element is not relevant to the sampling activity and that its omission will not impact the quality of the results based upon the type of pollutants to be samples, the type of surface water, and the purpose of the sampling.
3. The monitoring entity may include any of the following in the QAP or SAP:
    - a. The name, title, and role of each person and organization involved in the project, identifying specific roles and responsibilities for carrying out the procedures identified in the QAP and SAP;
    - b. A distribution list of each individual and organization receiving a copy of the approved QAP and SAP;
    - c. A table of contents;
    - d. A health and safety plan;
    - e. The inspection and acceptance requirements for supplies;
    - f. The data acquisition that describes types of data not obtained through this monitoring activity, but used in the project;
    - g. The audits and response actions that describe how field, laboratory, and data management activities and sampling personnel are evaluated to ensure data quality, including a description of how the project will correct any problems identified during these assessments; and
    - h. The waste disposal methods that identify wastes generated in sampling and methods for disposal of those wastes.
  4. Exceptions. The Department may determine that the following data are also credible and relevant to an impaired water identification or TMDL decision when data were collected, provided the conditions in subsections (A)(5), (A)(6), and (B) are met, and where the data were collected in the surface water or segment being evaluated for impairment:
    - a. The data were collected before July 12, 2002 and the Department determines that the data yield results of comparable reliability to the data collected under subsections (A)(1) and (A)(2);
    - b. The data were collected after July 12, 2002 as part of an ongoing monitoring effort by a governmental agency and the Department determines that the data yield results of comparable reliability to the data collected under subsections (A)(1) and (A)(2); or
    - c. The instream water quality data were or are collected under the terms of a NPDES or AZPDES permit or a compliance order issued by the Department or EPA, a consent decree signed by the Department or EPA, or a sampling program approved by the Department or EPA under WQARF or CERCLA, and the Department determines that the data yield results of comparable reliability to data collected under subsections (A)(1) and (A)(2).
  5. Data collection, preservation, and analytical procedures. The monitoring entity shall collect, preserve, and analyze data using methods of sample collection, preservation, and analysis established under A.A.C. R9-14-610.

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6. Laboratory. The monitoring entity shall ensure that chemical and toxicological samples are analyzed in a state-licensed laboratory, a laboratory exempted by the Arizona Department of Health Services for specific analyses, or a federal or academic laboratory that can demonstrate proper quality assurance/quality control procedures substantially equal to those required by the Arizona Department of Health Services, and shall ensure that the laboratory uses approved methods identified in A.A.C. R9-14-610.
- B. Documentation for data submission.** The monitoring entity shall provide the Department with the following information either before or with data submission:
1. A copy of the QAP or SAP, or both, revisions to a previously submitted QAP or SAP, and any other information necessary for the Department to evaluate the data under subsection (A)(4);
  2. The applicable dates of the QAP and SAP, including any revisions;
  3. Written assurance that the methods and procedures specified in the QAP and SAP were followed;
  4. The name of the laboratory used for sample analyses and its certification number, if the laboratory is licensed by the Arizona Department of Health Services;
  5. The quality assurance/quality control documentation, including the analytical methods used by the laboratory, method number, detection limits, and any blank, duplicate, and spike sample information necessary to properly interpret the data, if different from that stated in the QAP or SAP;
  6. The data reporting unit of measure;
  7. Any field notes, laboratory comments, or laboratory notations concerning a deviation from standard procedures, quality control, or quality assurance that affects data reliability, data interpretation, or data validity; and
  8. Any other information, such as complete field notes, photographs, climate, or other information related to flow, field conditions, or documented sources of pollutants in the watershed, if requested by the Department for interpreting or validating data.
- C. Recordkeeping.** The monitoring entity shall maintain all records, including sample results, for the duration of the listing cycle. If a surface water or segment is added to the Planning List or to the 303(d) List, the Department shall coordinate with the monitoring entity to ensure that records are kept for the duration of the listing.
- Historical Note**
- New Section made by final rulemaking at 8 A.A.R. 3380, effective July 12, 2002 (Supp. 02-3).
- R18-11-603. General Data Interpretation Requirements**
- A.** The Department shall use the following data conventions to interpret data for impaired water identifications and TMDL decisions:
1. Data reported below laboratory detection limits.
    - a. When the analytical result is reported as <X, where X is the laboratory detection limit for the analyte and the laboratory detection limit is less than or equal to the surface water quality standard, consider the result as meeting the water quality standard:
      - i. Use these statistically derived values in trend analysis, descriptive statistics or modeling if there is sufficient data to support the statistical estimation of values reported as less than the laboratory detection limit; or
      - ii. Use one-half of the value of the laboratory detection limit in trend analysis, descriptive statistics, or modeling, if there is insufficient data to support the statistical estimation of values reported as less than the laboratory detection limit.
    - b. When the sample value is less than or equal to the laboratory detection limit but the laboratory detection limit is greater than the surface water quality standard, shall not use the result for impaired water identifications or TMDL decisions;
  2. Identify the field equipment specifications used for each listing cycle or TMDL developed. A field sample measurement within the manufacturer's specification for accuracy meets surface water quality standards;
  3. Resolve a data conflict by considering the factors identified under the weight-of-evidence determination in R18-11-605(B);
  4. When multiple samples from a surface water or segment are not spatially or temporally independent, or when lake samples are from multiple depths, use the following resultant value to represent the specific dataset:
    - a. The appropriate measure of central tendency for the dataset for:
      - i. A pollutant listed in the surface water quality standards 18 A.A.C. 11, Article 1, Appendix A, Table 1, except for nitrate or nitrate/nitrite;
      - ii. A chronic water quality standard for a pollutant listed in 18 A.A.C. 11, Article 1, Appendix A, Table 2;
      - iii. A surface water quality standard for a pollutant that is expressed as an annual or geometric mean;
      - iv. The surface water quality standard for temperature or the single sample maximum water quality standard for suspended sediment concentration, nitrogen, and phosphorus in R18-11-109;
      - v. The surface water quality standard for radiochemicals in R18-11-109(G); or
      - vi. Except for chromium, all single sample maximum water quality standards in R18-11-112.
    - b. The maximum value of the dataset for:
      - i. The acute water quality standard for a pollutant listed in 18 A.A.C. 11, Article 1, Appendix A, Table 2 and acute water quality standard in R18-11-112;
      - ii. The surface water quality standard for nitrate or nitrate/nitrite in 18 A.A.C. 11, Article 1, Appendix A, Table 1;
      - iii. The single sample maximum water quality standard for bacteria in subsections R18-11-109(A); or
      - iv. The 90th percentile water quality standard for nitrogen and phosphorus in R18-11-109(F) and R18-11-112.
    - c. The worst case measurement of the dataset for:
      - i. Surface water quality standard for dissolved oxygen under R18-11-109(E). For purposes of this subsection, worst case measurement means the minimum value for dissolved oxygen;
      - ii. Surface water quality standard for pH under R18-11-109(B). For purposes of this subsection, "worst case measurement" means both the minimum and maximum value for pH.

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- B.** The Department shall not use the following data for placing a surface water or segment on the Planning List, the 303(d) List, or in making a TMDL decision.
1. Any measurement outside the range of possible physical or chemical measurements for the pollutant or measurement equipment,
  2. Uncorrected data transcription errors or laboratory errors, and
  3. An outlier identified through statistical procedures, where further evaluation determines that the outlier represents a valid measure of water quality but should be excluded from the dataset.
- C.** The Department may employ fundamental statistical tests if appropriate for the collected data and type of surface water when evaluating a surface water or segment for impairment or in making a TMDL decision. The statistical tests include descriptive statistics, frequency distribution, analysis of variance, correlation analysis, regression analysis, significance testing, and time series analysis.
- D.** The Department may employ modeling when evaluating a surface water or segment for impairment or in making a TMDL decision, if the method is appropriate for the type of waterbody and the quantity and quality of available data meet the requirements of R18-11-602. Modeling methods include:
1. Better Assessment Science Integrating Source and Non-point Sources (BASINS),
  2. Fundamental statistics, including regression analysis,
  3. Hydrologic Simulation Program-Fortran (HSPF),
  4. Spreadsheet modeling, and
  5. Hydrologic Engineering Center (HEC) programs developed by the Army Corps of Engineers.
- Historical Note**
- New Section made by final rulemaking at 8 A.A.R. 3380, effective July 12, 2002 (Supp. 02-3).
- R18-11-604. Types of Surface Waters Placed on the Planning List and 303(d) List**
- A.** The Department shall evaluate, at least every five years, Arizona's surface waters by considering all readily available data.
1. The Department shall place a surface water or segment on:
    - a. The Planning List if it meets any of the criteria described in subsection (D), or
    - b. The 303(d) List if it meets the criteria for listing described in subsection (E).
  2. The Department shall remove a surface water or segment from the Planning List based on the requirements in R18-11-605(E)(1) or from the 303(d) List, based on the requirements in R18-11-605(E)(2).
  3. The Department may move surface waters or segments between the Planning List and the 303(d) List based on the criteria established in R18-11-604 and R18-11-605.
- B.** When placing a surface water or segment on the Planning List or the 303(d) List, the Department shall list the stream reach, derived from EPA's Reach File System or National Hydrography Dataset, or the entire lake, unless the data indicate that only a segment of the stream reach or lake is impaired or not attaining its designated use, in which case, the Department shall describe only that segment for listing.
- C.** Exceptions. The Department shall not place a surface water or segment on either the Planning List or the 303(d) List if the non-attainment of a surface water quality standard is due to one of the following:
1. Pollutant loadings from naturally occurring conditions alone are sufficient to cause a violation of applicable water quality standards;
  2. The data were collected within a mixing zone or under a variance or nutrient waiver established in a NPDES or AZPDES permit for the specific parameter and the result does not exceed the alternate discharge limitation established in the permit. The Department may use data collected within these areas for modeling or allocating loads in a TMDL decision; or
  3. An activity exempted under R18-11-117, R18-11-118, or a condition exempted under R18-11-119.
- D.** Planning List.
1. The Department shall:
    - a. Use the Planning List to prioritize surface waters for monitoring and evaluation as part of the Department's watershed management approach;
    - b. Provide the Planning List to EPA; and
    - c. Evaluate each surface water and segment on the Planning List for impairment based on the criteria in R18-11-605(D) to determine the source of the impairment.
  2. The Department shall place a surface water or segment on the Planning List based the criteria in R18-11-605(C). The Department may also include a surface water or segment on the Planning List when:
    - a. A TMDL is completed for the pollutant and approved by EPA;
    - b. The surface water or segment is on the 1998 303(d) List but the dataset used for the listing:
      - i. Does not meet the credible data requirements of R18-11-602, or
      - ii. Contains insufficient samples to meet the data requirements under R18-11-605(D);
    - c. Some monitoring data exist but there are insufficient data to determine whether the surface water or segment is impaired or not attaining, including:
      - i. A numeric surface water quality standard is exceeded, but there are not enough samples or sampling events to fulfill the requirements of R18-11-605(D);
      - ii. Evidence exists of a narrative standard violation, but the amount of evidence is insufficient, based on narrative implementation procedures and the requirements of R18-11-605(D)(3);
      - iii. Existing monitoring data do not meet credible data requirements in R18-11-602; or
      - iv. A numeric surface water quality standard is exceeded, but there are not enough sample results above the laboratory detection limit to support statistical analysis as established in R18-11-603(A)(1).
    - d. The surface water or segment no longer meets the criteria for impairment based on a change in the applicable surface water quality standard or a designated use approved by EPA under section 303(c)(1) of the Clean Water Act, but insufficient current or original monitoring data exist to determine whether the surface water or segment will meet current surface water quality standards;
    - e. Trend analysis using credible and scientifically defensible data indicate that surface water quality standards may be exceeded by the next assessment cycle;
    - f. The exceedance of surface water quality standards is due to pollution, but not a pollutant;
    - g. Existing data were analyzed using methods with laboratory detection limits above the numeric surface

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- water quality standard but analytical methods with lower laboratory detection limits are available;
- h. The surface water or segment is expected to attain its designated use by the next assessment as a result of existing or proposed technology-based effluent limitations or other pollution control requirements under local, state, or federal authority. The appropriate entity shall provide the Department with the following documentation to support placement on the Planning List:
    - i. Verification that discharge controls are required and enforceable;
    - ii. Controls are specific to the surface water or segment, and pollutant of concern;
    - iii. Controls are in place or scheduled for implementation; and
    - iv. There are assurances that the controls are sufficient to bring about attainment of water quality standards by the next 303(d) List submission; or
  - i. The surface water or segment is threatened due to a pollutant and, at the time the Department submits a final 303(d) List to EPA, there are no federal regulations implementing section 303(d) of the Clean Water Act that require threatened waters be included on the list.

**E. 303(d) List.** The Department shall:

1. Place a surface water or segment on the 303(d) List if the Department determines:
  - a. Based on R18-11-605(D), that the surface water or segment is impaired due to a pollutant and that a TMDL decision is necessary; or
  - b. That the surface water or segment is threatened due to a pollutant and, at the time the Department submits a final 303(d) List to EPA, there are federal regulations implementing section 303(d) of the Clean Water Act that require threatened waters be included on the list.
2. Provide public notice of the 303(d) List according to the requirements of A.R.S. § 49-232 and submit the 303(d) List according to section 303(d) of the Clean Water Act.

**Historical Note**

New Section made by final rulemaking at 8 A.A.R. 3380, effective July 12, 2002 (Supp. 02-3).

**R18-11-605. Evaluating A Surface Water or Segment For Listing and Delisting**

- A.** The Department shall compile and evaluate all reasonably current, credible, and scientifically defensible data to determine whether a surface water or segment is impaired or not attaining.
- B.** Weight-of-evidence approach.
  1. The Department shall consider the following concepts when evaluating data:
    - a. Data or information collected during critical conditions may be considered separately from the complete dataset, when the data show that the surface water or segment is impaired or not attaining its designated use during those critical conditions, but attaining its uses during other periods. Critical conditions may include stream flow, seasonal periods, weather conditions, or anthropogenic activities;
    - b. Whether the data indicate that the impairment is due to persistent, seasonal, or recurring conditions. If the data do not represent persistent, recurring, or sea-

sonal conditions, the Department may place the surface water or segment on the Planning List;

- c. Higher quality data over lower quality data when making a listing decision. Data quality is established by the reliability, precision, accuracy, and representativeness of the data, based on factors identified in R18-11-602(A) and (B), including monitoring methods, analytical methods, quality control procedures, and the documented field and laboratory quality control information submitted with the data. The Department shall consider the following factors when determining higher quality data:
  - i. The age of the measurements. Newer measurements are weighted heavier than older measurements, unless the older measurements are more representative of critical flow conditions;
  - ii. Whether the data provide a direct measure of an impact on a designated use. Direct measurements are weighted heavier than measurements of an indicator or surrogate parameter; or
  - iii. The amount or frequency of the measurements. More frequent data collection are weighted heavier than nominal datasets.
2. The Department shall evaluate the following factors to determine if the water quality evidence supports a finding that the surface water or segment is impaired or not attaining:
  - a. An exceedance of a numeric surface water quality standard based on the criteria in subsections (C)(1), (C)(2), (D)(1), and (D)(2);
  - b. An exceedance of a narrative surface water quality standard based on the criteria in subsections (C)(3) and (D)(3);
  - c. Additional information that determines whether a water quality standard is exceeded due to a pollutant, suspected pollutant, or naturally occurring condition:
    - i. Soil type, geology, hydrology, flow regime, biological community, geomorphology, climate, natural process, and anthropogenic influence in the watershed;
    - ii. The characteristics of the pollutant, such as its solubility in water, bioaccumulation potential, sediment sorption potential, or degradation characteristics, to assist in determining which data more accurately indicate the pollutant's presence and potential for causing impairment; and
    - iii. Available evidence of direct or toxic impacts on aquatic life, wildlife, or human health, such as fish kills and beach closures, where there is sufficient evidence that these impacts occurred due to water quality conditions in the surface water.
  - d. Other available water quality information, such as NPDES or AZPDES water quality discharge data, as applicable.
  - e. If the Department determines that a surface water or segment does not merit listing under numeric water quality standards based on criteria in subsections (C)(1), (C)(2), (D)(1), or (D)(2) for a pollutant, but there is evidence of a narrative standard exceedance in that surface water or segment under subsection (D)(3) as a result of the presence of the same pollutant, the Department shall list the surface water or segment as impaired only when the evidence indi-

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states that the numeric water quality standard is insufficient to protect the designated use of the surface water or segment and the Department justifies the listing based on any of the following:

- i. The narrative standard data provide a more direct indication of impairment as supported by professionally prepared and peer-reviewed publications;
- ii. Sufficient evidence of impairment exists due to synergistic effects of pollutant combinations or site-specific environmental factors; or
- iii. The pollutant is bioaccumulative, relatively insoluble in water, or has other characteristics that indicate it is occurring in the specific surface water or segment at levels below the laboratory detection limits, but at levels sufficient to result in an impairment.

- 3. The Department may consider a single line of water quality evidence when the evidence is sufficient to demonstrate that the surface water or segment is impaired or not attaining.

C. Planning List.

- 1. When evaluating a surface water or segment for placement on the Planning List.
  - a. Consider at least ten spatially or temporally independent samples collected over three or more temporally independent sampling events; and
  - b. Determine numeric water quality standards exceedances. The Department shall:
    - i. Place a surface water or segment on the Planning List following subsection (B), if the number of exceedances of a surface water quality standard is greater than or equal to the number listed in Table 1, which provides the number of exceedances that indicate a minimum of a 10 percent exceedance frequency with a minimum of a 80 percent confidence level using a binomial distribution for a given sample size; or
    - ii. For sample datasets exceeding those shown in Table 1, calculate the number of exceedances using the following equation:  $(X \geq x | n, p)$  where  $n$  = number of samples;  $p$  = exceedance probability of 0.1;  $x$  = smallest number of exceedances required for listing with “ $n$ ” samples; and confidence level  $\geq$  80 percent.

**Table 1. Minimum Number of Samples Exceeding the Numeric Standard**

MINIMUM NUMBER OF SAMPLES EXCEEDING THE NUMERIC STANDARD								
Number of Samples		Number of Samples Exceeding Standard	Number of Samples		Number of Samples Exceeding Standard	Number of Samples		Number of Samples Exceeding Standard
From	To		From	To		From	To	
10	15	3	173	181	22	349	357	41
16	23	4	182	190	23	358	367	42
24	31	5	191	199	24	368	376	43
32	39	6	200	208	25	377	385	44
40	47	7	209	218	26	386	395	45
48	56	8	219	227	27	396	404	46
57	65	9	228	236	28	405	414	47
66	73	10	237	245	29	415	423	48
74	82	11	246	255	30	424	432	49
83	91	12	256	264	31	433	442	50
92	100	13	265	273	32	443	451	51
101	109	14	274	282	33	452	461	52
110	118	15	283	292	34	462	470	53
119	126	16	293	301	35	471	480	54
127	136	17	302	310	36	481	489	55
137	145	18	311	320	37	490	499	56
146	154	19	321	329	38	500		57
155	163	20	330	338	39			
164	172	21	339	348	40			

- 2. When there are less than ten samples, the Department shall place a surface water or segment on the Planning List following subsection (B), if three or more temporally independent samples exceed the following surface water quality standards:
  - a. The surface water quality standard for a pollutant listed in 18 A.A.C. 11, Article 1, Appendix A, Table 1, except for nitrate or nitrate/nitrite;
  - b. The surface water quality standard for temperature or the single sample maximum water quality standard for suspended sediment concentration, nitrogen, and phosphorus in R18-11-109;
  - c. The surface water quality standard for radiochemicals in R18-11-109(G);
  - d. The surface water quality standard for dissolved oxygen under R18-11-109(E);
  - e. The surface water quality standard for pH under R18-11-109(B); or
  - f. The following surface water quality standards in R18-11-112:
    - i. Single sample maximum standards for nitrogen and phosphorus,
    - ii. All metals except chromium, or
    - iii. Turbidity.

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- 3. The Department shall place a surface water or segment on the Planning List if information in subsections (B)(2)(c), (B)(2)(d), and (B)(2)(e) indicates that a narrative water quality standard violation exists, but no narrative implementation procedure required under A.R.S. § 49-232(F) exists to support use of the information for listing.
- D. 303(d) List.**
  - 1. When evaluating a surface water or segment for placement on the 303(d) List.
    - a. Consider at least 20 spatially or temporally independent samples collected over three or more temporally independent sampling events; and
    - b. Determine numeric water quality standards exceedances. The Department shall:
      - i. Place a surface water or segment on the 303(d) List, following subsection (B), if the number of exceedances of a surface water quality standard is greater than or equal to the number listed in Table 2, which provides the number of exceedances that indicate a minimum of a 10 percent exceedance frequency with a minimum of a 90 percent confidence level using a binomial distribution, for a given sample size; or
      - ii. For sample datasets exceeding those shown in Table 2, calculate the number of exceedances using the following equation:  $(X \geq x | n, p)$  where  $n$  = number of samples;  $p$  = exceedance probability of 0.1;  $x$  = smallest number of exceedances required for listing with “ $n$ ” samples; and confidence level  $\geq 90$  percent.

**Table 2. Minimum Number of Samples Exceeding the Numeric Standard**

MINIMUM NUMBER OF SAMPLES EXCEEDING THE NUMERIC STANDARD								
Number of Samples		Number of Samples Exceeding Standard	Number of Samples		Number of Samples Exceeding Standard	Number of Samples		Number of Samples Exceeding Standard
From	To		From	To		From	To	
20	25	5	174	182	24	344	352	43
26	32	6	183	191	25	353	361	44
33	40	7	192	199	26	362	370	45
41	47	8	200	208	27	371	379	46
48	55	9	209	217	28	380	388	47
56	63	10	218	226	29	389	397	48
64	71	11	227	235	30	398	406	49
72	79	12	236	244	31	407	415	50
80	88	13	245	253	32	416	424	51
89	96	14	254	262	33	425	434	52
97	104	15	263	270	34	435	443	53
105	113	16	271	279	35	444	452	54
114	121	17	280	288	36	453	461	55
122	130	18	289	297	37	462	470	56
131	138	19	298	306	38	471	479	57
139	147	20	307	315	39	480	489	58
148	156	21	316	324	40	490	498	59
157	164	22	325	333	41	499	500	60
165	173	23	334	343	42			

- 2. The Department shall place a surface water or segment on the 303(d) List, following subsection (B) without the required number of samples or numeric water quality standard exceedances under subsection (D)(1), if either the following conditions occur:
  - a. More than one temporally independent sample in any consecutive three-year period exceeds the surface water quality standard in:
    - i. The acute water quality standard for a pollutant listed in 18 A.A.C. 11, Article 1, Appendix A, Table 2 and the acute water quality standards in R18-11-112;
    - ii. The surface water quality standard for nitrate or nitrate/nitrite in 18 A.A.C. 11, Article 1, Appendix A, Table 1; or
    - iii. The single sample maximum water quality standard for bacteria in subsections R18-11-109(A).
  - b. More than one exceedance of an annual mean, 90th percentile, aquatic and wildlife chronic water quality standard, or a bacteria 30-day geometric mean water quality standard occurs, as specified in R18-11-109, R18-11-110, R18-11-112, or 18 A.A.C. 11, Article 1, Appendix A, Table 2.
- 3. Narrative water quality standards exceedances. The Department shall place a surface water or segment on the Planning List if the listing requirements are met under A.R.S. § 49-232(F).
- E. Removing a surface water, segment, or pollutant from the Planning List or the 303(d) List.**
  - 1. Planning List. The Department shall remove a surface water, segment, or pollutant from the Planning List when:
    - a. Monitoring activities indicate that:
      - i. There is sufficient credible data to determine that the surface water or segment is impaired under subsection (D), in which case the Department shall place the surface water or segment

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- on the 303(d) List. This includes surface waters with an EPA approved TMDL when the Department determines that the TMDL strategy is insufficient for the surface water or segment to attain water quality standards; or
- ii. There is sufficient credible data to determine that the surface water or segment is attaining all designated uses and standards.
- b. All pollutants for the surface water or segment are delisted.
2. 303(d) List. The Department shall:
    - a. Remove a pollutant from a surface water or segment from the 303(d) List based on one or more of the following criteria:
      - i. The Department developed, and EPA approved, a TMDL for the pollutant;
      - ii. The data used for previously listing the surface water or segment under R18-11-605(D) is superseded by more recent credible and scientifically defensible data meeting the requirements of R18-11-602, showing that the surface water or segment meets the applicable numeric or narrative surface water quality standard. When evaluating data to remove a pollutant from the 303(d) List, the monitoring entity shall collect the more recent data under similar hydrologic or climatic conditions as occurred when the samples were taken that indicated impairment, if those conditions still exist;
      - iii. The surface water or segment no longer meets the criteria for impairment based on a change in the applicable surface water quality standard or a designated use approved by EPA under section 303(c)(1) of the Clean Water Act;
      - iv. The surface water or segment no longer meets the criteria for impairment for the specific narrative water quality standard based on a change in narrative water quality standard implementation procedures;
      - v. A re-evaluation of the data indicate that the surface water or segment does not meet the criteria for impairment because of a deficiency in the original analysis; or
      - vi. Pollutant loadings from naturally occurring conditions alone are sufficient to cause a violation of applicable water quality standards;
    - b. Remove a surface water, segment, or pollutant from the 303(d) List, based on criteria that are no more stringent than the listing criteria under subsection (D);
    - c. Remove a surface water or segment from the 303(d) List if all pollutants for the surface water or segment are removed from the list;
    - d. Remove a surface water, segment, or pollutant, from the 303(d) List and place it on the Planning List, if:
      - i. The surface water, segment or pollutant was on the 1998 303(d) List and the dataset used in the original listing does not meet the credible data requirements under R18-11-602, or contains insufficient samples to meet the data requirements under subsection (D); or
      - ii. The monitoring data indicate that the impairment is due to pollution, but not a pollutant.

**Historical Note**

New Section made by final rulemaking at 8 A.A.R. 3380, effective July 12, 2002 (Supp. 02-3).

**R18-11-606. TMDL Priority Criteria for 303(d) Listed Surface Waters or Segments**

- A. In addition to the factors specified in A.R.S. § 49-233(C), the Department shall consider the following when prioritizing an impaired water for development of TMDLs:
  1. A change in a water quality standard;
  2. The date the surface water or segment was added to the 303(d) List;
  3. The presence in a surface water or segment of species listed as threatened or endangered under section 4 of the Endangered Species Act;
  4. The complexity of the TMDL;
  5. State, federal, and tribal policies and priorities; and
  6. The efficiencies of coordinating TMDL development with the Department's surface water monitoring program, the watershed monitoring rotation, or with remedial programs.
- B. The Department shall prioritize an impaired surface water or segment for TMDL development based on the factors specified in A.R.S. § 49-233(C) and subsection (A) as follows:
  1. Consider an impaired surface water or segment a high priority if:
    - a. The listed pollutant poses a substantial threat to the health and safety of humans, aquatic life, or wildlife based on:
      - i. The number and type of designated uses impaired;
      - ii. The type and extent of risk from the impairment to human health, aquatic life, or wildlife;
      - iii. The pollutant causing the impairment, or
      - iv. The severity, magnitude, and duration the surface water quality standard was exceeded;
    - b. A new or modified individual NPDES or AZPDES permit is sought for a new or modified discharge to the impaired water;
    - c. The listed surface water or segment is listed as a unique water in A.A.C. R18-11-112 or is part of an area classified as a "wilderness area," "wild and scenic river," or other federal or state special protection of the water resource;
    - d. The listed surface water or segment contains a species listed as threatened or endangered under the federal Endangered Species Act and the presence of the pollutant in the surface water or segment is likely to jeopardize the listed species;
    - e. A delay in conducting the TMDL could jeopardize the Department's ability to gather sufficient credible data necessary to develop the TMDL;
    - f. There is significant public interest and support for the development of a TMDL;
    - g. The surface water or segment has important recreational and economic significance to the public; or
    - h. The pollutant is listed for eight years or more.
  2. Consider an impaired surface water or segment a medium priority if:
    - a. The surface water or segment fails to meet more than one designated use;
    - b. The pollutant exceeds more than one surface water quality standard;
    - c. A surface water quality standard exceedance is correlated to seasonal conditions caused by natural events, such as storms, weather patterns, or lake turnover;

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- d. It will take more than two years for proposed actions in the watershed to result in the surface water attaining applicable water quality standards;
  - e. The type of pollutant and other factors relating to the surface water or segment make the TMDL complex; or
  - f. The administrative needs of the Department, including TMDL schedule commitments with EPA, permitting requirements, or basin priorities that require completion of the TMDL.
3. Consider an impaired surface water or segment a low priority if:
- a. The Department has formally submitted a proposal to delist the surface water, segment, or pollutant to EPA based on R18-11-605(E)(2). If the Department makes the submission outside the listing process cycle, the change in priority ranking will not be effective until EPA approves the submittal;
  - b. The Department has modified, or formally proposed for modification, the designated use or applicable surface water quality standard, resulting in an impaired water no longer being impaired, but the modification has not been approved by EPA;
  - c. The surface water or segment is expected to attain surface water quality standards due to any of the following:
    - i. Recently instituted treatment levels or best management practices in the drainage area,
    - ii. Discharges or activities related to the impairment have ceased, or
    - iii. Actions have been taken and controls are in place or scheduled for implementation that will likely to bring the surface water back into compliance;
  - d. The surface water or segment is ephemeral or intermittent. The Department shall re-prioritize the surface water or segment if the presence of the pollutant in the listed water poses a threat to the health and safety of humans, aquatic life, or wildlife using the water, or the pollutant is contributing to the impairment of a downstream perennial surface water or segment;
  - e. The pollutant poses a low ecological and human health risk;
  - f. Insufficient data exist to determine the source of the pollutant load;
  - g. The uncertainty of timely coordination with national and international entities concerning international waters;
  - h. Naturally occurring conditions are a major contributor to the impairment; and
  - i. No documentation or effective analytical tools exist to develop a TMDL for the surface water or segment with reasonable accuracy.
- C.** The Department will target surface waters with high priority factors in subsections (B)(1)(a) through (B)(1)(d) for initiation of TMDLs within two years following EPA approval of the 303(d) List.
- D.** The Department may shift priority ranking of a surface water or segment for any of the following reasons:
1. A change in federal, state, or tribal policies or priorities that affect resources to complete a TMDL;
  2. Resource efficiencies for coordinating TMDL development with other monitoring activities, including the Department's ambient monitoring program that monitors watersheds on a five-year rotational basis;
  3. Resource efficiencies for coordinating TMDL development with Department remedial or compliance programs;
  4. New information is obtained that will revise whether the surface water or segment is a high priority based on factors in subsection (B); and
  5. Reduction or increase in staff or budget involved in the TMDL development.
- E.** The Department may complete a TMDL initiated before July 12, 2002 for a surface water or segment that was listed as impaired on the 1998 303(d) List but does not qualify for listing under the criteria in R18-11-605, if:
1. The TMDL investigation establishes that the water quality standard is not being met and the allocation of loads is expected to bring the surface water into compliance with standards,
  2. The Department estimates that more than 50 percent of the cost of completing the TMDL has been spent,
  3. There is community involvement and interest in completing the TMDL, or
  4. The TMDL is included within an EPA-approved state workplan initiated before July 12, 2002.

**Historical Note**

New Section made by final rulemaking at 8 A.A.R. 3380, effective July 12, 2002 (Supp. 02-3).

**REGULAR RULEMAKING**  
**TITLE 18. Environmental Quality**  
**CHAPTER 11. Department of Environmental Quality**  
**Water Quality Standards**

The general and specific statutes authorizing the rules, including relevant definitions are:

- General:                   A.R.S. § 49-202(A)
- Specific:                   A.R.S. §§ 49-203(A)(1); 49-221; 49-222.
- Relevant definitions:   A.R.S. § 49-201

## 49-201. Definitions

In this chapter, unless the context otherwise requires:

1. "Administrator" means the administrator of the United States environmental protection agency.
2. "Aquifer" means a geologic unit that contains sufficient saturated permeable material to yield usable quantities of water to a well or spring.
3. "Best management practices" means those methods, measures or practices to prevent or reduce discharges and includes structural and nonstructural controls and operation and maintenance procedures. Best management practices may be applied before, during and after discharges to reduce or eliminate the introduction of pollutants into receiving waters. Economic, institutional and technical factors shall be considered in developing best management practices.
4. "CERCLA" means the comprehensive environmental response, compensation, and liability act of 1980, as amended (P.L. 96-510; 94 Stat. 2767; 42 United States Code sections 9601 through 9657), commonly known as "superfund".
5. "Clean closure" means implementation of all actions specified in an aquifer protection permit, if any, as closure requirements, as well as elimination, to the greatest degree practicable, of any reasonable probability of further discharge from the facility and of either exceeding aquifer water quality standards at the applicable point of compliance or, if an aquifer water quality standard is exceeded at the time the permit is issued, causing further degradation of the aquifer at the applicable point of compliance as provided in section 49-243, subsection B, paragraph 3. Clean closure also means postclosure monitoring and maintenance are unnecessary to meet the requirements in an aquifer protection permit.
6. "Clean water act" means the federal water pollution control act amendments of 1972 (P.L. 92-500; 86 Stat. 816; 33 United States Code sections 1251 through 1376), as amended.
7. "Closed facility" means:
  - (a) A facility that ceased operation before January 1, 1986, that is not, on August 13, 1986, engaged in the activity for which the facility was designed and that was previously operated and for which there is no intent to resume operation.
  - (b) A facility that has been approved as a clean closure by the director.
  - (c) A facility at which any postclosure monitoring and maintenance plan, notifications and approvals required in a permit have been completed.
8. "Concentrated animal feeding operation" means an animal feeding operation that meets the criteria prescribed in 40 Code of Federal Regulations part 122, appendix B for determining a concentrated animal feeding operation for purposes of 40 Code of Federal Regulations sections 122.23 and 122.24, appendix C.
9. "Department" means the department of environmental quality.
10. "Direct reuse" means the beneficial use of reclaimed water for specific purposes authorized pursuant to section 49-203, subsection A, paragraph 6.
11. "Director" means the director of environmental quality or the director's designee.
12. "Discharge" means the direct or indirect addition of any pollutant to the waters of the state from a facility. For purposes of the aquifer protection permit program prescribed by article 3 of this chapter, discharge means

the addition of a pollutant from a facility either directly to an aquifer or to the land surface or the vadose zone in such a manner that there is a reasonable probability that the pollutant will reach an aquifer.

13. "Discharge impact area" means the potential areal extent of pollutant migration, as projected on the land surface, as the result of a discharge from a facility.

14. "Discharge limitation" means any restriction, prohibition, limitation or criteria established by the director, through a rule, permit or order, on quantities, rates, concentrations, combinations, toxicity and characteristics of pollutants.

15. "Environment" means navigable waters, any other surface waters, groundwater, drinking water supply, land surface or subsurface strata or ambient air, within or bordering on this state.

16. "Existing facility" means a facility on which construction began before August 13, 1986 and which is neither a new facility nor a closed facility. For the purposes of this definition, construction on a facility has begun if the facility owner or operator has either:

(a) Begun, or caused to begin, as part of a continuous on-site construction program any placement, assembly or installation of a building, structure or equipment.

(b) Entered a binding contractual obligation to purchase a building, structure or equipment which is intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility engineering and design studies, do not constitute a contractual obligation for purposes of this definition.

17. "Facility" means any land, building, installation, structure, equipment, device, conveyance, area, source, activity or practice from which there is, or with reasonable probability may be, a discharge.

18. "Gray water" means wastewater that has been collected separately from a sewage flow and that originates from a clothes washer or a bathroom tub, shower or sink but that does not include wastewater from a kitchen sink, dishwasher or toilet.

19. "Hazardous substance" means:

(a) Any substance designated pursuant to sections 311(b)(2)(A) and 307(a) of the clean water act.

(b) Any element, compound, mixture, solution or substance designated pursuant to section 102 of CERCLA.

(c) Any hazardous waste having the characteristics identified under or listed pursuant to section 49-922.

(d) Any hazardous air pollutant listed under section 112 of the federal clean air act (42 United States Code section 7412).

(e) Any imminently hazardous chemical substance or mixture with respect to which the administrator has taken action pursuant to section 7 of the federal toxic substances control act (15 United States Code section 2606).

(f) Any substance which the director, by rule, either designates as a hazardous substance following the designation of the substance by the administrator under the authority described in subdivisions (a) through (e) of this paragraph or designates as a hazardous substance on the basis of a determination that such substance represents an imminent and substantial endangerment to public health.

20. "Inert material" means broken concrete, asphaltic pavement, manufactured asbestos-containing products, brick, rock, gravel, sand and soil. Inert material also includes material that when subjected to a water leach test that is designed to approximate natural infiltrating waters will not leach substances in concentrations that exceed numeric aquifer water quality standards established pursuant to section 49-223, including overburden and wall

rock that is not acid generating, taking into consideration acid neutralization potential, and that has not and will not be subject to mine leaching operations.

21. "Major modification" means a physical change in an existing facility or a change in its method of operation that results in a significant increase or adverse alteration in the characteristics or volume of the pollutants discharged, or the addition of a process or major piece of production equipment, building or structure that is physically separated from the existing operation and that causes a discharge, provided that:

(a) A modification to a groundwater protection permit facility as defined in section 49-241.01, subsection C that would qualify for an area-wide permit pursuant to section 49-243 consisting of an activity or structure listed in section 49-241, subsection B shall not constitute a major modification solely because of that listing.

(b) For a groundwater protection permit facility as defined in section 49-241.01, subsection C, a physical expansion that is accomplished by lateral accretion or upward expansion within the pollutant management area of the existing facility or group of facilities shall not constitute a major modification if the accretion or expansion is accomplished through sound engineering practice in a manner compatible with existing facility design, taking into account safety, stability and risk of environmental release. For a facility described in section 49-241.01, subsection C, paragraph 1, expansion of a facility shall conform with the terms and conditions of the applicable permit. For a facility described in section 49-241.01, subsection C, paragraph 2, if the area of the contemplated expansion is not identified in the notice of disposal, the owner or operator of the facility shall submit to the director the information required by section 49-243, subsection A, paragraphs 1, 2, 3 and 7.

22. "Navigable waters" means the waters of the United States as defined by section 502(7) of the clean water act (33 United States Code section 1362(7)).

23. "New facility" means a previously closed facility that resumes operation or a facility on which construction was begun after August 13, 1986 on a site at which no other facility is located or to totally replace the process or production equipment that causes the discharge from an existing facility. A major modification to an existing facility is deemed a new facility to the extent that the criteria in section 49-243, subsection B, paragraph 1 can be practicably applied to such modification. For the purposes of this definition, construction on a facility has begun if the facility owner or operator has either:

(a) Begun, or caused to begin as part of a continuous on-site construction program, any placement, assembly or installation of a building, structure or equipment.

(b) Entered a binding contractual obligation to purchase a building, structure or equipment which is intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility engineering and design studies, do not constitute a contractual obligation for purposes of this definition.

24. "Nonpoint source" means any conveyance which is not a point source from which pollutants are or may be discharged to navigable waters.

25. "On-site wastewater treatment facility" means a conventional septic tank system or alternative system that is installed at a site to treat and dispose of wastewater of predominantly human origin that is generated at that site.

26. "Permit" means a written authorization issued by the director or prescribed by this chapter or in a rule adopted under this chapter stating the conditions and restrictions governing a discharge or governing the construction, operation or modification of a facility.

27. "Person" means an individual, employee, officer, managing body, trust, firm, joint stock company, consortium, public or private corporation, including a government corporation, partnership, association or state, a political subdivision of this state, a commission, the United States government or any federal facility, interstate body or other entity.

28. "Point source" means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft from which pollutants are or may be discharged to navigable waters. Point source does not include return flows from irrigated agriculture.

29. "Pollutant" means fluids, contaminants, toxic wastes, toxic pollutants, dredged spoil, solid waste, substances and chemicals, pesticides, herbicides, fertilizers and other agricultural chemicals, incinerator residue, sewage, garbage, sewage sludge, munitions, petroleum products, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and mining, industrial, municipal and agricultural wastes or any other liquid, solid, gaseous or hazardous substances.

30. "Postclosure monitoring and maintenance" means those activities that are conducted after closure notification and that are necessary to:

(a) Keep the facility in compliance with either the aquifer water quality standards at the applicable point of compliance or, for any aquifer water quality standard that is exceeded at the time the aquifer protection permit is issued, the requirement to prevent the facility from further degrading the aquifer at the applicable point of compliance as provided under section 49-243, subsection B, paragraph 3.

(b) Verify that the actions or controls specified as closure requirements in an approved closure plan or strategy are routinely inspected and maintained.

(c) Perform any remedial, mitigative or corrective actions or controls as specified in the aquifer protection permit or perform corrective action as necessary to comply with this paragraph and article 3 of this chapter.

(d) Meet property use restrictions.

31. "Practicably" means able to be reasonably done from the standpoint of technical practicability and, except for pollutants addressed in section 49-243, subsection I, economically achievable on an industry-wide basis.

32. "Reclaimed water" means water that has been treated or processed by a wastewater treatment plant or an on-site wastewater treatment facility.

33. "Regulated agricultural activity" means the application of nitrogen fertilizer or a concentrated animal feeding operation.

34. "Safe drinking water act" means the federal safe drinking water act, as amended (P.L. 93-523; 88 Stat. 1660; 95-190; 91 Stat. 1393).

35. "Standards" means water quality standards, pretreatment standards and toxicity standards established pursuant to this chapter.

36. "Standards of performance" means performance standards, design standards, best management practices, technologically based standards and other standards, limitations or restrictions established by the director by rule or by permit condition.

37. "Tank" means a stationary device, including a sump, that is constructed of concrete, steel, plastic, fiberglass, or other non-earthen material that provides substantial structural support, and that is designed to contain an accumulation of solid, liquid or gaseous materials.

38. "Toxic pollutant" means a substance that will cause significant adverse reactions if ingested in drinking water. Significant adverse reactions are reactions that may indicate a tendency of a substance or mixture to cause long lasting or irreversible damage to human health.

39. "Trade secret" means information to which all of the following apply:

- (a) A person has taken reasonable measures to protect from disclosure and the person intends to continue to take such measures.
- (b) The information is not, and has not been, reasonably obtainable without the person's consent by other persons, other than governmental bodies, by use of legitimate means, other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding.
- (c) No statute specifically requires disclosure of the information to the public.
- (d) The person has satisfactorily shown that disclosure of the information is likely to cause substantial harm to the business's competitive position.

40. "Vadose zone" means the zone between the ground surface and any aquifer.

41. "Waters of the state" means all waters within the jurisdiction of this state including all perennial or intermittent streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, wells, aquifers, springs, irrigation systems, drainage systems and other bodies or accumulations of surface, underground, natural, artificial, public or private water situated wholly or partly in or bordering on the state.

42. "Well" means a bored, drilled or driven shaft, pit or hole whose depth is greater than its largest surface dimension.

## 49-202. Designation of state agency

A. The department is designated as the agency for this state for all purposes of the clean water act, including section 505, the resource conservation and recovery act, including section 7002, and the safe drinking water act. The department may take all actions necessary to administer and enforce these acts as provided in this section, including entering into contracts, grants and agreements, the adoption, modification or repeal of rules, and initiating administrative and judicial actions to secure to this state the benefits, rights and remedies of such acts.

B. The department shall process requests under section 401 of the clean water act for certification of permits required by section 404 of the clean water act in accordance with subsections C through H of this section. Subsections C and D, subsection E, paragraph 3, subsection F, paragraph 3 and subsection H of this section apply to the certification of nationwide or general permits issued under section 404 of the clean water act. If the department has denied or failed to act on certification of a nationwide permit or general permit, subsections C through H of this section apply to the certification of applications for or notices of coverage under those permits.

C. The department shall review the application for section 401 certification solely to determine whether the effect of the discharge will comply with the water quality standards for navigable waters established by department rules adopted pursuant to section 49-221, subsection A, and section 49-222. The department's review shall extend only to activities conducted within the ordinary high watermark of navigable waters. To the extent that any other standards are considered applicable pursuant to section 401(a)(1) of the clean water act, certification of these standards is waived.

D. The department may include only those conditions on certification under section 401 of the clean water act that are required to ensure compliance with the standards identified in subsection C of this section. The department may impose reporting and monitoring requirements as conditions of certification under section 401 of the clean water act only in accordance with department rules.

E. Until January 1, 1999:

1. The department may request supplemental information from the section 401 certification applicant if the information is necessary to make the certification determination pursuant to subsection C of this section. The department shall request this information in writing within thirty calendar days after receipt of the application for section 401 certification. The request shall specifically describe the information requested. Within fifteen calendar days after receipt of the applicant's written response to a request for supplemental information, the department shall either issue a written determination that the application is complete or request specific additional information. The applicant may deem any additional requests for supplemental information as a denial of certification for purposes of subsection H of this section. If the department fails to act within the time limits prescribed by this subsection, the application is deemed complete.

2. The department shall grant or deny section 401 certification and shall send a written notice of the department's decision to the applicant within thirty calendar days after receipt of a complete application for certification. Written notice of a denial of section 401 certification shall include a detailed description of the reasons for denial.

3. The department may waive its right to certification by giving written notice of that waiver to the applicant. The department's failure to grant or deny an application within the time limits prescribed by this section is deemed a waiver of certification pursuant to this subsection and section 401(a)(2) of the clean water act.

F. Beginning January 1, 1999:

1. The department may request supplemental information from the section 401 certification applicant if the information is necessary to make the certification determination pursuant to subsection C of this section. The department shall request this information in writing. The request shall specifically describe the information requested. After receipt of the applicant's written response to a request for supplemental information, the department shall either issue a written determination that the application is complete or request specific

additional information. The applicant may deem any additional requests for supplemental information as a denial of certification for purposes of subsection H of this section. In all other instances, the application is complete on submission of the information requested by the department.

2. The department shall grant or deny section 401 certification and shall send a written notice of the department's decision to the applicant after receipt of a complete application for certification. Written notice of a denial of section 401 certification shall include a detailed description of the reasons for denial.

3. The department may waive its right to certification by giving written notice of that waiver to the applicant. The department's failure to act on an application is deemed a waiver pursuant to this subsection and section 401(a)(2) of the clean water act.

G. The department shall adopt rules specifying the information the department requires an applicant to submit under this section in order to make the determination required by subsections C and D of this section. Until these rules are adopted, the department shall require an applicant to submit only the following information for certification under this section:

1. The name, address and telephone number of the applicant.
2. A description of the project to be certified, including an identification of the navigable waters in which the certified activities will occur.
3. The project location, including latitude, longitude and a legal description.
4. A United States geological service topographic map or other contour map of the project area, if available.
5. A map delineating the ordinary high watermark of navigable waters affected by the activity to be certified.
6. A description of any measures to be applied to the activities being certified in order to control the discharge of pollutants to navigable waters from those activities.
7. A description of the materials being discharged to or placed in navigable waters.
8. A copy of the application for a federal permit or license that is the subject of the requested certification.

H. Pursuant to title 41, chapter 6, article 10 an applicant for certification may appeal a denial of certification or any conditions imposed on certification. Any person who is or may be adversely affected by the denial of or imposition of conditions on the certification of a nationwide or general permit may appeal that decision pursuant to title 41, chapter 6, article 10.

I. Certification under section 401 of the clean water act is automatically granted for quarrying, crushing and screening of nonmetallic minerals in ephemeral waters if all of the following conditions are satisfied within the ordinary high watermark of jurisdictional waters:

1. There is no disposal of construction and demolition wastes and contaminated wastewater.
2. Water for dust suppression, if used, does not contain contaminants that could violate water quality standards.
3. Pollution from the operation of equipment in the mining area is removed and properly disposed.
4. Stockpiles of processed materials containing ten per cent or more of particles of silt are placed or stabilized to minimize loss or erosion during flow events. As used in this paragraph, "silt" means particles finer than 0.0625 millimeter diameter on a dry weight basis.
5. Measures are implemented to minimize upstream and downstream scour during flood events to protect the integrity of buried pipelines.

6. On completion of quarrying operations in an area, areas denuded of shrubs and woody vegetation are revegetated to the maximum extent practicable.

J. For purposes of subsection I of this section, "ephemeral waters" means waters of the state that have been designated as ephemeral in rules adopted by the department.

K. Certification under section 401 of the clean water act is automatically granted for any license or permit required for:

1. Corrective actions taken pursuant to chapter 6, article 1 of this title in response to a release of a regulated substance as defined in section 49-1001 except for those off-site facilities that receive for treatment or disposal materials that are contaminated with a regulated substance and that are received as part of a corrective action.

2. Response or remedial actions undertaken pursuant to chapter 2, article 5 of this title or pursuant to CERCLA.

3. Corrective actions taken pursuant to chapter 5, article 1 of this title or the resource conservation recovery act of 1976, as amended (42 United States Code sections 6901 through 6992).

4. Other remedial actions that have been reviewed and approved by the appropriate government authority and taken pursuant to applicable federal or state laws.

L. The department of environmental quality is designated as the state water pollution control agency for this state for all purposes of CERCLA, except that the department of water resources has joint authority with the department of environmental quality to conduct feasibility studies and remedial investigations relating to groundwater quality and may enter into contracts and cooperative agreements under section 104 of CERCLA for such studies and remedial investigations. The department of environmental quality may take all action necessary or appropriate to secure to this state the benefits of the act, and all such action shall be taken at the direction of the director of environmental quality as his duties are prescribed in this chapter.

M. The director and the department of environmental quality may enter into an interagency contract or agreement with the director of water resources under title 11, chapter 7, article 3 to implement the provisions of section 104 of CERCLA and to carry out the purposes of subsection L of this section.

### 49-203. Powers and duties of the director and department

A. The director shall:

1. Adopt, by rule, water quality standards in the form and subject to the considerations prescribed by article 2 of this chapter.
2. Adopt, by rule, a permit program that is consistent with but no more stringent than the requirements of the clean water act for the point source discharge of any pollutant or combination of pollutants into navigable waters. The program and the rules shall be sufficient to enable this state to administer the permit program identified in section 402(b) of the clean water act including the sewage sludge requirements of section 405 of the clean water act and as prescribed by article 3.1 of this chapter.
3. Adopt, by rule, a program to control nonpoint source discharges of any pollutant or combination of pollutants into navigable waters.
4. Adopt, by rule, an aquifer protection permit program to control discharges of any pollutant or combination of pollutants that are reaching or may with a reasonable probability reach an aquifer. The permit program shall be as prescribed by article 3 of this chapter.
5. Adopt, by rule, the permit program for underground injection control described in the safe drinking water act.
6. Adopt, by rule, technical standards for conveyances of reclaimed water and a permit program for the direct reuse of reclaimed water.
7. Adopt, by rule or as permit conditions, discharge limitations, best management practice standards, new source performance standards, toxic and pretreatment standards and other standards and conditions as reasonable and necessary to carry out the permit programs and regulatory duties described in paragraphs 2 through 5 of this subsection.
8. Assess and collect fees to revoke, issue, deny, modify or suspend permits issued pursuant to this chapter and to process permit applications. The director may also assess and collect costs reasonably necessary if the director must conduct sampling or monitoring relating to a facility because the owner or operator of the facility has refused or failed to do so on order by the director. The director shall set fees that are reasonably related to the department's costs of providing the service for which the fee is charged. Monies collected from aquifer protection permit fees and from Arizona pollutant discharge elimination system permit fees shall be deposited, pursuant to sections 35-146 and 35-147, in the water quality fee fund established by section 49-210. Monies from other permit fees shall be deposited, pursuant to sections 35-146 and 35-147, in the water quality fee fund unless otherwise provided by law. Monies paid by an applicant for review by consultants for the department pursuant to section 49-241.02, subsection D shall be deposited, pursuant to sections 35-146 and 35-147, in the water quality fee fund established by section 49-210. State agencies are exempt from all fees imposed pursuant to this chapter except for those fees associated with the dredge and fill permit program established pursuant to article 3.2 of this chapter. For services provided under the dredge and fill permit program, a state agency shall pay either:
  - (a) The fees established by the department under the dredge and fill permit program.
  - (b) The reasonable cost of services provided by the department pursuant to an interagency service agreement.
9. Adopt, modify, repeal and enforce other rules that are reasonably necessary to carry out the director's functions under this chapter.
10. Require monitoring at an appropriate point of compliance for any organic or inorganic pollutant listed under section 49-243, subsection I if the director has reason to suspect the presence of the pollutant in a discharge.

11. Adopt rules establishing what constitutes a significant increase or adverse alteration in the characteristics or volume of pollutants discharged for purposes of determining what constitutes a major modification to an existing facility under the definition of new facility pursuant to section 49-201. Before the adoption of these rules, the director shall determine whether a change at a particular facility results in a significant increase or adverse alteration in the characteristics or volume of pollutants discharged on a case-by-case basis, taking into account site conditions and operational factors.

B. The director may:

1. On presentation of credentials, enter into, on or through any public or private property from which a discharge has occurred, is occurring or may occur or on which any disposal, land application of sludge or treatment regulated by this chapter has occurred, is occurring or may be occurring and any public or private property where records relating to a discharge or records that are otherwise required to be maintained as prescribed by this chapter are kept, as reasonably necessary to ensure compliance with this chapter. The director or a department employee may take samples, inspect and copy records required to be maintained pursuant to this chapter, inspect equipment, activities, facilities and monitoring equipment or methods of monitoring, take photographs and take other action reasonably necessary to determine the application of, or compliance with, this chapter. The owner or managing agent of the property shall be afforded the opportunity to accompany the director or department employee during inspections and investigations, but prior notice of entry to the owner or managing agent is not required if reasonable grounds exist to believe that notice would frustrate the enforcement of this chapter. If the director or department employee obtains any samples before leaving the premises, the director or department employee shall give the owner or managing agent a receipt describing the samples obtained and a portion of each sample equal in volume or weight to the portion retained. If an analysis is made of samples, or monitoring and testing are performed, a copy of the results shall be furnished promptly to the owner or managing agent.

2. Require any person who has discharged, is discharging or may discharge into the waters of the state under article 3, 3.1 or 3.2 or 3.3 of this chapter and any person who is subject to pretreatment standards and requirements or sewage sludge use or disposal requirements under article 3.1 of this chapter to collect samples, to establish and maintain records, including photographs, and to install, use and maintain sampling and monitoring equipment to determine the absence or presence and nature of the discharge or indirect discharge or sewage sludge use or disposal.

3. Administer state or federal grants, including grants to political subdivisions of this state, for the construction and installation of publicly and privately owned pollutant treatment works and pollutant control devices and establish grant application priorities.

4. Develop, implement and administer a water quality planning process, including a ranking system for applicant eligibility, wherein appropriated state monies and available federal monies are awarded to political subdivisions of this state to support or assist regional water quality planning programs and activities.

5. Enter into contracts and agreements with the federal government to implement federal environmental statutes and programs.

6. Enter into intergovernmental agreements pursuant to title 11, chapter 7, article 3 if the agreement is necessary to more effectively administer the powers and duties described in this chapter.

7. Participate in, conduct and contract for studies, investigations, research and demonstrations relating to the causes, minimization, prevention, correction, abatement, mitigation, elimination, control and remedy of discharges and collect and disseminate information relating to discharges.

8. File bonds or other security as required by a court in any enforcement actions under article 4 of this chapter.

9. Adopt by rule a permit program for the discharge of dredged or fill material into navigable waters for purposes of implementing the permit program established by 33 United States Code section 1344.

C. Subject to section 38-503 and other applicable statutes and rules, the department may contract with a private consultant for the purposes of assisting the department in reviewing aquifer protection permit applications and on-site wastewater treatment facilities to determine whether a facility meets the criteria and requirements of this chapter and the rules adopted by the director. Except as provided in section 49-241.02, subsection D, the department shall not use a private consultant if the fee charged for that service would be greater than the fee the department would charge to provide that service. The department shall pay the consultant for the services rendered by the consultant from fees paid by the applicant or facility to the department pursuant to subsection A, paragraph 8 of this section.

D. The director shall integrate all of the programs authorized in this section and other programs affording water quality protection that are administered by the department for purposes of administration and enforcement and shall avoid duplication and dual permitting to the maximum extent practicable.

49-221. Water quality standards in general

A. The director shall adopt, by rule, water quality standards for all navigable waters and for all waters in all aquifers to preserve and protect the quality of those waters for all present and reasonably foreseeable future uses.

B. The director may adopt, by rule, water quality standards for waters of the state other than those described in subsection A of this section, including standards for the use of water pumped from an aquifer that does not meet the standards adopted pursuant to section 49-223, subsections A and B and that is put to a beneficial use other than drinking water. These standards may include standards for the use of water pumped as part of a remedial action. In adopting such standards, the director shall consider the economic, social and environmental costs and benefits that would result from the adoption of a water quality standard at a particular level or for a particular water category.

C. In setting standards pursuant to subsection A or B of this section, the director shall consider, but not be limited to, the following:

1. The protection of the public health and the environment.
2. The uses that have been made, are being made or with reasonable probability may be made of these waters.
3. The provisions and requirements of the clean water act and safe drinking water act and the regulations adopted pursuant to those acts.
4. The degree to which standards for one category of waters could cause violations of standards for other, hydrologically connected, water categories.
5. Guidelines, action levels or numerical criteria adopted or recommended by the United States environmental protection agency or any other federal agency.
6. Any unique physical, biological or chemical properties of the waters.

D. Water quality standards shall be expressed in terms of the uses to be protected and, if adequate information exists to do so, numerical limitations or parameters, in addition to any narrative standards that the director deems appropriate.

E. The director may adopt by rule water quality standards for the direct reuse of reclaimed water. In establishing these standards, the director shall consider the following:

1. The protection of public health and the environment.
2. The uses that are being made or may be made of the reclaimed water.
3. The degree to which standards for the direct reuse of reclaimed water may cause violations of water quality standards for other hydrologically connected water categories.

F. If the director proposes to adopt water quality standards for agricultural water, the director shall consult, cooperate, collaborate and, if necessary, enter into interagency agreements and memoranda of understanding with the Arizona department of agriculture relating to its administration, pursuant to title 3, chapter 3, article 4.1, of this state's authority relating to agricultural water under the United States food and drug administration produce safety rule (21 Code of Federal Regulations part 112, subpart E) and any other federal produce safety regulation, order or guideline or other requirement adopted pursuant to the FDA food safety modernization act (P.L. 111-353; 21 United States Code sections 2201 through 2252). For the purposes of this subsection:

1. "Agricultural water":

(a) Means water that is used in a covered activity on produce where water is intended to, or is likely to, contact produce or food contact surfaces.

(b) Includes all of the following:

(i) Water used in growing activities, including irrigation water, water used for preparing crop sprays and water used for growing sprouts.

(ii) Water used in harvesting, packing and holding activities, including water used for washing or cooling harvested produce and water used for preventing dehydration of produce.

2. "Covered activity" means growing, harvesting, packing or holding produce. Covered activity includes processing produce to the extent that the activity is within the meaning of farm as defined in section 3-525.

3. "Harvesting" has the same meaning prescribed in section 3-525.

4. "Holding" has the same meaning prescribed in section 3-525.

5. "Packing" has the same meaning prescribed in section 3-525.

6. "Produce" has the same meaning prescribed in section 3-525.

49-222. Water quality standards for navigable waters

A. Standards for the quality of navigable waters shall assure water quality, if attainable, which provides for protecting the public health and welfare, and shall enhance the quality of water taking into consideration its use and value for public water supplies, the propagation of fish and wildlife and recreational, agricultural, industrial and other purposes including navigation.

B. Not later than January 1, 1990, the director shall adopt standards for the quality of all navigable waters which establish numeric limitations on the concentrations of each of the toxic pollutants listed by the administrator pursuant to section 307 of the clean water act (33 United States Code section 1317).

C. In setting numeric standards for the quality of navigable waters, the director may consider the effect of local water quality characteristics on the toxicity of specific pollutants and the varying sensitivities of local affected aquatic populations to such pollutants, and the extent to which the natural flow of the stream is intermittent or ephemeral, as a result of which the instream flow consists mostly of treated wastewater effluent, except that such standards shall not, in any event, be inconsistent with the clean water act. In applying such standards the director may establish appropriate mixing zones.

**D-3**

**ARIZONA DEPARTMENT OF REVENUE (R19-0902)**

Title 15, Chapter 10, Article 5, Electronic Filing Program



# GOVERNOR'S REGULATORY REVIEW COUNCIL

## ATTORNEY MEMORANDUM - REGULAR RULEMAKING

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**MEETING DATE:**

**TO:** Members of the Governor's Regulatory Review Council (Council)

**FROM:** Council Staff

**DATE:** July 22, 2019

**SUBJECT: ARIZONA DEPARTMENT OF REVENUE (R19-0902)**  
Title 15, Revenue, Chapter 10, Department of Revenue, General Administration

**Amend:** R15-10-502, R15-10-503

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**Summary:**

This rulemaking from the Arizona Department of Revenue (Department) seeks to amend R15-10-502 and 515-10-503 within Title 15, Chapter 10, relating to General Administration. The rules include:

- **R15-10-502** (Recordkeeping Requirements); and
- **R15-10-503** (Electronic Signatures for Individual Income Tax).

The Department indicates that the rulemaking is necessary to resolve inconsistencies regarding the Department's ability to accept electronically filed income tax and withholding tax returns. The Department proposed the rulemaking to ensure that fiduciary returns, partnership returns, corporate returns, or S-corporation returns can be accepted electronically. These proposed rules comply with A.R.S. § 43-323, which requires that fiduciary returns, partnership returns, corporate returns, and S-corporation returns be filed electronically for taxable years beginning from and after December 31, 2019.

The Department received an exemption to the rulemaking moratorium on November 30, 2018.

1. **Are the rules legal, consistent with legislative intent, and within the agency's statutory authority?**

Yes. The Department cites to both general and specific statutory authority for the rules.

2. **Do the rules establish a new fee or contain a fee increase?**

No. The rules do not establish a new fee or contain a fee increase.

3. **Does the preamble disclose a reference to any study relevant to the rules that the agency reviewed and either did or did not rely upon?**

Yes. The Department indicates that it did not review or rely on a study in conducting this rulemaking.

4. **Summary of the agency's economic impact analysis:**

The amended rule allows the taxpayer to sign their Arizona tax return with the same electronic signature used to sign their federal tax return. This fulfills the requirement under A.R.S. § 43-323 that fiduciary returns, partnership returns, corporate returns, and S-corporation returns be filed electronically for taxable years beginning from and after December 31, 2019. No cost is associated with this amended rule because Arizona is accompanying the federal filing authorization. Stakeholders include the Department, current taxpayers other than individual income taxpayers, and prospective taxpayers other than individual income taxpayers.

5. **Has the agency analyzed the costs and benefits of the rulemaking and determined that the rules impose the least burden and costs to those who are regulated?**

The Department states that the adoption of the federal electronic filing signature is the least intrusive and least costly method of implementing the electronic filing mandate.

6. **What are the economic impacts on stakeholders?**

There may be some extra costs for taxpayers as they familiarize themselves with the new Arizona electronic filing signature. The Department may see some additional costs in providing education and customer service assistance for taxpayers unfamiliar with the new requirements. The benefits are a simplified procedure for both filing and processing the return. The Department also avoids incurring the extra costs associated with creating an Arizona-specific electronic signature protocol.

7. **Are the final rules a substantial change, considered as a whole, from the proposed rules and any supplemental proposals?**

No. The final rules are not a substantial change from the proposed rules.

8. **Does the agency adequately address the comments on the proposed rules and any supplemental proposals?**

Not applicable. The Department did not receive any written or oral comments.

9. **Do the rules require a permit or license and, if so, does the agency comply with A.R.S. § 41-1037?**

Not applicable. These rules do not require a permit.

10. **Are the rules more stringent than corresponding federal law and, if so, is there statutory authority to exceed the requirements of federal law?**

Not applicable. There is no corresponding federal law.

11. **Conclusion**

The Department has demonstrated adequate justification for this rulemaking. Council staff finds that clarifying the rules to allow the Department to accept electronically filed fiduciary returns, partnership returns, corporate returns, or S-corporation returns will make the rules more effective and benefit both the public and the Department. The Department accepts the usual 60-day delayed effective date for these rules. Council staff recommends approval of this rulemaking.

# STATE OF ARIZONA

Arizona Department of Revenue



Douglas A. Ducey  
Governor

Carlton Woodruff  
Interim Director

July 11, 2019

Ms. Nicole Sornsin, Chairperson  
Governor's Regulatory Review Council  
Arizona Department of Administration  
100 North 15<sup>th</sup> Avenue, Room 402  
Phoenix, Arizona 85007

**Re: Notice of Final Rulemaking – Amendment to rules in 15 A.A.C.10.**

Dear Ms. Sornsin:

The Department submits the enclosed Notice of Final Rulemaking amending the following rules for the Council's consideration and approval:

R15-10-502 Recordkeeping Requirements  
R15-10-503 Electronic Signatures for Individual Income Tax

The Department filed a Notice of Rulemaking Docket Opening and Notice of Proposed Rulemaking with the Arizona Secretary of State on May 10, 2019. The close of record date was June 9, 2019. This rulemaking activity does not relate to a five year review report and the rules do not establish any new fees or fee increases.

The Department did not receive any study relevant to the rules. Accordingly the Department certifies that the preamble discloses no reference to any such study and it did not rely on any such study in its evaluation of or justification for the rules. The Department does *not* believe that it will be necessary to engage any additional full-time employees to implement and enforce the rules.

The following documents are enclosed:

- The Notice of Final Rulemaking, including the preamble, table of contents for the rulemaking and the text of each rule;
- Economic, small business, and consumer impact statement that contains the information required by A.R.S. § 41-1055;
- E-mail approving the Department's request for an exception to the rulemaking moratorium.

If you have any questions, please contact Rory Wilson, Tax Policy Lead Counsel, Taxpayer Services Section at 602-716-6471 or via email at [RWilson@azdor.gov](mailto:RWilson@azdor.gov). Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "Grant Nülle".

Grant Nülle, Deputy Director  
Arizona Department of Revenue

Enclosures

**NOTICE OF Final RULEMAKING**

**TITLE #15. REVENUE**

**CHAPTER #10. Department of revenue – general administration**

**PREAMBLE**

<b><u>1. Article, Part, or Section Affected (as applicable)</u></b>	<b><u>Rulemaking Action</u></b>
R15-10-502	Amend
R15-10-503	Amend

**2. Citations to the agency's statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific):**

Authorizing statute: A.R.S. § 42-1005(A)1

Implementing statute: A.R.S. § 42-1105.01  
A.R.S. § 43-323

**3. The effective date of the rule:**

General effective date.

**4. Citations to all related notices published in the *Register* as specified in R1-1-409(A) that pertain to the record of the proposed rule:**

Notice of Rulemaking Docket Opening: 25 A.A.R. 1189, May 10, 2019

Notice of Proposed Rulemaking: 25 A.A.R. 1183, May 10, 2019

**5. The agency's contact person who can answer questions about the rulemaking:**

Name: Rory Wilson

Address: 1600 W. Monroe, Phoenix, AZ 85007

Telephone: (602) 716-6471

Fax: (602)716-7996

E-mail: [rwilson@azdor.gov](mailto:rwilson@azdor.gov)

Web site: [www.azdor.gov](http://www.azdor.gov)

**6. An agency's justification and reason why a rule should be made, amended, repealed**

**or renumbered, to include an explanation about the rulemaking:**

Under Laws 2017, the Legislature amended A.R.S. § 43-323 to add paragraphs (E) and (F).

Paragraph (E) states:

An individual income tax preparer who prepares more than ten original income tax returns that are timely filed during any taxable year that begins from and after December 31, 2017 shall file electronically all individual tax returns prepared by that tax preparer, for that taxable year and each subsequent taxable year. An individual income tax preparer may not charge a separate fee to the taxpayer for filing a return using the department's electronic filing program. This subsection does not apply if the taxpayer elects to have the return filed on paper or if the return cannot be filed electronically for reasons outside of the tax preparer's control.

Paragraph (F) states:

Fiduciary returns, partnership returns, withholding returns and corporate returns shall be filed electronically for taxable years beginning from and after December 31, 2019, or when the department establishes an electronic filing program, whichever is later. Any person who is required to file electronically pursuant to this subsection may apply to the director, on a form prescribed by the department, for an annual waiver from the electronic filing requirement. The director may grant the waiver, which may be renewed for one subsequent year, if any of the following applies:

1. The taxpayer has no computer.
2. The taxpayer has no internet access.

3. Any other circumstance considered to be worthy by the director exists.

The current rule(s) R15-10-502 and R15-10-503 permit the Department to accept to accept electronically filed individual income tax returns and withholding tax returns.

Without the proposed changes to the rules, the Department cannot accept the following electronically filed income tax returns: fiduciary returns, partnership returns, corporate returns, or S corporation returns.

**7. A reference to any study relevant to the rule that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**

The Department does not intend to review or rely on a study in its evaluation of or justification for any rule in this rulemaking.

**8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:**

NA

**9. The summary of the economic, small business, and consumer impact:**

By making the rule change, corporate, S corporation, partnership, and fiduciary taxpayers will be able to file their returns electronically. This will reduce the time and expense to taxpayers in filing their Arizona income tax returns.

**10. A description of any changes between the proposed rulemaking, to include supplemental notices, and the final rulemaking::**

None

**11. An agency's summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments:**

No comments received.

**12. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:**

Not Applicable

**a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:**

NA

**b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:**

NA

**c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:**

NA

**13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:**

NA.

**14. Whether the rule was previously made, amended or repealed as an emergency rule. If so, cite the notice published in the Register as specified in R1-1-409(A). Also the agency shall state where the text was changed between the emergency and the final rulemaking packages:**

NA

**15. The full text of the rules follows:**

**R15-10-502. Recordkeeping Requirements**

For each electronic return of ~~individual~~ income tax or withholding tax filed with the Department, the electronic return preparer shall keep the documents listed in A.R.S. § 42-1105(F) for four years following the later of the date on which the return was due to be filed with the Department or was presented to the taxpayer for signature.

**R15-10-503. Electronic Signatures for ~~Individual~~ Income Tax Returns**

A. If a taxpayer electronically signs the taxpayer's federal ~~individual~~ income tax return, the taxpayer may elect to use the electronic signature from the federal return to sign the taxpayer's Arizona ~~individual~~-income tax return. By electing to use the federal electronic signature for the Arizona electronic return, the taxpayer is declaring, under penalties of perjury, that the electronic return is, to the best of the taxpayer's knowledge and belief, true, correct, and complete.

B. A taxpayer makes an election under subsection (A) by doing the following:

1. If the taxpayer is preparing the taxpayer's Arizona electronic return, the taxpayer makes the election by signifying the election during the electronic filing process.
2. If the taxpayer uses an electronic return preparer to prepare the taxpayer's Arizona electronic return, the taxpayer makes the election by:
  - a. Signifying the election during the electronic filing process, or
  - b. Authorizing, in writing on a form prescribed by the Department, the electronic return preparer to make the election on behalf of the taxpayer.

C. A taxpayer that does not elect to electronically sign the taxpayer's electronic federal income tax return shall not electronically sign the taxpayer's electronic Arizona electronic income tax return.

ECONOMIC, SMALL BUSINESS AND CONSUMER IMPACT STATEMENT (“EIS”)

NOTICE OF FINAL RULEMAKING

**1. An identification of the final rulemaking:**

<u>Sections Affected</u>		<u>Rulemaking Action</u>
R15-10-502.	Recordkeeping Requirements	Amend
R15-10-503.	Electronic Signatures for Individual Income Tax	Amend

**2. An identification of the persons who will be directly affected by, bear the costs of, or directly benefit from the final rulemaking:**

The Department anticipates that the parties who will be directly affected by, bear the costs of, or directly benefit from this rulemaking are as follows:

- The Department;
- Current and prospective taxpayers other than individual income taxpayers

**3. A cost benefit analysis:**

The amended rule allows the taxpayer to sign their Arizona return with the same electronic signature used to sign their federal return. This fulfills the requirement under A.R.S. §43-323 that fiduciary returns, partnership returns, corporate returns, and S-Corporation returns shall be filed electronically for taxable years beginning from and after December 31, 2019. No cost is associated with this amended rule because Arizona is piggy backing on the federal filing authorization. The benefits are a simplified procedure for both filing and processing the return and the avoidance of incurring extra costs to create an Arizona specific electronic signature protocol.

**4. A general description of the probable impact on private and public employment in businesses, agencies, and political subdivisions of this state directly affected by the final rulemaking:**

The Department does not anticipate any impact on private and public employment (whether direct or indirect) in businesses, agencies, and political subdivisions of this state directly affected by this rulemaking.

**5. A statement of the probable impact of the final rulemaking on small businesses:**

A.R.S. § 41-1001 defines a small business as a concern, including its affiliates, that is independently owned and operated, not dominant in its field, and employs fewer than 100 full-time employees or that had gross annual receipts of less than \$4,000,000 in its last fiscal year.

**a. An identification of the small businesses subject to the final rulemaking:**

For small businesses, the same category of persons—that is, current and prospective taxpayers—as for mid- to large-sized businesses is potentially subject to this rulemaking as they have the *option* to file their tax returns online unless they are otherwise required to do so.

**b. The administrative and other costs required for compliance with the final rulemaking:**

There is no administrative costs associated with compliance with this amended rule. By using the federal electronic signature, administrative and other costs that would be incurred with a separate Arizona electronic signature are avoided.

**c. A description of the methods prescribed in A.R.S. § 41-1035 that the agency may use to reduce the impact on small businesses, with reasons for the agency's decision to use or not to use each method:**

Small businesses will not be impacted negatively by the rules so they cannot be further simplified, reduced, or exempted pursuant to A.R.S. § 41-1035.

**d. The probable cost and benefit to private persons and consumers who are directly affected by the final rulemaking:**

The Department does not anticipate that private persons other than current and prospective taxpayers would be directly affected by this rulemaking.

**6. A statement of the probable effect on state revenues:**

As the matters covered by the rules reflect current statutory requirement, the Department does not anticipate any effect on state revenues from this rulemaking; faster return processing and receipt of payments as a result of a more efficient electronic filing process may produce a positive effect, but the Department cannot currently quantify this effect.

**7. A description of any less intrusive or less costly alternative methods of achieving the purpose of the final rulemaking, including the monetizing of the costs and benefits for each option and providing the rationale for not using non-selected alternatives:**

The Department's adoption of the federal electronic filing signature is the least intrusive and costly method of implementing the electronic filing mandate. Adopting a separate Arizona electronic filing signature would create costs for the Department in the

development and application of this signature. Taxpayers would incur the extra costs of increased return preparation time as they familiarize themselves with the new Arizona electronic filing signature. Additional costs could be foreseen for the Department in providing education and customer service assistance for taxpayers unfamiliar with this new requirement.

**8. A description of any data on which a rule is based with a detailed explanation of how the data was obtained and why the data is acceptable data:**

Not applicable.

## Rules with Changes

R15-10-502.

### **Recordkeeping Requirements**

For each electronic return of ~~individual~~ income tax or withholding tax filed with the Department, the electronic return preparer shall keep the documents listed in A.R.S. § 42-1105(F) for four years following the later of the date on which the return was due to be filed with the Department or was presented to the taxpayer for signature.

R15-10-503.

### **Electronic Signatures for ~~Individual~~ Income Tax Returns**

A. If a taxpayer electronically signs the taxpayer's federal ~~individual~~ income tax return, the taxpayer may elect to use the electronic signature from the federal return to sign the taxpayer's Arizona ~~individual~~ income tax return. By electing to use the federal electronic signature for the Arizona electronic return, the taxpayer is declaring, under penalties of perjury, that the electronic return is, to the best of the taxpayer's knowledge and belief, true, correct, and complete.

B. A taxpayer makes an election under subsection (A) by doing the following: 1. If the taxpayer is preparing the taxpayer's Arizona electronic return, the taxpayer makes the election by signifying the election during the electronic filing process. 2. If the taxpayer uses an electronic return preparer to prepare the taxpayer's Arizona electronic return, the taxpayer makes the election by: a. Signifying the election during the electronic filing process, or b. Authorizing, in writing on a form prescribed by the Department, the electronic return preparer to make the election on behalf of the taxpayer.

C. A taxpayer that does not elect to electronically sign the taxpayer's electronic federal income tax return shall not electronically sign the taxpayer's electronic Arizona electronic income tax return.

#### 42-1005. Powers and duties of director

A. The director shall be directly responsible to the governor for the direction, control and operation of the department and shall:

1. Make such administrative rules as he deems necessary and proper to effectively administer the department and enforce this title and title 43.
2. On or before November 15 of each year issue a written report to the governor and legislature concerning the department's activities during the year. In any election year a copy of this report shall be made available to the governor-elect and to the legislature-elect.
3. On or before December 15 of each year issue a supplemental report which shall also contain proposed legislation recommended by the department for the improvement of the system of taxation in the state.
4. In addition to the report required by paragraph 2 of this subsection, on or before November 15 of each year issue a written report to the governor and legislature detailing the approximate costs in lost revenue for all state tax expenditures in effect at the time of the report. For the purpose of this paragraph, "tax expenditure" means any tax provision in state law which exempts, in whole or in part, any persons, income, goods, services or property from the impact of established taxes including deductions, subtractions, exclusions, exemptions, allowances and credits.
5. Annually, on or before January 10, prepare and submit to the legislature a report containing a summary of all the revisions made to the internal revenue code during the preceding calendar year.
6. Provide such assistance to the governor and the legislature as they may require.
7. Delegate such administrative functions, duties or powers as he deems necessary to carry out the efficient operation of the department.

B. The director may enter into an agreement with the taxing authority of any state which imposes a tax on or measured by income to provide that compensation paid in that state to residents of this state is exempt in that state from liability for income tax, the requirement for filing a tax return and withholding tax from compensation. Compensation paid in this state to residents of that state is reciprocally exempt from the requirements of title 43.

**42-1105.01. Signatures; return preparers and electronic return preparers; definition**

Any person who is a return preparer or an electronic return preparer shall sign the prepared return, statement or other document according to the department's administrative rules or tax rulings. For the purposes of this section, "tax ruling" has the same meaning prescribed in section 42-2052.

### 43-323. Place and form of filing returns

- A. All returns required by this title shall be in such a form as the department may from time to time prescribe and shall be filed with the department.
- B. The department shall prescribe a short form return for individual taxpayers who:
1. Are eligible and elect to pay tax based on the optional tax tables pursuant to section 43-1012.
  2. Elect to claim the optional standard deduction pursuant to section 43-1041.
  3. Elect not to file for credits against income tax liability other than those contained in sections 43-1072, 43-1072.01, 43-1072.02 and 43-1073.
  4. Are not required to add any income under section 43-1021 and do not elect any subtractions under section 43-1022, except for the exemptions allowed under section 43-1023.
- C. The department may provide a simplified return form for individual taxpayers who:
1. Are eligible and elect to pay tax based on the optional tax tables pursuant to section 43-1012.
  2. Are residents for the full taxable year.
  3. File as single individuals or married couples filing joint returns under section 43-309.
  4. Are not sixty-five years of age or older or blind at the end of the taxable year.
  5. Claim no exemptions under section 43-1023 for the taxable year.
  6. Elect to claim the optional standard deduction under section 43-1041.
  7. Are not required to add any income under section 43-1021 and do not elect to claim any subtractions under section 43-1022 or file for any credits under chapter 10, article 5 of this title, except the credits provided by sections 43-1072.01, 43-1072.02 and 43-1073.
  8. Do not elect to contribute a portion of any tax refund as provided by any provision of chapter 6, article 1 of this title. Notwithstanding any provision of chapter 6, article 1 of this title, a simplified return form under this subsection shall not include any space for the taxpayer to so contribute a portion of a refund.
- D. The department shall prepare blank forms for the returns and furnish them on request. Failure to receive or secure the form does not relieve any taxpayer from making any return required.
- E. An individual income tax preparer who prepares more than ten original income tax returns that are timely filed during any taxable year that begins from and after December 31, 2017 shall file electronically all individual tax returns prepared by that tax preparer, for that taxable year and each subsequent taxable year. An individual income tax preparer may not charge a separate fee to the taxpayer for filing a return using the department's electronic filing program. This subsection does not apply if the taxpayer elects to have the return filed on paper or if the return cannot be filed electronically for reasons outside of the tax preparer's control.
- F. Fiduciary returns, partnership returns, withholding returns and corporate returns shall be filed electronically for taxable years beginning from and after December 31, 2019, or when the department establishes an electronic filing program, whichever is later. Any person who is required to file electronically pursuant to this subsection may apply to the director, on a form prescribed by the department, for an annual waiver from the electronic filing requirement. The director may grant the waiver, which may be renewed for one subsequent year, if any of the following applies:

1. The taxpayer has no computer.
2. The taxpayer has no internet access.
3. Any other circumstance considered to be worthy by the director exists.

G. A waiver is not required if the return cannot be electronically filed for reasons beyond the taxpayer's control, including situations in which the taxpayer was instructed by either the internal revenue service or the department of revenue to file by paper.

**ARIZONA DEPARTMENT OF INSURANCE (R19-0904) (Expedited Rulemaking)**

Title 20, Chapter 6, Article 4, Types of Insurance Companies



# GOVERNOR'S REGULATORY REVIEW COUNCIL

## ATTORNEY MEMORANDUM - EXPEDITED RULEMAKING

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**MEETING DATE:** September 4, 2019

**TO:** Members of the Governor's Regulatory Review Council (Council)

**FROM:** Council Staff

**DATE:** July 23, 2019

**SUBJECT:** **ARIZONA DEPARTMENT OF INSURANCE (R19-0904)**  
Title 20, Chapter 6, Article 4, Department of Insurance

**Amend:** R20-6-401

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### **Summary:**

This is an expedited rulemaking from the Arizona Department of Insurance (Department) pursuant to A.R.S. 41-1027(A)(3) that seeks to amend one rule in Title 20, Chapter 6, Article 4.

This rule contains an incorporation by reference, which is authorized under A.R.S. § 41-1028(D). This statute requires the Department to state where copies of the incorporated material are available from the agency and the organization that issued the incorporated material. The Department is amending its own address in this rule because the Department relocated in June 2018 and the address of the National Association of Insurance Commissioners' (NAIC), whose model regulation is incorporated by reference in this rule.

The Department indicates that the rulemaking does not increase the cost of regulatory compliance or increase a fee. The Department received an exemption from the Governor's Office on September 24, 2018.

1. **Do the rules satisfy the criteria for expedited rulemaking pursuant to A.R.S. § 41-1027(A)?**

Yes. The Department satisfies the criteria for expedited rulemaking pursuant to A.R.S. § 41-1027(A)(3).

2. **Are the rules legal, consistent with legislative intent, and within the agency's statutory authority?**

Yes. The Department cites to general statutory authority for this rule.

3. **Do the rules establish a new fee or contain a fee increase?**

No. The rule does not establish a new fee or a fee increase.

4. **Does the agency adequately address the comments on the proposed rules and any supplemental proposals?**

Not applicable. No public comments were received.

5. **Are the final rules a substantial change, considered as a whole, from the proposed rules and any supplemental proposals?**

Not applicable. No changes have been made between the proposed rulemaking and the final rulemaking.

6. **Are the rules more stringent than corresponding federal law and, if so, is there statutory authority to exceed the requirements of federal law?**

No. This rule is not more stringent than federal law.

7. **Do the rules require a permit or license and, if so, does the agency comply with A.R.S. § 41-1037?**

No. This rule does not require a permit.

8. **Does the preamble disclose a reference to any study relevant to the rules that the agency reviewed and either did or did not rely upon?**

No. The Department did not rely on any study in conducting this rulemaking.

9. **Conclusion**

The Department is conducting an expedited rulemaking pursuant to A.R.S. § 41-1027(A)(3) to amend R20-6-401. Council staff finds that this is an acceptable basis

upon which to conduct this expedited rulemaking because it “corrects typographical errors, makes address or name changes, or clarifies language of a rule without changing its effect.” Council staff recommends approval of the rulemaking.



**Office of the Director  
Arizona Department of Insurance**

100 North 15<sup>th</sup> Avenue, Suite 102, Phoenix, Arizona 85007-2624

Phone: (602) 364-3100

Web: <https://insurance.az.gov>

---

**Douglas A. Ducey, Governor**

**Keith A. Schraad, Director**

July 8, 2019

VIA EMAIL: [grrc@azdoa.gov](mailto:grrc@azdoa.gov)

Nicole Sornsin, Council Chair

Governor's Regulatory Review Council

100 North 15<sup>th</sup> Avenue, Suite 305

Phoenix, Arizona 85007

RE: Arizona Department of Insurance  
Title 20, Chapter 6, Article 4, Rule A.A.C. R20-6-401  
Expedited Rulemaking

Dear Ms. Sornsin:

Please accept this Notice of Final Expedited Rulemaking from the Arizona Department of Insurance ("Department") for consideration and approval by the Council.

In compliance with R1-6-201(A)(1) we respectfully submit:

1. The close of record date for this rulemaking is June 18, 2019. The Department published the Notice of Close of Record on its website.
2. Arizona Revised Statutes ("ARS") § 41-1027(A)(3) allows an agency to conduct an expedited rulemaking that makes address changes without changing a rule's effect if the rulemaking does not increase the cost of regulatory compliance, increase a fee or reduce procedural rights of persons regulated under the rule.

In June, 2018, the Department changed its address. In addition, the rule incorporates by reference materials of the National Association of Insurance Commissioners ("NAIC"). The address for the NAIC has also changed. The reference to the incorporated by reference material is not being changed.

3. This rulemaking is not related to a five-year review report.

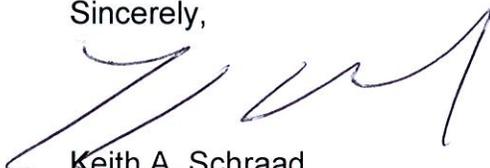
The Department certifies that the preamble discloses a reference to any study relevant to the rule that the agency reviewed. The Department certifies that the preamble states that it did not rely on any study in its evaluation of or justification for the rule.

The following documents are enclosed:

1. Notice of Final Expedited Rulemaking, including the preamble, table of contents, and text of the rule (R20-6-401);
2. **Not Applicable.** The Department did not receive any comments during the comment period;
3. **Not Applicable.** The Department did not receive any analysis regarding the rule's impact on the competitiveness of business in this state as compared to the competitiveness of business in other states;
4. A copy of the material incorporated by reference (National Association of Insurance Commissioners Model Laws, Regulations and Guidelines, Volume III, pp. 490-1 through 490-40, Regulation Regarding Proxies, Consents, and Authorization of Domestic Stock Insurers, April 1995);
5. **Not Applicable.** No statute was declared unconstitutional;
6. The general and specific statutes authorizing the rule (no relevant statutory definitions apply); and
7. **Not Applicable.** No term is defined in the rule by referring to another rule or statute other than the general and specific statutes authorizing the rule, the statute or other rule referred to in the definition.

If you have any questions or need additional information regarding this Notice of Expedited Rulemaking, please feel free to contact Mary Kosinski, Regulatory Legal Affairs Officer, at (602) 364-3476.

Sincerely,



Keith A. Schraad  
Director

Enclosures

NOTICE OF FINAL EXPEDITED RULEMAKING  
TITLE 20. COMMERCE, FINANCIAL INSTITUTIONS AND INSURANCE  
CHAPTER 6. DEPARTMENT OF INSURANCE

PREAMBLE

**1. Article, Part or Section Affected Rulemaking**

**Action**

Article 4

R20-6-401

Amend

**2. Citations to the agency's statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific):**

Authorizing statute: A.R.S. § 20-143(B)

**3. The effective date of the rule:**

**a. If the agency selected a date earlier than the 60 day effective date as specified in A.R.S. § 41-1032(A), include the earlier date and state the reason or reasons the agency selected the earlier effective date as provided in A.R.S. § 41-1032(A)(1) through (5):**

Not applicable. The agency has not selected a date earlier than the 60 day effective date as specified in A.R.S. § 41-1032(A).

**b. If the agency selected a date later than the 60 day effective date as specified in A.R.S. § 41-1032(A), include the later date and state the reason or reasons the agency selected the later effective date as provided in A.R.S. § 41-1032(B):**

Not applicable. The agency has not selected a date later than the 60 day effective date as specified in A.R.S. § 41-1032(A).

**4. Citations to all related notices published in the Register as specified in R1-1-409(A) that pertain to the record of the final rulemaking package:**

Notice of Rulemaking Docket Opening: 25 A.A.R. 896, April 12, 2019

Notice of Expedited Rulemaking: 25 A.A.R. 1220, May 17, 2019

**5. The agency's contact person who can answer questions about the rulemaking:**

Name: Mary E. Kosinski  
Address: Arizona Department of Insurance  
100 N. 15<sup>th</sup> Ave, Suite 102  
Phoenix, Arizona 85007-2624  
Telephone: (602) 364-3100  
E-mail: mkosinski@azinsurance.gov

**6. An agency's justification and reason why a rule should be made, amended, repealed, or renumbered to include an explanation about the rulemaking:**

On June 15, 2018, the Department relocated. Department rule R20-6-401 still recites the Department's prior address. The Department wishes to update the rule to its current address.

The rule also incorporates a National Association of Insurance Commissioners' (NAIC) model regulation by reference. A.R.S. § 41-1028, which authorizes an agency to incorporate matter in its rules by reference, requires a statement of where copies of the incorporated matter is available from the agency and from the organization originally issuing the incorporated matter. A.R.S. § 41-1028(D). The Department and NAIC addresses are both outdated and need to be corrected.

**7. A reference to any study relevant to the rule that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**

Not applicable. The agency did not review or rely on any study relevant to the rule in its justification for the rule..

**8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:**

Not applicable. The rulemaking does not diminish a previous grant of authority of a political subdivision of this state.

**9. A summary of the economic, small business, and consumer impact:**

Not applicable. No economic, small business or consumer impact is implicated.

The rulemaking is not changing the substance of the rule. It is only updating the addresses of the Department and the NAIC which are outdated.

**10. A description of any changes between the proposed rulemaking, to include supplemental notices, and the final rulemaking:**

Not applicable. No changes have been made between the proposed rulemaking and the final rulemaking.

**11. An agency's summary of the public stakeholder comments made about the rulemaking and the agency response to the comments:**

Not applicable. No person submitted comments to the Department about the rulemaking.

**12. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:**

**a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:**

The rule does not require a permit.

**b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:**

Under A.R.S. § 20-143(B), the Director shall make rules concerning proxies, consents or authorizations in respect of securities issued by domestic stock insurance companies having a class of equity securities held of record by one hundred or more persons to conform with the requirements of section 12(g)(2)(G)(ii) of the securities and exchange act of 1934, as amended, and as may be amended.

The rule is not more stringent than the federal law.

**c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:**

Not applicable. No person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states.

**13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:**

R20-6-401(A) references the National Association of Insurance Commissioner's (NAIC) Model Laws, Regulations and Guidelines, Volume III, pp. 490-1 through 490-40, Regulation Regarding Proxies, Consents and Authorizations of Domestic Stock Insurers, April 1995. This reference is not being changed. The addresses of the Department and NAIC where the reference material can be found are being updated.

**14. Whether the rule was previously made, amended or repealed as an emergency rule. If so, cite the notice published in the Register as specified in R1-1-409(A). Also, the agency shall state where the text was changed between the emergency and final rulemaking packages:**

Not applicable. This rule was not previously made, amended or repealed as an emergency rule.

**15. The full text of the rules follows:**

**TITLE 20. COMMERCE, FINANCIAL INSTITUTIONS AND INSURANCE**

**CHAPTER 6. DEPARTMENT OF INSURANCE**

**ARTICLE 4. TYPES OF INSURANCE COMPANIES**

**Section**

**R20-6-401. Proxies, Consents, and Authorizations of Domestic Stock Insurers**

**ARTICLE 4. TYPES OF INSURANCE COMPANIES**

**R20-6-401. Proxies, Consents, and Authorizations of Domestic Stock Insurers**

- A.** The Department incorporates by reference National Association of Insurance Commissioners Model Laws, Regulations and Guidelines, Volume III, pp. 490-1 through 490-40, Regulation Regarding Proxies, Consents, and Authorization of Domestic Stock Insurers, April 1995 (and no future editions or amendments), which is on file with the Office of the Secretary of State and available from the Department of Insurance, ~~2910 N. 44<sup>th</sup> St., Phoenix, AZ 85018~~ 100 N. 15<sup>th</sup> Ave., Suite 102, Phoenix, AZ 85007-2624 and the National Association of Insurance Commissioners, Publications Department, ~~2304~~

~~McGee St., Suite 800, Kansas City, MO 64108, 1100 Walnut Street, Suite 1500, Kansas City, MO 64106-2197,~~ modified as follows:

Section 1 A is modified to read: “No domestic stock insurer that has any class of equity securities held of record by 100 or more persons, or any director, officer or employee of that insurer, or any other person, shall solicit, or permit the use of the person’s name to solicit, by mail or otherwise, any proxy, consent, or authorization in respect to any class of equity securities in contravention of this regulation and Schedules A and B, hereby made a part of this regulation.

- B.** Domestic stock insurance companies shall comply with this Section as required under A.R.S. § 20-143(B).



Mary Kosinski &lt;mkosinski@azinsurance.gov&gt;

**Re: Request for Exemption**

1 message

**Christina Corieri** <ccorieri@az.gov>

Mon, Sep 24, 2018 at 2:17 PM

To: Keith Schraad &lt;kschraad@azinsurance.gov&gt;

Cc: Mary Kosinski &lt;mkosinski@azinsurance.gov&gt;

Director Schraad,

The Governor's office has approved your expedited rule making request. Please proceed with the rule making process.

On Mon, Sep 17, 2018 at 9:53 AM, Keith Schraad <kschraad@azinsurance.gov> wrote:  
Christina,

Please find the attached Request for Exemption for AAC R20-6-401.

Please let me know if you have questions.

Keith



Keith Schraad, Interim Director

**ARIZONA DEPARTMENT OF INSURANCE**[kschraad@azinsurance.gov](mailto:kschraad@azinsurance.gov) / (602) 364-3100

--

Christina Corieri

Senior Policy Advisor

Office of the Arizona Governor

1700 W. Washington Street

Phoenix, AZ 85007

O: (602)542-3394

E: [ccorieri@az.gov](mailto:ccorieri@az.gov)





**Office of the Director**  
**Arizona Department of Insurance**  
100 North 15<sup>th</sup> Ave., Suite 102, Phoenix, Arizona 85007-2624  
Phone: (602) 364-3100  
Web: <https://insurance.az.gov>

---

**Douglas A. Ducey, Governor**  
**Keith A. Schraad, Interim Director**

DATE: September 17, 2018  
TO: Christina Corieri, Senior Policy Advisor  
Office of the Governor  
FROM: Keith Schraad, Interim Director *KS*  
RE: Rulemaking Moratorium Exemption Request – Expedited Rulemaking to Correct Outdated Addresses

---

Pursuant to Governor Ducey's Executive Order 2018-02, I respectfully request written approval of the Office of the Governor to begin an expedited rulemaking to update the Department's address and the National Association of Insurance Commissioner (NAIC) address which are both referenced in Department rule A.A.C. R20-6-401.

Nature and Scope of Proposed Rules: On June 15, 2018, the Department relocated. Department rule A.A.C. R20-6-401 (attached) still contains the Department's prior address. In the rule, a NAIC Model Regulation is incorporated by reference. Under A.R.S. § 41-1028, which authorizes an agency to incorporate matter in its rules by reference, the rules must state where copies of the incorporated matter is available from the agency and from the organization originally issuing the matter. A.R.S. § 41-1028(D). In this rule, the Department and NAIC addresses are outdated.

Basis for Exemption Request: The Department believes the proposed rulemaking falls within Executive Order 2018-02, Paragraph 2(f).

Justification for Exemption:

*Paragraph 2(f), "To comply with a state statutory requirement."*

A.R.S. § 41-1028(D) states: The rules shall state where copies of the incorporated matter are available from the agency issuing the rule and from the agency of the United States or this state or the organization or association originally issuing the matter.

Because the Department and NAIC addresses are out of date, the Department no longer complies with this requirement. The Department seeks to update the addresses in this rule to comply with A.R.S. § 20-1028(D).

Consequences of Inaction: Violation of the statute will cause confusion to the public who may want to view the incorporated material in its entirety.

Please let me know if you need any additional information to assist with your evaluation.

Thank you for considering this request.

**R20-6-401. Proxies, Consents, and Authorizations of Domestic Stock Insurers**

A. The Department incorporates by reference National Association of Insurance Commissioners Model Laws, Regulations and Guidelines, Volume III, pp. 490-1 through 490-40, Regulation Regarding Proxies, Consents, and Authorizations of Domestic Stock Insurers, April 1995 (and no future editions or amendments), which is on file with the Office of the Secretary of State and available from the Department of Insurance, 2910 N. 44th St., Phoenix, AZ 85018 and the National Association of Insurance Commissioners, Publications Department, 2301 McGee St., Suite 800, Kansas City, MO 64108, modified as follows:

Section 1 A is modified to read: "No domestic stock insurer that has any class of equity securities held of record by 100 or more persons, or any director, officer or employee of that insurer, or any other person, shall solicit, or permit the use of the person's name to solicit, by mail or otherwise, any proxy, consent, or authorization in respect to any class of equity securities in contravention of this regulation and Schedules A and B, hereby made a part of this regulation."

B. Domestic stock insurance companies shall comply with this Section as required under A.R.S. § 20-143(B).

**Historical Note**

Former General Rule 57-3. R20-6-401 recodified from R4-14-401 (Supp. 95-1).

Section expired under A.R.S. § 41-1056(E), filed in the Office of the Secretary of State August 24, 2000 (Supp. 00-3). New Section made by final rulemaking at 9

A.A.R. 1086, effective March 6, 2003 (Supp. 03-1).

20-143. Rule-making power

A. The director may make reasonable rules necessary for effectuating any provision of this title.

B. The director shall make rules concerning proxies, consents or authorizations in respect of securities issued by domestic stock insurance companies having a class of equity securities held of record by one hundred or more persons to conform with the requirements of section 12(g)(2)(G)(ii) of the securities exchange act of 1934, as amended, and as may be amended. Such rule shall not apply to any such company having a class of equity securities which are registered or are required to be registered pursuant to section 12 of the securities exchange act of 1934, as amended, or as may be amended. Whenever such equity securities of any such company are registered or are required to be registered pursuant to section 12 of the securities exchange act of 1934, as amended, or as may be amended, then, no person shall solicit or permit the use of his name to solicit, in any manner whatsoever, any proxy, consent or authorization in respect of any equity security of such company without having first complied with the rules prescribed by the securities and exchange commission pursuant to section 14 of the securities exchange act of 1934, as amended, or as may be amended.

C. All rules made pursuant to this section shall be subject to title 41, chapter 6.

D. In addition to any other penalty provided, wilful violation of any rule made by the director is a violation of this title.

**ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (F19-0903) (Expedited  
Rulemaking)**

Title 18, Chapter 9, Article 1, Aquifer Protection Permits - General Provisions



# GOVERNOR'S REGULATORY REVIEW COUNCIL

## ATTORNEY MEMORANDUM - EXPEDITED RULEMAKING

---

**MEETING DATE:** September 4, 2019

**TO:** Members of the Governor's Regulatory Review Council (Council)

**FROM:** Council Staff

**DATE:** July 23, 2019

**SUBJECT:** **ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (R19-0903)**  
Title 18, Chapter 9, Article 1, Water Pollution Control

**Amend:** R18-9-101, R18-9-103

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### **Summary:**

This is an expedited rulemaking from the Arizona Department of Environmental Quality (Department) that seeks to amend two rules in Title 18, Chapter 9, Article 1 relating to water pollution control.

The Department is amending these rules to exempt federally regulated coal combustion residual disposal units from Arizona's Aquifer Protection Permit because federal regulations provide the same or greater protection and these rules are outdated. The Department aims to eliminate the duplicative requirements between the state and federal programs. The Department's Notice of Final Expedited Rulemaking contains a detailed description of this rulemaking and why it is necessary.

The Department indicates that the rulemaking does not increase the cost of regulatory compliance or increase a fee. The Department received an exemption from the rulemaking moratorium from the Governor's Office on April 8, 2019.

1. **Do the rules satisfy the criteria for expedited rulemaking pursuant to A.R.S. § 41-1027(A)?**

Yes. The Department satisfies the criteria for an expedited rulemaking pursuant to A.R.S. § 41-1027(A)(6).

2. **Are the rules legal, consistent with legislative intent, and within the agency's statutory authority?**

Yes. The Department cites to both general and specific statutory authority for these rules.

3. **Do the rules establish a new fee or contain a fee increase?**

No. These rules do not establish a new fee or a fee increase.

4. **Does the agency adequately address the comments on the proposed rules and any supplemental proposals?**

Yes. The Department received a number of comments, one from the Arizona Utilities Group and two from Pima County residents. The Department has adequately responded to these comments and promises to review the rulemaking again if any of the public's concerns come to fruition.

5. **Are the final rules a substantial change, considered as a whole, from the proposed rules and any supplemental proposals?**

Not applicable. No rule language changes were made between the proposed expedited rulemaking and the final expedited rulemaking.

6. **Are the rules more stringent than corresponding federal law and, if so, is there statutory authority to exceed the requirements of federal law?**

No. Certain classes of facilities are being exempted from state law and therefore, this rulemaking is not more stringent than federal law.

7. **Do the rules require a permit or license and, if so, does the agency comply with A.R.S. § 41-1037?**

Not applicable, these rules do not require a permit or a license.

**8. Does the preamble disclose a reference to any study relevant to the rules that the agency reviewed and either did or did not rely upon?**

Not applicable, the Department did not review or rely on any study in conducting this rulemaking.

**9. Conclusion**

The Department is conducting an expedited rulemaking pursuant to A.R.S. § 41-1027(A) to amend R18-9-101 and R18-9-103. Council staff finds that this rulemaking meets the criteria for an expedited rulemaking under A.R.S. § 41-1027(A)(6) as it “amends or repeals rules that are outdated, redundant, or otherwise no longer necessary for the operation of state government.” Council staff recommends approval of the rulemaking.



Douglas A. Ducey  
Governor

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Misael Cabrera  
Director

July 8, 2019

*Via electronic submission*

Ms. Nicole Sornsin, Chair  
Governor's Regulatory Review Council  
100 N. 15<sup>th</sup> Avenue, Suite 305  
Phoenix, Arizona 85007

Re: Notice of Proposed Expedited Rulemaking pursuant to A.R.S. § 41-1027(A)(6) to exempt federally regulated coal combustion residual disposal units from Arizona's aquifer protection permit program by modifying 18 A.A.C. 9, Article 1

Dear Ms. Sornsin:

The Arizona Department of Environmental Quality (ADEQ) has approved modifications to A.C.C. Title 18, Chapter 9, Article 1 to exempt federally regulated coal combustion residual (CCR) disposal units from Arizona's Aquifer Protection Permit program. ADEQ seeks to exempt a category of facilities, CCR disposal units, from aquifer protection permit program requirements because aquifer quality will be maintained and protected due to the existence of a federal regulation that provides the same or greater aquifer water quality protection as provided by A.R.S. Title 49, Chapter 2, Article 3. *See* A.R.S. § 49-250. CCR units are federally regulated pursuant to the Resource Conservation Recovery Act (RCRA) and implementing regulations. *See generally* 42 U.S.C. § 6945 (2018); 40 C.F.R. Part 257, Subpart D.

The following information is provided for your use in reviewing the enclosed rules for approval pursuant to A.R.S. § 41-1052 and A.A.C. R1-6-201:

I. Information Required Pursuant to R1-6-201(A)(1)

- The public record closed for this rulemaking on June 14, 2019 at 5:00 p.m.
- The rulemaking activity does not relate to a five-year review report.
- This proposed expedited rulemaking meets the requirements in A.R.S. § 41-1027(A)(6) because it "[a]mends or repeals rules that are outdated, redundant or otherwise no longer necessary for the operation of state government."
- I certify that the preamble discloses a reference to any study relevant to the rule that the agency reviewed and either did or did not rely on in the agency's evaluation of or justification for the rule.
- A list of all documents enclosed is provided in Section II below.

II. List of Documents Enclosed Pursuant to R1-6-201(A)

1. This cover letter.

2. The Notice of Final Expedited Rulemaking (NFERM), including the preamble, table of contents, and text of each rule.
3. Written comments on the Notice of Proposed Expedited Rulemaking (NPERM) received by ADEQ.
4. The general and specific statute authorizing this rule.
  - The agency did not receive any comments or testimony at the June 14, 2019 public hearing. The hearing was recorded, but hearings are not systematically transcribed by the agency. The recording is available upon request.
  - ADEQ received no analysis regarding the rule's impact on the competitiveness of businesses in this state as compared to the competitiveness of businesses in other states, therefore, no such analysis is included in this submittal.
  - There are no incorporations by reference added to the rules in this action.

Thank you for your timely review and approval. Please contact Heidi Haggerty Welborn, Legal Specialist, Water Quality Division, at 602-771-4815 or [haggerty.heidi@azdeq.gov](mailto:haggerty.heidi@azdeq.gov), if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Misael Cabrera', with a long horizontal flourish extending to the right.

Misael Cabrera, P.E.  
Director

Encls.



Heidi Welborn &lt;welborn.heidi@azdeq.gov&gt;

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**Fwd: RULEMAKING EXEMPTION - Coal Combustion Residual (CCR)**

1 message

---

**Trevor Baggione** <baggiore.trevor@azdeq.gov>  
To: Heidi Welborn <welborn.heidi@azdeq.gov>

Mon, Apr 8, 2019 at 10:19 AM

As mentioned in my other email.

Thanks,

**Trevor Baggione**

Water Quality Division Director

Ph: 602-771-2321

**azdeq.gov****Your feedback matters to ADEQ. Visit [azdeq.gov/feedback](https://azdeq.gov/feedback)**

----- Forwarded message -----

From: [hmoore@az.gov](mailto:hmoore@az.gov) <[hmoore@az.gov](mailto:hmoore@az.gov)>

Date: Tue, Mar 19, 2019 at 8:59 AM

Subject: RULEMAKING EXEMPTION - Coal Combustion Residual (CCR)

To: Misael Cabrera <[Cabrera.Misael@azdeq.gov](mailto:Cabrera.Misael@azdeq.gov)>Cc: Trevor Baggione <[baggiore.trevor@azdeq.gov](mailto:baggiore.trevor@azdeq.gov)>, Gretchen Conger <[gconger@az.gov](mailto:gconger@az.gov)>, Gilbert Davidson <[gddavidson@az.gov](mailto:gddavidson@az.gov)>, Anni Foster <[afoster@az.gov](mailto:afoster@az.gov)>

Director Cabrera,

I am sending this message after having reviewed the exception request by the Arizona Department of Environmental Quality (Department), to initiate a rulemaking to exempt Coal Combustion Residual (CCR) regulated facilities from the State's Aquifer Protection Permit (APP) program in accordance with the Administrative Procedures Act. As was explained in the memo, I agree that the rulemaking is necessary to reduce a regulatory burden while achieving the same regulatory objective.

I understand that ADEQ is seeking an exception for rulemaking to amend existing rules and to exempt CCR-regulated landfills and surface impoundments from APP until such time that ADEQ has an approved CCR program in APP. I understand that currently, CCR and APP requirements are duplicative of each other, but because CCR is in some instances more stringent than APP, the two programs may conflict.

I agree that this rulemaking will allow for avoidance of duplicative requirements between state APP and federal CCR programs, and still ensure protection of Arizona's aquifers in a manner that is as protective as the APP program. Because

APP and CCR are redundant of each other in many ways, I understand that ADEQ intends to pursue an expedited

rulemaking under A.R.S. § 41-1027.

I understand that the Department may conduct stakeholder meetings to discuss the State's approach and to solicit feedback on the approach and rule development from a number of participants. I encourage that participation, with attention paid to the stakeholders that have a vested interest in these changes.

I have reviewed the memorandum that Administrative Counsel Eddie Slade supplied regarding this request (see attached). Based on the materials provided to me, I believe that this request meets the criteria for an exception under paragraph 1(b) of Executive Order 2019-01.

Based on the authority granted to me, **I am hereby approving the rulemaking exemption so the Department can proceed.**

I am available for any questions you may have.

Hunter Moore  
Natural Resource Policy Advisor  
Office of Governor Doug Ducey  
C 602.769.7566  
[hmoore@az.gov](mailto:hmoore@az.gov)



**2019-03-18 CCR EXEMPTION FROM APP Rulemaking Exception Request.docx**

23K

NOTICE OF FINAL EXPEDITED RULEMAKING

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 9. DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER POLLUTION CONTROL

PREAMBLE

- |   |                                 |
|---|---------------------------------|
| <b><u>1. Article, Part, or Section Affected (as applicable)</u></b> | <b><u>Rulemaking Action</u></b> |
| R18-9-101   | Amend                           |
| R18-9-103   | Amend                           |
- 2. Citations to the agency’s statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific):**  
Authorizing and Implementing statute: A.R.S. § 49-250(A)
- 3. The effective date of the rule:**  
Pursuant to A.R.S. §41-1027(H), this rulemaking becomes effective immediately upon filing with the office of the Secretary of State.
- 4. Citations to all related notices published in the Register that pertain to the record of the final expedited rulemaking:**  
Notice of Rulemaking Docket Opening: 25 A.A.R. 1308 (May 24, 2019)  
Notice of Proposed Expedited Rulemaking: 25 A.A.R. 1293 (May 24, 2019)
- 5. The agency’s contact person who can answer questions about the rulemaking:**  
Name: Heidi M. Haggerty Welborn  
Address: 1110 W. Washington St.  
Phoenix, AZ 85007  
Telephone: (602) 771-4815  
E-mail: [Welborn.Heidi@azdeq.gov](mailto:Welborn.Heidi@azdeq.gov)  
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- 4. The agency’s explanation why the proposed expedited rule should be made, amended, repealed, or renumbered under A.R.S. § 41-1027(A) and why expedited proceedings are justified under A.R.S. § 41-1001(16)(c):**  
Under A.R.S. § 41-1027, an agency may conduct expedited rulemaking if the rulemaking does not increase the cost of regulatory compliance, increase a fee, or reduce procedural rights of persons regulated, and the rulemaking meets one of the statutorily enumerated conditions, one of which being

that the rulemaking “[a]mends or repeals rules that are outdated, redundant or otherwise no longer necessary for the operation of state government.” A.R.S. § 41-1027(A)(6). In accordance with A.R.S. § 49-250(A), Arizona Department of Environmental Quality (ADEQ) is exempting a category of facilities from aquifer protection permit program requirements because aquifer quality will be maintained and protected due to the existence of a federal regulation that provides the same or greater aquifer water quality protection as provided by A.R.S. Title 49, Chapter 2, Article 3. Because the federal rule (i.e., 40 C.F.R. Part 257, Subpart D) is as protective as the state law and authority, the state’s rules applicable to the class in question are redundant to the federal rule and are no longer necessary to effectuate the state’s operational duty to “provide for the prevention and abatement of water...pollution” in accordance with A.R.S. Title 49, Chapter 2. A.R.S. § 49-104(A)(10).

**General Explanation of this Rulemaking:**

Pursuant to A.R.S. § 49-250(A), ADEQ seeks to exempt coal combustion residual (CCR) disposal units from the requirement(s) to comply with the Aquifer Protection Permit (APP) statutes and regulations until such time that ADEQ obtains primacy for the implementation of the federal CCR regulations. *See* 42 U.S.C. § 6945(d)(1). CCR units are federally regulated pursuant to the Resource Conservation Recovery Act (RCRA) through 40 C.F.R. Part 257, Subpart D. This interim exemption will avoid conflicts and duplicative regulation between the federal CCR regulations and the state APP regulations and statutes, while at the same time laying the foundation for a potential future state-assumed CCR regulatory program.

**What is “CCR”?**

The federal CCR regulation establishes the national minimum criteria for the disposal of coal combustion materials, including regulations governing: location restrictions for disposal, design and operating criteria for disposal units, groundwater monitoring, corrective action, closure requirements, post-closure care, and recordkeeping, notification, and internet publication requirements. The CCR regulation is a federal solid waste regulatory program under RCRA Subtitle D. Subtitle D of RCRA is intended to ensure that CCR units (along with other forms of non-hazardous solid waste disposal) pose “no reasonable probability of adverse effects on health or the environment.” *See* 42 U.S.C. § 6944(a). The federal CCR regulations govern CCR disposal units (i.e., CCR surface impoundments and CCR landfills, along with later expansions of either, as defined by 40 CFR Subpart 257). CCR disposal units are used for the treatment, storage, or disposal of CCR, which can be wet or dry, and is generally composed of fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers.

The federal CCR rule was promulgated as a self-implementing rule, which generally means that the regulations were not intended to be implemented through direct government oversight, and enforcement is largely left to be performed through citizen lawsuits. *See generally Final Rule: Hazardous and Solid Water Management System; Disposal of CCR from Electric Utilities*, 80 Fed. Reg. 21,302 (Apr. 17, 2015). The substance of the rule has been in flux over the years as litigation and rulemaking modifications have persisted. As such, the operation of the rule is a combination of the RCRA statutes (as amended by the WIIN Act, *see* 42 U.S.C. § 6945(d)), the currently codified version (40 C.F.R. part 257, subpart D), subsequent rulemaking (*See Direct Final Rule [CCR; Response to Partial Vacatur]*, 81 Fed. Reg. 51,802 (Aug. 5, 2016); *Final Rule [CCR Phase One, Part One]*, 83 Fed. Reg. 36,435 (Jul. 30, 2018)) and case law (*See generally Util. Solid Waste Activities Grp. v. EPA*, 901 F.3d 414 (D.C. Cir. 2018)).

CCR units in Arizona are currently subject to the self-implementing federal CCR regulations. Many federal CCR requirements already overlap with both ADEQ's air and aquifer protection authorities and with some of Arizona's Department of Water Resources' (ADWR) dam safety authorities. In fact, Arizona facilities regulated under the federal CCR regulations already comply with aquifer protection permits featuring conditions similar to requirements imposed by the federal CCR regulations.

Below is a list of facilities currently regulated under, both, the federal CCR regulations, 40 C.F.R. Part 257, Subpart D, and Arizona's APP program, A.A.C. Title 18, Chapter 9:

- Apache Generating Station (Arizona Electric Power Cooperative, Inc.),
- Cholla Power Plant (Arizona Public Service Company),
- Springerville Generating Station (Tucson Electric Power Company), and
- Coronado Generating Station (Salt River Project).

### **Conflicts between APP and CCR**

There are numerous procedural APP requirements that conflict with the substantive requirements of EPA's federal CCR regulations. These conflicts generally arise from the overall structure of the two programs. APP is a permit program that provides for ADEQ involvement and approval of several key operational aspects of facilities that may affect Arizona aquifers (e.g., CCR landfills and surface impoundments operated by Arizona electric utilities). By contrast, EPA's federal CCR rules governing these facilities are entirely self-implementing, by which there is no government agency involvement in the same sorts of aquifer-impacting activities that would otherwise require approval

under APP. As such, under the federal regulations, operators of CCR disposal units are expected to simply comply with federal standards, under strict timeframes for which there is zero flexibility, and take significant actions without any government oversight (e.g., as to facility closure and corrective action). Thus, to the extent the APP program otherwise requires ADEQ approval prior to such aquifer-impacting actions being implemented—and where such state government review and approval cannot be completed within the strict timeframes dictated under federal regulations—adherence to the federal CCR regulations by Arizona electric utilities conflicts with state APP regulations and statutes.

One such example is the disposal unit closure process. By statute, the APP program requires that ADEQ to approve all closure actions that must be implemented when a permitted facility (e.g., CCR landfills or surface impoundments) ceases operation. *See* A.R.S. § 49-252. Specifically for closure activities that do not involve clean closure—i.e., where CCR or other waste materials are left in place as disposed and covered by a cap—the APP statute and regulations require the facility operator to submit an application for a new APP permit or request a permit modification. *See* A.C.C. R18-9-A209(B)(4); A.R.S. § 49-252(E). ADEQ is then subject to a duty to require that such applications be submitted for approval. *Id.*

By contrast, the federal CCR regulations simply require the initiation and implementation of CCR disposal unit closure within thirty (30) days after the unit ceases operation. *See* 40 C.F.R. § 257.102(e)(1)(i). In addition, such cessation of operation is often required for reasons beyond the control of CCR unit operators. *E.g.* 40 C.F.R. § 257.101(b)(1) (*requiring CCR unit closure where a facility violates location restrictions, e.g., as to nearby aquifer locations*). While such closure activities must be implemented in accordance with a published plan, the federal CCR regulations contain no requirement that such plans be reviewed and approved by any government entity. Under federal law, CCR unit operators are simply expected to develop a plan and then implement it. *See* 40 C.F.R. § 257.102(b).

#### **“As Protective As” Comparison Tables:**

Under A.R.S. § 49-250(A), ADEQ has the statutory authority to exempt, by rule, specifically described classes or categories of facilities (i.e., CCR disposal units) from the aquifer protection permit requirements on a finding that either:

1. There is no reasonable probability of degradation of the aquifer, or
2. Aquifer water quality will be maintained and protected because discharges from the class of facility are regulated under other federal or state programs that provide the same or greater

aquifer water quality protection as A.R.S. Title 18, Chapter 2, Article 3 (APP authority).

ADEQ has determined that the CCR federal regulations (40 C.F.R. Part 257, Subpart D) provide the same or greater aquifer water quality protection as provided by the APP statutes (A.R.S. Title 49, Chapter 2, Article 3) and rules (A.A.C. Title 18, Chapter 9). ADEQ’s determination is demonstrated in the tables below, which compare the federal CCR and state APP requirements in terms of the following categorical components, respectively:

- Siting Criteria
- Structural Integrity for Surface Impoundments
- Hydraulic Capacity for Surface Impoundments
- Facility Liner Design
- Groundwater Monitoring
- Discharge Limitations
- Alert Levels for Ground Water Monitoring
- Aquifer Quality Limits and Aquifer Water Quality Standards for Groundwater Monitoring
  
- Corrective Action/Contingency Plan
- Closure/Temporary-Cessation/Post-Closure
- Financial Assurance
- Reporting Requirements
- Public Notice and Public Participation
- Inspections
- Enforcement
- Permit Suspension/ Revocation/ Denial/ Termination

<b><i>Siting Criteria</i></b>		
<i>Importance to Environment: Ensures that facilities are designed and operated to limit discharge of pollutants to the aquifer and environment taking into account site specific conditions</i>		
<b>APP (A.R.S.; A.A.C.)</b>	<b>CCR (40 C.F.R. part 257)</b>	<b>CCR “as protective as” APP?</b>

<p>A.R.S. § 49-243; A.A.C. R18-9-A202</p> <p>Requires the owner to supply a permit application with information that describes the facility including design documents, a technical demonstration that the best available demonstrated control technology (BADCT) is used at the facility, and a demonstration that the owner has the technical capability to operate the facility.</p> <p>If adverse siting conditions are present at the facility, such as shallow groundwater, seismic impact zone, etc., the owner must account for these conditions in the design, operation, maintenance, and closure/post-closure of the facility.</p>	<p>§§ 257.60 through 257.64</p> <p>Requires the base of a CCR surface impoundment or landfill to be constructed at least five feet above the uppermost aquifer or no hydraulic connection between the base of the CCR Unit and the uppermost aquifer.</p> <p>Unless the owner or operator of the CCR Unit meets specific alternate enumerated requirements with respect to each restriction below, the following location restrictions prohibit a facility from:</p> <p>(1) being located in wetlands;</p> <p>(2) being located closer than 200 feet from the outermost damage zone of fault that has had displacement in Holocene time (the last 11,700 years);</p> <p>(3) being located in a seismic impact zone; and</p> <p>(4) being located in an unstable area (unless the facility has been designed to mitigate instability).</p>	<p>Yes, as protective</p> <p>CCR is prescriptive in its location restrictions, where APP analyzes whether adverse siting conditions are present on a case by case basis. CCR location restrictions are as protective because they prohibit a facility from operating in an area with adverse siting conditions.</p>
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***Structural Integrity for Surface Impoundments***

*Importance to Environment: Ensures that facilities are designed and operated to limit discharge of pollutants to the aquifer and environment taking into account site specific conditions*

APP (A.R.S.; A.A.C.)	CCR (40 C.F.R. part 257)	CCR “as protective as” APP?
<p>A.R.S. § 49-243; A.A.C. R18-9-A202</p> <p>Requires the owner to demonstrate that the best available demonstrated control technology (BADCT) is used at the facility, including a demonstration that dams associated with surface impoundments are designed for static and seismic stability.</p>	<p>§§ 257.73 and 257.74</p> <p>Prescribes specific structural integrity criteria for surface impoundments and requires periodic hazard potential classification assessments, an emergency action plan, periodic structural stability assessments, and periodic safety factor assessments.</p>	<p>Yes, as protective</p> <p>Federal CCR regulations require dam safety related assessments and plans beyond those required by APP authority. The federal CCR criteria also meet APP levels of protection of the aquifer, by protecting against dam failure of a surface impoundment.</p>

***Hydraulic Capacity for Surface Impoundments***

*Importance to Environment: Ensures that facilities are designed and operated to limit discharge of pollutants to the aquifer and environment taking into account site specific conditions*

APP (A.R.S.; A.A.C.)	CCR (40 C.F.R. part 257)	CCR “as protective as” APP?
<p>A.R.S. § 49-243; A.A.C. R18-9-A202</p>	<p>§§ 257.53 and 257.82</p>	<p>Yes, as protective</p>

<p>Requires the owner to demonstrate that the best available demonstrated control technology (BADCT) is used at the facility, including an evaluation of the capacity of a surface impoundment to contain coal combustion residuals and rainfall.</p>	<p>Specifies hydrologic and hydraulic capacity design criteria for surface impoundments with the degree of protection based on the hazard potential classification of the surface impoundment.</p> <p>Hazard potential classification means the possible adverse incremental consequences that result from the release of water or stored contents due to failure of the diked CCR surface impoundment or mis-operation of the diked CCR surface impoundment or its appurtenances. The hazard potential determination (High, Significant, or Low) relates to whether there is the potential for loss of human life, economic loss, environmental loss, disruption of lifeline facilities, or other concerns.</p>	<p>CCR requires more prescriptive surface impoundment design than APP. CCR requires the design to accommodate specific design storm events and methods to contain and control storm water. The CCR criteria also meet APP levels of protection.</p>
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**Facility Liner Design**

*Importance to Environment: Ensures that facilities are designed and operated to limit discharge of pollutants to the aquifer and environment taking into account site specific conditions*

APP (A.R.S.; A.A.C.)	CCR (40 C.F.R. part 257)	CCR “as protective as” APP?
<p>A.R.S. § 49-243; A.A.C. R18-9-A202</p> <p>Requires the owner to demonstrate that the best available demonstrated control technology (BADCT) is used at the facility including liner designs for landfills and surface impoundments and the run-on and run-off storm water management controls. Specific design storm events are not included in the APP rules.</p>	<p>§§ 257.70 through 257.72; 257.81</p> <p>Design criteria for CCR surface impoundments generally require a composite liner system consisting of a geomembrane liner overlying two feet of compacted soil, while new CCR landfills must be constructed with a leachate collection system. The requirements for the lower liner, ordinarily consisting of two feet of soil, can be replaced by an alternative liner meeting specific permeability requirements.</p> <p>Run-on and run-off management controls for landfills must be designed for specified design storm events.</p>	<p>Yes, as protective</p> <p>CCR requires prescriptive discharge control designs for liners; APP authorizes alternative designs that consider site specific hydrogeologic conditions. The CCR criteria meet APP levels of protection of the aquifer.</p> <p>CCR prescriptive design storm events and methods to manage storm water on landfill surfaces also meet APP levels of protection.</p>

**Groundwater Monitoring**

*Importance to Environment: Ensures that facilities meet requirements to protect groundwater and the environment. If groundwater exceedances occur, monitoring systems detect the exceedance so that they can be mitigated.*

APP (A.R.S.; A.A.C.)	CCR (40 C.F.R. part 257)	CCR “as protective as” APP?
<p>A.A.C. R18-9-A206</p>	<p>§§ 257.90 through 257.94</p>	<p>Yes, as protective</p>

<p>APP has authority to prescribe groundwater monitoring methods, parameters, frequency, equipment, reporting intervals, and recordkeeping in permits as appropriate.</p> <p>APP approves the design of the monitoring well network, and establishes the monitoring requirements in permits including sampling protocols, sampling parameters, alert levels and aquifer quality limits. Exceedances of alert levels or aquifer quality limits trigger contingency and mitigation actions.</p> <p>Periodic self-monitoring reports are consistently required in permits.</p> <p>Monitoring requirements are site specific and consider the hydrogeology conditions at the site.</p>	<p>Federal CCR regulations prescribe the groundwater monitoring system design, requires a minimum of: (1) eight rounds of sampling from each background and downgradient well prior to initiating regular phases of detection monitoring, (2) semiannual detection monitoring unless an alternate frequency has been established, statistical analysis to determine if there are statistically significant increases over background, (3) annual groundwater monitoring and corrective action reporting, monitoring system design, well design specifications, sampling protocols, analytical methods, groundwater contour maps, statistical methods, and detection monitoring program that could trigger assessment monitoring program. Federal CCR regulations require monitoring for specific constituents in Appendix III for the detection monitoring program and a comprehensive list of constituents for the assessment monitoring program (Appendix IV).</p> <p>Appendix III Detection Monitoring Constituents</p> <ul style="list-style-type: none"> <li>Boron</li> <li>Calcium</li> <li>Chloride</li> <li>Fluoride</li> <li>Sulfate</li> <li>Total Dissolved Solids</li> <li>pH</li> </ul> <p>Appendix IV Assessment Monitoring Constituents</p> <ul style="list-style-type: none"> <li>Antimony</li> <li>Arsenic</li> <li>Barium</li> <li>Beryllium</li> <li>Cadmium</li> <li>Chromium</li> <li>Cobalt</li> <li>Fluoride</li> <li>Lead</li> <li>Lithium</li> <li>Mercury</li> <li>Molybdenum</li> <li>Selenium</li> <li>Thallium</li> </ul>	<p>CCR monitoring requirements are prescriptive and leave very little room for consideration of site specific conditions; APP considers site-specific hydrogeologic conditions in determining the number and placement of wells and the parameters to be monitored. CCR monitoring requirements meet or exceed the requirements typically included in APP permits for coal combustion residual facilities.</p>
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	Radium 226 and 228 combined	
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**Discharge Limitations**

*Importance to Environment: Discharge limitations can be used to ensure that the treatment technologies being used meet the best available demonstrated control technology criteria. For example, a sewage treatment facility must treat the wastewater for nitrate prior to discharge to the environment.*

APP (A.R.S.; A.A.C.)	CCR (40 C.F.R. part 257)	CCR “as protective as” APP?
<p>A.R.S. § 49-243; A.A.C. R18-9-A205,</p> <p>If the APP includes limits on the type or quantity of pollutants placed within a surface impoundment or landfill, the limits are based on considerations such as the type of liners used in the facility, the operational practices used and the site specific hydrogeologic conditions. Disposal facilities rarely include treatment of the waste prior to disposal, therefore, discharge limits are usually only set for flow to the facility to assure adequate capacity, rather than limits on the concentration of pollutants.</p>	<p>No citation</p> <p>CCR rule does not have a comparable requirement or authorization to limit specific pollutants in coal combustion residuals from discharge to a facility. CCR requirements are specific to types of materials that have similar constituents or pollutants of concern. However, federal CCR regulations focus on protection of the aquifer by regulation of the ability of the CCR Unit to function so that there will not be a reasonable probability of adverse effects on health or the environment. In other words, rather than focus on the materials in the CCR units, the federal program focuses on containment of the CCR material in the CCR units.</p>	<p>Yes, as protective</p> <p>The pollutants in coal combustion residuals are a result of the pollutant concentrations in the coal and the air quality pollutant removal technology utilized. As more pollutants are removed from air emissions, their presence in the residuals increases. The purpose of discharging coal combustion residuals to surface impoundments and landfills is for appropriate disposal of the CCR material, and the CCR Program rule requirements are designed to ensure proper containment of the waste rather than reducing the concentration of pollutants in the CCR. This is why both the CCR and the APP regulations include design criteria that are protective of groundwater.</p> <p>ADEQ does not typically utilize the discretionary authority under APP to limit the type or quantity of pollutants placed within a surface impoundment or landfill by CCR facilities because the goal is containment of waste, not treatment of waste prior to containment. Therefore, APP does not routinely establish pollutant discharge limits for CCR facilities.</p>

**Alert Levels for Groundwater Monitoring**

*Importance to Environment: Alert levels for pollutants in groundwater are established in permits to trigger contingency actions early, before regulatory limits are exceeded in the aquifer*

APP (A.R.S.; A.A.C.)	CCR (40 C.F.R. part 257)	CCR “as protective as” APP?
<p>A.A.C. R18-9-A205</p> <p>If the APP includes an alert level,</p>	<p>§ 257.94</p> <p>The CCR detection monitoring</p>	<p>Yes, as protective</p> <p>The CCR rule’s approach is</p>

<p>the level will be based on a site-specific condition. The alert level may be based on a pollutant that indicates the potential appearance of another pollutant.</p> <p>Exceedance of an alert level triggers contingency actions, including increased monitoring frequency and investigation of the cause of the exceedance.</p>	<p>program requires semiannual sampling. Detection monitoring requires the facility to sample the seven constituents identified in 40 C.F.R. Part 257, Appendix III.</p>	<p>equally protective because Appendix III constituents move through the subsurface along with groundwater, and thus provide an early detection of whether contaminants are migrating from the facility. This concept is very similar to the APP requirements for setting and using alert levels in permits.</p>
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***Aquifer Quality Limits and Aquifer Water Quality Standards for Groundwater Monitoring***  
*Importance to Environment: Aquifer quality limits are regulatory limits established in a permit, that if exceeded, constitute a violation of the permit and triggers mitigation actions.*

<b>APP (A.R.S.; A.A.C.)</b>	<b>CCR (40 C.F.R. part 257)</b>	<b>CCR “as protective as” APP?</b>									
<p>A.A.C. R18-9-A205.C, A.R.S. § 49-223</p> <p>APP requires compliance with aquifer quality limits (AQLs), which are set equal to the aquifer water quality standards (AWQS) or, for non-attaining aquifers, the background concentration</p>	<p>§ 257.95 (as amended)</p> <p>If there is a statistically significant increase over background levels for any Appendix III constituent, the facility must then implement an assessment monitoring program, which requires monitoring of all pollutants regulated under the CCR rule (Appendix IV).</p> <p>Under assessment monitoring, the owner or operator must sample all wells for all Appendix IV constituents. The CCR groundwater protection standards are set at Maximum Contaminant Levels or MCLs, while parameters for cobalt, lead, lithium, and molybdenum (i.e., those constituents without an MCL) are set based upon EPA’s Risk Assessment Guidance for Superfund. See 83 Fed. Reg. 36,435, 36,444 (Aug. 29, 2018). For those parameters for which background concentrations are higher than the listed federal CCR groundwater protection standards, the groundwater protection standard is then set consistent with background concentrations.</p>	<p>Yes, as protective</p> <p>The table below is a comparison between AQLs imposed on a typical CCR unit under APP and groundwater protection standards imposed under the federal CCR regulation. The .015 mg/l groundwater protection standard for lead under the CCR rule is more stringent than the .05 mg/l AQL for lead under the APP standards. Likewise, the .01 groundwater protection standard for arsenic under the CCR rules is more stringent than the .05 AQL for arsenic under the APP standards.</p> <table border="1"> <thead> <tr> <th><i>Pollutant</i></th> <th><i>Aquifer Quality Limit (APP Program) (mg/l)</i></th> <th><i>Groundwater Protection Standard (CCR Rule) (mg/l)</i></th> </tr> </thead> <tbody> <tr> <td>Lead</td> <td>.05</td> <td>.015</td> </tr> <tr> <td>Arsenic</td> <td>.05</td> <td>.01</td> </tr> </tbody> </table>	<i>Pollutant</i>	<i>Aquifer Quality Limit (APP Program) (mg/l)</i>	<i>Groundwater Protection Standard (CCR Rule) (mg/l)</i>	Lead	.05	.015	Arsenic	.05	.01
<i>Pollutant</i>	<i>Aquifer Quality Limit (APP Program) (mg/l)</i>	<i>Groundwater Protection Standard (CCR Rule) (mg/l)</i>									
Lead	.05	.015									
Arsenic	.05	.01									

**Corrective Action/Contingency Plan**

*Importance to Environment: Ensures that if there is an exceedance of a groundwater standard or operational standard, the problem will be assessed and appropriate mitigation requirements implemented*

APP (A.R.S.; A.A.C.)	CCR (40 C.F.R. part 257)	CCR “as protective as” APP?
<p>A.A.C. R18-9-A204</p> <p>Requires contingency or correction actions in response to exceedances of groundwater limits (ALs or AQLs) or other permit conditions (DLs), or if there is an imminent and substantial endangerment to the public health or the environment. Exceedances may require verification sampling, ADEQ notification, additional monitoring and inspection, evaluation of facility integrity, investigation of impacts, and evaluation and implementation of corrective measures.</p> <p>The owner must maintain a contingency plan that includes responses to ALs, AQLs, DLs and an emergency response plan for imminent and substantial endangerment to public health or environment.</p>	<p>§§ 257.96 through 257.98</p> <p>Requires assessment of potential corrective measures upon detection of a release from a CCR unit or the identification of CCR constituents in groundwater statistically in excess of groundwater protection standards established under the federal CCR rule. In general, corrective measures must be designed to prevent further releases and to remediate the affected areas to the maximum extent feasible. The documented assessment of corrective measures for a given CCR facility, which are subject to public input requirements, must evaluate remedy implementation issues, including analysis of cross-media impacts and any controls necessary to address residual contamination, the time necessary to implement the remedy, and any institutional requirements among other considerations.</p> <p>Requires an owner to select a remedy that, at a minimum, achieves certain performance criteria, including without limitation a remedy that is protective of human health and the environment, attains groundwater protection standards, controls and/or reduces the source, eliminates to maximum extent feasible further releases, and removes as much contaminated material that was released from the CCR unit from the environment as feasible taking into account certain factors enumerated in the federal rule. In selecting a remedy that meets the mandatory performance criteria, the following factors, among others, must be considered and balanced: the long- and short-term effectiveness and protectiveness of the remedy along with the degree of certainty that the remedy will prove successful and the</p>	<p>Yes, as protective</p> <p>CCR corrective action requirements are prescriptive and meet or exceed the contingency and corrective action requirements typically included in APP permits for coal combustion residual facilities. APP authority in the rule and statute allows ADEQ to require the corrective action remedy selection, implementation and completion of activities that are prescriptive under CCR.</p>

	<p>ease or difficulty of implementing a potential remedy. A schedule for implementing and completing the remedy must be established.</p> <p>Requires an owner, within 90 days after remedy selection, to initiate remedial activities, implement a corrective action groundwater monitoring program, implement corrective action remedy and take interim measures necessary to reduce the contaminants leaching from the CCR unit.</p> <p>A remedy shall be considered complete when the groundwater protection standards have been achieved for a period of three consecutive years and all actions required to complete the remedy have been satisfied.</p>	
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**Closure/Temporary Cessation/Post-Closure**

*Importance to Environment: Ensures that the closure and post-closure activities are appropriate to provide protection of groundwater and the environment and eliminate further discharge from the facility*

APP (A.R.S.; A.A.C.)	CCR (40 C.F.R. part 257)	CCR “as protective as” APP?
<p>R18-9-A209</p> <p>Requires a closure plan to control the discharge of pollutants from the facility to the aquifer. The plan must include the method used, if any, to treat any material remaining at the facility, and the methods used to control discharge, such as a cover system, for materials to remain at the facility.</p>	<p>§§ 257.101 through 257.104 (as interpreted pursuant <i>Util. Solid Waste Activities Grp. v. EPA</i>)</p> <p>Requires a closure plan that includes the design of a final cover system to control, minimize, or eliminate (to the maximum extent feasible), both post-closure infiltration of liquids into disposed waste materials and releases of CCR, leachate, or contaminated runoff to the ground or surface waters or to the atmosphere. Prescriptive performance criteria for the final cover system. Closure through removal of CCR material is also an alternative.</p> <p>Establishes a list of mandatory triggering conditions (such as not satisfying liner criteria, violation of a location standard, or unsafe containment conditions) that require the retrofit or closure of an existing unlined surface impoundment or landfill.</p> <p>Establishes requirements that must be met to close, including without limitation final cover design, schedule, engineer certification of closure, deed restrictions, and public notifications.</p> <p>Allows for continued operation of a CCR facility that would normally close due to one of the triggering</p>	<p>Yes, as protective</p> <p>CCR closure requirements are prescriptive and meet or exceed the closure requirements typically included in APP permits for coal combustion residual facilities. APP authority in the rule and statute allows ADEQ to require the closure plan, and implementation and completion activities for closure that are prescriptive under CCR.</p>

	<p>conditions if the owner certifies the unit must continue operation due to absence of alternative disposal capacity. The extension of closure deadlines is only available for so long as the alternative disposal capacity is not available, and only for a maximum of five years from the initial certification.</p> <p>Requires post-closure care to maintain integrity and effectiveness of final cover, leachate collection system, and groundwater monitoring, for a 30-year period.</p> <p>A remedy shall be considered complete when the groundwater protection standards have been achieved and all actions required to complete the remedy have been satisfied.</p>	
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<p><b><i>Financial Assurance</i></b></p>		
<p><i>Importance to Environment: Ensures that electric utilities are capable of meeting the financial obligations to close and assure proper post-closure care for their facilities in a manner that meets environmental requirements.</i></p>		
<p><b>APP (A.R.S.; A.A.C.)</b></p>	<p><b>CCR (40 C.F.R. part 257)</b></p>	<p><b>CCR “as protective as” APP?</b></p>
<p>R18-9-A203 APP requires a demonstration of financial capability to construct, operate, close and ensure proper post-closure care and requires that the owner establish one of 8 financial mechanisms to cover costs of closure and post-closure care.</p>	<p>The CCR regulations do not include a financial assurance demonstration</p>	<p>While there is not a parallel requirement under federal CCR regulations as there is under APP to prove financial assurance for unit or facility closure, in practice, it is extremely unlikely that the class of regulated facilities at issue here will be unable to financially execute their environmental requirements under the federal CCR regulations, including as to facility closure.</p> <p>Owners that qualify as public service corporations under Arizona Corporation Commission (ACC) rules are subject to standards equivalent to or more stringent than the APP’s financial assurance requirements. The public service corporation rules require regulated entities to estimate costs, including both environmental compliance and CCR unit decommissioning costs (as part of the associated generating unit), develop a plan to manage those activities and associated uncertainties, update that plan once every two years, and provide a mechanism to ensure that those costs are met by the rates ordered by the ACC.</p> <p>Salt River Project (SRP) is not a public service corporation subject to ACC but is a self-governed Agricultural Improvement and Power District with public-customer elected Board pursuant to A.R.S. Title 48, Chapter 17 (A.R.S. § 48-2301 <i>et seq.</i>). The Board has approved a Master Bond Resolution, which obligates SRP to charge rates sufficient to meet its obligations, including decommissioning obligations (e.g. definition of “operating expenses” and Sec. 7.11 of Master Bond Resolution). There are other options to raise funds. For example, if SRP’s revenue is insufficient to discharge its reported obligations, the County Board of Supervisors shall levy a land-proportional tax “sufficient to raise the amount reported” in the District Board’s annual estimate. A.R.S. § 48-2414(A)</p>

		The processes described above provide the same or greater degree of cost estimation, cost updating, and financial provision as does the APP requirements, and therefore, also provides the same or better protection of aquifer water quality. Accordingly, financial assurance for this class of facility is provided by other applicable state programs and related assurances.
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**Reporting Requirements**

*Importance to Environment: Ensures that monitoring and facility inspection results are available for review to allow for compliance determinations*

APP (A.R.S.; A.A.C.)	CCR (40 C.F.R. part 257)	CCR “as protective as” APP?
R18-9-A207  Requires reporting of routine groundwater monitoring data to ADEQ on a periodic basis.  Requires owner to provide ADEQ notification of a permit violation (AQL or DL exceedance) within 5-days of becoming aware of violation and a written report of violation within 30-days. Owner must notify ADEQ with 5 days of a bankruptcy or entry of order or judgement.	§§ 257.105 through 257.107  Requires owners to self-report a wide range of demonstrations and reports to the facility's operating record and comply with the internet posting requirements.  Requires owner to notify ADEQ upon placement of documentation in the facility operating record for several different requirements including design criteria, inspection results, and groundwater corrective action.  Requires notifications and public disclosure in response to exceedances as described in Notification and Internet Site Requirements, which reference operative sections of the CCR regulation.	Yes, as protective in practice.  Internet posting requirements allow ADEQ and the public the opportunity to review significant facility records concerning CCR facility construction, inspections, closure planning, and groundwater quality, among others outlined in the Notification and Internet Requirements of the federal regulation. Notification requirements provide ADEQ updates on the status of compliance with CCR design and operation requirements which are closely related to APP requirements as described in the sections above.

**Public Notice and Public Participation**

*Importance to Environment: Public notice and participation ensures that the public is aware of actions of industrial facilities and that there is appropriate oversight, ensures the public to have a voice as to whether actions taken by facilities and agencies are appropriate to protect the aquifer*

APP (A.R.S.; A.A.C.)	CCR (40 C.F.R. part 257)	CCR “as protective as” APP?
R18-9-108: ADEQ (not owner) provides outside Entities (Counties, Fed/State/Local agencies, citizens) notification of key steps in the permitting process (applications, preliminary & final decisions, closure plans, significant amendments, revocations, clean closure approvals). Also provision	§§ 257.105 through 257.107  Requires owners maintain extensive operating record, retain most items 5 years from document date, retain website 5 years from posting date, retain certain items until unit closure completed, and provides short timeframes for notifications and web posting depending on event.	Yes, as protective  Information on facility design, operation and monitoring is readily available on the facilities' websites. Similar information would be provided by ADEQ under the APP process as part of the public notice requirements, therefore CCR provides

<p>for website posting.</p> <p>R18-9-109: ADEQ publishes Notices of Preliminary Decisions regarding issuance or denial of significant amendment to a permit or final determination. Provides for a written public comment period, and written response from ADEQ. Provides for public hearing if determined necessary.</p>	<p>A public meeting is required prior to selection of a corrective action remedy.</p>	<p>equivalent public information.</p>
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***Inspections***

*Importance to Environment: Ensures that facilities are accountable for their actions and will put measures in place to correct deficiencies*

<b>APP (A.R.S.; A.A.C.)</b>	<b>CCR (40 C.F.R. Part 257)</b>	<b>CCR “as protective as” APP?</b>
<p>R18-9-110 Provides for ADEQ personnel to conduct an inspection of a permitted facility per ARS 41-1009 (Inspections &amp; audits, applicability; exceptions).</p>	<p>§§ 257.83, 257.84</p> <p>Operators of CCR surface impoundments must complete weekly inspections for potential structural weakness and at all outlets of hydraulic structures that pass underneath the base of the surface impoundment or through the dike of the CCR unit for abnormal discoloration, flow or discharge of debris and monthly inspections of all CCR unit instrumentation.</p> <p>Requires annual and quinquennial (occurring every five years) inspections by a qualified professional engineer (QPE) to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards.</p> <p>For surface impoundments, the QPE must also provide a structural stability assessment.</p> <p>For landfills, the QPE must also identify any structural weakness or conditions that disrupt the operation or safety of the CCR unit.</p> <p>Requires website posting of the results of the inspections, conclusions, and appropriate next steps (e.g. additional monitoring</p>	<p>Yes, as protective</p> <p>The weekly inspections by CCR operators assures proper maintenance and operation of the facilities.</p> <p>The qualified professional engineer inspections provide oversight of facility design and operational integrity on a regular basis to assure adherence to CCR requirements which are similar to APP requirements (e.g. liner system design, impoundment operation and stability). In addition, similar to APP authority for ADEQ to conduct inspections, the U.S. EPA is empowered under RCRA to inspect facilities that manage CCR and to publicly disclose the results of such inspections. Moreover, ADEQ would continue to maintain the Department’s general inspection authority for situations where the Director determines, upon a reasonable basis belief, that a given facility may be in “violation of any environmental law or regulation.” See A.R.S. § 49-104(B)(8).</p>

	<p>and/or corrective action)</p> <p>The U.S. EPA is also authorized to access facilities used to manage CCR and conduct inspections to ensure compliance with federal CCR regulations. <i>See</i> 42 U.S.C. §§ 6945(d)(4)(A), 6927(a). Any records secured or generated by U.S. EPA in the course of such inspections must be made available to the public. <i>See id.</i></p>	
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**Enforcement**

*Importance to Environment: Ensures that facilities are accountable for their actions and will put measures in place to correct deficiencies*

<b>APP (A.R.S.; A.A.C.)</b>	<b>CCR (40 C.F.R. Part 257)</b>	<b>CCR “as protective as” APP?</b>
<p>Provides for state enforcement only under A.R.S. Title 49, Chapter 2, Article 4: Enforcement, for a person who owns or operates a facility contrary to Articles 1, 2, or 3 of AAC Title 18, Chapter 9.</p>	<p>CCR facilities are regulated under RCRA Subtitle D (42 U.S.C. §§ 6941-6949a). Excepting recent modifications under the WIIN Act, enforcement under subtitle D for self-implementing rules is left to citizens to initiate lawsuits to enforce a violation of a requirement under RCRA or any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility, who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment. <i>See</i> 42 U.S.C. §§ 6972–73) (providing authorization to commence an action with respect to the above-referenced circumstances, which would apply to a CCR unit regulated under RCRA Subpart D). In addition, the U.S. EPA is authorized to bring administrative and judicial enforcement actions under RCRA to enforce the federal CCR regulations. <i>See id.</i> §§ 6945(d)(4)(A), 6928 (providing U.S. EPA with federal enforcement authority specifically with respect to CCR, pursuant to legislation passed in 2016).</p>	<p>Yes, as protective</p> <p>APP program does not provide for a direct citizen enforcement mechanism, while CCR does. In the absence of state oversight, there is still an oversight mechanism built into the federal CCR regulations, including via U.S. EPA enforcement authorities under RCRA, specifically directed at CCR. Further, EPA’s self-implementing rules are promulgated to enable public inspection of data and decisions. <i>See, e.g.</i>, 40 C.F.R. § 257.107 (internet posting requirements). Such public disclosure enables citizen enforcement under 42 U.S.C. §§ 6972–73.</p>

**Permit Suspension/Revocation/Denial/Termination**

*Importance to Environment: Allows the Director to prohibit discharge to a facility that doesn't meet the requirements of the APP program for protection of groundwater and the environment*

APP (A.R.S.; A.A.C.)	CCR (40 C.F.R. Part 257)	CCR "as protective as" APP?
R18-9-A213  The Director may take actions upon determination that an owner failed to comply with APP requirements or misrepresented information in an APP application, a facility is causing a violation of groundwater limits or is causing/will cause an imminent and substantial endangerment to public health or the environment, or an owner failed to maintain financial capability.	257.101(b)  The CCR requirements are self-implementing; therefore, there isn't a permitting program. If a facility does not meet certain requirements, the rule requires closure of the facility. For example, existing CCR surface impoundments failing to meet location standards must close. In addition, CCR surface impoundments that are not lined in accordance with the federal CCR rule requirements must similarly close. Moreover, if CCR facilities are not in compliance with federal CCR regulations, the facility is considered an "open dump" and is subject to enforcement actions and citizen lawsuits. <i>See</i> 42 U.S.C. § 6945(d).	Yes, as protective  The CCR rule is written to be self-implementing and there are no exemptions from the rule.

**6. A reference to any study relevant to the rule that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**

Not applicable.

**7. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:**

Not applicable. The proposed amendments do not diminish a previous grant of authority of a political subdivision of this state. However, as previously explained, it will limit the authority of the state itself.

**8. The agency is exempt from the requirements under A.R.S. § 41-1055(G) to prepare and file an economic, small business, and consumer impact statement under A.R.S. § 41-1055(D)(2) because this is an expedited rulemaking.**

**9. A description of any changes between the proposed expedited rulemaking and the**

**final expedited rulemaking.**

No rule language changes were made between the proposed expedited rulemaking and the final expedited rulemaking.

**10. The agency’s contact person who can answer questions about the above statement regarding the preliminary summary of the economic, small business and consumer impact of the proposed expedited rule:**

Name: Heidi M. Haggerty Welborn  
Address: 1110 W. Washington St.  
Phoenix, AZ 85007  
Telephone: (602) 771-4815  
E-mail: [Welborn.Heidi@azdeq.gov](mailto:Welborn.Heidi@azdeq.gov)  
Website: <http://www.azdeq.gov/draft-and-proposed-rule-water-quality-division>

**11. The agency’s summary of the public or stakeholder comments made about the rulemaking and the agency’s response to the comments:**

**Comment 1: Arizona Utilities Group**

The Arizona Utilities Group (“AUG”) is pleased to provide the following comments to the Arizona Department of Environmental Quality (“ADEQ”) regarding the Notice of Proposed Expedited Rulemaking (“NPERM”), pursuant to A.R.S. § 41-1027(A)(6) and A.R.S. §49-250(A), to exempt federally regulated coal combustion residual (“CCR”) disposal units from Arizona’s aquifer protection permit program (“APP”).

The AUG is an ad hoc, unincorporated association of individual electric utilities operating in the state of Arizona, including for purposes of this request, Arizona Electric Power Cooperative, Arizona Public Service Company, Salt River Project Agricultural Improvement and Power District, and Tucson Electric Power Company. AUG member utilities generate electricity using a variety of resources and reliably and cost-effectively deliver that power to their customers and members over transmission and distribution infrastructure. As part of the AUG member utilities’ diverse array of power generation resources, AUG members own and operate coal-fired power plants within the state of Arizona.

In so doing, the AUG members strive to conduct these operations in strict compliance with a complex, interrelated web of state and federal environmental protection regulations, including as to the management of CCR and the protection of Arizona groundwater resources. In the vast majority

of situations, these regulations involve a complimentary scheme of rules that function together for comprehensive environmental protection as to the operation of coal-fired power plants. However, when these requirements come into conflict with one another and compel contradictory outcomes, changes become necessary.

As such, the AUG applauds ADEQ for recognizing, and taking important steps to address, certain serious conflicts between requirements of the APP regulations and the federal regulations governing CCR disposal from coal-fired power plants. See 40 C.F.R. Part 257, Subpart D. In this respect, ADEQ's NPERM appropriately recognizes the conflicts between the self-implementing nature of the federal CCR regulations and the APP regulations, which require hands-on review and approval of CCR discharging activities involving Arizona groundwater resources. In any number of situations, including those involving CCR disposal unit closure or corrective action, AUG members face serious challenges maintaining compliance with both regulations at the same time.

Nonetheless, ADEQ has also appropriately recognized the overlap between these federal and state regulatory programs—where groundwater protection with respect to CCR management is a paramount objective under both the federal CCR regulations and the state APP program. In light of this overlap, allowing CCR generated from Arizona coal-fired power plants to be regulated solely by the provisions of 40 C.F.R. Part 257, Subpart D will achieve environmental protection outcomes equivalent to having both sets of regulations apply at the same time. The NPERM's side-by-side walkthrough of the APP program as compared to federal CCR regulations does an exemplary job illustrating this point. As such, exempting facilities, which are already regulated by 40 C.F.R. Part 257, Subpart D, from the Arizona APP regulations, will appropriately maintain comprehensive protection of Arizona groundwater resources, while at the same time eliminating needlessly duplicative regulations as envisioned by A.R.S. §49-250(A) and A.R.S. § 41-1027(A)(6).

**ADEQ Response 1:**

Thank you for your comment.

**Comment 2 – Steve Brown, Pima County resident:**

Mr. Brown requested a public hearing to be held in Tucson as well as Phoenix.

**ADEQ Response 2:**

ADEQ contacted Mr. Brown by phone and email and conveyed that after consultation with counsel, for various reasons, ADEQ would hold only the hearing in Phoenix for the rulemaking. ADEQ encouraged Mr. Brown to submit written comments if he was unable to attend the hearing.

**Comment 3 – Steve Brown, joined by three other Pima County residents:**

In partnership with fellow Pima County residents Dr. Stanley R. Hart, Greg Shinsky and Carol Shinsky, I offer the following comments regarding Proposed Rule Changes to Coal Combustion Residuals (CCR).

We oppose your proposed rule changes because we believe they threaten to weaken the future ability of the ADEQ to protect public health of Arizonans from the potential hazards of coal combustion residuals.

While we understand the ADEQ’s point that your current rules create a redundancy to EPA rules, we are also cognizant of the existential threats facing the EPA and its regulatory power in the current political climate at the national level.

Should the EPA be rendered, by any of a number of possible political pressures, powerless to exercise its regulatory power concerning CCR in Arizona, under your proposed rule changes, Arizona citizens would be put at risk.

Therefore we respectfully request that you not adopt these proposed rule changes, deferring such possible changes at least until your next Triennial Review, when the future viability of the EPA may be clearer. We citizens of Arizona need for our ADEQ to remain a strong advocate for our health and well-being, accessible and responsive to us despite any potential collapse of the federal protection of the environmental quality we cherish here in Arizona.

**ADEQ Response 3:**

ADEQ appreciates your comment and valid concern. ADEQ agrees that federal law may change at any time, and A.R.S. § 49-250(A) only allows for a rulemaking to exempt facilities from the APP program *if* the existing applicable federal program provides the same or greater aquifer water quality protection as APP statutes. At this time, ADEQ is exempting a category of facilities from aquifer protection permit program requirements because it has concluded that the existing CCR statutes and regulations will maintain and protect aquifer quality to the same level as APP into the reasonably foreseeable future. Therefore, the rule exemption provided by this rulemaking is valid and in compliance with A.R.S. § 49-250(A) as long as the state statutory standard continues to be met. If the federal CCR rule is modified in a way that calls into question whether the statutory standard continues to be met, ADEQ will again review CCR relative to APP to ensure that the exemption is still valid.

**12. All agencies shall list other matters prescribed by statute applicable to the specific**

**agency or to any specific rule or class of rules.**

There are no additional matters prescribed by statute applicable specifically to ADEQ or this specific rulemaking.

- a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used (A.R.S. §§ 41-1052(D)(10) & -1037(A); A.A.C. R1-1-801(C)(5)(j)):**

Not applicable. This rulemaking exempts certain facilities from permitting.

- b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law (A.R.S. § 41-1052(D)(9)):**

As discussed above, for the very reason that federal law applies (RCRA and 40 C.F.R. part 257, subpart D), certain classes of facilities are being exempted from state law. Therefore, this rulemaking is not more stringent than federal law.

- c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states (A.A.C. R1-1-801(C)(5)(j)):**

No such analysis was submitted.

- 13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:**

None.

- 14. The full text of the rules follows:**

**TITLE 18. ENVIRONMENTAL QUALITY**

**CHAPTER 9. DEPARTMENT OF ENVIRONMENTAL QUALITY**

**WATER POLLUTION CONTROL**

**ARTICLE 1. AQUIFER PROTECTION PERMITS – GENERAL PROVISIONS**

Section

R18-9-101. Definitions

R18-9-103. Class Exemptions

### **R18-9-101. Definitions**

In addition to the definitions established in A.R.S. § 49-201, the following terms apply to Articles 1, 2, 3, and 4 of this Chapter:

1. “Aggregate” means a clean graded hard rock, volcanic rock, or gravel of uniform size, between 3/4 inch and 2 1/2 inches in diameter, offering 30 percent or more void space, washed or prepared to be free of fine materials that will impair absorption surface performance, and has a hardness value of three or greater on the Moh’s Scale of Hardness (can scratch a copper penny).
2. “Alert level” means a value or criterion established in an individual permit that serves as an early warning indicating a potential violation of a permit condition related to BADCT or the discharge of a pollutant to groundwater.
3. “AQL” means an aquifer quality limit and is a permit limitation set for aquifer water quality measured at the point of compliance that either represents an Aquifer Water Quality Standard or, if an Aquifer Water Quality Standard for a pollutant is exceeded in an aquifer at the time of permit issuance, represents the ambient water quality for that pollutant.
4. “Aquifer Protection Permit” means an individual permit or a general permit issued under A.R.S. §§ 49203, 49241 through 49-252, and Articles 1, 2, and 3 of this Chapter.
5. “Aquifer Water Quality Standard” means a standard established under A.R.S. §§ 49221 and 49223.
6. “AZPDES” means the Arizona Pollutant Discharge Elimination System, which is the state program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment and biosolids requirements under A.R.S. Title 49, Chapter 2, Article 3.1 and 18 A.A.C. 9, Articles 9 and 10.
7. “BADCT” means the best available demonstrated control technology, process, operating method, or other alternative to achieve the greatest degree of discharge reduction determined for a facility by the Director under A.R.S. § 49243.
8. “Bedroom” means, for the purpose of determining design flow for an on-site wastewater treatment facility for a dwelling, any room that has:
  - a. A floor space of at least 70 square feet in area, excluding closets;
  - b. A ceiling height of at least 7 feet;
  - c. Electrical service and ventilation;
  - d. A closet or an area where a closet could be constructed;
  - e. At least one window capable of being opened and used for emergency egress; and

- f. A method of entry and exit to the room that allows the room to be considered distinct from other rooms in the dwelling and to afford a level of privacy customarily expected for such a room.
9. “Book net worth” means the net difference between total assets and total liabilities.
10. “Chamber technology” means a method for dispersing treated wastewater into soil from an on-site wastewater treatment facility by one or more manufactured leaching chambers with an open bottom and louvered, load-bearing sidewalls that substitute for an aggregate-filled trench described in R18-9-E302.
10. “CCR” means coal combustion residuals which include fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers.
11. “CCR landfill” means an area of land or an excavation that receives CCR and which is not a municipal solid waste landfill, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. A CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, and any practice that does not meet the definition of beneficial use of CCR.
12. “CCR surface impoundment” means a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR.
13. “CCR unit” means any CCR landfill which receives CCR, any CCR surface impoundment designed to hold an accumulation of CCR and liquids, and the unit treats, stores or disposes of CCR. CCR unit includes a lateral expansion of a CCR unit, or a combination of more than one of these units that receives CCR.
- ~~14.~~14. “CMOM Plan” means a Capacity, Management, Operations, and Maintenance Plan, which is a written plan that describes the activities a permittee will engage in and actions a permittee will take to ensure that the capacity of the sewage collection system, when unobstructed, is sufficient to convey the peak wet weather flow through each reach of sewer, and provides for the management, operation, and maintenance of the permittee’s sewage collection system.
- ~~15.~~15. “Design capacity” means the volume of a containment feature at a discharging facility that accommodates all permitted flows and meets all Aquifer Protection Permit conditions, including allowances for appropriate peaking and safety factors to ensure sustained, reliable operation.
- ~~16.~~16. “Design flow” means the daily flow rate a facility is designed to accommodate on a sustained basis while satisfying all Aquifer Protection Permit discharge limitations and treatment and

operational requirements. The design flow either incorporates or is used with appropriate peaking and safety factors to ensure sustained, reliable operation.

- ~~14-17.~~ “Direct reuse site” means an area where reclaimed water is applied or impounded.
- ~~15-18.~~ “Disposal works” means the system for disposing treated wastewater generated by the treatment works of a sewage treatment facility or on-site wastewater treatment facility, by surface or subsurface methods. Disposal works do not include systems for activities regulated under 18 A.A.C. 9, Article 7.
- ~~16-19.~~ “Drywell” means a well which is a bored, drilled or driven shaft or hole whose depth is greater than its width and is designed and constructed specifically for the disposal of storm water. Drywells do not include class 1, class 2, class 3 or class 4 injection wells as defined by the Federal Underground Injection Control Program (P.L. 93-523, part C), as amended. A.R.S. § 49-331(3)
- ~~17-20.~~ “Dwelling” means any building, structure, or improvement intended for residential use or related activity, including a house, an apartment unit, a condominium unit, a townhouse, or a mobile or manufactured home that has been constructed or will be constructed on real property.
- ~~18-21.~~ “Final permit determination” means a written notification to the applicant of the Director’s final decision whether to issue or deny an Individual Aquifer Protection Permit.
- ~~19-22.~~ “Groundwater Quality Protection Permit” means a permit issued by the Arizona Department of Health Services or the Department before September 27, 1989 that regulates the discharge of pollutants that may affect groundwater.
- ~~20-23.~~ “Homeowner’s association” means a nonprofit corporation or unincorporated association of owners created pursuant to a declaration to own and operate portions of a planned community and which has the power under the declaration to assess association members to pay the costs and expenses incurred in the performance of the association’s obligations under the declaration.
- ~~21-24.~~ “Injection well” means a well that receives a discharge through pressure injection or gravity flow.
- ~~22-25.~~ “Intermediate stockpile” means in-process material not intended for long-term storage that is in transit from one process to another at a mining site. Intermediate stockpile does not include metallic ore concentrate stockpiles or feedstocks not originating at the mining site.
- ~~23-26.~~ “Land treatment facility” means an operation designed to treat and improve the quality of waste, wastewater, or both, by placement wholly or in part on the land surface to perform part or all of the treatment. A land treatment facility includes a facility that performs biosolids drying, processing, or composting, but not land application performed in compliance with 18 A.A.C. 9, Article 10.

- ~~24-27~~. “Mining site” means a site assigned one or more of the following primary Standard Industrial Classification Codes: 10, 12, 14, 32, and 33, and includes noncontiguous properties owned or operated by the same person and connected by a right-of-way controlled by that person to which the public is not allowed access.
- ~~25-28~~. “Nitrogen Management Area” means an area designated by the Director for which the Director prescribes measures on an area-wide basis to control sources of nitrogen, including cumulative discharges from on-site wastewater treatment facilities, that threaten to cause or have caused an exceedance of the Aquifer Water Quality Standard for nitrate.
- ~~26-29~~. “Notice of Disposal” means a document submitted to the Arizona Department of Health Services or the Department before September 27, 1989, giving notification of a pollutant discharge that may affect groundwater.
- ~~27-30~~. “On-site wastewater treatment facility” means a conventional septic tank system or alternative system installed at a site to treat and dispose of wastewater, predominantly of human origin, generated at that site. An on-site wastewater treatment facility does not include a pre-fabricated, manufactured treatment works that typically uses an activated sludge unit process and has a design flow of 3000 gallons per day or more.
- ~~28-31~~. “Operational life” means the designed or planned period during which a facility remains operational while being subject to permit conditions, including closure requirements. Operational life does not include post-closure activities.
- ~~29-32~~. “*Person*” means an individual, employee, officer, managing body, trust, firm, joint stock company, consortium, public or private corporation, including a government corporation, partnership, association or state, a political subdivision of this state, a commission, the United States government or any federal facility, interstate body or other entity. A.R.S. § 49-201(26). For the purposes of permitting a sewage treatment facility under Article 2 of this Chapter, person does not include a homeowner’s association.
- ~~30-33~~. “Pilot project” means a short-term, limited-scale test designed to gain information regarding site conditions, project feasibility, or application of a new technology.
- ~~31-34~~. “Process solution” means a pregnant leach solution, barren solution, raffinate, or other solution uniquely associated with the mining or metals recovery process.
- ~~32-35~~. “Residential soil remediation level” means the applicable predetermined standard established in 18 A.A.C. 7, Article 2, Appendix A.
- ~~33-36~~. “Seasonal high water table” means the free surface representing the highest point of groundwater rise within an aquifer due to seasonal water table changes over the course of a year.

- ~~34.~~37. “Setback” means a minimum horizontal distance maintained between a feature of a discharging facility and a potential point of impact.
- ~~35.~~38. “Sewage” means untreated wastes from toilets, baths, sinks, lavatories, laundries, other plumbing fixtures, and waste pumped from septic tanks in places of human habitation, employment, or recreation. Sewage does not include gray water as defined in R18-9-701(4), if the gray water is reused according to 18 A.A.C. 9, Article 7.
- ~~36.~~39. “Sewage collection system” means a system of pipelines, conduits, manholes, pumping stations, force mains, and all other structures, devices, and appurtenances that collect, contain, and convey sewage from its sources to the entry of a sewage treatment facility or on-site wastewater treatment facility serving sources other than a single-family dwelling.
- ~~37.~~40. “Sewage treatment facility” means a plant or system for sewage treatment and disposal, except for an on-site wastewater treatment facility, that consists of treatment works, disposal works and appurtenant pipelines, conduits, pumping stations, and related subsystems and devices. A sewage treatment facility does not include components of the sewage collection system or the reclaimed water distribution system.
- ~~38.~~41. “Surface impoundment” means a pit, pond, or lagoon with a surface dimension equal to or greater than its depth, and used for the storage, holding, settling, treatment, or discharge of liquid pollutants or pollutants containing free liquids.
- ~~39.~~42. “Tracer” means a substance, such as a dye or other chemical, used to change the characteristic of water or some other fluid to detect movement.
- ~~40.~~43. “Tracer study” means a test conducted using a tracer to measure the flow velocity, hydraulic conductivity, flow direction, hydrodynamic dispersion, partitioning coefficient, or other property of a hydrologic system.
- ~~41.~~44. “Treatment works” means a plant, device, unit process, or other works, regardless of ownership, used for treating, stabilizing, or holding municipal or domestic sewage in a sewage treatment facility or on-site wastewater treatment facility.
- ~~42.~~45. “Typical sewage” means sewage conveyed to an on-site wastewater treatment facility in which the total suspended solids (TSS) content does not exceed 430 mg/l, the five-day biochemical oxygen demand (BOD<sub>5</sub>) does not exceed 380 mg/l, the total nitrogen does not exceed 53 mg/l, and the content of oil and grease does not exceed 75 mg/l.
- ~~43.~~46. “*Underground storage facility*” means a constructed underground storage facility or a managed underground storage facility. A.R.S. § 45-802.01(21).
- ~~44.~~47. “Waters of the United States” means:

- a. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;
- b. All interstate waters, including interstate wetlands;
- c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any waters:
  - i. That are or could be used by interstate or foreign travelers for recreational or other purposes;
  - ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - iii. That are used or could be used for industrial purposes by industries in interstate commerce;
- d. All impoundments of waters defined as waters of the United States under this definition;
- e. Tributaries of waters identified in subsections (a) through (d);
- f. The territorial sea; and
- g. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in subsections (a) through (f).

**R189103. Class Exemptions**

Class exemptions. In addition to the classes or categories of facilities listed in A.R.S. § 49250(B), the following classes or categories of facilities are exempt from the Aquifer Protection Permit requirements in Articles 1, 2, and 3 of this Chapter:

- 1. Facilities that treat, store, or dispose of hazardous waste and have been issued a permit or have interim status, under the Resource Conservation and Recovery Act (P.L. 94580; 90 Stat. 2796; 42 U.S.C. 6901 et seq., as amended), or have been issued a permit according to the hazardous waste management rules adopted under 18 A.A.C. 8, Article 2;
- 2. Underground storage tanks that contain a regulated substance as defined in A.R.S. § 49-1001;
- 3. Facilities for the disposal of solid waste, as defined in A.R.S. § 49-701.01, that are located in unincorporated areas and receive solid waste from four or fewer households;
- 4. Land application of biosolids in compliance with 18 A.A.C. 9, Articles 9 and 10; and

5. CCR Units that were in existence as of January 1, 2019, and which are governed by 40 C.F.R. Part 257, Subpart D. This exemption for CCR Units shall only extend until such time as both of the following are met, as applicable to a given CCR Unit:
- a. Regulations are approved by the U.S. Environmental Protection Agency, in accordance with 42 U.S.C. § 6945(d)(1), for the issuance of permits governing CCR Units, and
  - b. The Director issues a permit to a given CCR Unit, which incorporates terms at least as protective as 40 C.F.R. Part 257, Subpart D.

## 49-250. Exemptions

- A. The director may, by rule, exempt specifically described classes or categories of facilities from the aquifer protection permit requirements of this article on a finding either that there is no reasonable probability of degradation of the aquifer or that aquifer water quality will be maintained and protected because the discharges from the facilities are regulated under other federal or state programs that provide the same or greater aquifer water quality protection as provided by this article.
- B. The following are exempt from the aquifer protection permit requirement of this article:
1. Household and domestic activities.
  2. Household gardening, lawn watering, lawn care, landscape maintenance and related activities.
  3. The noncommercial use of consumer products generally available to and used by the public.
  4. Ponds used for watering livestock and wildlife.
  5. Mining overburden returned to the excavation site including any common material that has been excavated and removed from the excavation site and has not been subjected to any chemical or leaching agent or process of any kind.
  6. Facilities used solely for surface transportation or storage of groundwater, surface water for beneficial use or reclaimed water that is regulated pursuant to section 49-203, subsection A, paragraph 6 for beneficial use.
  7. Discharge to a community sewer system.
  8. Facilities that are required to obtain a permit for the direct reuse of reclaimed water.
  9. Leachate resulting from the direct, natural infiltration of precipitation through undisturbed regolith or bedrock if pollutants are not added to the leachate as a result of any material or activity placed or conducted by man on the ground surface.
  10. Surface impoundments used solely to contain storm runoff, except for surface impoundments regulated by the federal clean water act.
  11. Closed facilities. However, if the facility ever resumes operation the facility shall obtain an aquifer protection permit and the facility shall be treated as a new facility for purposes of section 49-243.
  12. Facilities for the storage of water pursuant to title 45, chapter 3.1 unless reclaimed water is added.
  13. Facilities using central Arizona project water for underground storage and recovery projects under title 45, chapter 3.1, article 6.
  14. Water storage at a groundwater saving facility that has been permitted under title 45, chapter 3.1.
  15. Application of water from any source, including groundwater, surface water or wastewater, to grow agricultural crops or for landscaping purposes, except as provided in section 49-247.
  16. Discharges to a facility that is exempt pursuant to paragraph 6 if those discharges are regulated pursuant to 33 United States Code section 1342.
  17. Solid waste and special waste facilities when rules addressing aquifer protection are adopted by the director pursuant to section 49-761 or 49-855 and those facilities obtain plan approval pursuant to those rules. This exemption shall only apply if the director determines that aquifer water quality standards will be maintained and protected because the discharges from those facilities are regulated under rules adopted pursuant to section 49-

761 or 49-855 that provide aquifer water quality protection that is equal to or greater than aquifer water quality protection provided pursuant to this article.

18. Facilities used in:

- (a) Corrective actions taken pursuant to chapter 6, article 1 of this title in response to a release of a regulated substance as defined in section 49-1001 except for those off-site facilities that receive for treatment or disposal materials that are contaminated with a regulated substance and that are received as part of a corrective action.
- (b) Response or remedial actions undertaken pursuant to article 5 of this chapter or pursuant to CERCLA.
- (c) Corrective actions taken pursuant to chapter 5, article 1 of this title or the resource conservation and recovery act of 1976, as amended (42 United States Code sections 6901 through 6992).
- (d) Other remedial actions that have been reviewed and approved by the appropriate governmental authority and taken pursuant to applicable federal or state laws.

19. Municipal solid waste landfills as defined in section 49-701 that have solid waste facility plan approval pursuant to section 49-762.

20. Storage, treatment or disposal of inert material.

21. Structures that are designed and constructed not to discharge and that are built on an impermeable barrier that can be visually inspected for leakage.

22. Pipelines and tanks designed, constructed, operated and regularly maintained so as not to discharge.

23. Surface impoundments and dry wells that are used to contain storm water in combination with discharges from one or more of the following activities or sources:

- (a) Firefighting system testing and maintenance.
- (b) Potable water sources, including waterline flushings.
- (c) Irrigation drainage and lawn watering.
- (d) Routine external building wash down without detergents.
- (e) Pavement wash water where no spills or leaks of toxic or hazardous material have occurred unless all spilled material has first been removed and no detergents have been used.
- (f) Air conditioning, compressor and steam equipment condensate that has not contacted a hazardous or toxic material.
- (g) Foundation or footing drains in which flows are not contaminated with process materials.
- (h) Occupational safety and health administration or mining safety and health administration safety equipment.

24. Industrial wastewater treatment facilities designed, constructed and operated as required by section 49-243, subsection B, paragraph 1 and using a treatment system approved by the director to treat wastewater to meet aquifer water quality standards prior to discharge, if that water is stored at a groundwater storage facility pursuant to title 45, chapter 3.1.

25. Any point source discharge caused by a storm event and authorized in a permit issued pursuant to section 402 of the clean water act.

26. Except for class V wells, any underground injection well covered by a permit issued under article 3.3 of this chapter or under 42 United State Code section 300h-1(c). This exemption does not apply until the date that the United States environmental protection agency approves the department's underground injection control permit program established pursuant to article 3.3 of this chapter.

**INDUSTRIAL COMMISSION (R19-0903)**

Title 20, Chapter 5, Article 2, Self-Insurance Requirements for Individual Employers and Workers' Compensation Pools Organized under A.R.S. §§ 11-952.01(B) and 41-462.01.



# GOVERNOR'S REGULATORY REVIEW COUNCIL

## ATTORNEY MEMORANDUM - FIVE-YEAR REVIEW REPORT

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**MEETING DATE:** September 4th, 2019

**TO:** Members of the Governor's Regulatory Review Council (Council)

**FROM:** Council Staff

**DATE:** July 30, 2019

**SUBJECT: INDUSTRIAL COMMISSION OF ARIZONA (F19-0903)**  
Title 20, Chapter 5, Article 2, Self-Insurance Requirements for Individual Employers and Workers' Compensation Pools Organized Under A.R.S. §§ 11-952.01(B) and 41-621.01

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### **Summary**

This five year review report (5YRR) from the Industrial Commission of Arizona (Commission) relates to rules in Title 20, Chapter 5, Article 2, regarding Self-Insurance Requirements for Individual Employers and Workers' Compensation Pools Organized under A.R.S. §§ 11-952.01(B) and 41-621.01.

In the previous 5YRR for these rules, the Commission proposed to revise Article 2 by removing language that is duplicative of rules in Article 11 (Self-Insurance for Individual Employers) by May 2018. However, the Commission did not complete its prior proposed course of action due to significant staffing turnover and other higher priority rulemakings.

### **Proposed Action**

The Commission plans to review Articles 2, 7 and 11 within the next two years and conduct rulemaking(s) to resolve inconsistencies and duplicities and address clarity issues in the rules contained in those articles. The Commission indicates that after

finishing the 5YRR for Article 11, the Commission will begin a global review of Articles 2, 7, 11, to comprehensively repeal each article in order to streamline the rules by reducing duplicity and clarity problems. In Article 2, the Commission plans to revise the following rules:

- **R20-5-203** (Self-Insurance Renewal Application Requirements);
- **R20-5-204** (Denial of Authorization to Self-Insure);
- **R20-5-205** (Resolution of Authorization);
- **R20-5-209** (Authorization Limitation);
- **R20-5-210** (Continuation of Authorization);
- **R20-5-215** (Fixed Premium Plan: Definition; Formula; Eligibility);
- **R20-5-216** (Ex-medical Plan: Definition; Formula; Eligibility; Modification);
- **R20-5-217** (Guaranteed Cost Plan: Definition; Formula; Eligibility; Cost of Calculation);
- **R20-5-218** (Retrospective Rating Plan: Definition; Formula; Eligibility);
- **R20-5-219** (Payment of Taxes by Self-insurers);
- **R20-5-220** (Basis; Definitions);
- **R20-5-221** (Book and Record Review by the Commission);
- **R20-5-223** (Time-frames for Processing Initial and Renewal Applications for Authorization to Self-insure); and
- **R20-5-224** (Computation of Time).

**1. Has the agency analyzed whether the rules are authorized by statute?**

Yes. The Commission cites to both general and specific authority for the rules.

**2. Summary of the agency's economic impact comparison and identification of stakeholders:**

The Commission does not believe that the current estimated economic, small business, and consumer impact of the rules is substantially different from that set out in the 1998 Economic Impact Statement, as cited in the 2014 5YRR. Stakeholders include the Commission, employers, and workers' compensation pools organized under A.R.S. § 41-621.01 (A) (contractors licensed to do work for the state).

**3. Has the agency analyzed the costs and benefits of the rulemaking and determined that the rules impose the least burden and costs to those who are regulated?**

The Commission believes the probable benefits of the rules outweigh the probable costs. In addition, the Commission believes that the rules imposed the least burden and costs on regulated persons and entities. The Commission further explains a study regarding worker's compensation coverage and self insured premiums in Item 11 of the 5YRR.

4. **Has the agency received any written criticisms of the rules over the last five years?**

No. The Commission did not receive any written criticisms of these rules over the last five years.

5. **Has the agency analyzed the rules' clarity, conciseness, and understandability, consistency with other rules and statutes, and effectiveness?**

Yes. The Commission indicates that most rules in Article 2 are clear, concise, and understandable. However, the Commission indicates that the following rules could be revised to increase clarity, conciseness, and understandability:

- **R20-5-202, R20-5-203, R20-5-204:** The Commission indicates that sections of these rules are duplicative of rules in Article 11 and should be repealed.
- **R20-5-220:** The Commission indicates that this rule is outdated because the State Compensation Fund no longer exists.

The Commission indicated that many rules within Article 2 are inconsistent with other Commission rules because of the addition of Article 11 in 2005. The following rules are inconsistent with rules in Article 11: R20-5-209, R20-5-210, R20-5-215, R20-5-216, R20-5-217, R20-5-218, R20-5-219, R20-5-221, R20-5-223, and R20-5-224.

The Commission indicates that the rules in Article 2 are effective due to its experience enforcing the rules and the significant number of Arizona employees covered by pools under Article 2.

6. **Has the agency analyzed the current enforcement status of the rules?**

Yes. The Commission indicates that the rules are enforced as written.

7. **Are the rules more stringent than corresponding federal law and, if so, is there statutory authority to exceed the requirements of federal law?**

No. The Commission indicates that no federal law corresponds with Article 2.

8. **For rules adopted after July 29, 2010, do the rules require a permit or license and, if so, does the agency comply with A.R.S. § 41-1037?**

Not applicable. The Commission indicates that no rules adopted after July 29, 2010 require the issuance of a regulatory permit, license, or agency authorization.

## 9. **Conclusion**

Although not all of the rules under review are clear, concise, understandable, and effective, the Commission identifies several options to increase their clarity, conciseness, understandability, and effectiveness.

As indicated above, the Commission intends to amend the following rules to increase effectiveness and reduce overlap with Article 11: R20-5-202, R20-5-203, R20-5-204, R20-5-209, R20-5-210, R20-5-215, R20-5-216, R20-5-217, R20-5-218, R20-5-219, R20-5-220, R20-5-221, R20-5-223, and R20-5-224. If the Commission's 5YRR for Article 11 is approved and an exemption to the rulemaking moratorium is granted, the Commission anticipates conducting a rulemaking within the next two years. The Commission's justification for this timeframe is adequate. Council staff recommends approval of this report.

**THE INDUSTRIAL COMMISSION OF ARIZONA  
OFFICE OF THE DIRECTOR**



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June 26, 2019

Sent via e-mail to [grrc@azdoa.gov](mailto:grrc@azdoa.gov)

Nicole Sornsin, Chair  
Governor's Regulatory Review Council  
Arizona Department of Administration  
100 North 15th Avenue, Suite 305  
Phoenix, Arizona 85007

Re: A.AC. Title 20, Chapter 5, Article 2, Five-year Review Report

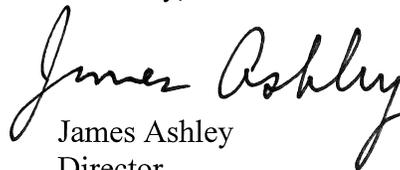
Dear Ms. Sornsin:

The Industrial Commission of Arizona (the "Commission") submits for approval by the Governor's Regulatory Review Council (the "Council") the attached Five-year Review Report on 20 A.AC. 5, Article 2. The Commission has timely filed this report on or before Friday, June 28, 2019.

An electronic copy of this cover letter, the report, the rules being reviewed, the general and specific statutes authorizing the rules, and economic impact statements is concurrently submitted by e-mail to Krishna Jhaveri. The Commission believes that the report complies with the requirements of A.R.S. § 41-1056.

The Commission has reviewed all rules in Article 2 and has complied with A.R.S. § 41-1091, which requires the Commission to annually publish a directory summarizing the subject matter of all currently applicable rules and substantive policy statements, by posting directories of its current rules and substantive policy statements on the Commission's website, as required by A.R.S. § 41-1091.01(1) & (2). Should you have any questions concerning the report, please contact Chief Counsel Gaetano Testini at (602) 542-5905.

Sincerely,

  
James Ashley  
Director

SAR/kh  
Enclosure

**FIVE-YEAR-REVIEW REPORT**  
**TITLE 20. COMMERCE, FINANCIAL INSTITUTIONS, AND INSURANCE**  
**CHAPTER 5. INDUSTRIAL COMMISSION OF ARIZONA**  
**ARTICLE 2. SELF-INSURANCE REQUIREMENTS FOR INDIVIDUAL**  
**EMPLOYERS AND WORKERS' COMPENSATION POOLS ORGANIZED**  
**UNDER A.R.S. §§ 11-952.01(B) AND 41-621.01**

**FIVE-YEAR-REVIEW REPORT**  
**TITLE 20. COMMERCE, FINANCIAL INSTITUTIONS, AND INSURANCE**  
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4.	GENERAL AND SPECIFIC STATUTES	Attached

## **FIVE-YEAR REVIEW SUMMARY**

The Industrial Commission of Arizona (the “Commission”) was created in 1925 as a result of legislation (Arizona Workman’s Compensation Act) implementing the constitutional provisions establishing a workers’ compensation system. From 1925 to 1969, the workers’ compensation system consisted of the State Compensation Fund, which was then a part of the Commission, and self-insured employers which generally comprised the mining and the railroad companies. In 1969, the workers’ compensation system reorganized and expanded to include private insurance companies. The State Compensation Fund was split off from the Commission and established as a separate agency responsible for providing workers’ compensation insurance coverage. The Commission retained both its responsibility as the file of record and its authority over the processing of workers’ compensation claims. Since that time, the role of the Commission has grown to include other labor-related issues such as occupational safety and health, youth employment laws, resolution of wage-related disputes, minimum wage, vocational rehabilitation, workers’ compensation coverage for claimants of uninsured employers, and self-insured employers.

### **Certification Regarding Compliance with A.R.S. § 41-1091**

In the cover letter for this report, the Commission’s Director certifies that the Commission has complied with A.R.S. § 41-1091 with respect to substantive policy statements relating to the rules in Article 2, as well as other substantive policy statements in the Commission’s online Substantive Policy Statement Directory.

### **About Article 2**

Until 1997, Arizona law mandated that employers “secure workers’ compensation to their employees” by either: (1) acquiring insurance from a carrier licensed to write workers’ compensation insurance in the state or (2) obtaining authorization from the Industrial Commission of Arizona (Commission) to self-insure. *See* A.R.S. § 23-961(A). In 1997, the Arizona Legislature added “self-insurance pools” as a third mechanism for securing workers’ compensation. *See* A.R.S. §§ 23-961(A), 23-961.01. Specifically, A.R.S. § 23-961.01(A) permits two or more employers who are engaged in similar industries to form

a workers' compensation pool to provide for the direct payment and administration of workers' compensation claims.

Title 20, Chapter 5, Article 2 of the Arizona Administrative Code sets forth the requirements for self-insurance for individual self-insured employers, public agency pools (under A.R.S. § 11-952.01(B)), and state contractor pools (under A.R.S. § 41-621.01). These rules have been in effect since July 6, 1993. A.R.S. § 23-961.01, the primary governing statute, has been amended only once in 1999 to remove an exemption from general laws relating to nonprofit corporations and make non-substantive amendments to the statute. In 2005, the Commission created Article 11 to provide clarity regarding rules that applied only to self-insured individual employers and intended to leave Article 2 to address self-insurance pools created under A.R.S. §§ 11-952.01(B) or 41-621.01.

**FIVE-YEAR-REVIEW REPORT**  
**TITLE 20. COMMERCE, FINANCIAL INSTITUTIONS, AND INSURANCE**  
**CHAPTER 5. INDUSTRIAL COMMISSION OF ARIZONA**  
**ARTICLE 2. SELF-INSURANCE REQUIREMENTS FOR INDIVIDUAL**  
**EMPLOYERS AND WORKERS' COMPENSATION POOLS ORGANIZED**  
**UNDER A.R.S. §§ 11-952.01(B) AND 41-621.01**

**1. General and specific statutes authorizing the rules, including any statute that authorizes the agency to make rules.**

The rules in Article 2 have general and specific authorization under A.R.S. §§ 23-107(A)(1), 23-108.03(B)(1), 23-961(G), 23-961(B) & (F), 41-621.01, and 11-952.01.

A.R.S. § 23-107(A)(1) provides that the Commission “has full power, jurisdiction, and authority to formulate and adopt rules . . . for effecting the purposes of [A.R.S. Title 23, Chapter 1, Article 1].” A.R.S. § 23-108.03(B)(1) provides that “[a]ny powers and duties prescribed by law to the commission in [A.R.S. Title 23, Chapters 1, 2 and 6]” may, with certain exceptions (including rulemaking), “be delegated . . . to the director or any of its department heads or assistants.”

A.R.S. § 23-961(G) provides that every “self-insured employer, including workers’ compensation pools, on or before March 31 of each year shall pay a tax of not more than three percent of the premiums that would have been paid . . . during the preceding calendar year.” A.R.S. § 23-1065(A) provides that the Commission may direct payment into the state treasury of not to exceed one percent of the premiums received by private insurance carriers during the immediately preceding calendar year. Finally, under A.R.S. § 23-1065(F), the Commission is permitted to levy an additional assessment of up to a half percent of the premiums, if the apportionment annual reserved liabilities exceed six million dollars. Under A.R.S. § 23-961(G), the Commission has authority to “adopt rules that specify the premium plans and methods to be used for the calculation of rates and premiums and that shall be the basis for the taxes assessed to self-insured employers.”

A.R.S. § 23-961.01(B) provides the Commission with broad authority to “adopt rules as necessary to carry out the purposes of [the] section.” With respect to rules related to safeguarding the solvency of pools and guaranteeing that injured workers receive workers’ compensation benefits under Title 23, Chapter 6, A.R.S. § 23-961.01(F) specifies that the rules must “include at a minimum, matters pertaining to classification and rating, loss reserves, investments, financial security including minimum and combined premiums, combined net worth and other indicia necessary for protection from insolvency, specific and aggregate excess insurance, group homogeneity and assessments necessary for participation in and administration of the workers’ compensation system.”

A.R.S. § 41-621.01(A) provides that the Commission may “by rule, resolution or order, . . . adopt requirements for the administration of a workers’ compensation pool under [§ 41-621.01 . . .]” and that a workers’ compensation pool formed under § 41-621.01 is subject to “rules adopted pursuant to” Title 23, Chapter 6. Similarly, A.R.S. § 11-952.01 provides that a workers’ compensation pool formed under § 11-952.01 is subject to “rules adopted pursuant to” Title 23, Chapter 6.

**2. Objective of the rules, including the purposes for the existence of the rules.**

Article 2 sets forth the frame work for individual self-insured employers, public pools, and state contract pools. Specifically, Article 2 outlines the requirements for new applications and renewals; the Commission’s authorization, limitation, and revocation process; the requirement for guaranty bonds or alternatively securities; ratings for specific plans; and the Commissions right to record and book reviews along with audits. The Commission’s overarching objectives regarding Article 2, in no particular order with respect to priority, are to: (1) simplify the existing procedural framework for the Commission’s Administration Division to authorize self-insurance for the purpose of payment and administration of workers’ compensation claims; (2) reduce regulatory burden imposed on self-insurance pools created under A.R.S. §§ 11-952.01(B) or 41-621.01; (3) further the objectives of A.R.S. § 23-961, which include safeguarding the solvency of self-insurance pools, guaranteeing that injured workers received workers’

compensation benefits, and facilitation of competition, loss control, and an employer-tailored safety programs; and (4) provide self-insurance pools created under A.R.S. §§ 11-952.01(B) or 41-621.01 with the same opportunity for a long-term reduction in the costs for workers' compensation insurance experienced by large self-insured employers.

R20-5-201. Definition of Self-insurer

R20-5-201. Defines the term "self-insurer" or "self-insured," as utilized in A.A.C. R20-5-201 through R20-5-224.

R20-5-202. Self-insurance Application; Requirements

R20-5-202. Sets forth the process for an initial application for self-insured status for both individual employers and workers' compensation pools.

R20-5-203. Self-insurance Renewal Application; Requirements

R20-5-203. Sets forth the process and the requirements for renewal applications for both individual employers and workers' compensation pools.

R20-5-204. Denial of Authorization to Self-insure

R20-5-204. Provides a process for initiating an appeal under A.R.S. § 23-945 if the Commission issues an Order denying an initial or renewal application for authorization to self-insure.

R20-5-205. Resolution of Authorization

R20-5-205. Provides for the Commission to issue a Resolution of Authorization to self-insure that will be conditioned upon the receipt of the appropriate securities, as specified by A.R.S. § 23-961.

R20-5-206. Posting of Guaranty Bond; Effective Date; Execution; Subsidiary Company Guaranty Bond; Parent Company Guaranty; Bond Amounts.

- R20-5-206. Sets forth the process for posting a guaranty bond as security under A.R.S. § 23-961 to applicants requesting authorization to self-insure. Specifies the amount of the guaranty bond required to be posted and how the amount of the guaranty bond is calculated.
- R20-5-207. Posting of Securities in Lieu of Guaranty Bond; Registration; Deposit
- R20-5-207. Provides applicants requesting to self-insure with an alternative to posting the guaranty bond required under R20-5-206 by allowing them to post U.S. Bonds.
- R20-5-208. Posting Other Securities
- R20-5-208. Provides notice to self-insure applicants that, if the Commission accepts any securities other than those specified in R20-5-207, those securities must be registered in the same manner required in R20-5-207.
- R20-5-209. Authorization Limitation
- R20-5-209. Provides notice to self-insurers of the limitation period of a Resolution of Authorization to self-insure issued by the Commission.
- R20-5-210. Continuation of Authorization
- R20-5-210. Provides notice to self-insurers that the existing authorization to self-insure will continue if proper application is made under R20-5-203 and until the Commission issues a determination on the entity's renewal application.
- R20-5-211. Revocation of Authorization; Notice of Insolvency; Notice of Change of Ownership
- R20-5-211. Provides notice of the conditions for revocation and consequences if a self-insurer fails to notify the Commission that the self-insurer's assets are insufficient to discharge its legal liabilities.

- R20-5-212. Notice of Revocation of Resolution of Authorization to Self-insure
- R20-5-212. Sets forth the process that the Commission follows to give notice of its decision to revoke the Resolution to Authorization to self-insure.
- R20-5-213. Substitution of Bond or Securities
- R20-5-213. Provides notice to self-insurers that any substitution of bond or securities will be returned unless the Commission provides written notice that it will accept the substituted bond or security.
- R20-5-214. Rating Plans Available for Self-insurers
- R20-5-214. Provides notice to self-insurers of the rating plans for calculating the taxes required under A.R.S. §§ 23-961 and 23-1065.
- R20-5-215. Fixed Premium Plan: Definition; Formula; Eligibility
- R20-5-215. Defines a “Fixed Premium Plan” and provides the formula used to calculate a Fixed Premium Plan.
- R20-5-216. Ex-medical Plan: Definition; Formula; Eligibility; Modification
- R20-5-216. Defines an “Ex-medical Plan” and provides notice to self-insurers of the formula used to calculate an Ex-medical Plan for self-insurers that are eligible to utilize this Plan.
- R20-5-217. Guaranteed Cost Plan: Definition; Formula; Eligibility; Cost of Calculation
- R20-5-217. Defines a “Guaranteed Cost Plan” and provides the formula used to calculate a Guaranteed Cost Plan.
- R20-5-218. Retrospective Rating Plan: Definition; Formula; Eligibility
- R20-5-218. Defines a “Retrospective Rating Plan” and provides the formula used to calculate a Retrospective Rating Plan.

- R20-5-219. Payment of Taxes by Self-insurers
- R20-5-219. Provides notice of the obligations to pay taxes and the penalty for failure to pay taxes.
- R20-5-220. Basis; Definitions
- R20-5-220. Provides notice that the Commission uses the same rating system used by the State Compensation Fund.
- R20-5-221. Book and Record Review by the Commission
- R20-5-221. Provides notice that all reports, books and records that they maintain are subject to review by the Commission.
- R20-5-222. Audits; Cost of Audit
- R20-5-222. Provides notice that the Commission may perform or have performed, an audit of the payroll, loss payment and loss reserve records for any self-insurer and that the self-insurer will be responsible for the cost of the audit.
- R20-5-223. Time-frames for Processing Initial and Renewal Applications for Authorization to Self-insure
- R20-5-223. Provides the Commission's time frames for processing applications.
- R20-5-224. Computation of Time
- R20-5-224. Describes how the Commission calculates time periods prescribed or allowed by the rules in Article 2.

3. **Effectiveness of the rules in achieving their objectives, including a summary of any available data supporting the conclusion reached.**

The rules reviewed are effective in achieving their respective objectives. This determination is based on the Commission's experience using the rules and the

significant number of employees covered by pools covered by Article 2. Currently, four self-insurance pools formed pursuant to A.R.S. § 11-952.01. These public self-insurance pools cover 12 counties, 70 cities and towns, 229 school districts, and 4 community colleges. These public self-insurance pools cover a significant number of employees within Arizona.

**4. Consistency of the rules with state and federal statutes and other rules made by the agency, and a listing of the statutes or rules used in determining the consistency.**

Except as noted below, the rules reviewed are consistent with state statutes and other Commission rules. The addition of Article 11 in 2005 created the following inconsistent and duplicative rules:

R20-5-209 is inconsistent with R20-5-1105 (inconsistent duration of Resolution of Authorization).

R20-5-210 is inconsistent with R20-5-1105 (inconsistent duration of Resolution of Authorization).

R20-5-215 is inconsistent with R20-5-1116 (Fixed Premium Plans are inconsistent for self-insurance pools and self-insured individual employers).

R20-5-216 is inconsistent with R20-5-1117 (Ex-medical Plans should be identical for self-insurance pools and individual employers).

R20-5-217 is inconsistent with R20-5-1118 (Guaranteed Cost Plans should be identical for self-insurance pools and individual employers).

R20-5-218 is inconsistent with R20-5-1119 (Retrospective-Rating Plans should be identical for self-insurance pools and individual employers).

R20-5-219 is inconsistent with R20-5-1120 (payment of taxes should be identical for self-insurance pools and self-insured individual employers).

R20-5-220 is outdated, as the State Compensation Fund ceased to exist in 2013.

R20-5-221 is inconsistent with R20-5-1122 (book and record review should be identical for self-insurance pools and self-insured individual employers).

R20-5-223 is inconsistent with R20-5-1106 (time frames are inconsistent).

R20-5-224 is inconsistent with R20-5-1102 (inconsistent written request requirements).

There are no federal statutes or rules specific to self-insurance requirements for workers' compensation pools.

**5. Agency enforcement policy, including whether the rules are currently being enforced and, if so, whether there are any problems with enforcement.**

The rules reviewed are enforced as written. The Commission is not aware of any problems with enforcement.

**6. Clarity, conciseness, and understandability of the rules.**

With the exceptions of R20-5-202, R20-5-203, and R20-5-204, the rules reviewed are clear, concise, and understandable. The following rules are duplicative and confusing for the following reasons:

R20-5-202 Subsection B of the rule was moved to Article 11 in 2004 (R20-5-1101 through R20-5-1136), which created the framework for individual self-insurance applications. Subsection B of the rule should have been deleted.

R20-5-203 The portion of the rule related to individual applications for renewal is contained in Article 11.

R20-5-204 Portions of this rule are duplicative of Article 11.

R20-5-220 This rule references the State Compensation Fund that ceased to exist in 2013.

**7. Written criticisms of the rules received by the agency within the five years immediately preceding the five-year review report.**

There have been no written criticisms of the rules received by the agency within the last 5 years.

8. **A comparison of the estimated economic, small business, and consumer impact of the rules with the economic, small business, and consumer impact statement prepared on the last making of the rules or, if no economic, small business, and consumer impact statement was prepared on the last making of the rules, an assessment of the actual economic, small business, and consumer impact of the rules.**

The most recent Economic Impact Statement is from 1998. The Commission does not believe that the current estimated economic, small business, and consumer impact of the rules is substantially different from that set out in the 1998 Economic Impact Statement, as cited in the 2014 Five Year Review Report.

9. **Any analysis submitted to the agency by another person regarding the rules' impact on this state's business competitiveness as compared to the competitiveness of businesses in other states.**

No business competitiveness analysis has been submitted to the Commission regarding Article 2.

10. **If applicable, whether the agency completed the course of action indicated in the agency's previous five-year-review report.**

The previous Five Year Review Report on Article 2 proposed revisions to the rule by May 2018. Specifically, the Commission stated its intent to revise Article 2 to remove language that is duplicative of rules in Article 11. However, significant staffing turnover and other higher priority rulemaking within the agency prevented the revisions from being timely completed.

**11. A determination after analysis that probable benefits outweigh probable costs and that the rules impose the least burden and costs on persons regulated.**

The probable benefits of the rules in Article 2 outweigh the probable costs. In addition, the Commission believes that the rules impose the least burden and costs on regulated persons/entities in the sense that they are in driver's seat for their worker's compensation coverage.

This means that they control their risk and safety program, which effects and mitigates losses, which saves them from paying money on potential losses. This in turn reduces reserves, (it is also notable that when a pool administers its own claims, which all of them do, it controls the reserves set), which allows them to post a lower security deposit. If the negotiable instrument they use requires collateral, then the lower security deposit allows them to reduce their collateral.

In a traditional work comp policy, the carrier often increases the payroll rates to ensure a higher manual premium. This increase with the increased reserves and paid amounts set by the carrier increases the Experience Modification Rate (EMod). The increase in payroll rates and EMod ensures a higher premium. The carrier calculates a premium to cover losses and make a profit. The pool then has to pay higher taxes on that premium.

When a pool is self-insured a premium is only calculated to assess a tax. So they do not pay a premium at all. In addition that tax is lower because the ICA uses a pure unmanipulated payroll rate to calculate a premium opposed to an insurance carrier rate that is higher. If an EMod is used, it is often lower due to the lower pure base payroll rates.

These savings are then reinvested in the pool to be used in other activities, including investments and improving the safety and risk program.

12. **A determination after analysis that the rule is not more stringent than a corresponding federal law unless there is statutory authority to exceed the requirements of that federal law.**

The rules in Article 2 implement state law, specifically A.R.S. §§ 23-961, 23-961.01, 41-621.01, and 11-952.01. There is no corresponding federal law.

13. **For rules adopted after July 29, 2010, that require issuance of a regulatory permit, license or agency authorization, whether the rule complies with A.R.S. § 41-1037.**

There have been no rules adopted after July 29, 2010, which require the issuance of a regulatory permit, license or agency authorization.

14. **Proposed course of action.**

The Commission plans to globally review Articles 2, 7 and 11, and initiate rulemaking within the next two years to resolve inconsistency and duplicity/clarity problems discussed in Sections 4 and 6 above. Specifically, the Commission has identified the following rules (discussed above) that require action: R20-5-203, R20-5-204, R20-5-205, R20-5-209, R20-5-210, R20-5-215, R20-5-216, R20-5-217, R20-5-218, R20-5-219, R20-5-220, R20-5-221, R20-5-223, and R20-5-224.

Although the Commission could potentially initiate the rulemaking within the next year, the Commission believes that a two year period is more appropriate. The Commission is currently preparing the Five Year Review for Article 11. Once the Five Year Review for Article 11 is approved the Commission will conduct a global review of Articles 2, 7 and 11 and draft an initial outline of a comprehensive plan to repeal Articles 2, 7 and 11 and replace with a new article that would streamline the rules related to self-insurance and pools to resolve inconsistency and duplicity/clarity problems. The Commission will

begin stakeholder outreach and meetings within 6 months. The stakeholders are a very involved group and the Commission expects they will be heavily involved in the drafting of all proposed new rules. Thus, it is expected that the time period within which the Commission will solicit stakeholder input would take approximately one year. Once the Commission has a draft of the new article it will need to be placed on the Commission Meeting agenda and voted on at the open meeting in which again stakeholders and the public will have an opportunity to comment on the new article. From there, the Commission will need to seek an exception from the Governor under Executive Order 2019-01. The last time the Commission sought an exception, it took approximately three months to receive it. Thus, we are building in a three month buffer before we initiate rulemaking for the new article or alternatively amendments to Articles 2, 7 and 11.

**ARTICLE 2**  
**CURRENT RULES**

**Article 2. SELF-INSURANCE REQUIREMENTS FOR INDIVIDUAL EMPLOYERS AND WORKERS'  
COMPENSATION POOLS ORGANIZED UNDER A.R.S. §§ 11-952.01(B) AND 41-621.01**

**R20-5-201. Definition of Self-insurer**

"Self-insurer" or "self-insured" means an individual employer or a workers' compensation pool as defined in A.R.S. §§ 11-952.01(B) or 41-621.01(A) that is authorized by the Commission to self-insure for workers' compensation.

**Historical Note**

Former Rule 1. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-201 recodified from R4-13-201 (Supp. 95-1). Amended effective October 9, 1998 (Supp. 98-4).

**R20-5-202. Self-insurance Application; Requirements**

- A. All applicants who initially apply for self-insurance on or after the certification of the 1993 rule amendments by the Attorney General and filing of those amendments with the Secretary of State shall:
1. Complete, date, sign, and file with the Commission an application for authority to self-insure on a form that can be obtained from the Commission and contains the following information:
    - a. Applicant identification including names, addresses, corporation, subsidiary, and partnership information;
    - b. Nature of business;
    - c. History of business in Arizona and elsewhere;
    - d. Payroll data;
    - e. Work force data;
    - f. Insurance data;
    - g. Claims history;
    - h. Method proposed to finance self-insurance liability and reserves;
    - i. Program for compliance with occupational safety and health standards, rules, and laws of this state;
    - j. Program to finance medical, surgical, and hospital benefits including information on organization responsible for processing claims;
    - k. Names and addresses of Arizona agents upon whom legal notice of proceedings before the Commission is served;
    - l. Authorization for signator;
    - m. Authorization by corporate resolution, or board of trustees resolution, if applicable; and
    - n. Statement attesting to the truthfulness of the information in the application.
  2. Maintain an office in Arizona. Payroll reports and other materials relating to the calculation of premiums shall be readily available at this office for inspection and audit by the Commission or its authorized representative.
  3. In the first year of operation, obtain a guaranty bond and specific excess insurance or excess of loss insurance in an amount as provided in R20-5-206(D)(1) to adequately protect against catastrophic losses. Starting with the second year of operation, an individual self-insurer shall choose one of the two options provided in R20-5-206(D). The insurance shall contain:
    - a. A 60-day notice of termination; and
    - b. A provision that insolvency of the self-insurer does not relieve the excess insurer of liability assumed under the contract.
- B. An individual applicant for self-insurance that is not a member of a workers' compensation pool, in addition to complying with subsection (A) of this rule, shall:
1. Have been engaged in business in Arizona for at least five years prior to the date of application.
  2. Provide an annual payroll in this state of at least \$2,000,000 (this payroll may include the combined payrolls of all subsidiary companies carried under the self-insurance authorization; the requirements of this subsection do not apply to political subdivisions of this state) and meet either of the following thresholds:
    - a. Total reported assets of at least \$50,000,000; or
    - b. Combination of \$10,000,000 in net worth and a cash flow ratio of .25.
  3. Provide the Commission with an internally certified copy of the employer's audited or reviewed financial statements for the most current and prior two years. The Commission's review of the applicant's financial statements includes the following:
    - a. Calculation of the following ratios:
      - i. Cash Flow Ratio - Cash flow from operations divided by current liabilities which is an indication of the ability of the applicant to meet current obligations out of cash flow.
      - ii. Current Ratio - Current assets divided by current liabilities which indicate the applicant's ability to service current obligations.
      - iii. Debt Status Ratio - Net worth divided by total liabilities which indicate the proportion of funds supplied by the applicant relative to the funds supplied by creditors.
      - iv. Profitability Ratio - Profit before taxes, divided by total assets, multiplied by 100 which measures the return on assets and the efficiency of assets employed by the firm.
      - v. Quick Ratio - Cash and equivalents, plus trade receivables, divided by current liabilities which express the degree to which the applicant's liabilities are covered by the most liquid current assets.

- vi. Working Capital Ratio - Working capital divided by sales which measures the sufficiency of working capital to support sales.
  - b. Comparison of the applicant's ratios with the ratios of existing self-insurers in the same or a closely related industry.
  - c. Review of notes to the financial statement.
  - d. Review of management report of operation and other information published in the annual statement.
  - 4. Provide the Commission with the names of all other jurisdictions in which it has been granted authority to self-insure and the effective dates of such authorization.
  - 5. Provide the Commission with the names of all other jurisdictions in which its application to self-insure has been denied or its authority to self-insure has been suspended or revoked, and the dates and reasons for such denials, suspensions, or revocations.
- C. In addition to the requirements of subsection (A), a workers' compensation pool applicant for self-insurance shall:
- 1. File with the application for self-insurance a completed indemnity agreement on a form that can be obtained from the Commission, signed by a duly authorized agent of the pool jointly and severally binding the pool and each of its members to comply with the provisions of A.R.S. Title 23, Chapter 6 and rules adopted pursuant to Chapter 6. The indemnity agreement shall contain the following information:
    - a. Name of the group, with names of trustees and members;
    - b. Amount of the corporate surety bond;
    - c. Name of the service agent of the group, including a description of the agent's duties and responsibilities; and
    - d. Statement that the group will defend and assume liabilities in the name of and on behalf of any member of the group.
  - 2. Provide a copy of the most recently audited financial report of the pool prepared by a certified public accountant, including a copy of the examination report prepared by the Department of Insurance and that Department's recommendations, if any.
  - 3. Provide the names and addresses of the members of the board of trustees of the pool.
  - 4. Provide the agreement indicating the terms and conditions of coverage within the pool including any exclusions of coverage.
  - 5. An intergovernmental agreement filed with the Commission pursuant to A.R.S. § 11-952.01(G)(7) shall contain the provisions of A.R.S. § 11-952.01(I).

**Historical Note**

Former Rule II, Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-202 recodified from R4-13-202 (Supp. 95-1).

**R20-5-203. Self-insurance Renewal Application; Requirements**

- A. All individual applicants for self-insurance renewal authority shall:
  - 1. Complete, date, sign, and file with the Commission an Option Election form that can be obtained from the Commission when providing a bond or other security as required by R20-5-206(D) for the payment of workers' compensation liabilities. The Option Election form shall list the following:
    - a. Total outstanding workers' compensation accrued liabilities for all previous periods of self-insurance;
    - b. Amount of future reserves;
    - c. Amount of calculated bond based on the amount of total estimated future liability x 125%.
 For those self-insurers complying with R20-5-206(D)(1), the self-insurer shall additionally provide a certificate of excess insurance.
  - 2. Provide a continuation certificate for the guaranty bond or letter of credit signed by an authorized representative of the surety or bank. The amount of the bond, letter of credit, or securities shall equal the amount submitted on the Option Election form.
  - 3. Submit a copy of the most recent certified annual financial statement at least 30 days prior to the anniversary date of the authorization to self-insure. A parent company that has executed a guaranty for a subsidiary shall also submit a copy of its most recent certified annual financial statement within the same time period required by this subsection.
  - 4. Provide a Guaranty To Satisfy Compensation Claims Under Workers' Compensation Act in Arizona form as provided in R20-5-206(C) completed, signed, and dated by the parent company of a subsidiary self-insurer if the parent company of the self-insurer is different from the last filing approved by the Commission.
- B. All workers' compensation pool applicants for self-insurance renewal authority shall:
  - 1. Provide information to the Commission as required under subsections (A)(1), (2), and (3).
  - 2. Provide an updated indemnity agreement pursuant to R20-5-202(C)(2) for changes occurring since the last filing approved by the Commission.
- C. All applicants for renewal shall continue to maintain an office in Arizona as described in R20-5-202(A)(2).
- D. The Commission's analysis for renewal includes the following:
  - 1. A review of the items required by R20-5-202(A).
  - 2. A review of the claims profile which includes a review of the preceding year's claims filed, claims denied, and denial rate. Denial rates in excess of 8% require additional analysis by the Commission's Claims Division to establish the reasons for the denials.
  - 3. A review of the self-insurer's financial profile which includes a review of the financial data as described in R20-5-202(B)(3).

**Historical Note**

Former Rule III. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-203 recodified from R4-13-203 (Supp. 95-1).

**R20-5-204. Denial of Authorization to Self-insure**

If the Commission denies an application for authorization to self-insure for failure to comply with A.R.S. § 23-961(A)(2) or for failure to comply with the requirements of R20-5-202 or R20-5-203, the Commission shall issue an Order to the applicant refusing authorization to self-insure. An appeal of such denial may be made pursuant to A.R.S. § 23-945.

**Historical Note**

Former Rule IV. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-204 recodified from R4-13-204 (Supp. 95-1).

**R20-5-205. Resolution of Authorization**

If the Commission grants authorization to self-insure, a Resolution of Authorization to Self-insure will be issued. The issuance of the Resolution shall be conditioned upon the deposit with the Commission, prior to the effective date stated in the Resolution, of the bonds or other securities specified by A.R.S. § 23-961(A)(2) and this Article.

**Historical Note**

Former Rule V. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-205 recodified from R4-13-205 (Supp. 95-1).

**R20-5-206. Posting of Guaranty Bond; Effective Date; Execution; Subsidiary Company Guaranty Bond; Parent Company Guaranty; Bond Amounts**

- A. Any guaranty bond filed with the Commission shall bear the same effective date as the effective date of the Resolution of Authorization to Self-insure and shall be for a minimum of one year, subject to annual renewal.
- B. A guaranty bond shall be made by a company authorized and licensed to transact the business of fidelity and surety insurance in Arizona. The guaranty bond shall be executed by a duly authorized agent of the surety and be countersigned by a licensed resident agent. A bond form can be obtained from the Commission and contains the following information:
1. Applicant identification;
  2. Amount of the bond;
  3. Conditions of the bond obligations; and
  4. Statement regarding responsibility for fees and costs associated with collection of the bond and responsibility for payment of any award or judgment against the surety.
- C. For the Commission to issue a Resolution of Authorization to Self-insure to a subsidiary company, the parent company shall first execute a guaranty for the subsidiary on a form that can be obtained from the Commission. The parent company shall submit its most recent audited financial statement to the Commission for analysis to determine the ability of the parent company to meet its obligations under the guaranty and under A.R.S. § 23-961(A)(2). The guaranty shall state that the parent company agrees and guarantees on behalf of the subsidiary that any and all liabilities against the subsidiary, under or by virtue of the Workers' Compensation Laws of Arizona, shall be promptly and fully paid, and the subsidiary company has on deposit a guaranty bond or securities. The guaranty for a subsidiary company, and the Resolution of Authorization to Self-insure issued to such subsidiary company, shall be valid and effective only as long as the parent company has on file with the Commission a valid guaranty to satisfy compensation claims of the subsidiary. A parent company is one which owns sufficient stock in the subsidiary company to control the subsidiary and does not mean a company in which all or a majority of the stockholders are the same as in the subsidiary. The guaranty shall be accompanied by a verified certificate as to stock ownership of the subsidiary, a certified copy of the charter or articles of incorporation of the parent company and a certified copy of the resolution of the directors of the parent company authorizing a designated officer to execute the guaranty.
- D. In compliance with this Article and the Workers' Compensation Laws of Arizona, an individual self-insurer that is not a member of a workers' compensation pool shall post either:
1. A minimum \$250,000 guaranty bond and a specific excess reinsurance policy with a self-insured retention of \$250,000 and a policy limit of liability of not less than \$10,000,000.
  2. A guaranty bond equal to 125% of the total outstanding accrued liability as reflected in the Option Election form from the self-insurer to the Commission or a minimum guaranty bond in the amount of \$100,000, whichever is greater. The total outstanding accrued liabilities shall be determined by certification from the self-insurer for the Commission's approval.
- E. In compliance with this Article and the Workers' Compensation Laws of Arizona, a workers' compensation pool shall post a guaranty bond equal to 125% of the total outstanding accrued liability as reflected in the Option Election form from the self-insured pool to the Commission or a minimum guaranty bond in the amount of \$100,000, whichever is greater. The total outstanding accrued liabilities shall be determined by certification from the self-insured pool for the Commission's approval.

**Historical Note**

Former Rule VI; Amended effective February 27, 1975 (Supp. 75-1). Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-206 recodified from R4-13-206 (Supp. 95-1).

**R20-5-207. Posting of Securities in Lieu of Guaranty Bond; Registration; Deposit**

- A. In lieu of posting a guaranty bond as provided in R20-5-206, the self-insurer may deposit with the Commission for transmittal to the State Treasurer bonds of the United States.
- B. Any securities deposited with the State Treasurer shall be registered to: "The Industrial Commission of Arizona, in trust for the fulfillment by ----- of its obligations under the Arizona Workers' Compensation Laws. The securities shall be held by the State Treasurer, as custodian subject to the order of, and in trust for, The Industrial Commission of Arizona, with the power in the Commission to collect or order collection of the principal as it becomes due, to sell or order the sale of these securities or any part of these securities, and to apply or order the application of the proceeds to the payment of any award rendered against the self-insurer in the event of the default in the payment of its obligations. The interest coupons on such securities shall be remitted by the Commission to the self-insurer upon request as they mature.
- C. The securities deposited in compliance with subsections (A) and (B) shall have a face value at maturity in the amount specified by the Commission.

**Historical Note**

Former Rule VII. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-207 recodified from R4-13-207 (Supp. 95-1).

**R20-5-208. Posting Other Securities**

If the Commission accepts securities other than those specified in R20-5-207, including letters of credit, these securities shall be registered in the same manner as provided in R20-5-207.

**Historical Note**

Former Rule VIII. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-208 recodified from R4-13-208 (Supp. 95-1).

**R20-5-209. Authorization Limitation**

If the Resolution of Authorization to Self-insure is validated by a deposit of acceptable securities, or by a guaranty bond, the resolution shall remain in full force and effect for a period of one year unless revoked by the Commission.

**Historical Note**

Former Rule IX. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-209 recodified from R4-13-209 (Supp. 95-1).

**R20-5-210. Continuation of Authorization**

If timely and sufficient application for renewal is made pursuant to R20-5-203, the existing authorization to self-insure shall continue, subject to compliance with A.R.S. Title 23, Chapter 6 and this Article, until the renewal application has been finally determined by the Commission.

**Historical Note**

Former Rule X. R20-5-210 recodified from R4-13-210 (Supp. 95-1).

**R20-5-211. Revocation of Authorization; Notice of Insolvency; Notice of Change of Ownership**

- A. The Commission may revoke a resolution of authorization to self-insure for good cause. Good cause includes:
1. The impairment of the solvency of the self-insurer.
  2. The failure of the self-insurer to respond within 10 days of a demand by the Commission to substitute a satisfactory guaranty bond or securities when in the Commission's judgment the bond or securities on deposit are unsatisfactory or insufficient in amount or character.
  3. The failure of the self-insurer to pay tax assessments levied by the Commission within 30 days of the due dates prescribed by A.R.S. §§ 23-961 and 23-1065.
  4. The failure of the self-insurer to promptly provide the Commission within 60 days the reports required by the Commission under this Article concerning the business, operations, employees, wages, injuries, and other subjects under Commission jurisdiction.
  5. The failure to comply with state workers' compensation laws.
  6. The failure of the self-insurer to pay or comply with any award of the Commission within 30 days after the award becomes final.
  7. The willful misstating of any material fact in a payroll report, injury report, or other report or statement made to the Commission.
  8. The deliberate refusal of the self-insurer to comply with Commission rules.
  9. The failure of the workers' compensation pool to notify the Commission within 30 days before termination or cancellation that a member has been terminated or cancelled.
  10. The failure of the workers' compensation pool to notify the Commission within 30 days of receipt of notification that, as a result of the annual audit or examination by the Director of the Department of Insurance, it appears that the assets of the pool are insufficient to enable the pool to discharge its legal liabilities and other obligations and the resulting notification by the Director of the Department of Insurance to the administrator and board of trustees of the workers' compensation pool of the insufficiency and the Director's list of recommendations to abate the deficiency.

11. The failure of the pool to comply with the recommendation of the Director of the Department of Insurance within 60 days of the date of notice as prescribed in A.R.S. §§ 11-952.01(L) and 41-621.01(J).
- B. The self-insurer shall notify the Commission within 24 hours of any bankruptcy filing under federal law or insolvency proceeding under any state's laws.
- C. The self-insurer shall notify the Commission within 24 hours of any change in the ownership status of the employer.

**Historical Note**

Former Rule XI. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-211 recodified from R4-13-211 (Supp. 95-1).

**R20-5-212. Notice of Revocation of Resolution of Authorization to Self-Insure**

The registration and deposit in the United States mail of a Notice of Revocation of the Resolution of Authorization to Self-insure, addressed to the last known address of the employer as shown by the records of the Commission, and signed by the Commission, shall be deemed to constitute actual delivery of such notice to a self-insurer.

**Historical Note**

Former Rule XII. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-212 recodified from R4-13-212 (Supp. 95-1).

**R20-5-213. Substitution of Bond or Securities**

No bond or other security deposited as a condition precedent to validating a Resolution of Authorization to Self-insure shall be returned nor shall any substitution be allowed, except upon written order of the Commission. No return of such bond or other security shall be authorized except upon proof that the employer has placed with the Commission an amount or amounts as determined by the Commission to be sufficient to provide for the present value of all death benefits, awards, and determinations previously made by the Commission or the self-insurer, with an adequate contingency amount to apply to reopened claims that have been closed and become final during the period of self-insurance.

**Historical Note**

Former Rule XIII. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-213 recodified from R4-13-213 (Supp. 95-1).

**R20-5-214. Rating Plans Available for Self-insurers**

- A. Any of the following rating plans are available to self-insured employers for the purpose of calculating the taxes required by A.R.S. §§ 23-961(G) and 23-1065(A).
1. Fixed Premium Plan
  2. Ex-medical Plan
  3. Guaranteed Cost Plan
  4. Retrospective Rating Plan
- B. The provisions of the rating plans apply only to operations and payroll in Arizona, and all such operations in Arizona shall be combined as a single base for the calculation of any premium modifications to all such operations.

**Historical Note**

Former Rule XIV. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-214 recodified from R4-13-214 (Supp. 95-1).

**R20-5-215. Fixed Premium Plan: Definition; Formula; Eligibility**

- A. A Fixed Premium Plan means a plan in which neither losses nor incurred loss reserves are used for calculation. The only discount is for premium size.
- B. The formula for calculation of the fixed premium plan is as follows: Payroll x Applicable Rate Less Premium Discount.
- C. Fixed Premium Plan shall be the exclusive plan available to:
1. Those self-insurers electing this plan.
  2. Those self-insurers whose annual net taxable premium does not exceed \$100,000 annually.
  3. Those self-insurers not eligible for any other plan authorized by the Commission for rating purposes.

**Historical Note**

Former Rule XV. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-215 recodified from R4-13-215 (Supp. 95-1).

**R20-5-216. Ex-medical Plan: Definition; Formula; Eligibility; Modification**

- A. An Ex-Medical Plan means a plan for premium calculation which provides for rate revisions based upon the self-insurer operating a medical facility with a program for providing medical, surgical, or hospital services to all of the self-insurer's employees for their benefit and that has complied with the requirements specified in A.R.S. § 23-1070. Neither losses nor incurred loss reserves are used in such plan.
- B. The formula for calculation of the Ex-Medical Plan is as follows: [(Payroll x Applicable Rate) x (1-Ex-Medical Factor)] less Premium Discount.
- C. Only those self-insurers whose program for medical, surgical, or hospital services has been authorized by the Commission are eligible to utilize this plan, for premium calculation.

D. To be eligible for this plan the self-insurer's annual net taxable premium must exceed \$100,000.

**Historical Note**

Former Rule XVI. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-216 recodified from R4-13-216 (Supp. 95-1).

**R20-5-217. Guaranteed Cost Plan: Definition; Formula; Eligibility; Cost of Calculation**

- A. A Guaranteed Cost Plan means a plan providing for the direct relationship, on an annual basis, of the premium for tax purposes and the experience modification developed to reflect the loss payment and incurred loss experience of the self-insured employer. Loss data for three complete years must be provided to calculate the experience modification factor. This plan shall be calculated annually and the premium shall not be subject to further adjustment during the subsequent year.
- B. The formula for the calculation of the Guaranteed Cost Plan is as follows: Payroll x Applicable Rate x Experience Modification Factor Less Premium Discount.
- C. Only those self-insurers who satisfy all of the following requirements shall be eligible to use the Guaranteed Cost Plan:
  1. The submission of data concerning paid loss determinations and incurred loss reserves for each workers' compensation claimant. The information is used to calculate an experience modification factor for the self-insurer. Three years of loss data shall be formulated to calculate the experience modification factor.
  2. An annual net taxable premium exceeding \$100,000.

**Historical Note**

Former Rule XVII. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-217 recodified from R4-13-217 (Supp. 95-1).

**R20-5-218. Retrospective Rating Plan: Definition; Formula; Eligibility**

- A. Retrospective rating plan means a plan providing for the relationship between the premium for tax purposes, the experience modification factor developed to reflect the loss payment and incurred loss experience of the self-insured employer, and the actual incurred losses for the tax year. This plan is to be calculated annually and the premiums shall not be subject to further adjustment during the tax year.
- B. The formula for calculating the retrospective rating plan is as follows: [Payroll x Applicable Rate x Experience Modification Factor x Basic Premium Factor + (losses current year + adjusted losses previous year) x loss conversion factor]] x Tax Multiplier = Net Taxable Premium (NTP). The NTP is subject to a maximum and minimum premium level depending on which one of the four rating option plans specified in the rating systems filed by the rating organization used by the State Compensation Fund pursuant to A.R.S. Title 20, Chapter 2, Article 4 is used.
- C. Only those self-insurers who satisfy all of the following requirements shall be eligible to use the retrospective rating plan:
  1. The submission of data concerning paid loss determinations and incurred loss reserved for each worker's compensation claimant. The information is used to calculate an experience modification factor for the self-insurer. Four years of loss data must be formulated. The oldest three years of data is used to calculate the rate and the most current year's data is used in the actual tax calculation.
  2. An annual net taxable premium exceeding \$100,000.

**Historical Note**

Former Rule XVIII. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-218 recodified from R4-13-218 (Supp. 95-1).

**R20-5-219. Payment of Taxes by Self-insurers**

The tax payments described in A.R.S. §§ 23-961(G) through (J) and 23-1065(A) shall be processed in accordance with the following:

1. All self-insurers shall submit their payroll, loss, medical, and other information to the Commission by January 31 of each year.
2. All self-insurers shall pay their annual taxes on or before March 31 based on premiums calculated for the preceding calendar year. The payment for each tax shall not be less than \$250.00 per year.
3. Those self-insurers who paid \$2,000.00 or more for the administrative fund tax (A.R.S. § 23-961(G)) for the preceding calendar year shall pay a quarterly tax in the following year. One of two methods can be used to calculate the payment. The first method is a quarterly payment of 25% of the tax calculated for the previous year. The second method is based on actual payroll and premiums calculated for each quarter. Those self-insured employers who paid \$2,000.00 or more for the Special Fund tax (A.R.S. § 23-1065(A)) for the preceding calendar year must pay a quarterly tax using the same methods to calculate payment. The quarterly payments are due April 30, July 31, October 31, and January 31 for the periods ending March 31, June 30, September 30, and December 31, respectively.
4. Upon calculation of the annual taxes, it shall be determined by the Commission if the self-insured employer has overpaid or underpaid its taxes. If the total of the quarterly payments is less than the actual taxes calculated for the year, then the amount representing the difference is due on or before March 31. If the total of the quarterly payments exceeds the amount of the actual taxes calculated for the year, a refund will be paid to the self-insurer.
5. If the self-insurer fails to pay the annual or quarterly taxes when due, a penalty of the greater of \$25.00 or 5% of the tax or payment due plus interest at the rate of 1% per month from the date the tax or payment was due shall be paid by the self-insurer.

**Historical Note**

Former Rule XIX. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-219 recodified from R4-13-219 (Supp. 95-1).

**R20-5-220. Basis; Definitions**

For determining the premium for purposes of R20-5-214, the Commission shall utilize as the basis for classifications, rating procedures, and plans those specified in the rating systems filed by the rating organization used by the State Compensation Fund pursuant to A.R.S. Title 20, Chapter 2, Article 4.

**Historical Note**

Former Rule XX. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-220 recodified from R4-13-220 (Supp. 95-1).

**R20-5-221. Book and Record Review by the Commission**

All reports, books, and records of the self-insurer relating to classifications, payroll, incurred loss reserves, and procedures for development of statistical information for the development of rating information are subject to review by the Commission and its authorized representatives. If, in the judgment of the Commission, reports, records, and data relating to payroll or claims are not valid or credible, the Commission reserves the right to require correction of procedure and data to better determine the information needed to evaluate the rating programs.

**Historical Note**

Former Rule XXI. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-221 recodified from R4-13-221 (Supp. 95-1).

**R20-5-222. Audits; Cost of Audit**

The Commission may, at any time upon three working days' notice, perform or have performed for its benefit an audit of the payroll, loss payment, and loss reserve records for incurred losses of the self-insurer for the purpose of determining the scope and adequacy of the maintained records. The entire cost of the audit will be borne by the self-insurer.

**Historical Note**

Former Rule XXII. Section repealed, new Section adopted effective July 6, 1993 (Supp. 93-3). R20-5-222 recodified from R4-13-222 (Supp. 95-1).

**R20-5-223. Time-frames for Processing Initial and Renewal Applications for Authorization to Self-insure**

**A. Administrative completeness review.**

**1. Initial application.**

- a. The Administration Division shall review an initial application for authority to self-insure within 20 days of receipt of the application to determine whether the application contains the information required by A.R.S. § 23-961 and this Article.
- b. The Administration Division shall inform an applicant by written notice whether the application is complete within the time-frame provided in this subsection. If the application is incomplete, the Administration Division shall include in its written notice to the applicant a complete list of the missing information.
- c. The Administration Division shall deem the application withdrawn if an applicant fails to file a complete application within 45 days of being notified by the Administration Division that the application is incomplete, unless the applicant obtains an extension to provide the missing information under subsection (D).

**2. Renewal application.**

- a. The Administration Division shall review a renewal application for authority to self-insure within 20 days of receipt of the application to determine whether the application contains the information required by A.R.S. § 23-961 and this Article.
- b. The Administration Division shall inform a self-insurer by written notice whether the application is complete within the time-frame provided in subsection (A)(2)(a). If the application is incomplete, the Administration Division shall include in its written notice to the self-insurer a complete list of the missing information.
- c. The Administration Division shall deem the application withdrawn if a self-insurer fails to file a complete application within 45 days of being notified by the Administration Division that the application is incomplete, unless the self-insurer obtains an extension to provide the missing information under subsection (D).

**B. Substantive review.**

1. Initial application. Within 70 days after the Administration Division determines an initial application complete, the Commission shall determine whether an initial application for authority to self-insure meets the substantive criteria of A.R.S. § 23-961 and this Article and shall issue an order granting or denying authority to self-insure.
2. Renewal application. Within 40 days after the Administration Division determines a renewal application complete, the Commission shall determine whether a renewal application for authority to self-insure meets the substantive criteria of A.R.S. § 23-961 and this Article and shall issue an order granting or denying authority to self-insure.

**C. Overall review.**

1. Initial application. The overall review period shall be 90 days, unless extended under A.R.S. § 41-1072 et seq.
2. Renewal application. The overall review period shall be 60 days, unless extended under A.R.S. § 41-1072 et seq.

- D. If an applicant or self-insurer cannot timely submit to the Administration Division information to complete an initial or renewal application, the applicant or self-insurer may obtain an extension to submit the missing information by filing a written request with the Administration Division no later than 40 days after receipt of the notice from the Administration Division that the initial or renewal application is incomplete. The written request for an extension shall state the reasons the applicant or self-insurer is unable to meet the 45-day deadline. If an extension will enable the applicant or self-insurer to assemble and submit the missing information, the Administration Division shall grant an extension of not more than 30 days and provide written notice of the extension to the applicant or self-insurer.

**Historical Note**

Former Rule XXIII. Section repealed effective July 6, 1993 (Supp. 93-3). R20-5-223 recodified from R4-13-223 (Supp. 95-1). New Section adopted October 9, 1998 (Supp. 98-4).

**R20-5-224. Computation of Time**

- A. In computing any period of time prescribed or allowed by this Article, the day of the act or event from which the designated period of time begins to run shall not be included. The last day of the period computed shall be included unless it is a Saturday, Sunday, or legal holiday, in which event the period runs until the end of the next day which is not a Saturday, Sunday, or legal holiday. When the period of time prescribed or allowed is less than 11 days, intermediate Saturdays, Sundays, and legal holidays shall be excluded in the computation.
- B. Except as otherwise provided by law, the Commission may extend time limits prescribed by this Article for good cause.

**Historical Note**

Former Rule XXIV. Section repealed effective July 6, 1993 (Supp. 93-3). R20-5-224 recodified from R4-13-224 (Supp. 95-1). New Section adopted effective October 9, 1998 (Supp. 98-4).

**ARTICLE 2**  
**GENERAL AND SPECIFIC**  
**STATUTES**

11-952.01. Public agency pooling of property, fidelity, liability, workers' compensation, life, health, accident and disability coverage; exemptions; board of trustees; contract; termination; audit; insolvency; definition

A. In addition to other authority granted pursuant to this title, two or more public agencies may enter into contracts or agreements pursuant to this article for the joint purchasing of insurance, including prepaid legal insurance or reinsurance, or to pool retention of their risks for property, fidelity and liability losses and to provide for the payment of such property loss, fidelity loss, prepaid legal insurance or claim of liability made against any member of the pool, including any elected or appointed official, officer or employee covered by the pool, on a cooperative or contract basis with one another or may jointly form a nonprofit corporation or enter into a trust agreement to carry out this section in their behalf directly or by contract with a private party.

B. In addition to other authority granted pursuant to this title, two or more public agencies may enter into contracts or agreements pursuant to this article to establish a workers' compensation pool to provide for the payment of workers' compensation claims pursuant to title 23, chapter 6 on a cooperative or contract basis with one another or may jointly form a nonprofit corporation or enter into a trust agreement to carry out this section in their behalf directly or by contract with a private party. A workers' compensation pool established pursuant to this subsection may provide coverage for workers' compensation, employers' liability and occupational disease claims. A workers' compensation pool is subject to approval as a self-insurer by the industrial commission pursuant to section 23-961, subsection A, paragraph 2 and is subject to title 23, chapter 6 and rules adopted pursuant to that chapter in addition to the requirements of this section. The industrial commission, by rule, resolution or order, may adopt requirements for the administration of a workers' compensation pool under this subsection, including separation or commingling of funds, accounting, auditing, reporting, actuarial standards and procedures.

C. In addition to other authority granted pursuant to this title, two or more public agencies may enter into contracts or agreements for the joint purchase of life insurance, disability insurance, accident insurance or health benefits plan insurance or may pool retention of their risks of loss for life, disability, health or accident claims made against any public agency member of the pool or to jointly provide the health and medical services authorized in section 36-2907. Public agencies may establish pools for the purposes of this subsection by any of the following methods:

1. On a cooperative or contract basis.
2. By the formation of a nonprofit corporation.
3. By contracts or intergovernmental agreements with the Arizona health care cost containment system administration.

4. By the execution of a trust agreement directly by the agencies or by contracting with a third party.

D. In addition to other authority granted pursuant to this title, two or more public agencies may enter into contracts or agreements pursuant to this article for the joint purchasing of insurance for property, liability or workers' compensation losses or to pool retention of their risks for property and liability loss to cover the public agency, its elected officials and employees and the contractor and subcontractor of every tier engaged in the performance of a construction project for the public agency. Public agencies may establish pools for the purpose of this subsection by any of the following methods:

1. On a cooperative or contract basis.

2. By the formation of a nonprofit corporation.

3. By the execution of a trust agreement directly by the agencies or by contracting with a third party.

E. Section 10-11301 does not apply to nonprofit corporations formed pursuant to this section.

F. Title 41, chapter 23 does not apply to the procurement of insurance or reinsurance, or to the procurement of the services provided for in subsection K, paragraph 8 of this section, by any pool established pursuant to this section.

G. Title 43 does not apply to any pool established pursuant to this section. Any pool established pursuant to this section is exempt from taxation under title 43.

H. Each pool shall be operated by a board of trustees consisting of at least three persons who are elected officials or employees of public entities within this state. The board of trustees shall notify the director of the department of insurance of the existence of the pool and shall file with the director and with the attorney general a copy of the intergovernmental agreement or contract. The board of trustees of each group shall do all of the following:

1. Establish terms and conditions of coverage within the pool, including exclusions of coverage.

2. Ensure that all claims are paid promptly.

3. Take all necessary precautions to safeguard the assets of the group.

4. Maintain minutes of its meetings.

5. Designate an administrator to carry out the policies established by the board of trustees and to provide day-to-day management of the group and delineate in the written minutes of its meetings the areas of authority it delegates to the administrator.

6. If the pool is a workers' compensation pool, file a copy of the agreement with the director of the industrial commission.

I. If the pool includes private, nonprofit educational institutions, each private, nonprofit educational institution shall post a bond, cash deposit or other comparable financial security in an amount that is equal to at least one and one-half times the amount of the private, nonprofit educational institution's annual premium to ensure payment of the school's or institution's legal liabilities and other obligations if the pool is determined to be insolvent or is otherwise found to be unable to discharge the pool's legal liabilities and other obligations pursuant to subsection N of this section.

J. The board of trustees shall not:

1. Extend credit to individual members for payment of a premium, except pursuant to payment plans established by the board.
2. Borrow any monies from the group or in the name of the group except in the ordinary course of business.

K. In addition to the requirements of section 11-952, a contract or agreement made pursuant to this section shall contain the following:

1. A provision for a system or program of loss control.
2. A provision for termination of membership, including either:
  - (a) Cancellation of individual members of the pool by the pool.
  - (b) Election by an individual member of the pool to terminate its participation.
3. A provision requiring the pool to pay all claims for which each member incurs liability during each member's period of membership.
4. A provision stating that each member is not relieved of its liability incurred during the member's period of membership except through the payment of losses by the pool or by the member.
5. A provision for the maintenance of claim reserves equal to known incurred losses and an estimate of incurred but not reported claims.
6. A provision for a final accounting and settlement of the obligations of or refunds to a terminating member to occur when all incurred claims are concluded, settled or paid.

7. A provision that the pool may establish offices where necessary in this state and employ necessary staff to carry out the purposes of the pool.

8. A provision that the pool may retain legal counsel, actuaries, auditors, engineers, private consultants and advisors.

9. A provision that the pool may make and alter bylaws and rules pertaining to the exercise of its purpose and powers.

10. A provision that the pool may purchase, lease or rent real and personal property it deems necessary.

11. A provision that the pool may enter into financial services agreements with banks and other financial institutions, that it may issue checks in its own name and that it may invest its monies in equity securities, mutual funds and investment funds registered with the United States securities and exchange commission, debt obligations and any eligible investment permitted by section 35-323.

L. A pool or a terminating member shall provide at least ninety days' written notice of the termination or cancellation. A workers' compensation pool shall notify the industrial commission of the termination or cancellation of a member thirty days before the termination or cancellation of the member.

M. The pool shall be audited annually at the expense of the pool by a certified public accountant, with a copy of the report submitted to the governing body or chief executive officer of each member of the pool and to the director of the department of insurance. The board of trustees of the pool shall obtain an appropriate actuarial evaluation of the claim reserves of the pool, including an estimate of the incurred but not reported claims. The department of insurance shall examine each public agency pool once every five years. The director of the department of insurance may examine a public agency pool sooner than five years from the preceding examination if the director has reason to believe that the pool is insolvent. The costs of any examination shall be paid by the pool subject to the examination.

N. If, as a result of the annual audit or an examination by the director of the department of insurance, it appears that the assets of the pool are insufficient to enable the pool to discharge its legal liabilities and other obligations, the director of the department of insurance shall notify the administrator and the board of trustees of the pool of the deficiency and the director's list of recommendations to abate the deficiency, including a recommendation not to add any new members until the deficiency is abated. If the pool fails to comply with the recommendations within sixty days after the date of the notice, the director shall notify the chief executive officer or the governing bodies, if any, of the members of the pool, the governor, the president of the senate and the speaker of the house of representatives that the pool has failed to comply with the recommendations of the director.

O. If a pool is determined to be insolvent or is otherwise found to be unable to discharge its legal liabilities and other obligations, each agreement or contract shall provide that the members of the pool shall be assessed on a pro rata basis as calculated by the amount of each member's annual contribution in order to satisfy the amount of deficiency. The assessment shall not exceed the amount of each member's annual contribution to the pool.

P. A pool established pursuant to this section may make available programs providing for insurance coverages described in subsections A, B and C of this section to those charter schools governed by section 15-183, subsection M and, except for a workers' compensation pool, to private, nonprofit educational institutions.

Q. In addition to the authority set forth in this title, a pool established pursuant to this section may invest public monies on behalf of pool members, but any such investments shall be limited to those permitted by section 35-323, except as provided in section 15-1225, subsection G. A pool established pursuant to this section may not invest monies that are required by law to be deposited with a county treasurer.

R. A pool established pursuant to this section, by the adoption of a resolution of continuing effect, may authorize and request the state treasurer to invest funds for the pool pursuant to section 35-326.

S. A pool established pursuant to this section may offer services on behalf of pool participants that participate in the unemployment insurance program administered by the department of economic security, including the option to make payments in lieu of contributions as permitted by sections 23-750 and 23-751. The pool is deemed an agent of the pool participants as employers for the purposes of title 23, chapter 4.

T. For the purposes of this section, "health benefits plan" means a hospital or medical service corporation policy or certificate, a health care services corporation contract, a multiple employer welfare arrangement or any other arrangement under which health and medical benefits and services are provided to two or more persons.

41-621.01. Contractors or subcontractors; pooling of property, liability and workers' compensation coverage; exemptions; board of trustees; contract; termination; audit; insolvency

A. Pursuant to section 41-621, subsection D and section 41-622.01 two or more contractors or subcontractors licensed to do work for this state or any political subdivision of this state may with the approval of the department of administration enter into contracts or agreements pursuant to this section for the joint purchase of insurance, to pool retention of their risks for property and liability losses and to provide for the payment of the property loss or claim of liability made against any member of the pool on a cooperative or contract basis with one

another or may jointly form a nonprofit corporation or enter into a trust agreement to carry out the provisions of this section in their behalf directly or by contract with a private party, if the department of administration has determined to sanction such a pool. Two or more contractors may also enter into contracts or agreements pursuant to this section to establish a workers' compensation pool to provide for the payment of workers' compensation claims pursuant to title 23, chapter 6 on a cooperative or contract basis with one another or may jointly form a nonprofit corporation or enter into a trust agreement to carry out the provisions of this section in their behalf directly or by contract with a private party. A workers' compensation pool established pursuant to this subsection may provide coverage for workers' compensation, employers' liability and occupational disease claims. A workers' compensation pool is subject to approval as a self-insurer by the industrial commission pursuant to section 23-961, subsection A, paragraph 2 and is subject to title 23, chapter 6 and rules adopted pursuant to that chapter in addition to the requirements of this section. The industrial commission, by rule, resolution or order, may adopt requirements for the administration of a workers' compensation pool under this subsection, including separation or commingling of funds, accounting, auditing, reporting, actuarial standards and procedures.

B. In addition to other authority granted pursuant to this title, two or more contractors or subcontractors licensed to do work for this state or any political subdivision of this state may enter into contracts or agreements for the joint purchase of life insurance, disability insurance, accident insurance or health benefits plan insurance, to pool retention of their risks of loss for life, disability, health or accident claims made against any contractor or subcontractor member of the pool or to jointly provide the health and medical services authorized in section 36-2907. Contractors and subcontractors may establish pools for the purposes of this subsection by any of the following methods:

1. On a cooperative or contract basis.
2. By the formation of a nonprofit corporation.
3. By a contract or intergovernmental agreement with the Arizona health care cost containment system administration.
4. By the execution of a trust agreement directly by the contractors and subcontractors or by contracting with a third party.

C. Contractors or subcontractors of a political subdivision of this state that is a member of a risk retention pool authorized under title 11 may obtain life insurance, disability insurance, accident insurance or health benefits plan insurance coverage directly from that political subdivision if coverage is available and as authorized by section 11-952.01, subsection C.

D. Section 10-11301 does not apply to nonprofit corporations formed pursuant to this section.

E. Chapter 23 of this title does not apply to the procurement of insurance or to the procurement of the services provided for in subsection I, paragraph 8 of this section by any pool established pursuant to this section.

F. Title 43 does not apply to any pool established pursuant to this section. Any pool established pursuant to this section is exempt from taxation under title 43.

G. Each pool shall be operated by a board of trustees consisting of at least five members. The board of trustees of each group shall do all of the following:

1. Establish terms and conditions of coverage within the pool including exclusions of coverage.
2. Ensure that all claims are paid promptly.
3. Take all necessary precautions to safeguard the assets of the group.
4. Maintain minutes of its meetings.
5. Designate an administrator to carry out the policies established by the board of trustees and to provide day to day management of the group and delineate in the written minutes of its meetings the areas of authority it delegates to the administrator.
6. Notify the director of the department of insurance of the existence of the pool and file a copy of the agreement with the director and with the attorney general.
7. If the pool is a workers' compensation pool, file a copy of the agreement with the director of the industrial commission.

H. The board of trustees shall not:

1. Extend credit to individual members for payment of a premium except pursuant to payment plans established by the board.
2. Borrow any monies from the group or in the name of the group except in the ordinary course of business.

I. A contract or agreement made pursuant to subsection A of this section shall contain the following:

1. A provision for a system or program of loss control.
2. A provision for termination of membership including either:
  - (a) Cancellation of individual members of the pool by the pool.

(b) Election by an individual member of the pool to terminate its participation.

3. A provision requiring the pool to pay all claims for which each member incurs liability during each member's period of membership.

4. A provision stating that each member is not relieved of its liability incurred during the member's period of membership except through the payment of losses by the pool or by the member.

5. A provision for the maintenance of claims reserves equal to known incurred losses and an estimate of incurred but not reported claims.

6. A provision for a final accounting and settlement of the obligations of or refunds to a terminating member to occur when all incurred claims are concluded, settled or paid.

7. A provision that the pool may establish offices where necessary in this state and employ necessary staff to carry out the purposes of the pool.

8. A provision that the pool may retain legal counsel, actuaries, auditors, engineers, private consultants and advisors.

9. A provision that the pool may make and alter bylaws and rules pertaining to the exercise of its purpose and powers.

10. A provision that the pool may purchase, lease or rent real and personal property it deems necessary.

11. A provision that the pool shall enter into a financial services agreement with banks and that it may issue checks in its own name.

J. A pool or a terminating member shall provide at least ninety days' written notice of the termination or cancellation. A workers' compensation pool shall notify the industrial commission of the termination or cancellation of a member thirty days before the termination or cancellation of the member.

K. The pool shall be audited annually at the expense of the pool by a certified public accountant, with a copy of the report submitted to the governing body or chief executive officer of each member of the pool and to the director of the department of insurance. The board of trustees of the pool shall obtain an appropriate actuarial evaluation of the claim reserves of the pool including an estimate of the incurred but not reported claims. The department of insurance shall examine each contractor pool once every five years. The director of the department of insurance may examine a contractor pool sooner than five years from the preceding examination if the director has reason to believe that the pool is insolvent. The costs of any examination shall be paid by the pool subject to the examination.

L. If, as a result of the annual audit or an examination by the director of the department of insurance, it appears that the assets of the pool are insufficient to enable the pool to discharge its legal liabilities and other obligations, the director of the department of insurance shall notify the administrator and the board of trustees of the pool of the deficiency and provide the director's list of recommendations to abate the deficiency, including a recommendation not to add any new members until the deficiency is abated. If the pool fails to comply with the recommendations within sixty days after the date of the notice, the director shall notify the chief executive officer or the governing bodies, if any, of the members of the pool, the governor, the president of the senate and the speaker of the house of representatives that the pool has failed to comply with the recommendations of the director.

M. If a pool is determined to be insolvent or is otherwise found to be unable to discharge its legal liabilities and other obligations, each agreement or contract shall provide that the members of the pool shall be assessed on a pro rata basis as calculated by the amount of each member's annual contribution in order to satisfy the amount of deficiency. The assessment shall not exceed the amount of each member's annual contribution to the pool.

N. If a workers' compensation pool fails to comply with title 23, chapter 6 or rules adopted pursuant to that chapter, the director of the industrial commission shall immediately notify the director of the department of administration and the director of the department of insurance.

41-1091. Substantive policy statements; directory

A. An agency shall file substantive policy statements pursuant to section 41-1013, subsection B.

B. An agency shall ensure that the first page of each substantive policy statement includes the following notice:

This substantive policy statement is advisory only. A substantive policy statement does not include internal procedural documents that only affect the internal procedures of the agency and does not impose additional requirements or penalties on regulated parties or include confidential information or rules made in accordance with the Arizona administrative procedure act. If you believe that this substantive policy statement does impose additional requirements or penalties on regulated parties you may petition the agency under section 41-1033, Arizona Revised Statutes, for a review of the statement.

C. The agency shall publish at least annually a directory summarizing the subject matter of all currently applicable rules and substantive policy statements. The agency shall keep copies of this directory and all of its substantive policy statements at one location. The directory, rules and substantive policy statements and any materials incorporated by reference in the rules or substantive policy statements shall be open to public inspection at the office of the agency director.

23-961. Methods of securing compensation by employers; deficit premium; civil penalty

A. Employers shall secure workers' compensation to their employees in one of the following ways:

1. By insuring and keeping insured the payment of such compensation with an insurance carrier authorized by the director of insurance to write workers' compensation insurance in this state.
2. By furnishing to the commission satisfactory proof of financial ability to pay the compensation directly or through a workers' compensation pool approved by the commission in the amount and manner and when due as provided in this chapter. The requirements of this paragraph may be satisfied by furnishing to the commission satisfactory proof that the employer is a member of a workers' compensation pool approved by the commission pursuant to section 23-961.01. The commission may require a deposit or any other security from the employer for the payment of compensation liabilities in an amount fixed by the commission, but not less than one hundred thousand dollars for workers' compensation liabilities. If the employer does not fully comply with the provisions of this chapter relating to the payment of compensation, the commission may revoke the authority of the employer to pay compensation directly.

B. An employer may not secure compensation to comply with this chapter by any mechanism other than as provided in this section. No insurance, combination or other program may be marketed, offered or sold as workers' compensation that does not comply with this section. An employer violates this chapter if the employer purchases or secures its obligations under this chapter through a substitute for workers' compensation that does not comply with this section.

C. Insurance carriers that transact the business of workers' compensation insurance in this state are subject to the rules of the director of insurance.

D. On application of an insurance carrier, the director of insurance may order the release to the insurance carrier of all or part of the cash or securities that the insurance carrier deposited before the effective date of this amendment to this section with the state treasurer pursuant to this section. In determining whether to order the release of all or part of the deposit, the director of insurance shall consider all of the following:

1. The financial condition of the insurance carrier.
2. The insurance carrier's liabilities for workers' compensation loss and loss expenses in this state.
3. Whether the insurance carrier is subject to a finding of hazardous condition, an order of supervision, a delinquency proceeding or any other regulatory action in this state, the insurance

carrier's state of domicile or any other state in which the insurance carrier transacted the business of insurance.

4. Any other factors the director of insurance determines are relevant to the application for release of the deposit.

E. Except in the event of nonpayment of premiums, each insurance carrier shall carry a risk to the conclusion of the policy period unless the policy is cancelled by the employer or unless one or both of the parties to a professional employer agreement terminate the agreement. The policy period shall be agreed upon by the insurance carrier and the employer.

F. At least thirty days' notice shall be given by the insurance carrier to the employer and to the commission of any cancellation or nonrenewal of a policy if the cancellation or nonrenewal is at the election of the insurance carrier. The insurance carrier shall promptly notify the commission of any cancellation by the employer or failure of the employer to renew the policy. The failure to give notice of nonrenewal if the nonrenewal is at the election of the insurance carrier shall not extend coverage beyond the policy period. An insurance carrier shall notify the commission on a form prescribed by the commission that it has insured an employer for workers' compensation promptly after undertaking to insure the employer.

G. Every insurance carrier on or before March 1 of each year shall pay to the state treasurer for the credit of the administrative fund, in lieu of all other taxes on workers' compensation insurance, a tax of not more than three per cent on all premiums collected or contracted for during the year ending December 31 next preceding, less the deductions from such total direct premiums for applicable cancellations, returned premiums and all policy dividends or refunds paid or credited to policyholders within this state and not reapplied as premiums for new, additional or extended insurance. Every self-insured employer, including workers' compensation pools, on or before March 31 of each year shall pay a tax of not more than three per cent of the premiums that would have been paid by the employer if the employer had been fully insured by an insurance carrier authorized to transact workers' compensation insurance in this state during the preceding calendar year. The commission shall adopt rules that shall specify the premium plans and methods to be used for the calculation of rates and premiums and that shall be the basis for the taxes assessed to self-insured employers. The tax shall be not less than two hundred fifty dollars per annum and shall be computed and collected by the commission and paid to the state treasurer for the credit of the administrative fund at a rate not exceeding three per cent to be fixed annually by the industrial commission. The rate shall be no more than is necessary to cover the actual expenses of the industrial commission in carrying out its powers and duties under this title. Any quarterly payments of tax pursuant to subsection I of this section shall be deducted from the tax payable pursuant to this subsection.

H. An insurance carrier may reduce the amount of premiums paid by an employer by up to five per cent if all of the following apply:

1. The insured employer complies with the drug testing policy requirements prescribed in section 23-493.04.

2. The insured employer conducts drug testing of prospective employees.

3. The insured employer conducts drug testing of an employee after the employee has been injured.

4. The insured employer allows the employer's insurance carrier to have access to the drug testing results under paragraphs 2 and 3 of this subsection.

I. Any insurer that, pursuant to this section, paid or is required to pay a tax of two thousand dollars or more for the preceding calendar year shall file a quarterly report, in a form prescribed by the commission, accompanied by a payment in an amount equal to the tax due at the rates prescribed in subsection G of this section for premiums determined pursuant to subsection G of this section or an amount equal to twenty-five per cent of the tax paid or required to be paid pursuant to subsection G of this section for the preceding calendar year. The quarterly payments shall be due and payable on or before the last day of the month following the close of the quarter and shall be made to the state treasurer.

J. If an overpayment of taxes results from the method prescribed in subsection I of this section the industrial commission may refund the overpayment without interest.

K. An insurer who fails to pay the tax prescribed by subsection G or I of this section or the amount prescribed by section 23-1065, subsection A is subject to a civil penalty equal to the greater of twenty-five dollars or five per cent of the tax or amount due plus interest at the rate of one per cent per month from the date the tax or amount was due.

L. An insurance carrier authorized to write workers' compensation insurance may not assess an employer premiums for services provided by a contractor alleged to be an employee under section 23-902, subsection B or C, unless the carrier has done both of the following:

1. Prepared written audit or field investigation findings establishing that all applicable factors for determining employment status under section 23-902 have been met.

2. Provided a copy of such findings to the employer in advance of assessing a premium.

M. Notwithstanding section 23-901, paragraph 6, subdivision (i), a sole proprietor may waive the sole proprietor's rights to workers' compensation coverage and benefits if both the sole proprietor and the insurance carrier of the employer subject to this chapter for which the sole proprietor performs services sign and date a waiver that is substantially in the following form:

I am a sole proprietor, and I am doing business as (name of sole proprietor). I am performing work as an independent contractor for (name of employer). I am not the employee of (name

of employer) for workers' compensation purposes, and, therefore, I am not entitled to workers' compensation benefits from (name of employer). I understand that if I have any employees working for me, I must maintain workers' compensation insurance on them.

---

Sole proprietor Date

---

Insurance carrier Date

### 23-961.01. Self-insurance pools

A. Two or more employers, each of whom are engaged in similar industries, may enter into contracts to establish a workers' compensation pool to provide for the payment and administration of workers' compensation claims pursuant to this chapter. The members of each workers' compensation pool shall elect a board of trustees to manage the workers' compensation pool established pursuant to this section. Each member employer shall have been in business for at least five consecutive years before entering into a contract to establish a workers' compensation pool. The total amount of gross workers' compensation insurance premiums paid by the members of the pool in the year preceding the execution of the contract must equal at least seven hundred fifty thousand dollars. The group of employers that makes up a workers' compensation pool shall have been formed for a specific purpose, other than to engage in self-insurance, before the formation of a workers' compensation pool. Employers may establish workers' compensation pools pursuant to this section by one of the following means:

1. On a cooperative or contract basis.
2. Through the joint formation of a nonprofit corporation.
3. By the execution of a trust agreement to carry out the provisions of this chapter directly by the employers or by contracting with a third party.

B. A workers' compensation pool established pursuant to this section is subject to approval as a self-insurer by the industrial commission pursuant to section 23-961, subsection A, paragraph 2. The commission shall adopt rules as necessary to carry out the purposes of this section.

C. Workers' compensation pools established pursuant to this section are exempt from taxation under title 43.

D. Each agreement or contract shall provide that the members of a workers' compensation pool are jointly and severally liable for the liabilities of the pool. If a member of a pool discontinues its membership in the pool, that party shall be liable only for liabilities accruing prior to the discontinuation of its membership in the pool.

E. As to self-insurance pools established under this section, no pool, employer within a pool, or agent of any pool or employer within a pool may require an employee to be treated by or directed to any specific medical provider subsequent to the employee's initial visit to treat an industrial injury or illness, except as may be required as part of an independent medical examination for an employee making a workers' compensation claim.

F. The industrial commission shall adopt rules necessary for safeguarding the solvency of pools and guaranteeing that injured workers receive benefits as required under this chapter. These rules shall include, at a minimum, matters pertaining to classification and rating, loss reserves, investments, financial security including minimum and combined premiums, combined net worth and other indicia necessary for protection from insolvency, specific and aggregate excess insurance, group homogeneity and assessments necessary for participation in and administration of the workers' compensation system.

#### 23-107. General powers

A. The commission has full power, jurisdiction and authority to:

1. Formulate and adopt rules and regulations for effecting the purposes of this article.
2. Administer and enforce all laws for the protection of life, health, safety and welfare of employees in every case and under every law when such duty is not specifically delegated to any other board or officer, and, when such duty is specifically delegated, to counsel, advise and assist in the administration and enforcement of such laws and for such purposes may conduct investigations.
3. Promote the voluntary arbitration, mediation and conciliation of disputes between employers and employees.
4. License and supervise the work of private employment offices, bring together employers seeking employees and working people seeking employment, and make known the opportunities for employment in the state.
5. Collect, collate and publish all statistical and other information relating to employees, employers, employments and places of employment with other appropriate statistics.
6. Act as the regulatory agency insuring that workers' compensation carriers are processing claims in accordance with chapter 6 of this title.

7. Provide nonpublic, confidential or privileged documents, materials or other information to another state, local or federal regulatory agency for the purpose of the legitimate administrative needs of the programs administered by that agency if the recipient agency agrees and warrants that it has the authority to maintain and will maintain the confidentiality and privileged status of the documents, materials or other information.

8. Receive nonpublic documents, materials and other information from another state, local or federal regulatory agency to properly administer programs of the commission. The commission shall maintain as confidential or privileged any document, material or other information that is identified by the exchange agency as confidential or privileged under the laws of the jurisdiction that is the source of the document, material or other information.

9. Enter into agreements that govern the exchange of nonpublic documents, materials and other information that are consistent with paragraphs 7 and 8. The commission may request nondisclosure of information that is identified as privileged or confidential. Any disclosure pursuant to paragraph 7 or 8 or this paragraph is not a waiver of any applicable privilege or claim of confidentiality in the documents, materials or other information.

B. Upon petition by any person that any employment or place of employment is not safe or is injurious to the welfare of any employee, the commission has power and authority, with or without notice, to make investigations necessary to determine the matter complained of.

C. The members of the commission may confer and meet with officers of other states and officers of the United States on matters pertaining to their official duties.

D. Notwithstanding any other law, the commission may protect from public inspection the financial information that is received from a private entity that applies to self-insure or that renews its self-insurance plan pursuant to section 23-961, subsection A if the information is kept confidential by the private entity in its ordinary and regular course of business.

### 23-108.03. Performance of certain powers and duties

A. The industrial commission shall be responsible for determining the policy of the commission.

B. Any powers and duties prescribed by law to the commission in this chapter and chapters 2 and 6 of this title, whether ministerial or discretionary, may by resolution be delegated by the commission to the director or any of its department heads or assistants, provided, that the commission shall not delegate its power or duty to:

1. Make rules and regulations.

2. Commute awards to a lump sum.

3. License self-insurers.

C. The commission shall be responsible for the official acts of its employees acting in the name of the commission and by its delegated authority.

23-1065. Special fund; purposes; investment committee

A. The industrial commission may direct the payment into the state treasury of not to exceed one per cent of all premiums received by private insurance carriers during the immediately preceding calendar year. The same percentage shall be assessed against self-insurers based on the total cost to the self-insured employer as provided in section 23-961, subsection G. Such assessments shall be computed on the same premium basis as provided for in section 23-961, subsections G, H, I, J and K and shall be no more than is necessary to keep the special fund actuarially sound. Such payments shall be placed in a special fund within the administrative fund to provide, at the discretion of the commission, such additional awards as may be necessary to enable injured employees to accept the benefits of any law of this state or of the United States, or both jointly, for promotion of vocational rehabilitation of persons with disabilities in industry.

B. In claims involving an employee who has a preexisting industrially-related permanent physical impairment of the type specified in section 23-1044, subsection B and who thereafter suffers an additional permanent physical impairment of the type specified in such subsection, the claim involving the subsequent impairment is eligible for reimbursement, as provided by subsection D of this section, according to the following:

1. The employer in whose employ the subsequent impairment occurred or its insurance carrier is solely responsible for all temporary disability compensation to which the employee is entitled and for an amount equal to the permanent disability compensation provided by section 23-1044, subsection B for the subsequent impairment. If the employee is determined to have sustained no loss of earning capacity after the medically stationary date, the employer or carrier shall pay him as a vocational rehabilitation bonus the amount calculated under this paragraph as a lump sum, which shall be a credit against any permanent compensation benefits awarded in any subsequent proceeding. The amount of the vocational rehabilitation bonus for which the employer or carrier is responsible under this paragraph shall be calculated solely on physical, medically rated permanent impairment and not on occupational or other factors.

2. If the commission determines that the employee is entitled to compensation for loss of earning capacity under section 23-1044, subsection C or permanent total disability under section 23-1045, subsection B, the total amount of permanent benefits for which the employer or carrier is solely responsible under paragraph 1 of this subsection shall be expended first, with monthly payments made according to the loss of earning capacity or permanent total disability award. The employer or carrier and the special fund are equally responsible for the remaining amount of compensation for loss of earning capacity under section 23-1044, subsection C or permanent total disability under section 23-1045, subsection B. This paragraph shall not be construed as requiring payment of any benefits under section 23-1044, subsection B in any case

in which an employee is entitled to benefits for loss of earning capacity under section 23-1044, subsection C or permanent total disability benefits under section 23-1045, subsection B.

C. In claims involving an employee who has a preexisting physical impairment that is not industrially-related and, whether congenital or due to injury or disease, is of such seriousness as to constitute a hindrance or obstacle to employment or to obtaining reemployment if the employee becomes unemployed, and the impairment equals or exceeds a ten per cent permanent impairment evaluated in accordance with the American medical association guides to the evaluation of permanent impairment, and the employee thereafter suffers an additional permanent impairment not of the type specified in section 23-1044, subsection B, the claim involving the subsequent impairment is eligible for reimbursement, as provided by subsection D of this section, under the following conditions:

1. The employer in whose employ the subsequent impairment occurred or its carrier is solely responsible for all temporary disability compensation to which the employee is entitled.
2. The employer had knowledge of the permanent impairment at the time the employee was hired, or that the employee continued in employment after the employer acquired such knowledge.
3. The employee's preexisting impairment is due to one or more of the following:
  - (a) Epilepsy.
  - (b) Diabetes.
  - (c) Cardiac disease.
  - (d) Arthritis.
  - (e) Amputated foot, leg, arm or hand.
  - (f) Loss of sight of one or both eyes or a partial loss of uncorrected vision of more than seventy-five per cent bilaterally.
  - (g) Residual disability from poliomyelitis.
  - (h) Cerebral palsy.
  - (i) Multiple sclerosis.
  - (j) Parkinson's disease.
  - (k) Cerebral vascular accident.

- (l) Tuberculosis.
- (m) Silicosis.
- (n) Psychoneurotic disability following treatment in a recognized medical or mental institution.
- (o) Hemophilia.
- (p) Chronic osteomyelitis.
- (q) Hyperinsulinism.
- (r) Muscular dystrophies.
- (s) Arteriosclerosis.
- (t) Thrombophlebitis.
- (u) Varicose veins.
- (v) Heavy metal poisoning.
- (w) Ionizing radiation injury.
- (x) Compressed air sequelae.
- (y) Ruptured intervertebral disk.

4. The employer or carrier and the special fund are equally responsible for the amount of compensation for loss of earning capacity under section 23-1044, subsection C or permanent total disability under section 23-1045, subsection B.

D. The employer or insurance carrier shall notify the commission of its intent to claim reimbursement for an eligible claim under subsection B or C of this section not later than the time the employer or insurance carrier notifies the commission pursuant to section 23-1047, subsection A. Upon receiving notice the commission may expend funds from the special fund created by this section for travel and discovery procedures and for the employment of such independent legal, medical, rehabilitation, claims or labor market consultants or experts as may be deemed necessary by the commission to assist in the determination of the liability of the special fund, if any, under subsection B or C of this section. In the event there is any dispute regarding liability to the special fund pursuant to subsection B or C of this section, the commission shall not delay the issuance of a permanent award pursuant to section 23-1047, subsection B.

E. If the special fund created by this section is determined to be liable under either subsection B or C of this section, the employer or insurance carrier that is primarily liable shall pay the entire amount of the award to the injured employee and the commission shall by rule provide for the reimbursement of the employer or insurance carrier on an annual basis. In any case arising out of subsection B or C of this section, the written approval of the special fund is required for the compromise of any claim made pursuant to section 23-1023. In any such case, written approval shall not be unreasonably withheld by the special fund, carrier, self-insured employer or other person responsible for the payment of compensation. Failure to obtain the written approval of the special fund shall not cause the injured worker to lose any benefits but ends the special fund's liability for reimbursement and makes the employer or carrier solely responsible for the payment of the remaining benefits.

F. The employer or insurance carrier shall make its claim for reimbursement to the commission no later than November 1 each year, for payments made pursuant to subsection B or C of this section during the twelve months prior to October 1 each year. Claims shall be paid before December 31 each year. If the total annual reserved liabilities of the special fund obligated under subsections B and C of this section exceed six million dollars, as determined by the annual actuarial study performed pursuant to subsection I of this section, the commission, after notice and a hearing, may levy an additional assessment under subsection A of this section of up to one-half per cent to meet such liabilities. Any insurance carrier or employer who may be adversely affected by the additional assessment may at any time prior to the sixtieth day after such additional assessment is ordered file a complaint challenging the validity of the additional assessment in the superior court in Maricopa county for a judicial review of the additional assessment. On judicial review the determination of the commission shall be upheld if supported by substantial evidence in the record considered as a whole.

G. In the event the injured employee is awarded additional compensation, under subsection A of this section, the commission retains jurisdiction to amend, alter or change the award upon a change in the physical condition of the injured employee resulting from the injury.

H. On receiving notice that the special fund may be liable under this chapter, the commission may spend monies from the special fund established by this section for expenses that are necessary to assist in the processing, payment or determination of liability of the fund. These expenses may include travel, discovery procedures and employing any legal, medical, rehabilitation, claims or labor market consultant, examiner or expert.

I. The commission shall cause an annual actuarial study of the special award fund to be made by a qualified actuary who is a member of the society of actuaries. The actuary shall make specific recommendations for maintaining the fund on a sound actuarial basis. The actuarial study shall be completed on or before September 1.

J. The special fund of the commission consists of all monies from premiums and assessments, except penalties assessed pursuant to this chapter, received and paid into the fund, property and securities acquired by the use of monies in the fund, interest earned on monies in the fund

and other monies derived from the sale, use or lease of properties belonging to the fund. The special fund created by this section shall be administered by the director of the industrial commission, subject to the authority of the industrial commission. The director of the commission with approval of the investment committee, in the administration of the special fund, may provide loans, subject to repayment, budgetary review and legislative appropriation, to the administrative fund for the purposes and subject to section 23-1081, acquire real property and acquire or construct a building or other improvements on the real property as may be necessary to house, contain, furnish, equip and maintain offices and space for departmental and operational facilities of the commission. The commission when using space constructed pursuant to this section shall make equal payments of rent on a semiannual basis, which shall be deposited in the special fund. The investment committee shall determine the amount of the rent, which must be at least equal to or greater than that determined by the joint committee on capital review for buildings of similar design and construction as provided by section 41-792.01.

K. There is established an investment committee consisting of the director and the chairman of the commission and three persons knowledgeable in investments and economics appointed by the governor. Of the members appointed by the governor, one shall be a professional in the investment business, one shall represent workers' compensation insurers and one shall represent self-insurers. The term of members appointed by the governor is three years, which shall begin on July 1 and end on June 30 three years later. The committee shall prescribe by rule investment policies and supervise the investment activities of the special fund.

L. Each member of the investment committee, other than the director of the commission, is eligible to receive from the special fund:

1. Compensation of fifty dollars for each day while in actual attendance at meetings of the investment committee.
2. Reimbursement for expenses pursuant to title 38, chapter 4, article 2.

M. The investment committee shall meet at least once every month.

N. The investment committee shall periodically review and assess the investment strategy.

O. The investment committee, by resolution, may invest and reinvest the surplus or reserves in the funds established under this chapter in any legal investments authorized under section 38-718.

P. In addition to the investments authorized under section 38-718, the investment committee may approve the investment in real property and improvements on real property to house and maintain offices of the commission, including spaces for its departmental and operational facilities. Title to the real estate and improvements on the real estate vests in the special fund of the commission, and the assets become part of the fund as provided by this section.

Q. The investment committee may appoint a custodian for the safekeeping of all or any portion of the investments owned by the special fund of the commission and may register stocks, bonds and other investments in the name of a nominee. Except for investments held by a custodian or in the name of a nominee, all securities purchased pursuant to subsection O of this section shall promptly be deposited with the state treasurer as custodian thereof, who shall collect the dividends, interest and principal thereof, and pay, when collected, into the special fund. The state treasurer shall pay all vouchers drawn for the purchase of securities. The director may sell any of the securities as the director deems appropriate, if authorized by resolution of the investment committee, and the proceeds therefrom shall be payable to the state treasurer for the account of the special fund upon delivery of the securities to the purchaser or the purchaser's agent.

23-945. Petition for hearing on validity of order; procedure; substitution of order

A. Any employer or other person interested in or affected by an order of the commission may petition for a hearing on the reasonableness and lawfulness of such order by a verified petition filed with the commission. The petition shall set forth specifically and in detail the order upon which a hearing is desired, the reasons why the order is unreasonable or unlawful and the issue to be considered by the commission on the hearing. Objections other than those set forth in the petition are deemed finally waived.

B. Upon receipt of the petition, if the issue raised in the petition has theretofore been adequately considered, the commission shall confirm, without hearing, its previous determination. If a hearing is necessary to determine the issue raised, the commission shall order a hearing thereon at such time as it prescribes. Notice of the time and place of hearing shall be given the petitioner and such other persons as the commission finds directly interested in the decision.

C. Upon the hearing, if it is found that the order complained of is unlawful or unreasonable, the commission shall substitute therefor a reasonable and lawful order, and may grant further time reasonably necessary for compliance with its order.

**INDUSTRIAL COMMISSION (F19-0904)**

Title 20, Chapter 5, Article 1, Workers' Compensation Practice and Procedure



# GOVERNOR'S REGULATORY REVIEW COUNCIL

## ATTORNEY MEMORANDUM - FIVE-YEAR REVIEW REPORT

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**MEETING DATE:** September 4, 2019

**TO:** Members of the Governor's Regulatory Review Council (Council)

**FROM:** Council Staff

**DATE:** August 8, 2019

**SUBJECT: INDUSTRIAL COMMISSION OF ARIZONA (F19-0904)**  
Title 20, Commerce, Financial Institutions, and Insurance, Chapter 5. Industrial Commission of Arizona, Article 1, Workers' Compensation Practice and Procedure

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This Five-Year-Review Report from the Industrial Commission of Arizona (Commission) relates to rules in Title 20, Commerce, Financial Institutions, and Insurance, Chapter 5, Industrial Commission of Arizona, the rules cover the following:

- **Article 1** (Workers' Compensation Practice and Procedure).

The Commission did not propose a course of action in its previous Five-Year-Review Report.

### **Proposed Action**

The Commission indicates that it incorporated a new Claims and Administrative Law Judge (ALJ) computer system, which offers alternative methods of communicating with the Commission, including webforms, document upload, electronic fax, and a secured file transfer protocol. The system also allows parties in worker's compensation cases to have web-based access to the Claim and ALJ records.

The Commission created a committee that includes members from the ALJ division, claims division, legal division, and outside stakeholders from both the applicant bar and defense bar to study the effect of the new system. The Commission indicates that it plans to study the effect of the new system, and upon approval of the committee's recommendations to the Commission, will initiate a rulemaking within the next year to modernize any impacted rules in Article 1. The Commission expects the recommendation will be completed by December 2019. The Commission has already identified rules that need to be amended as a result of the system:

- **R20-5-107(A) and (B)** (Manner of Completion of Forms and Documents);
- **R20-5-108(G)** (Confidentiality of a Commission Claims File; Reproduction and Inspection of a Commission Claims File);
- **R20-5-109(B)** (Admission into Evidence of Documents Contained in a Commission Claims File);
- **R20-5-110** (Employer Duty to Report Fatality);
- **R20-5-112(B)** (Physician's Initial Report of Injury); and
- **R20-5-158(B)** (Service of Awards and Others Matters).

The Commission also plans to resolve the inconsistencies mentioned in sections 4 and 6 of the report.

**1. Has the agency analyzed whether the rules are authorized by statute?**

Yes, the Commission cites both and general and specific authority for these rules.

**2. Summary of the agency's economic impact comparison and identification of stakeholders:**

The Commission states that the current estimated economic, small business, and consumer impact of the rules is not substantially different from that stated in the 2001 Economic Impact Statement, as cited in the 2014 Five Year Review Report.

Stakeholders include the Commission, injured workers, employers (including self-insured employers), workers' compensation insurance carriers, third party processors (companies that process claims on behalf of self-insured employers and workers' compensation carriers), and medical providers that provide services to injured workers.

**3. Has the agency analyzed the costs and benefits of the rulemaking and determined that the rules impose the least burden and costs to those who are regulated?**

Yes. The Commission states that the probable benefits of the rules significantly outweigh the probable costs. The rules impose the least burden and costs on the regulated community.

4. **Has the agency received any written criticisms of the rules over the last five years?**

No, the Commission indicates that it did not receive any written criticisms of these rules over the last five years.

5. **Has the agency analyzed the rules' clarity, conciseness, and understandability, consistency with other rules and statutes, and effectiveness?**

Yes. For the reasons specified in the report, the Commission indicates that the following rules could be amended to improve their clarity, conciseness, and understandability:

- **R20-5-101(A)(3)** (Application of the Article; Notice of Rules; Part of Record);
- **R20-5-102** (Definitions);
- **R20-5-106(B)(12)** (Commission Forms);
- **R20-5-113(F)** (Physician's Duty to Provide Signed Reports; Rating of Impairment of Function; Restriction Against Interruption or Suspension of Benefits; Change of Physician);
- **R20-5-114(F)** (Examination at Request of Commission, Carrier or Employer; Motion for Relief); and
- **R20-5-128(A)** (Medical Information Reproduction Cost Limitation; Definition of Medical Information).

6. **Has the agency analyzed the current enforcement status of the rules?**

Yes, the Commission indicates that the rules are enforced as written.

7. **Are the rules more stringent than corresponding federal law and, if so, is there statutory authority to exceed the requirements of federal law?**

No. The rules in Article 1 implement Title 23, Chapter 6, of the Arizona Revised Statutes, which governs workers' compensation. There is no corresponding federal law.

8. **For rules adopted after July 29, 2010, do the rules require a permit or license and, if so, does the agency comply with A.R.S. § 41-1037?**

Not applicable. The rules do not require a general permit.

9. **Conclusion**

As indicated above, the Commission plans to analyze the effects of its newly implemented computer system. It plans to study the effect of the new system and upon approval of the committee's recommendations to the Commission, will initiate a rulemaking to modernize any impacted rules in Article 1. The Commission expects the recommendation will be completed by December 2019. The Commission also plans to

address the issues identified in sections 4 and 6 of the report. Council staff recommends approval of this report.

**THE INDUSTRIAL COMMISSION OF ARIZONA  
OFFICE OF THE DIRECTOR**



DALE L. SCHULTZ, CHAIRMAN  
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June 27, 2019

Sent via e-mail to [grrc@azdoa.gov](mailto:grrc@azdoa.gov)  
Nicole Sornsins, Chair  
Governor's Regulatory Review Council  
Arizona Department of Administration  
100 North 15th Avenue, Suite 305  
Phoenix, Arizona 85007

Re: A.A.C. Title 20, Chapter 5, Article 1, Five-year Review Report

Dear Ms. Sornsins:

The Industrial Commission of Arizona (the "Commission") submits for approval by the Governor's Regulatory Review Council (the "Council") the attached Five-year Review Report on 20 A.A.C. 5, Article 1. The Commission has timely filed this report on or before Friday, June 28, 2019.

An electronic copy of this cover letter, the report, the rules being reviewed, the general and specific statutes authorizing the rules, and economic impact statement is concurrently submitted by e-mail to Krishna Jhaveri. The Commission believes that the report complies with the requirements of A.R.S. § 41-1056.

The Commission has reviewed all rules in Article 1 and has complied with A.R.S. § 41-1091, which requires the Commission to annually publish a directory summarizing the subject matter of all currently applicable rules and substantive policy statements, by posting directories of its current rules and substantive policy statements on the Commission's website, as required by A.R.S. § 41-1091.01(1) & (2). Should you have any questions concerning the report, please contact Chief Counsel Gaetano Testini at (602) 542-5905.

Sincerely,

  
James Ashley  
Director

GJT/kh  
Enclosure

**FIVE-YEAR-REVIEW REPORT**

**TITLE 20. COMMERCE, FINANCIAL INSTITUTIONS, AND INSURANCE**

**CHAPTER 5. INDUSTRIAL COMMISSION OF ARIZONA**

**ARTICLE 1. WORKERS' COMPENSATION PRACTICE AND PROCEDURE**

**FIVE-YEAR-REVIEW REPORT**  
**TITLE 20. COMMERCE, FINANCIAL INSTITUTIONS, AND INSURANCE**  
**CHAPTER 5. INDUSTRIAL COMMISSION OF ARIZONA**  
**ARTICLE 1. WORKERS' COMPENSATION PRACTICE AND PROCEDURE**

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4.	GENERAL AND SPECIFIC STATUTES	Attached

## **FIVE-YEAR REVIEW SUMMARY**

The Industrial Commission of Arizona (the “Commission”) was created in 1925 as a result of legislation (Arizona Workman’s Compensation Act) implementing the constitutional provisions establishing a workers’ compensation system. From 1925 to 1969, the workers’ compensation system consisted of the State Compensation Fund, which was then a part of the Commission, and self-insured employers which generally comprised the mining and the railroad companies. In 1969, the workers’ compensation system reorganized and expanded to include private insurance companies. The State Compensation Fund was split off from the Commission and established as a separate agency responsible for providing workers’ compensation insurance coverage. The Commission retained both its responsibility as the file of record and its authority over the processing of workers’ compensation claims. Since that time, the role of the Commission has grown to include other labor-related issues such as occupational safety and health, youth employment, resolution of wage-related disputes, minimum wage, vocational rehabilitation, workers’ compensation coverage for claimants of uninsured employers, and self-insured employers.

### **Certification Regarding Compliance with A.R.S. § 41-1091**

In the cover letter for this report, the Commission’s Director certifies that the Commission has complied with A.R.S. § 41-1091 with respect to substantive policy statements relating to the rules in Article 1, as well as other substantive policy statements in the Commission’s online Substantive Policy Statement Directory.

### **About Article 1**

Article 1 sets forth procedures for workers' compensation proceedings before the Commission, general filing requirements for workers' compensation documents submitted to the Commission, required content for various workers' compensation forms used by the Commission, and other procedural directives pertaining to workers' compensation. The rules in Article 1 pertain to workers' compensation actions and proceedings before the Commission resulting from workplace injuries that occurred on or after January 1, 1969.

### **Recent Rulemaking Related to Article 1**

Since the most-recent Five Year Review Report on Article 1, the Commission has engaged in rulemaking related to Article 1. First, on November 8, 2016, R20-5-136 expired pursuant to A.R.S. § 41-1056(J). Second, in 2017, the Arizona Legislature directed the Commission to review and determine a process for streamlining the authorization process for treatment that is within the evidence-based treatment guidelines (contained in Article 13). Effective October 1, 2018, R20-5-106(A) was amended to include subsection (A)(12), which describes and mandates the use of a Medical Treatment Pre-Authorization Form.

## **FIVE-YEAR-REVIEW REPORT**

### **TITLE 20. COMMERCE, FINANCIAL INSTITUTIONS, AND INSURANCE**

#### **CHAPTER 5. INDUSTRIAL COMMISSION OF ARIZONA**

#### **ARTICLE 1. WORKERS' COMPENSATION PRACTICE AND PROCEDURE**

**1. General and specific statutes authorizing the rules, including any statute that authorizes the agency to make rules.**

The rules in Article 1 have general and specific authorization under: (1) A.R.S. § 23-107(A)(1), which states that the Commission “has full power, jurisdiction, and authority to . . . [f]ormulate and adopt rules . . . for effecting the purposes of [A.R.S. Title 23, Chapter 1, Article 1]”; (2) A.R.S. § 23-921(B), which states that “[t]he Commission may make and declare all rules and regulations which are reasonably required in the performance of its duties, including but not limited to rules of practice and procedure in connection with hearing and review proceedings”; (3) A.R.S. § 23-930(E), which states that “[t]he Commission shall adopt by rule a definition of unfair claim processing practices and bad faith”; (4) A.R.S. § 23-1044(G), which states that “[t]he Commission may adopt a schedule for rating loss of earning capacity and reasonable and proper rules to carry out this section”; and (5) A.R.S. § 23-1062.03, which states that “[t]he Commission shall develop and implement a process for the use of evidence-based medical treatment guidelines.”

**2. Objective of the rules, including the purposes for the existence of the rules.**

The Commission’s overarching objectives regarding Article 1, in no particular order with respect to priority, are to: (1) set forth the procedural framework for a just and humane compensation law in the State of Arizona, for the relief and protection of injured workers, their widows, children or dependents, from the burdensome, expensive and litigious remedies for injuries to, or death of, such workers; (2) minimize burden upon the regulated community; and (3) incentivize compliance with established procedures.

- R20-5-101. Application of the Article; Notice of Rules; Part of Record
- R20-5-101. This rule provides the types of actions and proceedings relating to Article 1, that the Article is part of the record in each action without reference thereto, that all parties are deemed to have knowledge of the rules of procedure, and that a copy of the Article is available from the Commission free of charge.
- R20-5-102. Definitions
- R20-5-102. This rule defines terms utilized in R20-5-101 through R20-5-165.
- R20-5-103. Location of Industrial Commission Offices and Office Hours
- R20-5-103. This rule states the location of the offices of the Commission and the hours of operation.
- R20-5-104. Address of Claimant and Uninsured Employer
- R20-5-104. This rule gives notice to claimants and uninsured employers against whom a workers' compensation claim has been filed that they have a duty to keep the Commission, insurance carrier (if applicable), self-insured employer (if applicable), and Special Fund (if applicable) advised of their address, and that providing the address of their attorney is insufficient to comply with the rule.
- R20-5-105. Filing Requirements; Time for Filing; Computation of Time; Response to Motion
- R20-5-105. This rule provides the procedure for computing time for filing pleadings, reports, documents, instruments, a response to a motion to join, and other written matters with the Commission. The rule also sets forth the requirement that motions involving discovery matters must include a statement that good faith efforts to resolve the dispute have been exhausted.
- R20-5-106. Commission Forms

- R20-5-106. This rule provides a list with requirements of Commission forms that are either required or optional. This rule also specifies that forms may not be changed, amended, or otherwise altered without the approval of the Commission.
- R20-5-107. Manner of Completion of Forms and Documents
- R20-5-107. This rule provides that forms must be completed legibly, signed by the party or party's authorized representative, and the procedures for incomplete forms.
- R20-5-108. Confidentiality of a Commission Claims File; Reproduction and Inspection of a Commission Claims File
- R20-5-108. This rule sets forth the parameters for when a Claims file is available for inspection and copying, as well as the applicable charge for copies.
- R20-5-109. Admission into Evidence of Documents Contained in a Commission Claims File
- R20-5-109. This rule allows for the entry into evidence documents contained in a Commission claims file.
- R20-5-110. Employer Duty to Report Fatality
- R20-5-110. This rule sets forth an employer's duty to report a fatality as a result of an injury by accident arising out of and in the course and scope of employment to the Commission's Claims Division. The rule sets forth the manner of reporting, details to be reported, and time frame for the reporting.
- R20-5-111. Request for Autopsy
- R20-5-111. This rule provides that the requesting party shall bear the cost of an autopsy.
- R20-5-112. Physician's Initial Report of Injury
- R20-5-112. This rule sets forth the requirements for completion of Form 102.

R20-5-113. Physician's Duty to Provide Signed Reports; Rating of Impairment of Function; Restriction Against Interruption or Suspension of Benefits; Change of Physician

R20-5-113. This rule describes the relationship between a treating physician and an injured worker, as well as the obligations of a treating physician during the period of time in which the physician is treating the injured worker. Subsection (A) imposes a duty upon the treating physician to keep the insurance carrier, the self-insured employer, or Special Fund Division informed of the injured worker's medical condition by completing a progress report every 30 days. Subsection (B) states that upon medical discharge, the physician is also required to complete a final discharge report establishing the details of the rating of impairment and the clinical findings that support the rating. All these reports are required to be signed by the treating physician. Subsection (C) of the rule states that a carrier, self-insured employer, or the Special Fund Division shall not interrupt or suspend a claimant's temporary disability compensation benefits because a physician fails to comply with the requirements of the rule. Subsection (D) of the rule establishes that a carrier, self-insured employer or the Special Fund Division may withhold payments to a physician until the physician complies with Subsection (A) and submits progress reports. Subsection (E) sets forth the procedure to change treating physicians.

R20-5-114. Examination at Request of Commission, Carrier or Employer; Motion for Relief

R20-5-114. This rule sets forth the guidelines for requested examinations, the consequences of unreasonably failing to attend the examination, the disclosure of the examination report, and the process to secure a protective order against a notice of examination.

R20-5-115. Request to Leave the State

R20-5-115. This rule sets forth the effective date of an order granting or denying a request to leave the state, and defines terms in A.R.S. § 23-1071(A).

- R20-5-116. Payment of Claimant's Travel Expenses When Directed to Report for Medical Examination or Treatment
- R20-5-116. This rule allows for advanced payment of travel expenses for a claimant directed to report for a medical examination or treatment in a locality other than the claimant's current place of residence or employment, based upon the current reimbursement rate paid to a state employee.
- R20-5-117. Medical, Surgical, Hospital, and Burial Expenses
- R20-5-117. This rule provides the manner in which medical, surgical, hospital, and burial bills should be presented for payment, allows for reimbursement if bills are paid, and disallows balance billing.
- R20-5-118. Effective Date of Notices of Claim Status and Other Determinations; Attachments to Notices of Claim Status; Form of Notices of Claim Status
- R20-5-118. This rule requires that once a Notice of Claim Status has gone final accepting a claim for benefits, any subsequent Notice of Claim Status affecting the amount of, or entitlement to, compensation or medical, surgical, or hospital benefits can have a maximum retroactive date of 30 days from issuance. This rule also requires that Notices based upon a medical report must include a copy of the medical report when sent to the Commission or served upon a party, except for a mental examination which may be served upon the treating doctor.
- R20-5-119. Notice of Third-party Settlement
- R20-5-119. This rule requires notification to a carrier, self-insured employer, or Special Fund Division of a third-party settlement or judgment, and copies of all pleadings and offers of settlement.
- R20-5-120. Settlement Agreements, Compromises and Releases

R20-5-120. This rule requires that any compromise and settlement of a workers' compensation claim is not valid unless approved by the Commission. The rule clarifies that an insurance carrier will not be relieved of its obligations under the Arizona Workers' Compensation Act if a monetary settlement is made without the approval of the Commission. Furthermore, the insurance carrier will not be entitled to a credit unless the Commission approves the settlement.

R20-5-121. Present Value and Basis of Calculation of Lump Sum Commutation Awards

R20-5-121. This rule requires that a permanent disability award commuted to a lump sum pursuant to A.R.S. § 23-1067, is to be calculated based upon the present value of the award. The rule provides the date on which the present value shall be calculated and that the United States Life Tables shall be used in the calculation of the present value.

R20-5-122. Lump Sum Commutation

R20-5-122. This rule sets forth the prerequisites and substantive requirements for a lump sum commutation

R20-5-123. Rejection of the Act

R20-5-123. This rule requires that an employer shall keep a copy of the employee's rejection of the Workers' Compensation Act as part of its business records.

R20-5-124. Rejection Not Applicable to New Employment

R20-5-124. This rule provides that a rejection of the Workers' Compensation Act remains in effect if an employer changes carriers or employer entity, but the rejection ceases if the employee goes to a new employer or terminates employment with the prior employer and is subsequently rehired.

- R20-5-125. Rejection Before an Employer Complies with A.R.S. §§ 23-961(A) and 23-906(D)
- R20-5-125. This rule allows for employees to reject coverage under the Workers' Compensation Act prior to the time that their employer procures workers' compensation insurance.
- R20-5-126. Revocation of Rejection
- R20-5-126. This rule provides the procedure to revoke a rejection of coverage under the Workers' Compensation Act.
- R20-5-127. Insurance Carrier Notification to Commission of Coverage
- R20-5-127. This rule requires an insurance carrier is to notify the Commission within five days of new coverage, but failure to comply with the rule does not affect the validity of the coverage.
- R20-5-128. Medical Information Reproduction Cost Limitation; Definition of Medical Information
- R20-5-128. This rule defines "medical information" and sets forth the permissible charges for a health care provider supplying copies of these records.
- R20-5-129. Carrier or Workers' Compensation Pool Determinations Binding upon its Insured or Members; Self-Rater Exception
- R20-5-129. The rule informs employers that their insurance carrier or workers' compensation pool is the employer's agent and that the carrier's or pool's decisions are binding upon the employer. However, the rule recognizes an employer may disagree with a carrier or pool's actions and may file a timely protest of a notice in writing.
- R20-5-130. Claims Office Location and Function; Requirements of Maintaining an Out-of-State Claims Office

- R20-5-130. This rule requires that insurance carriers that have, or are underwriting workers' compensation insurance in Arizona, and each employer and workers' compensation pool that has been granted authority to act as a self-insurer, have a claims office in Arizona. A carrier, self-insured employer, and self-insured workers' compensation pool are required to notify the Commission of the address of the claims office. The rule requires that claims be paid within the State of Arizona unless permission is obtained from the Commission to do otherwise. The rule also provides that a carrier or self-insured employer may request authorization to maintain an out-of-state claims office under certain conditions specified in the rule. The rule also permits carriers, self-insured employers, or workers' compensation pools to have more than one designated representative, with appropriate notification to the Commission.
- R20-5-131. Maintenance of Carrier and Self-insured Employer Claims Files; Contents; Inspection and Copying; Exchange of Medical Reports; Authorization to Obtain Medical Records
- R20-5-131. This rule sets forth the requirement for carriers and self-insured employers to maintain a file, and to make that file available for inspection and copying within five days for in-state carriers, and ten days for out-of-state carriers
- R20-5-132. Parties' Notice to Commission of Intention to Impose Liability upon A.R.S. § 23-1065 Special Fund
- R20-5-132. This rule provides that the Commission shall not be bound by prior testimony and evidence presented at any hearing which relates to imposition of liability upon the Special Fund if the notices required by A.R.S. § 23-1065 are not given.
- R20-5-133. Claimant's Petition to Reopen Claim
- R20-5-133. This rule sets forth the applicable timelines and required medical documentation for the processing of Petitions to Reopen under A.R.S. § 23-1061(H), as well as

the procedure for objecting to out-of-state physician medical reports and the consequences of such an objection.

R20-5-134. Petition for Rearrangement or Readjustment of Compensation Based Upon Increase or Reduction of Earning Capacity

R20-5-134. This rule sets forth the procedure and necessary documentation for filing a Petition for Rearrangement or Readjustment. The rule also provides that, if a self-insured employer, carrier, Special Fund Division, or uninsured employer requests a hearing protesting the Commission's determination under A.R.S. § 23-1044(F), and the claimant resides outside of Arizona, the Commission may order the self-insured employer, carrier, Special Fund Division, or uninsured employer to pay the transportation and living expenses of the claimant to attend any scheduled hearing.

R20-5-135. Requests for Hearing; Form

R20-5-135. This rule states that a request for hearing shall be in writing and details the form available upon request from the Commission.

R20-5-137. Service of a Request for Hearing

R20-5-137. The rule states that a party requesting a hearing shall serve a copy of the request upon all other parties at the same time that the request is filed with the Commission.

R20-5-138. Hearing Calendar and Assignment to Administrative Law Judge; Notification of Hearing

R20-5-138. This rule states that the Chief Administrative Law Judge shall maintain a hearing calendar ensuring that requests for hearing are placed on the hearing calendar and assigned to a presiding administrative law judge.

- R20-5-139. Administrative Resolution of Issues by Stipulation Before Filing a Request for Hearing
- R20-5-139. This rule states that the issues in dispute may be resolved prior to filing a request for hearing by filing a stipulation with the Commission. The Commission may then approve the stipulation or other such action as may be appropriate, including issuing an award without the necessity of a formal hearing.
- R20-5-140. Informal Conferences
- R20-5-140. This rule sets forth the procedures for informal conferences with an Administrative Law Judge. This rule also sets forth procedures for hearings set to address unresolved issues after the informal conference.
- R20-5-141. Subpoena Requests for Witnesses; Objection to Documents or Reports Prepared by Out-of-State Witness
- R20-5-141. This rule sets forth the procedures to request subpoenas for medical and non-medical witnesses, for the submission of out-of-state medical reports, for witness fees and objections to an out-of-state physician's report, and documents prepared by out-of-state non-medical witnesses.
- R20-5-142. In-State Oral Depositions
- R20-5-142. The rule sets forth the procedures for the taking of depositions of witnesses who reside in the State of Arizona, including applicable objections, the requisite time frames, and payment and expenses. It also describes how depositions may be used in a hearing before the Commission. The rule also refers to the taking of telephonic depositions. The rule also states that no scheduled hearing shall be canceled or continued for failure to take or complete a deposition and that the Arizona Rules of Civil Procedure govern the taking of depositions.
- R20-5-143. Out-of-State Oral Depositions

- R20-5-143. The rule sets forth the procedures for the taking of depositions of out-of-state witnesses, which are similar to those provided in R20-5-142.
- R20-5-144. Written Interrogatories
- R20-5-144. The rule sets forth the procedures for submitting written interrogatories, including time frames, instructions, and the purposes for which written interrogatories may be used. It also states that no scheduled hearing shall be canceled or continued for failure to answer interrogatories.
- R20-5-145. Refusal to Answer or Attend; Motion to Compel; Sanctions Imposed
- R20-5-145. This rule describes the procedures to follow when a party or other deponent refuses to answer any questions either in deposition or by interrogatory, and sets forth that sanctions may be imposed for a willful failure to appear or answer, including related costs and expenses that may be assessed against the party obstructing discovery.
- R20-5-147. Videotape Recordings and Motion Pictures
- R20-5-147. This rule provides the procedures to offer a videotape recording or motion picture into evidence. The rule does not apply if the videotape recording or motion picture is obtained for surveillance purposes or is a depiction of a medical procedure performed by a physician. The rule also provides that no scheduled hearing shall be canceled or continued for failure to view the videotape recording or motion picture.
- R20-5-148. Burden of Presentation of Evidence; Offer of Proof
- R20-5-148. This rule provides that, when a dispute arises, the Administrative Law Judge shall direct who has the burden of proof, and if a witness is prohibited from providing testimony, the Administrative Law Judge must permit an offer of proof by avowal or in writing.

- R20-5-149. Presence of Claimant at Hearing; Notice of a Parties' Non-Appearance at Hearing; Assessment of Hearing Costs for Non-Appearance
- R20-5-149. The rule informs injured workers that their presence is required at the hearing before the Commission unless excused by the Administrative Law Judge. The rule permits a party to notify the presiding Administrative Law Judge three days before a hearing of the non-appearance of a party or party's representative which will require the judge to cancel or reschedule the hearing and the consequences of failing to so notify the presiding Administrative Law Judge.
- R20-5-150. Joinder of a Party
- R20-5-150. The rule provides the procedure and relevant time frames by which a party may apply to the Administrative Law Judge for the joinder of any person, firm, corporation, or other entity against which a right of relief may exist. The rule also allows for the Administrative Law Judge to join a party sua sponte.
- R20-5-151. Special Appearance
- R20-5-151. The rule sets forth that a party against whom a claim before the Commission may appear to exist, may file a special appearance without invoking the jurisdiction of the Commission.
- R20-5-152. Resolution of Issues by Stipulation After the Filing of a Request for Hearing; Notice of Resolution; Assessment of Hearing Costs
- R20-5-152. This rule allows for resolution by stipulation, either orally or in writing after a request for hearing has been filed, if the stipulation is reasonably supported by the facts in evidence. Where the written stipulation is filed less than three working days before a hearing, the rule allows the Administrative Law Judge to assess costs related to the hearing.

R20-5-153. Exclusion of Witnesses

R20-5-153. This rule provides for the exclusion of witnesses during the course of a hearing until such time as they are called to testify. The rule instructs the Administrative Law Judge to admonish the witnesses not to discuss their testimony with anyone other than the attorneys on the case.

R20-5-154. Correspondence to Administrative Law Judge

R20-5-154. The rule provides that correspondence, including requests for subpoenas, may be directed to the Administrative Law Judge with simultaneous copies sent to the other parties. The rule also sets forth that, absent agreement by all parties, neither correspondence nor subpoena requests will be considered as evidence.

R20-5-155. Filing of Medical and Non-Medical Reports Into Evidence; Request for Subpoena to Cross-examine Author of Report Submitted into Evidence; Failure to Timely Request Subpoena for Author

R20-5-155. This rule sets forth the time frame within which medical and non-medical reports are required to be submitted to an Administrative Law Judge, but allows an Administrative Law Judge discretionary authority to suspend the time limits. This rule also requires contemporaneous copies to all parties for reports submitted to an Administrative Law Judge. The rule also provides that a subpoena for cross-examination must be received to preserve the right to cross-examine a witness.

R20-5-156. Continuance of Hearing

R20-5-156. This rule provides the Administrative Law Judge discretion in continuing hearings, and sets forth the circumstances in which a further hearing may be granted for the introduction of further evidence. This rule also provides the process for resetting filing deadlines when a hearing has been rescheduled.

R20-5-157. Sanctions

R20-5-157. This rule sets forth the procedures for an Administrative Law Judge to order sanctions, or set aside sanctions.

R20-5-158. Service of Awards and Other Matters

R20-5-158. The rule provides that the Commission will serve documents upon an interested party and his authorized representative, deeming service upon the authorized representative as service upon the party. The rule sets forth the manner of service and when service is completed.

R20-5-159. Record for Award or Decision of Review

R20-5-159. The rule provides that the Administrative Law Judge's decisions shall be based upon the record, as it exists at the conclusion of the hearing and any subsequent memoranda.

R20-5-160. Application to Set Attorney Fees Under A.R.S. § 23-1069

R20-5-160. This rule sets forth the procedures for an attorney or claimant to submit a petition to the Commission regarding attorney fees.

R20-5-161. Stipulations for Extensions of Time

R20-5-161. This rule states stipulations for extensions of time in which to file papers or briefs in the various courts shall be received and signed by the Chief Counsel or other members of the Legal Department.

R20-5-162. Legal Division Participation

R20-5-162. This rule provides that the Chief Counsel and other members of the legal staff of the Commission who participate in proceedings or matters under the Act and this Article do so on behalf of the Commission.

- R20-5-163. Bad Faith and Unfair Claim Processing Practices
- R20-5-163. This rule sets forth the definitions of “Bad Faith,” and “Unfair Claim Processing Practices” and provides the procedure for processing such a complaint. The rule also allows for the Commission to initiate a claim for bad faith or unfair claim processing.
- R20-5-164. Human Immunodeficiency Virus, Hepatitis C, Methicillin-resistant Staphylococcus Aureus, Spinal Meningitis and Tuberculosis; Significant Exposure; Employee Notification; Reporting; Documentation; Forms
- R20-5-164. This rule provides for the implementation of A.R.S. §§ 23-1043.02, 23-1043.03 and 23-1043.04. The rule requires employers to inform their employees of the requirements of the statutes and to provide to employees the forms necessary to comply with the statutes. The rule also specifies the relevant time frames for the submission of a written report of a significant exposure by an employee. The rule also mandates that when investigating an allegation of exposure, an employer, insurance carrier, or any employees, agents or contractors of the employer or carrier, shall not disclose, except as authorized or required by law, details of the exposure.
- R20-5-165. Calculation of Maximum Average Monthly Wage
- R20-5-165. This rule sets forth the appropriate index for the Commission to utilize when it sets the annual maximum average monthly wage.

**3. Effectiveness of the rules in achieving their objectives, including a summary of any available data supporting the conclusion reached.**

The rules reviewed are effective in achieving their respective objectives. In the past five years, over 435,000 claims for workers’ compensation benefits were filed with the Commission, over 31,000 claims were referred for hearing before the Administrative Law Judge (“ALJ”) Division,

over 26,000 hearings were held, and over 30,000 Awards were issued. Despite this heavy volume of work, no written complaints were received regarding the rules in Article 1. Except as noted below, the rules in Article 1 establish an effective procedural framework for processing of workers' compensation claims and disputes.

**4. Consistency of the rules with state and federal statutes and other rules made by the agency, and a listing of the statutes or rules used in determining the consistency.**

Excepted as noted below, the rules reviewed are consistent with state statutes and other Commission rules, including Title 23, Chapter 6 of Arizona Revised Statutes and Arizona Administrative Code Title 20, Chapter 5, Articles 2, 4-8, 10-13. There are no federal statutes or rules specific to administrative procedures related to Arizona workers' compensation claims.

R20-5-106(B)(5) and R20-5-135(B) are redundant and somewhat inconsistent.

**5. Agency enforcement policy, including whether the rules are currently being enforced and, if so, whether there are any problems with enforcement.**

The rules reviewed are enforced as written. The Commission is not aware of any problems with enforcement of the rules in Article 1.

**6. Clarity, conciseness, and understandability of the rules.**

Excepted as noted below, the rules reviewed are clear, concise, and understandable, though some of the rules are technologically outdated and should be modernized (*see* Section 14, below).

R20-5-101(A)(3) refers to A.R.S. § 23-907(I), but should refer to A.R.S. § 23-907(J).

R20-5-102's definition of "Act" refers to A.R.S. Title 23, Ch. 6, Articles 1 through 11, but should refer to A.R.S. Title 23, Ch. 6, Articles 1 through 12.

R20-5-106(B)(12)(a) refers to A.R.S. § 23-1021(F), which no longer exists.

R20-5-113(F) refers to A.R.S. § 23-908(E), but should refer to A.R.S. § 23-908(F).

R20-5-114(F) refers to subsection (E), and should refer to subsection (F).

R20-5-128(A) refers to A.R.S. § 23-908(C), but should refer to A.R.S. § 23-908(D).

7. **Written criticisms of the rules received by the agency within the five years immediately preceding the five-year review report.**

There have been no written criticisms of the rules received by the Commission within the last 5 years.

8. **A comparison of the estimated economic, small business, and consumer impact of the rules with the economic, small business, and consumer impact statement prepared on the last making of the rules or, if no economic, small business, and consumer impact statement was prepared on the last making of the rules, an assessment of the actual economic, small business, and consumer impact of the rules.**

Although a narrow Economic Impact Statement was prepared as part of the 2018 rulemaking that amended R20-5-106, the most recent Economic Impact Statement addressing the entirety of Article 1 is from 2001. The current estimated economic, small business, and consumer impact of the rules is not substantially different from that set out in the 2001 Economic Impact Statement and the 2014 Five Year Review Report.

9. **Any analysis submitted to the agency by another person regarding the rules' impact on this state's business competitiveness as compared to the competitiveness of businesses in other states.**

No business competitiveness analysis has been submitted to the Commission regarding Article 1.

10. **If applicable, whether the agency completed the course of action indicated in the agency's previous five-year-review report.**

The previous Five Year Review Report on Article 1 proposed no course of action.

11. **A determination after analysis that probable benefits outweigh probable costs and that the rules impose the least burden and costs on persons regulated.**

The probable benefits of the rules in Article 1 significantly outweigh the probable costs. In addition, the rules impose the least burden and costs on the regulated community.

12. **A determination after analysis that the rule is not more stringent than a corresponding federal law unless there is statutory authority to exceed the requirements of that federal law.**

The rules in Article 1 implement state law, specifically Title 23, Chapter 6 of Arizona Revised Statutes. There is no corresponding federal law specific to Arizona workers' compensation administration.

13. **For rules adopted after July 29, 2010, that require issuance of a regulatory permit, license or agency authorization, whether the rule complies with A.R.S. § 41-1037.**

There have been no rules adopted after July 29, 2010, which require the issuance of a regulatory permit, license, or agency authorization.

14. **Proposed course of action.**

The Commission recently launched a new Claims and Administrative Law Judge computer system featuring automated workflow capabilities, enhanced analytics, superior document

management, and a dynamic web-based portal for interested parties – known as the “ICA Community.” The new System offers alternative methods of communicating with the Commission, including webforms, document upload, electronic fax, or secured file transfer protocol (“SFTP”). The new System also allows interested parties in workers’ compensation cases to have web-based access to Claim and Administrative Law Judge records.

The Commission has engaged a committee that includes members from the ALJ division, the claims division, the legal division, and outside stakeholders from both the applicant bar and the defense bar to study the effect of the new System upon the rules in Article 1, to resolve the inconsistency discussed in Section 4, and to update the clarity issues identified in Section 6, above. Specifically, in addition to the rules cited in Sections 4 and 6, above, the Commission has identified the following rules that may require modernization as a result of the new System: R20-5-107(A) & (B), R20-5-108(G), R20-5-109(B), R20-5-110, R20-5-112(B); R20-5-121(B), and R20-5-158(B). The Commission intends to initiate a rulemaking upon the approval of the committee’s recommendation to the commissioners. The committee anticipates the recommendation will be completed by December 2019.

**RULES  
REVIEWED**

## **ARTICLE 1. WORKERS' COMPENSATION PRACTICE AND PROCEDURE**

### **R20-5-101. Application of the Article; Notice of Rules; Part of Record**

A. This Article applies to all actions and proceedings before the Commission resulting from:

1. Injuries that occurred on or after January 1, 1969;
2. Petitions to Reopen or Petitions for Readjustment or Rearrangement of Compensation filed on or after that date; and
3. Requests for hearing under A.R.S. §§ 23-907(H), (I), and (J).

B. This Article is part of the record in each action or proceeding without reference to the Article.

C. The Commission deems all parties to have knowledge of this Article.

D. The Commission shall provide a copy of this Article upon request to any person free of charge.

### **R20-5-102. Definitions**

In this Article, unless the context otherwise requires:

“Act” means the Arizona Workers’ Compensation Act, A.R.S. Title 23, Ch. 6, Articles 1 through 11.

“Authorized representative” means an individual authorized by law to act on behalf of a party who files with the Commission a written instrument advising of the individual’s authority to act on behalf of the party.

“Carrier” or “insurance carrier” means the state compensation fund and every insurance carrier authorized by the Arizona Department of Insurance to underwrite workers’ compensation insurance in Arizona.

“Claimant” means an employee who files a claim for workers’ compensation.

“Filing” means actual receipt of a report, document, instrument, videotape, audiotape, or other written matter at a Commission office during office hours as set forth in R20-5-103.

“Physician” means a licensed physician or other licensed practitioner of the healing arts.

“Self-insured employer” means an employer or workers’ compensation pool granted authority by the Commission to selfinsure for workers’ compensation.

“Uninsured employer” or “noncomplying employer” means an employer that is subject to and fails to comply with A.R.S. §§23-961 or 23-962.

“Working days” means all days except Saturdays, Sundays, and state legal holidays.

### **R20-5-103. Location of Industrial Commission Offices and Office Hours**

The main office of the Industrial Commission of Arizona is located in Phoenix, Arizona. An office is also located in Tucson, Arizona. The offices are open for business from 8:00 a.m. until 5:00 p.m. every day except Saturdays, Sundays, and state legal holidays.

**R20-5-104. Address of Claimant and Uninsured Employer**

A. A claimant shall advise the Commission and carrier or selfinsured employer of the claimant's current mailing address and place of residence. If a claimant files a workers' compensation claim against an uninsured employer, the claimant shall advise the special fund division of the claimant's current mailing address and place of residence.

B. An uninsured employer against whom a claimant files a workers' compensation claim shall advise the special fund division of the uninsured employer's current mailing address and place or places of residence.

C. Providing the address of a claimant's or uninsured employer's attorney or authorized representative is not sufficient to meet the requirements of this Section.

**R20-5-105. Filing Requirements; Time for Filing; Computation of Time; Response to Motion**

A. A report, document, instrument, videotape, audiotape, or other written matter required to be filed with the Commission under A.R.S. § 23-901 et seq. and this Article shall be filed at a Commission office within the time required by law and this Article.

B. For purposes of computing time under this Article, the following applies:

1. The Commission shall not include in the computation of time the day of the act or event from which the designated period begins to run.

2. The Commission shall include in the computation of time the last day of the designated period, unless the last day is a Saturday, Sunday, or state legal holiday, in which event the period runs until the end of the next day that is not a Saturday, Sunday, or state legal holiday.

3. If this Article or other law requires that a report, document, instrument, videotape, audiotape, or other written matter be filed within a designated period of time before hearing, the Commission shall not include the day of the act or event from which the designated period of time begins to run. The Commission shall include the last day of the designated period unless that day is a Saturday, Sunday, or state legal holiday, in which event the period runs to the end of the next day that is not a Saturday, Sunday, or state legal holiday.

4. If the period of time prescribed is less than 11 days, the Commission shall not include intermediate Saturdays, Sundays, or state legal holidays in the computation of time.

C. The Commission shall deem a report, document, instrument, videotape, audiotape, or other written matter filed at the Tucson office as filed at the main office for purposes of computing time.

D. A person upon whom a motion to join is filed under this Article may file a response to the motion within 10 days after the motion is filed.

E. The Commission shall not consider a discovery motion unless the moving party attaches a separate statement to the discovery motion certifying that after good faith efforts to do so, the moving party has been unable to satisfactorily resolve the matter giving rise to the discovery motion with the opposing party.

**R20-5-106. Commission Forms**

A. The following forms shall be used when applicable:

1. Employer's report of industrial injury (form 101) shall contain:

- a. Employee, employer, and carrier identification;
- b. Description of employment;
- c. Description of accident and injury;
- d. Description of medical treatment received by employee;
- e. Employee's wage data;
- f. Date, signature, and title of employer or the employer's representative; and
- g. Statement doubting the validity of the claim, if the employer doubts the validity of the claim.

2. The physician's portion of the worker's and physician's report of injury (form 102) shall contain:

- a. Name and address of physician;
- b. Information regarding preexisting conditions;
- c. Information regarding the industrial injury, treatment, and prognosis;
- d. Statement authorizing the attachment of a medical report that contains the information required in form 102; and
- e. Physician's signature and date.

3. Notice of supportive medical benefits (form 103) shall contain:

- a. Employee, employer, insurance carrier, and claim identification;
- b. Description of authorized medical benefits;
- c. Date the notice is mailed;
- d. Name and telephone number of the individual issuing the notice; and
- e. Statement regarding reopening and appeal rights including filing requirements.

4. Notice of claim status (form 104) shall contain:

- a. Employee, employer, insurance carrier, and claim identification;
- b. Status of the claim;
- c. Date the notice is mailed;
- d. Name and telephone number of the individual issuing the notice; and
- e. Statement of a party's hearing and appeal rights including filing requirements.

5. Notice of suspension of benefits (form 105) shall contain:

- a. Employee, employer, insurance carrier, and claim identification;
- b. Effective date of the suspension;
- c. Reasons for the suspension;
- d. Date the notice is mailed;
- e. Name and telephone number of the individual issuing the notice; and
- f. Statement of a party's hearing and appeal rights including filing requirements.

6. Notice of permanent disability or death benefits (form 106) shall contain:

- a. Employee, employer, insurance carrier, and claim identification;
- b. Applicable statutory authority under which compensation is paid;
- c. Disability and compensation information;
- d. Date the notice is mailed;
- e. Name and telephone number of the individual issuing the notice; and
- f. Statement regarding hearing and appeal rights including filing requirements.

7. Notice of permanent disability and request for determination of benefits (form 107) shall contain:

- a. Employee, employer, insurance carrier, and claim identification;
- b. Type of disability;
- c. Applicable statutory authority for designated disability;
- d. Designation of dependents where death is involved;
- e. Designation of advanced payments and amount of the advance;
- f. Date the notice is mailed; and
- g. Name and telephone number of the individual issuing the notice.

8. Carrier's recommended average monthly wage calculation (form 108) shall contain:
  - a. Employee, employer, insurance carrier, and claim identification;
  - b. Employment and wage history;
  - c. Designation of dependents; and
  - d. Carrier's calculations for the recommended average monthly wage and the basis for the calculation.
9. Notice of permanent compensation payment plan (form 111) shall contain:
  - a. Employee, employer, and carrier identification;
  - b. Amount of permanent compensation and description of payment plan;
  - c. Name of the responsible entity contracted by the carrier to administer the payment plan;
  - d. Statement that the carrier remains the responsible party for payment;
  - e. Statement regarding supportive care and reopening rights;
  - f. Date the notice is mailed; and
  - g. Name and telephone number of the individual issuing the notice.
10. Report of insurance coverage (form 0006) shall contain:
  - a. Name and address of the carrier;
  - b. Legal name of entity that the carrier insures;
  - c. All other insured names or subsidiary entities under which the carrier's insured does business in Arizona;
  - d. Address of all insured entities with insurance policy information for each address; and
  - e. Employer Identification Number (EIN), Taxpayer Identification Number (TIN), or Federal Identification Number (FIN) assigned to each insured person or entity.
11. Report of significant work exposure to bodily fluids or other infectious material shall contain:
  - a. The requirements set forth in A.R.S. §§ 23-1043.02(B), 23-1043.03(B), and 23-1043.04(B);
  - b. Employee identification,
  - c. Employer identification,
  - d. Source of exposure person identification (if known),
  - e. Details of the exposure including:

- i. Date of exposure,
  - ii. Time of exposure,
  - iii. Place of exposure,
  - iv. How exposure occurred,
  - v. Type of bodily fluid or fluids,
  - vi. Source of bodily fluid or fluids,
  - vii. Part or parts of body exposed to bodily fluid or fluids,
  - viii. Presence of break or rupture in skin or mucous membrane, and
  - ix. Witnesses (if known), and
- f. Dated signature of employee or the employee's authorized representative.

12. The medical treatment preauthorization form (MRO-1.1) shall contain five sections, as follows:

- a. Section I (Provider Request for Preauthorization) shall contain:
- i. Injured employee identification, including name, date of injury, date of birth, and payer claim number (if known);
  - ii. Provider identification, including name, phone number, provider medical specialty, preferred method of contact, and contact information;
  - iii. Payer identification, including name and contact information (i.e., mailing address, fax number, or e-mail address);
  - iv. Information regarding requested medical treatment and/or services, including:
    - (1) Applicable diagnosis and/or ICD codes;
    - (2) A detailed statement of the treatment or services requested;
    - (3) Applicable Current Procedural Terminology (CPT) codes and/or National Drug Codes (NDC);
    - (4) Type of request (i.e., routine or urgent); and
    - (5) An indication as to whether the provider has attached documentation to support the medical necessity and appropriateness of the requested treatment and/or services; and
  - v. Dated signature or electronic signature of provider or provider's authorized representative.
- b. Section II (Payer Decision on Request for Preauthorization) shall contain:

- i. Payer's preferred method of contact and contact information;
- ii. Date request for preauthorization is received;
- iii. The Commission claim number;
- iv. The payer's decision (i.e., approved, partial denial, denied, request for preauthorization incomplete, or IME requested);
- v. An indication as to whether the payer has attached a statement of what treatment and/or services have been authorized, including, if applicable, a partial authorization, and, if the request for preauthorization is denied, in whole or in part, a statement of explanation that includes the medical reason supporting the payer's decision; and
- vi. Dated signature or electronic signature of payer or payer's authorized representative.

c. Section III (Provider or Employee Request for Reconsideration of Payer Decision) shall contain:

- i. An indication as to whether the provider or injured employee has attached a statement of the specific reasons and justifications to support the request for reconsideration;
- ii. An indication as to whether the provider or injured employee has attached documentation to support the medical necessity and appropriateness of the requested treatment and/or services, if not previously provided; and
- iii. Dated signature or electronic signature of provider, provider's authorized representative, injured employee, or injured employee's authorized representative.

d. Section IV (Payer Decision on Request for Reconsideration) shall contain:

- i. Date request for reconsideration received;
- ii. The payer's decision (e.g., approved, partial denial, denied, or IME requested);
- iii. An indication as to whether the payer has attached a statement of what has been authorized, including if applicable, a partial authorization, and, if the request for preauthorization is denied, in whole or in part, a statement of explanation that includes the medical reason supporting the payer's decision; and
- iv. Dated signature or electronic signature of payer or payer's authorized representative.

e. Section V (Provider or Employee Request for Administrative Peer Review) shall contain:

- i. An indication of the basis for the request for administrative peer review (e.g., payer nonresponse, denial (in whole or in part) of requested treatment or services, the payer's decision on the request for preauthorization denied treatment or services that are subject to R20-5-1304(B));
- ii. An indication as to whether the provider or injured employee has attached copies of relevant medical records and, if applicable, documentation related to the payer's non-response;
- iii. An indication as to whether the provider or injured employee has attached all documentation and statements previously attached to Sections I-IV; and
- iv. Dated signature or electronic signature of provider, provider's authorized representative, injured employee, or injured employee's authorized representative.

B. The following forms may be used:

1. The workers' portion of the worker's and physician's report of injury (form 102) requests:

- a. Employee, employer, insurance carrier, and physician identification;
- b. Description of the accident, including date of injury; and
- c. Date and signature of the employee or the employee's authorized representative.

2. Worker's report of injury (form 407) requests:

- a. Employee and employer identification,
- b. Job title,
- c. Employment description,
- d. Employee's wage data,
- e. Date of injury,
- f. Accident and injury descriptions,
- g. Medical treatment information,
- h. Information concerning prior injuries of the employee,
- i. Disability income, and
- j. Date and signature of the employee or the employee's authorized representative.

3. Worker's annual report of income (form 110-A) requests:
  - a. Employee, employer, insurance carrier, and claim identification;
  - b. Employment and wage history for the preceding 12 months;
  - c. Date and signature of the employee or the employee's authorized representative attesting to the truthfulness of the employment and wage information; and
  - d. Statement that failure to submit an annual report of income may result in a suspension of benefits by the carrier or self-insured employer.
4. Notice of intent to suspend (form 110-B) requests:
  - a. Employee, employer, insurance carrier, and claim identification;
  - b. Employment and wage history for the preceding 12 months;
  - c. Date and signature of the employee or the employee's authorized representative attesting to the truthfulness of the employment and wage information;
  - d. Statement that failure to submit an annual report within 30 days of the date of the notice shall result in a suspension of benefits by the carrier or self-insured employer.
5. Request for hearing requests:
  - a. Names of the employee, employer, and insurance carrier;
  - b. Claim identification;
  - c. Identification of the award, notice, order, or determination protested and reason(s) for the protest;
  - d. Estimated length of time for hearing and city or town in which hearing is requested;
  - e. Name and address of any witness for whom a subpoena is requested; and
  - f. Date and signature of party or the party's authorized representative.
6. Petition to reopen requests:
  - a. Names of the employee, employer, and insurance carrier;
  - b. Claim identification;
  - c. Identification or description of the new, additional, or previously undiscovered temporary or permanent disability or medical condition justifying the reopening of the claim; and
  - d. Employee's medical and employment history.
7. Petition for rearrangement or readjustment of compensation requests:
  - a. Names of the employee, employer, and insurance carrier;

- b. Claim identification;
- c. Income and employment history;
- d. Medical history; and
- e. Statement of the basis for the increase or decrease in earning capacity.

8. Claim for dependent's benefits-fatality form requests:

- a. Identification of dependent filing claim;
- b. Identification of deceased;
- c. Date of death;
- d. Date of injury, if different than date of death;
- e. Name and address of employer at time of deceased's death;
- f. Statement of cause of death;
- g. Names and addresses of health care providers rendering treatment to deceased in two years before death;
- h. Conditions treated by health care providers in the two years before deceased's death;
- i. If claim is for spousal benefits, the form requests:
  - i. Name, address, and date of birth of spouse;
  - ii. Copy of marriage certificate;
  - iii. Date and place of marriage to deceased;
  - iv. History of prior marriages of deceased and deceased's spouse, including copies of divorce decrees; and
  - v. Statement of living arrangements at time of deceased's death, including reason for living apart at time of death, if applicable;
- j. If claim is for a dependent child, the form requests:
  - i. Name, date of birth, and address of child at time of deceased's death;
  - ii. List of children in care and custody of current spouse; and
  - iii. Statement of whether unborn child is expected and date expected;
- k. If claim is for dependent other than a child, the form requests:
  - i. Name and address of other dependent,
  - ii. Relationship of other dependent to deceased, and

iii. Statement of the nature and extent of dependency; and

l. Date, telephone number, and signature of dependent or authorized representative of dependent.

9. Request to leave the state form requests:

- a. Employee, insurance carrier, and claim identification;
- b. Reason for requesting to leave Arizona;
- c. Dates leaving and returning to Arizona;
- d. Out-of-state address;
- e. Name and telephone number of attending physician; and
- f. Date and signature of the employee or the employee's authorized representative.

10. Request to change doctors form requests:

- a. Employee, insurance carrier, and claim identification;
- b. Reason for requesting change of doctor;
- c. Name and phone number of claimant's current doctor;
- d. Name and phone number of doctor claimant requests to change to; and
- e. Date and signature of the employee or the employee's authorized representative.

11. Complaint of bad faith and unfair claim processing practices requests:

- a. Employee, employer, and insurance carrier identification;
- b. Description of the alleged bad faith or unfair claim processing practices;
- c. Date of the complaint; and
- d. Name, address, and telephone number of the person signing the complaint.

12. Certification of employer's drug and alcohol testing policy requests:

- a. Employer's certification as described under A.R.S. §23-1021(F),
- b. Name and federal identification number of the employer, and
- c. Name of all subsidiaries and locations of the employer.

C. Optional use of a form described in subsection (B) does not affect any requirement under the Act or this Article.

D. Forms or format for the forms described in this Section are available from the Commission.

E. Forms prescribed under this Section shall not be changed, amended, or otherwise altered without the prior written approval of the Commission.

**R20-5-107. Manner of Completion of Forms and Documents**

A. An individual completing a form or document shall fill out the form or document legibly in ink or by typewriter.

B. A party or a party's authorized representative shall sign any form or document that is required by the Act, this Article, or other law to be signed.

C. Unless otherwise provided in this Article, if a party is required to sign a form or document, the Commission shall not accept a typewritten name or stamped signature.

D. If, within the time period prescribed by law, a party files an incomplete form or document, or files an instrument other than a form or document when a form or document is required, the Commission shall serve notice to the party that the form or document fails to comply with this Section. The Commission deems the report or document timely filed if the party files a properly completed and signed form or document within 14 days after the Commission serves the notice described in this subsection.

**R20-5-108. Confidentiality of a Commission Claims File; Reproduction and Inspection of a Commission Claims File**

A. Except as provided in this Section, a claims file maintained by the Commission is private and confidential and the Commission shall not make the claims file available for inspection and copying. For purposes of this Section, "claims file" means the official record maintained by the Commission for a claimant's industrial injury including the worker's report of injury, employer's report of injury, worker and physician's report of injury, and all other reports, records, instruments, videotapes, audiotapes, transcripts, and other matters scanned or otherwise placed into the file.

B. Except as provided in subsections (D) and (E), the Commission shall make a Commission claims file relating to a current or prior claim of a claimant available for inspection and copying by any party to any proceeding currently or previously before the Commission involving the same claimant.

C. Except as provided in subsections (D) and (E), the Commission shall not make a Commission claims file available to a non-party for inspection and copying unless the Commission receives a court order or written authorization signed by the affected claimant or the affected claimant's authorized representative.

D. The Commission shall make a transcript contained in a Commission claims file available for inspection and copying if:

1. The person requesting to inspect and copy the transcript is a person authorized under subsections (B) or (C); and
2. The transcript concerns a hearing related to a claim that is not in litigation.

E. The Commission shall make a transcript contained in a Commission claims file available only for inspection if:

1. The person requesting to inspect and copy the transcript is a person authorized under subsections (B) or (C); and
2. The transcript concerns a hearing related to a claim currently in litigation.

F. The Commission shall provide copies at a charge of \$.25 per page.

G. A Commission claims file shall not be removed from a Commission office unless in the custody of an authorized representative of the Commission.

#### **R20-5-109. Admission into Evidence of Documents Contained in a Commission Claims File**

A. If a party or an administrative law judge considers a document contained in a Commission claims file, including a transcript of a prior proceeding, necessary or appropriate for hearing purposes, the administrative law judge shall receive a copy of the document into evidence if the document is otherwise admissible.

B. With the permission of the administrative law judge, instead of submitting a copy of the document into evidence, a party may refer to the document's location on the Commission's optical disk imaging system by providing an accurate description of the document that includes the claimant's claim number and image document identification number the Commission assigns to the document.

#### **R20-5-110. Employer Duty to Report Fatality**

If an employee dies as a result of an injury by accident arising out of and in the course of employment, the employer shall report the death to the Commission's claims division by telephone, telegram, or electronic filing, no later than the next business day following the death. The report shall state the name of the employee, when, how, and where the accident occurred, and the nature of the condition causing the accident. This Section does not limit or affect an employer's duty to report a death to the Arizona Occupational Safety and Health Division of the Commission as required under R20-5-637.

#### **R20-5-111. Request for Autopsy**

If a claim is filed for compensation for death from an industrial injury and an autopsy is requested, the expense of the autopsy shall be borne by the requesting party.

#### **R20-5-112. Physician's Initial Report of Injury**

A. A physician shall complete and file with the Commission a physician's initial report of injury under A.R.S. § 23-908(A) within eight days after first providing treatment to an injured worker. The physician shall report the injury:

1. Using Commission form 102 (worker's and physician's report of injury), or
2. Attaching to form 102 a medical report that contains the information required in form 102.

B. The physician shall sign and date form 102 or the medical report attached to form 102. The signature of the physician may be typewritten or stamped on this form.

C. If a claimant uses form 102 to initiate a claim, either the injured worker or the injured worker's authorized representative shall sign the worker's portion of form 102.

**R20-5-113. Physician's Duty to Provide Signed Reports; Rating of Impairment of Function; Restriction Against Interruption or Suspension of Benefits; Change of Physician**

A. If a claimant's disability extends beyond seven days, every physician who attends, treats, or examines the claimant shall provide to the insurance carrier, self-insured employer, or special fund division, at least once every 30 days while the claimant's disability continues, a personally signed report describing the:

1. Claimant's condition,
2. Nature of treatment,
3. Expected duration of disability, and
4. Claimant's prognosis.

B. When a physician discharges a claimant from treatment, the physician:

1. Shall determine whether the claimant has sustained any impairment of function resulting from the industrial injury. The physician should rate the percentage of impairment using the standards for the evaluation of permanent impairment as published by the most recent edition of the American Medical Association in Guides to the Evaluation of Permanent Impairment, if applicable; and
2. Shall provide a final signed report to the insurance carrier, self-insured employer, or special fund division that details the rating of impairment and the clinical findings that support the rating.

C. A carrier, self-insured employer, and special fund division shall not interrupt or suspend a claimant's temporary disability compensation benefits because a physician fails to comply with any requirement of subsection (A).

D. A carrier, self-insured employer, and special fund division may withhold payment to a physician for services rendered to a claimant until the physician complies with subsection (A).

E. Upon application of a party, the Commission shall authorize a change of physician if:

1. The Commission determines that the health, life, or recovery of a claimant is retarded, endangered, or impaired;
2. The attending physician agrees to the change or is unavailable to continue treatment;
3. The Commission determines that the relationship between the attending physician and claimant renders further progress or improvement unlikely;

4. The Commission determines that the claimant's recovery may be expedited by a change of physician or conditions of treatment; or

5. The insurance carrier agrees to the change.

F. Except as provided in A.R.S. § 23-1070 and this subsection, a claimant who is examined by a physician under A.R.S. § 23-908(E) is not required to obtain written authorization to change to another physician. If, however, the claimant continues to see, or treat with, a physician who the claimant initially saw or treated with under A.R.S. § 23-908(E), then that physician is an attending physician and the claimant shall obtain written authorization to change under A.R.S. § 23-1071(B) if the claimant seeks to change to another physician.

#### **R20-5-114. Examination at Request of Commission, Carrier or Employer; Motion for Relief**

A. If the Commission or a party requests an examination of a claimant by a physician, the party requesting the examination shall serve the claimant, or if represented, the claimant's attorney, with notice of the time, date, place, and physician conducting the examination at least 15 days before the scheduled date of the examination.

B. If a claimant unreasonably fails to attend or promptly advise of the claimant's inability to attend an examination under this Section, the party requesting the examination may charge the claimant or deduct from the claimant's entitlement to present or future temporary or permanent disability compensation, any reasonable expense of the missed appointment.

C. A party adverse to a party who schedules a medical examination may offer into evidence the report of any medical examination as provided in R20-5-155 or within five days after the adverse party receives the report, subject to the right of cross-examination by the party who scheduled the examination.

D. If a carrier, self-insured employer, or special fund division requests an examination of a claimant's mental or physical condition under A.R.S. § 23-1026, the carrier, self-insured employer, or special fund division shall immediately, upon receipt of the report of the examination, provide a copy of the report to the claimant or the claimant's authorized representative. If the mental condition of an unrepresented claimant is examined under A.R.S. § 23-1026, the carrier, self-insured employer, or special fund division may, in its discretion, provide the report to the claimant's treating physician rather than to the claimant.

E. To protect a claimant from annoyance, embarrassment, oppression, or undue burden or expense, the Commission may order, upon good cause shown, one or both of the following:

1. That the examination not be held; or

2. That the examination may be conducted only on specified terms and conditions, including a designation of the time, place, and examining physician.

F. A claimant requesting protection under subsection (E) shall file a motion with the presiding administrative law judge or chief administrative law judge if a judge has not been assigned to the case, within three days after the claimant receives notice of the examination. The claimant shall

serve a copy of the motion on all parties. The party requesting the examination shall have three days after receiving the motion to file a response. The party shall serve the response on the claimant or, if represented, the claimant's attorney of record.

**R20-5-115. Request to Leave the State**

A. The effective date of an order granting or denying a request to leave the state under A.R.S. § 23-1071(A) is the date a claimant files a request to leave the state with the Commission.

B. For purposes of A.R.S. § 23-1071(A):

1. "While the necessity of having medical treatment continues" means the period of time in which a claimant asserts an entitlement to temporary compensation, or active medical, surgical, or hospital benefits;
2. "Leave the state" means to travel across the state border, except when the logical or nearest medical facility is situated across the state border; and
3. "From the date the employee first requested the written approval" means from the date the claimant's request is filed with the Commission.

**R20-5-116. Payment of Claimant's Travel Expenses When Directed to Report for Medical Examination or Treatment**

A. If a claimant is directed by a carrier, self-insured employer, or special fund division to report for a medical examination or treatment in a locality other than either the claimant's current place of residence or employment, the carrier, self-insured employer, or special fund division shall pay, in advance, the claimant's travel expenses from either the claimant's current place of residence or employment, whichever route of travel is required.

B. For purposes of this Section, "travel expenses" means those expenses required to be paid under A.R.S. § 23-1026.

C. The carrier, self-insured employer, or special fund division shall calculate travel expenses using the current rates applicable to state employees.

**R20-5-117. Medical, Surgical, Hospital, and Burial Expenses**

A. A carrier, self-insured employer, or special fund division, shall pay bills for medical, surgical, and hospital benefits provided under A.R.S. § 23-901 et seq. according to applicable medical and surgical fee schedules adopted by the Commission and in effect at the time the services are rendered. A physician or provider of nursing, hospital, drug or other medical services shall itemize and submit a bill for payment only to the responsible carrier, self-insured employer, or special fund division.

B. A claimant shall not be responsible to pay any disputed amounts between the medical provider and the carrier, self-insured employer, or special fund division.

C. If a claimant pays a bill described in subsection (A), the responsible carrier, self-insured employer, or special fund division shall reimburse the claimant the amount allowed by the fee

schedules, provided that the claimant presents receipted vouchers or other proof of payment to support the claim for reimbursement.

D. If an insured employer pays a bill described in subsection (A), the responsible carrier or self-insured employer shall reimburse the employer the amount allowed by the fee schedules, provided that the employer presents receipted vouchers or other proof of payment to support the claim for reimbursement.

E. An insurance carrier, self-insured employer, or special fund division may pay any authorized burial expenses directly to the funeral service professional.

F. If an employee's dependent pays burial expenses, the responsible carrier, self-insured employer, or special fund division shall reimburse the dependent the amount authorized by A.R.S. § 23-1046 provided that the dependent presents proof of payment to support the claim for reimbursement.

G. If an insured employer pays burial expenses, the responsible carrier or self-insured employer shall reimburse the employer to the extent authorized by A.R.S. § 23-1046 provided that the employer presents proof of payment to support the claim for reimbursement.

**R20-5-118. Effective Date of Notices of Claim Status and Other Determinations; Attachments to Notices of Claim Status; Form of Notices of Claim Status**

A. If a notice of claim status accepting a claim for benefits is final, any subsequent notice of claim status that changes a claimant's amount of, or entitlement to, compensation or medical, surgical, or hospital benefits shall not have a retroactive effect for more than 30 days from the date a carrier or selfinsured employer issues the subsequent notice of claim status. This subsection does not apply to a subsequent notice that affects the entitlement to or amount of death benefits. The Commission may for good cause relieve a carrier or selfinsured employer of the effect of this subsection.

B. If a notice of claim status or other determination issued by a carrier, self-insured employer, or special fund division, is based upon a physician's report:

1. The carrier or self-insured employer shall attach a copy of the physician's complete report to the notice of claim status or other determination sent to the Commission; and
2. The carrier, self-insured employer, or special fund division shall attach a copy of the physician's complete report to the notice of claim status or other determination served on a party, except as provided in R20-5-114(D).

C. If a carrier, self-insured employer, or special fund division pays compensation to a claimant:

1. The carrier or self-insured employer shall close the claim by issuing a notice of claim status; and
2. The special fund division shall close the claim by issuing a notice of determination.

D. The inadvertent failure of a carrier, self-insured employer, or special fund division to comply with subsection (B) shall not affect the validity of a notice or determination if the carrier, self-insured employer, or special fund division issuing the notice or determination had in its possession at the time the notice or determination is issued a medical report consistent with the notice or determination.

#### **R20-5-119. Notice of Third-party Settlement**

A. Except as otherwise provided by law, if an employer is insured for workers' compensation insurance and a claimant, or in the event of death, the claimant's dependent, elects to proceed against a third party, the claimant shall notify the appropriate workers' compensation carrier, or self-insured employer, of any settlement or judgment in the third party suit and the basis upon which the claimant and third party agree to disburse the proceeds of the settlement or judgment.

B. If an employer is uninsured for workers' compensation insurance and a claimant, or in the event of death, the claimant's dependent, elects to proceed against a third party, the claimant shall notify the special fund division of any settlement or judgment in the third party suit and the basis upon which the claimant and third party agree to disburse the proceeds of the settlement or judgment.

C. If a lawsuit is filed against a third party, the claimant or the claimant's attorney shall provide copies of pleadings and all offers of settlement to the workers' compensation carrier, selfinsured employer, or special fund division to whom notice is required under subsections (A) and (B).

#### **R20-5-120. Settlement Agreements, Compromises and Releases**

A. No settlement agreement, compromise, or waiver of rights of a workers' compensation claim, will be valid unless approved by the Commission.

B. The acceptance of any payments or the signing of a settlement agreement, compromise, release or waiver of rights, unless approved by the Commission, shall not release the employer or his insurance carrier from any obligation imposed by the Workers' Compensation Law.

C. The carrier or employer shall not be entitled to a credit for any sums paid to an employee under a settlement agreement which has not been approved by the Commission.

#### **R20-5-121. Present Value and Basis of Calculation of Lump Sum Commutation Awards**

A. The Commission shall calculate the present value of an award that is commuted to a lump sum under R20-5-122. The Commission shall not include in the present value calculation compensation paid before the filing of a lump sum commutation petition. The Commission shall use the filing date of a lump sum commutation petition to compute the present value of an award.

B. The Commission shall calculate the present value of an award at least annually, whether payable for a period of months or based upon the life of the employee, using the United States Life Tables, 2003, National Vital Statistics Reports, Vol. 54, Number 14, April 19, 2006, revised March 28, 2007, Table incorporated by reference, and discounted at the rate established by the Commission. This incorporation does not include any later amendments or editions of the

incorporated matter. A copy of this referenced material is available for review at the Commission and may be obtained from the U.S. Department of Health and Human Services, Centers for Disease Control.

The rate established by the Commission is based on the following formula: The mean average of the three-month Treasury Bill rate on December 31 of each of the five years prior to July 1 of the current year. The rate, once calculated, is effective until the Commission calculates a new rate under this subsection. The discount rate is published in the minutes of the Commission meeting establishing the rate and is available upon request from the Commission.

#### **R20-5-122. Lump Sum Commutation**

A. A petition for a lump sum commutation in an unscheduled case shall not be approved unless the carrier approves of such petition.

B. If the lump sum commutation petition is approved by the carrier, the Commission's primary consideration in passing upon the petition will be whether more net income per month will be generated after receipt of the lump sum than the applicant is presently receiving. The granting of a lump sum petition will only be granted if the facts demonstrate a reasonable basis for financial betterment or rehabilitation of the claimant.

C. The burden of proving that the commutation of compensation satisfies the criteria in (B) is on the applicant.

#### **R20-5-123. Rejection of the Act**

If an employee serves upon an employer written notice under A.R.S. § 23-906, rejecting the provisions of the Act, the employer shall keep one copy of the rejection in the employer's business records.

#### **R20-5-124. Rejection Not Applicable to New Employment**

A. An election by an employee to reject the Act is not binding upon the employee in a new employment by another employer or following re-employment by the same employer.

B. If an employee is continuously employed and the employer changes workers' compensation insurance carriers, or form of doing business, the prior rejection is valid and remains in full force and effect.

#### **R20-5-125. Rejection Before an Employer Complies with A.R.S. §§ 23-961(A) and 23-906(D)**

An employee's rejection of the Act received by an employer before the employer complies with the requirements of A.R.S. §§ 23-961(A) or 23-906(D) is valid and continues in full force and effect whether the employer subsequently obtains workers' compensation coverage under A.R.S. § 23-961(A), posts the notice required under A.R.S. § 23-906(D), or makes available the forms required under A.R.S. § 23-906(D).

#### **R20-5-126. Revocation of Rejection**

A. An employee who rejects the Act may revoke that rejection by serving upon the employee's employer an original and one copy of a written notice of revocation. The written revocation shall state that the employee revokes the employee's prior rejection of the Act.

B. Within five days after receiving a written notice of revocation, an insured employer shall file with the employer's carrier, or workers' compensation pool, a copy of the notice of revocation. The employee has all rights to compensation and benefits provided by the Act for any injury that occurs after the employee serves the revocation notice upon the employer.

**R20-5-127. Insurance Carrier Notification to Commission of Coverage**

A. Every insurance carrier authorized to underwrite workers' compensation insurance in Arizona shall, within five days after undertaking to insure an employer, report that information to the Commission. The carrier shall provide the information on or in the same format as Commission form 0006. Form 0006 is available upon request from the Commission.

B. Failure to comply with this Section does not affect the validity of coverage.

**R20-5-128. Medical Information Reproduction Cost Limitation; Definition of Medical Information**

A. A health care provider shall not charge more than \$.25 per page plus \$10 per hour in associated clerical costs for reproduction of medical information when a party, an authorized representative of a party, or an entity that is authorized by a claimant in a workers' compensation matter makes a request for that information under A.R.S. § 23-908(C).

B. This Section applies to all A.R.S. § 23-908(B) health care providers providing medical services to injured claimants including health care providers that contract with copying services, recordkeeping services, or other similar services for the reproduction of medical information. For purposes of this Section, fees for reproduction of medical information charged by these services are considered the same as if the reproduction fees are charged by a health care provider.

C. For purposes of this Section, "medical information" means:

1. A communication recorded in any form or medium and maintained for the purpose of patient care, diagnosis, or treatment, including a report, note, order, test result, photograph, videotape, X-ray, and billing record;
2. A report of an independent medical examination that describes patient care or treatment;
3. A psychological record;
4. A medical record held by a health care provider including a medical record prepared by another provider; and
5. A recorded communication between emergency medical personnel and medical personnel concerning the care or treatment of a person.

D. For purposes of this Section, "medical information" does not include:

1. Materials that are prepared in connection with utilization review, peer review, or quality assurance activities, including records that a health care provider prepares under A.R.S. §§ 36-441, 36-445 or 36-2402; and
2. Recorded telephone and radio calls to and from a publicly operated emergency dispatch office relating to requests for emergency services or reports of suspected criminal activity.

**R20-5-129. Carrier or Workers' Compensation Pool Determinations Binding upon its Insured or Member; Self-Rater Exception**

A. The Commission deems an insurance carrier or workers' compensation pool the agent of an employer insured by the carrier or workers' compensation pool.

B. The Commission also deems any action or determination taken or made by the insurance carrier or workers' compensation pool binding upon the employer. The employer may not protest or petition the Commission for relief concerning an action or determination taken by the employer's insurance carrier or workers' compensation pool unless the employer notifies the carrier or workers' compensation pool, and the Commission in writing that the employer disagrees with the carrier's or worker's compensation pool's action or determination within the time described in A.R.S. § 23-947.

C. This Section does not apply to employers insured under a Self-Rating Insurance Plan.

**R20-5-130. Claims Office Location and Function; Requirements of Maintaining an Out-of-State Claims Office**

A. Except as provided in subsection (B), each carrier that has or is underwriting workers' compensation insurance in Arizona, and each employer and workers' compensation pool that has been granted authority to act as a self-insurer by the Commission, shall maintain a workers' compensation claims office in Arizona. A carrier, self-insured employer, and self-insured workers' compensation pool shall process and pay workers' compensation claims and maintain the workers' compensation claims files described in R20-5-131 in its Arizona office. A carrier, self-insured employer, and self-insured workers' compensation pool shall notify the claims division of the Commission of the address of the Arizona claims office.

B. Except as provided in subsections (C) and (D), a carrier or self-insured employer may request authorization from the Commission to maintain an out-of-state claims office. The Commission shall grant a carrier or self-insured employer authorization to maintain an out-of-state claims office no later than 20 days after the carrier or self-insured employer provides satisfactory evidence of the following:

1. Existence of a toll-free telephone line to the out-of-state claims office;
2. Completion of Commission claims division's training by the individuals responsible for claims processing at the out-of-state office; and
3. Designation of a financial institution located in Arizona that will cash on demand checks issued by the out-of-state claims office.

C. The Commission shall not permit a self-insured workers' compensation pool to maintain a claims office out-of-state.

D. The Commission shall rescind its authorization to maintain an out-of-state claims office if a carrier or self-insured employer no longer meets the requirements of subsection (B) or fails to process and pay claims as required under the Act and this Article.

E. A carrier or self-insured employer maintaining an out-of-state claims office shall print the carrier's or self-insured employer's toll-free telephone number to the out-of-state claims office on all notices of claim status or other determinations issued by the out-of-state claims office. Failure to print the toll-free telephone number on a notice or other determination as required by this subsection does not affect the validity of the notice or determination.

F. For claims processing purposes, a carrier, self-insured employer, or self-insured workers' compensation pool may have more than one designated representative provided the carrier, self-insured employer, or self-insured workers' compensation pool:

1. Notifies the Commission at the time an insurance policy is issued or authorization to self-insure is granted; and

2. Notifies the Commission each time that the insurance policy or authorization to self-insure is renewed.

**R20-5-131. Maintenance of Carrier and Self-insured Employer Claims Files; Contents; Inspection and Copying; Exchange of Medical Reports; Authorization to Obtain Medical Records**

A. A carrier and self-insured employer shall maintain a workers' compensation claims file for each claimant. A carrier and self-insured employer shall include in a workers' compensation claims file all employer's reports, medical and hospital reports, awards, orders, notices of claims status, wage data, and all other items affecting the claim required by law to be maintained by a carrier or self-insured employer.

B. Subject to subsection (C), all parties, authorized representatives of parties, and authorized representatives of the Commission may inspect and copy items contained in a carrier's or self-insured employer's claims file within five days from the date the item is filed in the claims file.

C. If a carrier or self-insured employer maintains a claims file at an out-of-state claims office, the carrier or self-insured employer shall make the claims file available for copying and inspection to the persons listed in subsection (B) within 10 days after receiving a request for the file at a location in Arizona designated by the carrier or self-insured employer.

D. A carrier or self-insured employer shall furnish copies of a claims file within 10 days after receiving a request from any party, authorized representative of a party, and authorized representative of the Commission at a charge not to exceed \$.25 per page. A carrier or self-insured employer may require prepayment of the copying charges if the requester or authorized representative has an account with the carrier or self-insured employer that is more than 30 days overdue.

E. A carrier or self-insured employer is not required to maintain in a claims file, or produce for inspection and copying:

1. Documents or matters representing the work product of the carrier or self-insured employer;
2. Documents or matters representing the work product of a carrier's or self-insured's attorney; or
3. Investigation and rehabilitation reports.

F. All medical records concerning a claimant's mental or physical condition that are in a party's possession shall be furnished, upon request, to another party in the same Commission proceeding.

G. Within 10 days of a request, a claimant shall provide to a party in a Commission proceeding involving the claimant, a release of information authorizing any attending, treating, or examining physician to provide records described in A.R.S. § 23-908(C).

**R20-5-132. Parties' Notice to Commission of Intention to Impose Liability upon A.R.S. § 23-1065 Special Fund**

If the notices required by A.R.S. § 23-1065 are not given to the Commission, the Commission shall not be bound by the testimony and evidence presented at a hearing as it relates to the imposition of liability upon the special fund.

**R20-5-133. Claimant's Petition to Reopen Claim**

A. A petition to reopen filed with the Commission under A.R.S. § 23-1061(H) shall be in writing, signed, and dated by the claimant or the claimant's authorized representative. A petition to reopen form is available from the Commission upon request.

B. A claimant shall provide to the Commission a copy of a medical report supporting the disability or condition justifying the reopening of the claim.

C. If the Commission does not receive the medical report described in subsection (B) within 14 days of receipt of a petition to reopen, the Commission shall notify all parties, in writing, that it has received a petition to reopen without the required medical report. A carrier or self-insured employer is not required to act on a petition to reopen that is received without the required medical report.

D. If the Commission receives a medical report in support of a petition to reopen and a claimant does not file a petition to reopen within 14 days of receipt of the medical report, the Commission shall forward the medical report to the carrier or self-insured employer for information purposes only. A carrier or self-insured employer is not required to take any action upon receipt of the medical report.

E. If the Commission receives a medical report in support of a petition to reopen from an out-of-state physician and a party objects to the report at least 20 days before a scheduled hearing, the Commission shall not consider the report or place the report in evidence unless the party submitting the report produces the author of the report for cross-examination either at the hearing

or at a deposition. The party submitting into evidence the medical report prepared by an out-of-state physician shall pay the expenses of a deposition under this subsection.

**R20-5-134. Petition for Rearrangement or Readjustment of Compensation Based Upon Increase or Reduction of Earning Capacity**

A. A petition for rearrangement or readjustment of compensation filed with the Commission under A.R.S. § 23-1044(F) shall be in writing. A form is available from the Commission upon request.

B. A party or a party's authorized representative shall sign a petition for rearrangement or readjustment and include in the petition:

1. A statement of the basis upon which the rearrangement or readjustment of compensation is sought, and
2. Documentation in support of the petition.

C. The petition shall be signed by the employee or the employee's authorized representative, the employer, or, in the case of an insurance carrier, by its authorized representative, and shall include a statement of the basis upon which the rearrangement of compensation is sought accompanied by supportive documentary evidence.

D. If a self-insured employer, carrier, special fund division, or uninsured employer requests a hearing protesting the Commission's determination under A.R.S. § 23-1044(F) and the claimant resides outside of Arizona, the Commission may order the self-insured employer, carrier, special fund division, or uninsured employer to pay the claimant's transportation and living expenses to attend any scheduled hearing.

**R20-5-135. Requests for Hearing; Form**

A. Any interested party or the party's authorized representative, except as otherwise provided by law or this Article, may request a hearing on a claim. A request for hearing shall be in writing.

B. A Request for Hearing form is available upon request from the Commission and requests the following:

1. Employee, employer, insurance carrier, authorized representative, and claim identification;
2. Issue upon which the request for hearing is filed;
3. Requests for subpoenas of witnesses;
4. Desired location and length of time for the hearing;
5. Signature and address of requesting party.

**R20-5-137. Service of a Request for Hearing**

A party filing a request for hearing shall serve a copy of the party's request for hearing upon all other parties at the same time that the party files the request for hearing with the Commission.

The failure to serve a copy of a request for hearing upon other parties does not affect the validity of the hearing request.

**R20-5-138. Hearing Calendar and Assignment to Administrative Law Judge; Notification of Hearing**

A. The chief administrative law judge shall maintain a hearing calendar. The chief administrative law judge shall ensure that a request for hearing filed in accordance with this Article is:

1. Placed on the hearing calendar, and
2. Assigned to an administrative law judge who is designated as the presiding administrative law judge.

B. A presiding administrative law judge may hold a hearing at an earlier date than required under A.R.S. § 23-941(D), if all parties to the proceeding agree.

**R20-5-139. Administrative Resolution of Issues by Stipulation Before Filing a Request for Hearing**

A. At any time before the filing of a request for hearing, parties may resolve issues by written stipulation. The parties shall file the stipulation with the Commission for approval or other action as may be appropriate.

B. If the Commission determines that a written stipulation is reasonably supported by the facts, the Commission may approve the stipulation or enter an appropriate award without a request for hearing or hearing.

**R20-5-140. Informal Conferences**

A. A presiding administrative law judge may hold an informal conference to:

1. Resolve and dispose of disputed issues;
2. Narrow or limit the scope of the issues to be considered at a subsequent hearing;
3. Simplify the method of proof at a hearing; or
4. Eliminate the need for hearing if the facts appear to be uncontested.

B. A party may request that a pending hearing be disposed of by an informal conference, by filing a written request that:

1. Specifies the purpose for the conference consistent with subsection (A), and
2. Does not contain any argument regarding the merits of the case.

C. If the presiding administrative law judge determines that an informal conference is appropriate, the judge shall give notice to the parties of the time and place of the conference. The presiding administrative law judge may, without a request from a party, schedule an informal conference

by giving five days notice to the parties of the time, place, and subject matter of the informal conference. The parties may waive the five day notice requirement of this subsection.

D. If a presiding administrative law judge disposes of issues in controversy at an informal conference, the presiding administrative law judge may enter an award without convening a hearing.

E. If a presiding administrative law judge disposes of, narrows, or limits some, but not all issues in controversy, the presiding administrative law judge shall prepare and mail to the parties a statement setting forth the issues to be resolved at a hearing. The presiding administrative law judge shall limit the hearing to the issues contained in the statement unless at the hearing all parties and, the presiding administrative law judge agree that the judge may consider issues beyond the scope of the statement.

F. Upon request by a party or upon a presiding administrative law judge's own motion, the presiding administrative law judge may order the parties to file a joint statement listing the disputed issues to be considered at formal hearing. The presiding administrative law judge shall give the parties at least 10 days to file the statement and shall order the parties to file the statement three to 10 days before the first scheduled hearing.

#### **R20-5-141. Subpoena Requests for Witnesses; Objection to Documents or Reports Prepared by Out-of-State Witness**

A. Subpoena requests for witnesses.

1. Subpoena request for non-medical witness. A party may request a presiding administrative law judge to issue a subpoena to compel the appearance of a non-medical witness by filing a written request with the presiding administrative law judge at least 10 days before the date of the first scheduled hearing.

2. Subpoena request for expert medical witness. A party may request a presiding administrative law judge to issue a subpoena to compel the appearance of an expert medical witness by filing a written request with the presiding administrative law judge at least 20 days before the date of the first scheduled hearing.

3. Statement of expected testimony. In the discretion of the presiding administrative law judge, the judge may order the party requesting a subpoena to file within five days of the order a written statement summarizing the substance of the testimony expected of the witness.

4. Issuance of Subpoena. A presiding administrative law judge shall issue a subpoena requested under this Section if the judge determines that the testimony of the witness is material and necessary and, if applicable:

a. The party files a timely statement under subsection (A)(3); or

b. The party shows at or before the first scheduled hearing that good cause exists for the party's failure to respond timely to the judge's order under subsection (A)(3).

5. Service of a subpoena. The Commission may serve a subpoena by mail unless the party requesting the subpoena requests personal service. If a party requests personal service of a subpoena, the Commission shall prepare the subpoena and the party requesting personal service shall:

- a. Ensure that the subpoena is served in the same manner as in a civil action; and
- b. Pay all expenses of the service.

B. A presiding administrative law judge shall not grant a party a continued hearing because a subpoenaed witness fails to appear at hearing unless the party filed a timely request for subpoena as required by subsection (A). If a party timely requested a subpoena for a witness who fails to appear at a scheduled hearing, the presiding administrative law judge may grant a continued hearing if the party requesting the subpoena demonstrates that:

1. The testimony of the witness is material and necessary, and
2. Good cause is shown as to why the witness failed to appear.

C. Witness Fees.

1. If a non-medical witness requests a witness fee, the party requesting the subpoena shall pay the non-medical witness fees and mileage provided for witnesses in civil actions in the Superior Court. If more than one party subpoenas the same witness, the parties shall divide the witness fee equally.
2. The Commission shall pay the witness fee to a medical witness under the Commission's medical fee schedule after the presiding administrative law judge approves the fee.

D. Objection to an out-of-state physician's report.

1. A presiding administrative law judge shall not consider or place into evidence a timely filed physician's report authored by a physician residing outside Arizona if a party files an objection to that report at least 20 days before the scheduled hearing, unless the party submitting the report produces the author for cross-examination either at the hearing or at a deposition.
2. Nothing in R20-5-143(G) precludes a party from taking or submitting into evidence a deposition of a physician taken under this subsection.
3. The party submitting into evidence a report of an out-of-state physician shall pay the expenses of a deposition taken under this subsection.

E. Objection to document prepared by out-of-state non-medical witness.

1. A presiding administrative law judge shall not consider or place into evidence a timely filed document prepared by a non-medical witness who resides outside Arizona if a party files an objection to that document at least seven days before the scheduled hearing unless the party submitting the document produces the author for cross-examination either at the hearing or at a deposition.

2. Nothing in R20-5-143 precludes a party from taking or submitting into evidence a deposition within the time limits set by a presiding administrative law judge.

3. The party submitting into evidence a document prepared by an out-of-state non-medical witness shall pay the expenses of a deposition taken under this subsection.

F. If a presiding administrative law judge approves, the testimony of a party's out-of-state non-medical or expert medical witness may be taken telephonically.

### **R20-5-142. In-State Oral Depositions**

A. A party may take the oral deposition of another party or a witness residing in Arizona by serving a Notice of Deposition by Oral Examination upon the deponent and every party at least 10 days before the date of the oral deposition and at least 40 days before the first scheduled hearing.

B. A party may file with the presiding administrative law judge a written objection to the taking of an oral deposition within five days after service of the Notice of Deposition. If no request for hearing has been filed, a party shall file the written objection with the chief administrative law judge. The party objecting to the deposition shall:

1. State the basis for objecting to the deposition; and
2. Serve a copy of the party's objections on all parties.

C. The oral deposition shall not commence until the presiding administrative law judge rules on the written objection. The presiding administrative law judge shall rule on the written objection to the taking of an oral deposition within seven days after a party files a written objection by:

1. Ordering the deposition to proceed;
2. Ordering the deposition not be taken; or
3. Entering any other appropriate protective order.

D. The party taking the deposition shall comply with the Arizona Rules of Civil Procedure governing the taking of depositions.

E. The expense of any deposition shall be borne by the party taking the deposition but shall not include the expense of any other interested party.

F. A presiding administrative law judge shall not cancel or continue a hearing because a party fails to take or complete a deposition under this Section.

G. A deposition taken under this Section shall only be used to impeach a witness during a hearing, except that, in the exercise of discretion, the presiding administrative law judge may admit a deposition into evidence for another purpose if:

1. The deponent is deceased at the time of the hearing, or
2. All parties agree.

H. A party may take a telephonic deposition under this Section either by agreement of the parties or by order of the presiding administrative law judge in the exercise of the judge's discretion.

#### **R20-5-143. Out-of-State Oral Depositions**

A. A party shall obtain permission from a presiding administrative law judge before taking an out-of-state oral deposition of another party or a witness by filing a written request with the presiding administrative law judge that contains:

1. The name and address of the party or witness to be deposed, and
2. Each reason why the party's or witness' testimony is necessary.

B. The party requesting permission to take the out-of-state deposition shall serve a copy of the request upon each party.

C. If no objection to the request for permission to take the deposition is filed under subsection (D) the presiding administrative law judge shall, within seven days from the date of the request, grant or deny permission to take the deposition.

D. A party may file with the presiding administrative law judge a written objection to the taking of an out-of-state oral deposition within five days after being served with a request to take the out-of-state deposition. The party objecting to the out-of-state deposition shall:

1. State the basis for objecting to the deposition; and
2. Serve a copy of the party's objections on each party.

E. The oral deposition shall not commence until the presiding administrative law judge rules on the written objection. The presiding administrative law judge shall rule on the written objection to the taking of an out-of-state oral deposition within seven days after a party files the written objection by:

1. Ordering the deposition to proceed,
2. Ordering the deposition not be taken, or
3. Entering any other appropriate protective order.

F. A party shall not take more than two depositions per hearing under this Section unless a presiding administrative law judge, upon a showing of good cause, approves the taking of additional depositions.

G. In the exercise of discretion, the presiding administrative law judge may admit into evidence a deposition taken under this Section if the transcript of the deposition is filed with the Commission at least five days before any scheduled hearing or as otherwise directed by the presiding administrative law judge. If the transcript of the deposition is not timely filed under this subsection, the administrative law judge shall not consider the deposition for any purpose unless the parties and the administrative law judge agree that the deposition may be considered.

H. Parties may take telephonic depositions under this Section either by agreement of the parties or by order of a presiding administrative law judge in the exercise of the administrative law judge's discretion.

I. A party taking a deposition taken under this Section shall comply with R20-5-142(A), (D), (E) and (F).

**R20-5-144. Written Interrogatories**

A. After a party files a request for hearing with the Commission, any party may serve written interrogatories upon another party. A party shall serve written interrogatories at least 40 days before the scheduled hearing.

B. A party shall not serve more than 25 interrogatories, including subsections.

C. A party shall serve answers to the interrogatories upon all parties within 10 days after service of the interrogatories. A party shall not file answers to the interrogatories with the Commission.

D. A presiding administrative law judge shall not cancel or continue a hearing because a party fails to answer interrogatories under this Section.

E. A party shall only use written interrogatories served under this Section to impeach a witness during a hearing, except that, in the exercise of discretion, the presiding administrative law judge may admit the interrogatory answers into evidence for another purpose if the party answering the interrogatories is deceased at the time of the scheduled hearing.

**R20-5-145. Refusal to Answer or Attend; Motion to Compel; Sanctions Imposed**

A. If a party or deponent refuses to answer any question asked at a deposition under R20-5-142 or R20-5-143, the party asking the question shall either complete the deposition in other matters or adjourn the deposition. With notice to all persons affected by the deponent's refusal to answer a question, the party asking the question may apply to the presiding administrative law judge for an order compelling the deponent to answer the question.

B. If a party refuses to answer an interrogatory served under R20-5-144, the party serving the interrogatory may submit the interrogatory to the presiding administrative law judge and apply for an order compelling the answer.

C. If a presiding administrative law judge issues an order compelling an answer under subsection (A) or (B) and finds that a refusal to answer is without substantial justification, the presiding administrative law judge shall require the party or witness refusing to answer or the authorized representative advising that party or witness not to answer, or both of them, to pay to the party asking the question:

1. Reasonable attorney's fees incurred to obtain the order compelling the answer, and
2. Reasonable expenses that will be incurred to obtain the requested answer.

D. If a presiding administrative law judge denies a motion to compel an answer under subsection (A) or (B), and finds that the motion was made without substantial justification, the presiding

administrative law judge shall require the party filing the motion, or the parties' authorized representative advising that party to make the motion, or both of them, to pay to the party or witness refusing to answer, reasonable attorney's fees incurred in opposing the motion.

E. In addition to the sanctions authorized under R20-5-157, a presiding administrative law judge may, upon a party's motion, impose the following sanctions upon a party if the party, or an officer or managing agent of that party, willfully fails to appear for a deposition after being served with proper notice of the deposition, or fails to serve answers to interrogatories after proper service of the interrogatories:

1. Strike out all or any part of a document filed by the party;
2. Dismiss the action or proceeding, or any part of the action or proceeding;
3. Order the suspension or forfeiture of compensation; or
4. Preclude the introduction of evidence.

F. The party filing a motion under subsections (A), (B), or (E) shall attach to the motion:

1. The statement required under R20-5-105(E) and
2. A proposed order that includes the relief requested and a service page with the names and addresses of all parties served.

#### **R20-5-147. Videotape Recordings and Motion Pictures**

A. A party proposing to offer a videotape recording or motion picture into evidence at a Commission hearing shall provide written notice to the Commission and all parties at least 40 days before the first scheduled hearing.

B. If a party serves a written request to view a videotape recording or motion picture upon the party proposing to submit the videotape recording or motion picture into evidence, the party proposing to offer the videotape recording or motion picture into evidence shall provide the necessary facilities and equipment to allow the other party to view the videotape recording or motion picture no later than 25 days before the first scheduled hearing.

C. A presiding administrative law judge may admit into evidence a videotape recording or motion picture if the videotape recording or motion picture:

1. Is a reasonable and accurate representation of the scene, person, object, or action portrayed; and
2. Will aid in the understanding of the issues before the presiding administrative law judge.

D. The party submitting the videotape recording or motion picture into evidence shall ensure that commentary, interrogation, dialogue, or testimony are not a part of the videotape recording or motion picture.

E. A presiding administrative law judge shall not cancel or continue a hearing because a party fails to view a videotape recording or motion picture as provided in this Section.

F. This Section does not apply to:

1. Videotape recordings or motion pictures obtained by surveillance, or
2. Videotape recordings or motion pictures of medical procedures performed by a physician.

**R20-5-148. Burden of Presentation of Evidence; Offer of Proof**

A. A party shall rest at the conclusion of the presentation of the party's evidence. If there is a dispute as to which party has the burden of proof, the presiding administrative law judge shall direct who has the burden of proof.

B. If a presiding administrative law judge prohibits a witness from answering a question, the presiding administrative law judge shall permit an offer of proof in the form of an avowal or in writing.

**R20-5-149. Presence of Claimant at Hearing; Notice of a Parties' Non-Appearance at Hearing; Assessment of Hearing Costs for Non-Appearance**

A. A claimant, whether or not represented by an attorney, shall appear personally at any hearing without the necessity of subpoena unless excused by the presiding administrative law judge.

B. Subject to subsection (A), at least three days before a scheduled hearing a party shall notify the presiding administrative law judge of any non-appearance by a party or party's authorized representative that requires the judge to cancel or reschedule the hearing.

C. If a party fails to notify the presiding administrative law judge as required under subsection (B), the presiding administrative law judge may order the party or the party's authorized representative to reimburse the Commission for hearing expenses and costs incurred by the Commission including fees of expert medical witnesses and other witness fees.

**R20-5-150. Joinder of a Party**

A. An administrative law judge may join as a party any person, firm, corporation, or other entity in favor of whom or against whom a right to relief may exist and over whom the Commission may acquire jurisdiction.

B. Joinder may be made upon application of any party or upon the presiding administrative law judge's own motion.

C. A party seeking to join another person, firm, corporation, or other entity shall file a motion requesting joinder with the presiding administrative law judge at least 30 days before hearing. The moving party shall serve a copy of the motion upon the person, firm, corporation, or other entity for whom joinder is requested, and upon all other parties.

D. If the requirements of this Section are met, the presiding administrative law judge shall join as a party the person, firm, corporation, or other entity for whom joinder is requested and shall issue a notice advising the parties of the joinder.

#### **R20-5-151. Special Appearance**

Any party against whom a claim may exist under the Act, or against whom a contingent liability may exist under the Act, and over whom the Commission has not acquired jurisdiction, may enter a special appearance. A special appearance made under this Section does not invoke the jurisdiction of the Commission.

#### **R20-5-152. Resolution of Issues by Stipulation After the Filing of a Request for Hearing; Notice of Resolution; Assessment of Hearing Costs**

A. Subject to the requirement of subsection (D), parties may stipulate to any fact or issue after a party files a request for hearing. The stipulation may be in writing or made orally at the time of hearing.

B. A stipulation is binding upon the parties unless a presiding administrative law judge or the Commission grants the parties permission to withdraw the stipulation.

C. If a stipulation is not reasonably supported by the evidence, a presiding administrative law judge or the Commission, may set aside or refuse to accept the stipulation and proceed to determine the true facts.

D. A party shall notify a presiding administrative law judge of any stipulation, compromise or settlement agreement, or withdrawal of a hearing request that makes a hearing unnecessary at least three days before a scheduled hearing.

E. The presiding administrative law judge may order a party or parties to reimburse the Commission for hearing expenses and costs incurred by the Commission including fees of expert medical witnesses and other witness fees if a party fails to notify the presiding administrative law judge as required under subsection (D).

#### **R20-5-153. Exclusion of Witnesses**

Any party may request that all other witnesses except the parties be excluded from the hearing until called to testify. The presiding administrative law judge may, in the judge's discretion, grant or deny the request. If the request is granted, the presiding administrative law judge shall admonish each witness not to discuss the witness's testimony with anyone other than attorneys on the case.

#### **R20-5-154. Correspondence to Administrative Law Judge**

A person submitting correspondence, including subpoena requests, to an administrative law judge concerning a matter pending before the administrative law judge, shall contemporaneously serve a copy of the correspondence upon all other parties, or if represented, the parties' authorized representatives. The administrative law judge shall not consider correspondence or subpoena requests to be evidence except by agreement of all parties to the matter.

**R20-5-155. Filing of Medical and Non-Medical Reports Into Evidence; Request for Subpoena to Cross-examine Author of Report Submitted into Evidence; Failure to Timely Request Subpoena for Author**

A. Except as provided in R20-5-114(C), a party filing a medical report or hospital record into evidence (“medical report”) that is not already contained in the Commission’s claims file, shall file the medical report with the presiding administrative law judge at least 25 days before the first scheduled hearing.

B. A party filing into evidence a document, report, instrument, or other written matter not described in subsection (A) (“nonmedical report”) that is not already contained in the Commission’s claims file, shall file the non-medical report with the presiding administrative law judge at least 15 days before the first scheduled hearing.

C. The party filing a medical or non-medical report into evidence shall serve a copy of the report to all other parties.

D. A presiding administrative law judge shall not receive into evidence any medical or non-medical report that is not filed as required under this Section. If the report has been placed in the Commission’s claims file, the presiding administrative law judge shall remove the report from the Commission’s claims file and return the report to the filing party.

E. The presiding administrative law judge may suspend the requirements of this Section;

1 Upon a showing of good cause; or

2. If the parties agree that the judge may accept the medical or non-medical report into evidence.

F. The party filing a medical or non-medical report under this Section shall file a cover letter with the report stating:

1. The party’s identity;

2. The reports filed; and

3. Proof of service of the reports upon the other parties.

G. A party seeking to cross-examine the author of any medical or non-medical report filed into evidence shall request a subpoena under R20-5-141.

H. If a party fails to timely request a subpoena under this Section and R20-5-141, the party waives the right to cross-examine the author of any medical or non-medical report filed into evidence and the presiding administrative law judge shall admit the medical or non-medical report in evidence.

**R20-5-156. Continuance of Hearing**

A. A party may request a continuance of a scheduled hearing. If a party shows good cause, a presiding administrative law judge may grant a request that a hearing be continued.

B. If at the conclusion of a hearing a party seeks to continue the hearing to introduce additional evidence, the party shall state specifically and in detail:

1. The nature and substance of the additional evidence,
2. The names and addresses of additional witnesses, and
3. The reason the party was unable to produce the evidence or witnesses at the hearing.

C. A presiding administrative law judge may deny a request for a continuance under subsection (B) if the presiding administrative law judge determines that, with the exercise of due diligence, the evidence or testimony could have been produced or the evidence or testimony would be cumulative, immaterial, or unnecessary.

D. A presiding administrative law judge may, on the judge's own motion, continue a hearing and order further examinations or investigations that the judge determines are warranted.

E. If more than 40 days before the first scheduled hearing, a presiding administrative law judge reschedules the hearing discovery and filing deadlines under this Article shall be calculated with respect to the new hearing date.

F. If less than 40 days before the first scheduled hearing, a presiding administrative law judge reschedules the hearing discovery and filing deadlines under this Article shall be calculated with respect to the original hearing date.

#### **R20-5-157. Sanctions**

A. A presiding administrative law judge may impose the following sanctions against any party or authorized representative of a party who fails to comply with this Article or fails to comply with an order of the presiding administrative law judge or Commission:

1. Dismissal of the party's request for hearing;
2. Refusal to permit the introduction of evidence by the party; or
3. Assessment of reasonable attorney's fees and costs against the sanctioned party or authorized representative of a party.

B. If a party shows good cause, a presiding administrative law judge or the Commission may relieve a party of sanctions imposed under subsection (A).

#### **R20-5-158. Service of Awards and Other Matters**

A. An award, decision, order, subpoena, notice, document, or other matter required by the Act, this Article, or other law to be served shall be made upon a party or, if represented, the party's authorized representative. Service upon the authorized representative is service upon the party.

B. Service may be made and is deemed complete by:

1. Depositing the document or matter in the United States mail, with postage prepaid, addressed to the party served at the address as shown by the records of the Commission; or

2. Personal service in the same manner as a summons is served in a civil action.

C. Proof of service may be made by an affidavit or oral testimony of the person making such service.

**R20-5-159. Record for Award or Decision on Review**

A presiding administrative law judge's award or decision under A.R.S. § 23-942 or award or decision upon review under A.R.S. §23-943 shall be based upon:

1. The record as it exists at the conclusion of the hearings, and
2. Any memoranda provided under A.R.S. § 23-943(E) or requested by the presiding administrative law judge.

**R20-5-160. Application to Set Attorney Fees Under A.R.S. §23-1069**

A. For purposes of A.R.S. § 23-1069, "final disposition of a case" occurs when all compensation benefits have been released to a claimant.

B. A claimant or attorney filing an application for attorney's fees under A.R.S. § 23-1069 shall serve notice of the application to all parties, including if applicable, the insurance carrier, self-insured employer, or special fund division.

C. Upon the filing of an application, the attorney and claimant shall, provide information to the Commission to enable the Commission to award reasonable attorney's fees.

D. Attorney's fees awarded under this Section shall be set by the Commission, an administrative law judge, or other authorized representative of the Commission.

**R20-5-161. Stipulations for Extensions of Time**

Stipulations for extensions of time in which to file papers or briefs in the various courts shall be received and signed by the Chief Counsel or other members of the Legal Department.

**R20-5-162. Legal Division Participation**

The chief counsel and other members of the legal staff of the Commission who participate in proceedings or matters under the Act and this Article do so on behalf of the Commission.

**R20-5-163. Bad Faith and Unfair Claim Processing Practices**

A. For purposes of A.R.S. § 23-930, an employer, self-insured employer, insurance carrier, or claims processing representative commits "bad faith" if the employer, self-insured employer, insurance carrier, or claims processing representative:

1. Institutes a proceeding or interposes a defense that is not:
  - a. Well-grounded in fact;
  - b. Warranted by existing law; or

- c. A good faith argument for the extension, modification, or reversal of existing law;
- 2. Unreasonably delays:
  - a. Payment of benefits; or
  - b. Authorization for, or receipt of, medical benefits or treatment;
- 3. Unreasonably underpays benefits;
- 4. Unreasonably terminates benefits;
- 5. Intentionally misleads a claimant as to applicable statutes of limitation, benefits, or remedies available to the claimant under the Act or under this Article; or
- 6. Unreasonably interferes with or obstructs the claimant's right to choose the claimant's attending physician, except in cases involving a self-insured employer under A.R.S. §23-1070.

B. For purposes of A.R.S. § 23-930, an employer, self-insured employer, insurance carrier, or claims processing representative commits "unfair claim processing practices" if the employer, self-insured employer, insurance carrier, or claims processing representative:

- 1. Unreasonably issues a notice of claim status without adequate supporting information in its possession or available to it;
- 2. Unreasonably fails to acknowledge communications from the Commission, an unrepresented claimant, or a claimant's attorney with respect to a claim;
- 3. Fails to act reasonably and promptly upon communications from the Commission, an unrepresented claimant, or a claimant's attorney with respect to a claim;
- 4. Directly advises a claimant not to consult or obtain the services of an attorney; or
- 5. Communicates directly, for an improper purpose, with a claimant represented by an attorney.

C. A person alleging bad faith or unfair claim processing practices ("complainant") shall file a written complaint with the claims manager of the Commission. The complainant, or the complainant's authorized representative, shall sign the complaint.

D. The complaint shall describe the specific actions of the employer, self-insured employer, insurance carrier, or claims processing representative, that are alleged to constitute bad faith or unfair claim processing practices. A complaint form is available upon request from the Commission.

E. Upon receipt of a complaint under this subsection, the claims manager of the Commission shall serve the complaint upon all parties.

F. If the Commission acts on its own motion under A.R.S. § 23-930(A), the claims manager shall mail a notice of alleged bad faith or unfair claim processing practices to the claimant or the claimant's authorized representative and the:

1. Employer;
2. Self-insured employer;
3. Insurance carrier; or
4. Claims processing representative.

G. The person or entity named in a complaint or notice served under A.R.S. § 23-930 and this Section shall file with the claims manager a written response to the complaint or notice, within 30 days after service by the Commission of the complaint or notice.

H. The person or entity filing a written response shall serve a copy of the response upon the complainant, or the complainant's authorized representative, if represented.

I. If the person or entity named in a complaint or notice served under A.R.S. § 23-930 and this Section fails to file a written response, the Commission shall consider the absence of a response a denial of the allegations of the complaint or notice.

J. Upon receipt of a written response, or upon the expiration of 30 days if no response is filed, the Commission shall enter an award as it deems, in its discretion, appropriate under A.R.S. §§ 23-930(B) or (C).

**R20-5-164. Human Immunodeficiency Virus, Hepatitis C, Methicillin-resistant Staphylococcus Aureus, Spinal Meningitis and Tuberculosis; Significant Exposure; Employee Notification; Reporting; Documentation; Forms**

A. An employer subject to the Act shall notify its employees of the requirements of A.R.S. §§ 23-1043.02, 23-1043.03, and 23-1043.04 by posting the Commission notices titled "Work Exposure to Bodily Fluids" and "Work Exposure to methicillin-resistant Staphylococcus Aureus (MRSA), Spinal Meningitis, or Tuberculosis (TB)" in a conspicuous place immediately next to the "Notice to Employees" notice required under A.R.S. § 23-906(D).

B. Properly posted "Work Exposure to Bodily Fluids" and "Work Exposure to Methicillin-resistant Staphylococcus Aureus (MRSA), Spinal Meningitis, or Tuberculosis (TB)" notices constitute sufficient notice to employees of the requirements of a prima facie case under A.R.S. §§ 1043.02(B), 23-1043.03(B), and 23-1043.04(B).

C. An employer's insurance carrier, claims processor, or workers' compensation pool shall provide the notices specified in subsection (A) to the employer. These notices are also available from the Commission upon request.

D. An employer shall make readily available to its employees the Commission form described in R20-5-106 titled "Report of Significant Work Exposure to Bodily Fluids or Other Infectious Material." An employer's insurance carrier, claims processor, or workers' compensation pool shall provide the "Report of Significant Work Exposure to Bodily Fluids or Other Infectious Material" to the employer. This form is also available from the Commission upon request.

E. If an employee sustains a significant exposure as defined in A.R.S. §§ 23-1043.02(G), 23-1043.03(G), or 23-1043.04(H)(2), the employee shall complete, date, and sign a “Report of Significant Work Exposure to Bodily Fluids or Other Infectious Material” form. The employee or employee’s authorized representative shall give to the employer the completed, dated, and signed form. The employer shall return one copy of the completed form to the employee or to the employee’s authorized representative. Nothing in this subsection limits the requirements to report an injury or file a claim under the Act.

F. If an employee submits a written report of a significant exposure to an employer, but does not use the Commission form titled “Report of Significant Work Exposure to Bodily Fluids or Other Infectious Material,” the employer shall provide the employee the Commission form within five calendar days after receiving the employee’s initial written report.

G. The date of the receipt by the employer or its authorized representative of the employee’s initial report is the date used to compute the time period prescribed in A.R.S. §§ 23-1043.02(B)(2), 23-1043.03(B)(2), and 23-1043.04(B)(2) if:

1. The initial report contains the information required in the “Report of Significant Work Exposure to Bodily Fluids or Other Infectious Material” form, or
2. The employee gives to the employer the completed Commission form within 10 calendar days after the employer’s receipt of the Commission form.

H. Failure or refusal by the employer to provide the Commission form to the employee shall not be a defense to a prima facie claim under A.R.S. §§ 23-1043.02(B), 23-1043.03(B), and 23-1043.04(B).

I. In investigating the circumstances and facts surrounding an employee’s report to an employer of a significant exposure under A.R.S. §§ 23-1043.02(C), 23-1043.03(C), and 23-1043.04(C), the employer, or its carrier, or any employees, agents or contractors of either the employer or carrier, shall not disclose to any person, except as authorized or required by law, that the reporting employee, or any witness or alleged source of exposure, may have or did contract the human immunodeficiency virus, acquired immune deficiency syndrome, hepatitis C, methicillin-resistant *Staphylococcus aureus*, spinal meningitis, or tuberculosis. However, an employer, its carrier or their respective attorneys, may:

1. Direct an agent to investigate the employee’s report of significant exposure, and
2. Communicate with the investigating agent about the conduct and results of the investigation.

J. As required under the federal Occupational Safety and Health Standard for Bloodborne Pathogens, 29 CFR 1910.1030, an employer shall pay for the testing required by A.R.S. § 23-1043.02.

## **R20-5-165. Calculation of Maximum Average Monthly Wage**

In using the Bureau of Labor Statistics Employment Cost Index to adopt the amount of an increase to the maximum average monthly wage under A.R.S. § 23-1041(E), the Commission shall use the Bureau of Labor Statistics, Employment Cost Index for Wages and Salaries, for Civilian Workers, by Occupational Group and Industry, All Workers, available at <http://www.bls.gov/>.

**GENERAL  
AND  
SPECIFIC  
STATUTES**

**A.R.S. § 23-107. General powers**

A. The commission has full power, jurisdiction and authority to:

1. Formulate and adopt rules and regulations for effecting the purposes of this article.

**A.R.S. § 23-906. Liability under chapter or under common law of employer securing compensation; carriers; service representatives; right of employee to make election; procedure for making election**

D. Every employer engaged in the occupations designated in this chapter shall post and keep posted in a conspicuous place upon his premises, in English and Spanish and available for inspection by all workmen, a notice in substantially the following form:

All employees are hereby notified that in the event they do not specifically reject the provisions of the compulsory compensation law they are deemed by the laws of Arizona to have accepted the provisions of such law, and to have elected to accept compensation under the terms of such law, and that under the terms thereof employees have the right to reject the same by written notice thereof prior to any injury sustained, and that blanks and forms for such notice are available to all employees at the office of this company.

**A.R.S. § 23-907. Liability of employer failing to secure compensation; defenses; presumption; right of employee to compensation under chapter; information exchange; civil penalties; settlement of disputed claim**

A. Employers who are subject to and who fail to comply with section 23-961 or 23-962 shall not be entitled to the benefits of this chapter during the period of noncompliance, but shall be liable in an action under any other applicable law of the state. In such action the defendant shall not avail himself of the defenses of assumption of risk or contributory negligence. In all such actions proof of the injury shall constitute prima facie evidence of negligence on the part of the employer and the burden shall be upon the employer to show freedom from negligence resulting in the injury.

B. An employee of such an employer, or the employee's dependents in case death ensued, in lieu of proceeding against the employer by civil action in court, may file an application with the commission for compensation in accordance with this chapter, and the commission shall hear and determine the application for compensation in the manner other claims are heard and determined before the commission. Except for a protest of compensability, an employer who protests or petitions the commission for relief of actions or determinations made by the special fund established by section 23-1065 shall be in compliance with section 23-961 or 23-962. The employer's protest or petition shall include proof that the employer is complying with section 23-961 or 23-962. The proof shall be either a copy of the declaration page of the workers' compensation insurance policy under section 23-961, subsection A, paragraph 1 or a notice to the commission that the employer is in good standing with the commission under section 23-961, subsection A, paragraph 2. The compensation so determined shall be paid from the special fund to the person entitled as provided in this section.

C. The special fund may begin the payment of medical or compensation benefits on a claim which involves an employer who has failed to secure compensation as required by section 23-961 and which is processed under subsection B of this section, pending finality of a notice, a determination, an order or a finding and award on a claim, condition or other matter accepted by the special fund. After payment begins, the payment shall not be interrupted if there is a protest, petition for hearing, request for review or appeal to a higher court by an employer unless, before a notice, determination or order is final, the special fund issues a notice, determination or order that rescinds or amends its prior action or terminates the payment of medical or compensation benefits. Any overpayment of medical or compensation benefits that occurs shall be credited or adjusted against any future liability on the same claim. Any overpayment of medical or compensation benefits to a claimant for a claim, condition or matter that is finally determined to be noncompensable shall be borne by the special fund.

D. The commission may spend monies from the special fund that relate to a claim under this section and shall include as part of an employer's liability under this section those expenditures for the employment or contracting of medical, rehabilitation or labor market consultants, experts or examiners that are necessary for processing and determining benefits and assisting in determining the liability of the special fund on a claim.

E. The employer shall be notified of the employer's liability to the special fund periodically and this notice shall include a ten per cent penalty of the amount expended by the special fund or a penalty of one thousand dollars, whichever is greater, plus interest on the amount expended and the penalty pursuant to section 44-1201. The payments made from the special fund pursuant to the award plus the penalty shall act as a judgment against the employer. The commission shall file the award in the office of the clerk of the superior court in any county in the state and such award shall be entered in the civil order book and judgment docket and when so filed and entered shall be a lien for eight years from the date of the award upon the property of the employer located in the county. Execution may issue thereon within eight years in the same manner and with like effect as if the award were a judgment of the superior court. The commission may recover reasonable attorney fees incurred pursuant to this section. Any civil penalties and interest assessed pursuant to this section shall be deposited, pursuant to sections 35-146 and 35-147, in the state general fund and any payments and attorney fees shall be deposited in the special fund account.

F. An employer with one or more employees who is required to comply with this chapter but who fails to obtain coverage through an insurance carrier or as a self-insurer shall be subject to an action by the commission to apply to the court for an injunction which shall cause the employer to cease the operation of business until such employer complies with the provisions of law pertaining thereto.

G. The commission and other state and local governmental agencies may exchange information concerning employers who fail to comply with section 23-961 or 23-962 with other federal, state or local governmental agencies. This exchange of information shall be made only for the purpose of the valid administrative needs of the programs administered by the commission or other agencies and shall not be made for the purpose of criminal prosecution of an employer.

H. The commission may assess a civil penalty of one thousand dollars on an uninsured employer if the commission makes an award for a noncompensable claim against the employer and finds that:

1. At the time of the accident for which the claim was made the employer was subject to this chapter.
2. The employer was not insured pursuant to this chapter.

I. The commission may issue an order assessing a civil penalty of not to exceed one thousand dollars on an employer who is subject to this chapter and who is not insured pursuant to this chapter. The order is final against the employer unless the employer requests a hearing before the commission within fifteen working days after a copy of the order is mailed to the employer. The employer's request for hearing shall specify the facts and grounds that are the basis of the employer's objection to the order issued under this subsection. Following the hearing the commission may affirm, reverse or modify its order and shall serve a copy of its decision by first class mail on the employer. An employer aggrieved by this decision may seek judicial review pursuant to title 12, chapter 7, article 6.

J. If the commission has assessed a civil penalty under this section against an employer within the previous five years for failure to secure workers' compensation as required under this chapter, the commission may assess an additional civil penalty against the employer that:

1. Does not exceed five thousand dollars for the second failure to secure the payment of compensation.
2. Does not exceed ten thousand dollars for a third or subsequent failure to secure the payment of compensation. As an aggravating factor only, the commission may consider the economic benefit that the employer received by failing to comply with this chapter.

K. In determining the amount of the final penalty under subsection H, I or J of this section, the commission may consider any relevant factor to waive or reduce the penalty, including:

1. The history of the employer's noncompliance with section 23-961 or 23-962.
2. The history of no insurance claims filed against the employer.
3. Whether the failure to secure workers' compensation coverage was inadvertent. For the purposes of this paragraph, "inadvertent" includes a lapse in coverage of not more than thirty days if there is a change of insurance carrier, a change of ownership or a change in the form of the business.
4. Whether the failure to secure workers' compensation coverage was because the employer was a victim of fraud, misrepresentation or gross negligence by an insurance agent or broker or by a person whom a reasonable person would believe is an insurance agent or broker.

L. Civil penalties assessed pursuant to subsections H, I and J of this section are payable to the state general fund and shall act as a judgment in the same manner as prescribed in subsection E of this section. Recovery of attorney fees and accrual of interest are the same as prescribed in subsection E of this section.

M. The commission may compromise or otherwise settle a disputed claim with an employee of an employer who is subject to and who fails to comply with section 23-961 or 23-962 by filing a notice of compromise and settlement or notice of stipulation with the presiding administrative law judge. The notice shall be served on the employer at the last known mailing address as shown on the records of the commission. The employer shall keep the commission informed of its current mailing address once the employer has been notified by the commission of the filing of a claim against the employer. If the employer does not request a hearing protesting the terms of the agreement or stipulation within ten working days of the service of the notice, the commission and the employee may execute the agreement or stipulation without the consent of the employer, subject to the approval of the presiding administrative law judge. Any payments made to the employee pursuant to this subsection shall be paid from the special fund and are subject to reimbursement and collection from the employer in the same manner as other payments made pursuant to this chapter.

**A.R.S. § 23-908. Injury reports by employer and physician; schedule of fees; violation; classification**

A. Every employer that is affected by this chapter, and every physician who attends an injured employee of that employer, shall file with the commission and the employer's insurance carrier from time to time a full and complete report of every known injury to the employee arising out of or in the course of employment and resulting in loss of life or injury. The report shall be furnished to the commission and the insurance carrier at times and in the form and detail the commission prescribes, and the report shall make special answers to all questions required by the commission under its rules.

B. The commission shall fix a schedule of fees to be charged by physicians, physical therapists or occupational therapists attending injured employees and, subject to subsection C of this section, for prescription medicines required to treat an injured employee under this chapter. Notwithstanding subsection C of this section, the schedule of fees may include other reimbursement guidelines for medications dispensed in settings that are not accessible to the general public. The commission shall annually review the schedule of fees.

C. If a schedule of fees for prescription medicines adopted pursuant to subsection B of this section includes provisions regarding the use of generic equivalent drugs or interchangeable biological products, those provisions shall comply with section 32-1963.01, subsections A, B and D through L. If the commission considers the adoption of fee schedule provisions that involve specific prices, values or reimbursements for prescription drugs, the commission shall base the adoption on studies or practices that are validated and accepted in the industry, including the applicability of formulas that use average wholesale price, plus a dispensing fee, and that have been made publicly available for at least one hundred eighty days before any hearing conducted by the commission.

D. Notwithstanding section 12-2235, information obtained by any physician or surgeon examining or treating an injured person shall not be considered a privileged communication if that information is requested by interested parties for a proper understanding of the case and a determination of the rights involved. Hospital records of an employee concerning an industrial claim shall not be considered privileged if requested by an interested party in order to determine the rights involved. Medical information from any source pertaining to conditions unrelated to the pending industrial claim shall remain privileged.

E. When an accident occurs to an employee, the employee shall forthwith report the accident and the injury resulting from the accident to the employer, and any physician employed by the injured employee shall forthwith report the accident and the injury resulting from the accident to the employer, the insurance carrier and the commission.

F. If an accident occurs to an employee, the employer may designate in writing a physician chosen by the employer, who shall be permitted by the employee, or any person in charge of the employee, to make one examination of the injured employee in order to ascertain the character and extent of the injury occasioned by the accident. The physician so chosen shall forthwith report to the employer, the insurance carrier and the commission the character and extent of the injury as the physician ascertains. If the accident is not reported by the employee or the employee's physician forthwith, as required, or if the injured employee or those in charge of the employee refuse to permit the employer's physician to make the examination, and the injured employee is a party to the refusal, no compensation shall be paid for the injury claimed to have resulted from the accident. The commission may relieve the injured person or that person's dependents from the loss or forfeiture of compensation if it believes after investigation that the circumstances attending the failure on the part of the employee or physician to report the accident and injury are such as to have excused them.

G. Within ten days after receiving notice of an accident, the employer shall inform the insurance carrier and the commission on the forms and in the manner as prescribed by the commission.

H. Immediately on notice to the employer of an accident resulting in an injury to an employee, the employer shall provide the employee with the name and address of the employer's insurance carrier, the policy number and the expiration date.

I. Any person failing or refusing to comply with this section is guilty of a petty offense.

#### **A.R.S. § 23-921. Administration of chapter**

B. The commission may make and declare all rules and regulations which are reasonably required in the performance of its duties, including but not limited to rules of practice and procedure in connection with hearing and review proceedings. Such rules and regulations may provide for informal prehearing conferences in order to expedite claim adjudication, amicably dispose of controversies, narrow issues and simplify the method of proof at hearings.

#### **A.R.S. § 23-930. Unfair claim processing practices; bad faith; civil penalties**

E. The commission shall adopt by rule a definition of unfair claim processing practices and bad faith. In adopting a rule under this subsection, the commission shall consider, among other factors, recognized and approved claim processing practices within the insurance industry, the commission's own experience in processing workers' compensation claims and the workers' compensation and insurance laws of this state.

**A.R.S. § 23-961. Methods of securing compensation by employers; deficit premium; civil penalty**

A. Employers shall secure workers' compensation to their employees in one of the following ways:

1. By insuring and keeping insured the payment of such compensation with an insurance carrier authorized by the director of insurance to write workers' compensation insurance in this state.

2. By furnishing to the commission satisfactory proof of financial ability to pay the compensation directly or through a workers' compensation pool approved by the commission in the amount and manner and when due as provided in this chapter. The requirements of this paragraph may be satisfied by furnishing to the commission satisfactory proof that the employer is a member of a workers' compensation pool approved by the commission pursuant to section 23-961.01. The commission may require a deposit or any other security from the employer for the payment of compensation liabilities in an amount fixed by the commission, but not less than one hundred thousand dollars for workers' compensation liabilities. If the employer does not fully comply with the provisions of this chapter relating to the payment of compensation, the commission may revoke the authority of the employer to pay compensation directly.

**A.R.S. § 23-1021. Right of employee to compensation**

Every employee coming within the provisions of this chapter who is injured, and the dependents of every such employee who is killed by accident arising out of and in the course of his employment, wherever the injury occurred, unless the injury was purposely self-inflicted, shall be entitled to receive and shall be paid such compensation for loss sustained on account of the injury or death, such medical, nurse and hospital services and medicines, and such amount of funeral expenses in the event of death, as are provided by this chapter.

**A.R.S. § 23-1043.02. Human immunodeficiency virus; establishing exposure; definition**

A. A claim for a condition, infection, disease or disability involving or related to the human immunodeficiency virus or acquired immune deficiency syndrome shall include the occurrence of a significant exposure as defined in this section and, except as provided in subsection B of this section, shall be processed and determined under the provisions of this chapter and applicable principles of law.

B. Notwithstanding any other law, an employee who satisfies the following conditions presents a prima facie claim for a condition, infection, disease or disability involving or related to the human immunodeficiency virus or acquired immune deficiency syndrome if the medical evidence shows

to a reasonable degree of medical probability that the employee sustained a significant exposure within the meaning of this section:

1. The employee's regular course of employment involves handling or exposure to blood or body fluids, other than tears, saliva or perspiration, including health care providers as defined in title 36, chapter 6, article 4, forensic laboratory workers, fire fighters, law enforcement officers, emergency medical technicians, paramedics and correctional officers.

2. Within ten calendar days after a possible significant exposure which arises out of and in the course of his employment, the employee reports in writing to the employer the details of the exposure. The employer shall notify its insurance carrier or claims processor of the report. Failure of the employer to notify the insurance carrier is not a defense to a claim by the employee.

3. The employee has blood drawn within ten days after the possible significant exposure, the blood is tested for the human immunodeficiency virus by antibody testing within thirty days after the exposure and the test results are negative.

4. The employee is tested or diagnosed, according to clinical standards established by the centers for disease control of the United States public health service, as positive for the presence of the human immunodeficiency virus within eighteen months after the date of the possible significant exposure.

C. On presentation or showing of a prima facie claim under this section, the employer may produce specific, relevant and probative evidence to dispute the underlying facts, to contest whether the exposure was significant as defined in this section, or to establish an alternative significant exposure involving the presence of the human immunodeficiency virus.

D. A person alleged to be a source of a significant exposure shall not be compelled by subpoena or other court order to release confidential human immunodeficiency virus related information either by document or by oral testimony. Evidence of the alleged source's human immunodeficiency virus status may be introduced by either party if the alleged source knowingly and willingly consents to the release of that information.

E. Notwithstanding title 36, chapter 6, article 4, medical information regarding the employee obtained by a physician or surgeon is subject to the provisions of section 23-908, subsection D.

F. The commission by rule shall prescribe requirements and forms regarding employee notification of the requirements of this section and the proper documentation of a significant exposure.

G. For the purposes of this section, "significant exposure" means contact of an employee's ruptured or broken skin or mucous membrane with a person's blood or body fluids, other than tears, saliva or perspiration, of a magnitude that the centers for disease control have epidemiologically demonstrated can result in transmission of the human immunodeficiency virus. For purposes of filing a claim under this section, significant exposure does not include sexual activity or illegal drug use.

**A.R.S. § 23-1043.03. Hepatitis C; establishing exposure; definition**

A. A claim for a condition, infection, disease or disability involving or related to hepatitis C shall include the occurrence of a significant exposure as defined in this section and, except as provided in subsection B of this section, shall be processed and determined under this chapter and applicable principles of law.

B. Notwithstanding any other law, an employee who satisfies the following conditions presents a prima facie claim for a condition, infection, disease or disability involving or related to hepatitis C if the medical evidence shows to a reasonable degree of medical probability that the employee sustained a significant exposure within the meaning of this section:

1. The employee's regular course of employment involves handling of or exposure to blood or body fluids, other than tears, saliva or perspiration, including health care providers as defined in section 36-661, forensic laboratory workers, fire fighters, law enforcement officers, emergency medical technicians, paramedics and correctional officers.

2. Within ten calendar days after a possible significant exposure that arises out of and in the course of his employment, the employee reports in writing to the employer the details of the exposure. The employer shall notify its insurance carrier or claims processor of the report. Failure of the employer to notify the insurance carrier is not a defense to a claim by the employee.

3. The employee has blood drawn within ten days after the possible significant exposure, the blood is tested for hepatitis C by antibody testing within thirty days after the exposure and the test results are negative.

4. The employee is tested or diagnosed, according to clinical standards established by the centers for disease control of the United States public health service, as positive for the presence of hepatitis C within seven months after the date of the possible significant exposure.

C. On presentation or showing of a prima facie claim under this section, the employer may produce specific, relevant and probative evidence to dispute the underlying facts, to contest whether the exposure was significant as defined in this section, or to establish an alternative significant exposure involving the presence of hepatitis C.

D. A person alleged to be a source of a significant exposure shall not be compelled by subpoena or other court order to release confidential hepatitis C related information either by document or by oral testimony. Evidence of the alleged source's hepatitis C status may be introduced by either party if the alleged source knowingly and willingly consents to the release of that information.

E. Notwithstanding title 36, chapter 6, article 4, medical information regarding the employee obtained by a physician or surgeon is subject to section 23-908, subsection D.

F. The commission by rule shall prescribe requirements and forms regarding employee notification of the requirements of this section and the proper documentation of a significant exposure.

G. For the purposes of this section, "significant exposure" means contact of an employee's ruptured or broken skin or mucous membrane or other significant unbroken surface area with a person's blood or body fluids, other than tears, saliva or perspiration, of a magnitude that the centers for disease control have epidemiologically demonstrated can result in transmission of hepatitis C. For

purposes of filing a claim under this section, significant exposure does not include sexual activity or illegal drug use.

**A.R.S. § 23-1043.04. Methicillin-resistant staphylococcus aureus; spinal meningitis; tuberculosis; establishing exposure; definitions**

A. A claim for a condition, infection, disease or disability involving or related to methicillin-resistant staphylococcus aureus, spinal meningitis or tuberculosis shall include the occurrence of a significant exposure as defined in this section and, except as provided in subsection B of this section, shall be processed and determined under this chapter and applicable principles of law.

B. Notwithstanding any other law, an employee who satisfies the following criteria presents a prima facie claim for a condition, infection, disease or disability involving or related to methicillin-resistant staphylococcus aureus, spinal meningitis or tuberculosis if the medical evidence shows to a reasonable degree of medical probability that the employee sustained a significant exposure within the meaning of this section:

1. The employee's regular course of employment involves handling of or exposure to methicillin-resistant staphylococcus aureus, spinal meningitis or tuberculosis.
2. Within thirty calendar days after a possible significant exposure that arises out of and in the course of employment, the employee reports in writing to the employer the details of the exposure. The employer shall notify its insurance carrier or claims processor of the report. Failure of the employer to notify the insurance carrier is not a defense to a claim by the employee.
3. For a claim involving methicillin-resistant staphylococcus aureus, the employee must be diagnosed with methicillin-resistant staphylococcus aureus within fifteen days after the employee reports pursuant to paragraph 2 of this subsection.
4. For a claim involving spinal meningitis, the employee is diagnosed with spinal meningitis within two to eighteen days of the possible significant exposure.
5. For a claim involving tuberculosis, the employee is diagnosed with tuberculosis within twelve weeks of the possible significant exposure.

C. On presentation or showing of a prima facie claim under this section, the employer may produce specific, relevant and probative evidence to dispute the underlying facts, to contest whether the exposure was significant as defined in this section or to establish an alternative significant exposure involving the presence of methicillin-resistant staphylococcus aureus, spinal meningitis or tuberculosis.

D. A person alleged to be a source of a significant exposure shall not be compelled by subpoena or other court order to release confidential information relating to methicillin-resistant staphylococcus aureus, spinal meningitis or tuberculosis either by document or by oral testimony. Evidence of the alleged source's methicillin-resistant staphylococcus aureus, spinal meningitis or tuberculosis status may be introduced by either party if the alleged source knowingly and willingly consents to the release of that information.

E. Notwithstanding title 36, chapter 6, article 4, medical information regarding the employee obtained by a physician or surgeon is subject to section 23-908, subsection D.

F. The commission by rule shall prescribe requirements and forms regarding employee notification of the requirements of this section and the proper documentation of a significant exposure.

G. Notwithstanding any other law, expenses for postexposure evaluation and follow-up, including reasonably required prophylactic treatment, for spinal meningitis or tuberculosis, shall be a medical benefit under section 23-1061 or 23-1062 for any significant exposure that arises out of and in the course of employment if the employee files a claim under this article for the significant exposure or the employee reports in writing to the employer the details of the exposure. Providing postexposure evaluation and follow-up, including prophylactic treatment, does not constitute acceptance of a claim for a condition, infection, disease or disability involving or related to the significant exposure.

H. For the purposes of this section:

1. "Employee" means firefighters, law enforcement officers, corrections officers, probation officers, emergency medical technicians and paramedics who are not employed by a health care institution as defined in section 36-401.

2. "Significant exposure" means exposure in the course of employment to aerosolized bacteria for claims under this section relating to methicillin-resistant staphylococcus aureus, spinal meningitis or tuberculosis. Significant exposure includes exposure in the course of employment to bodily fluids or skin for claims under this section relating to methicillin-resistant staphylococcus aureus.

#### **A.R.S. §23-1044. Compensation for partial disability; computation**

F. For the purposes of subsection C of this section, the commission, in accordance with the provisions of section 23-1047 when the physical condition of the injured employee becomes stationary, shall determine the amount that represents the reduced monthly earning capacity and on such determination make an award of compensation that is subject to change in any of the following events:

1. On a showing of a change in the physical condition of the employee after such findings and award arising out of the injury resulting in the reduction or increase of the employee's earning capacity.

2. On a showing of a reduction in the earning capacity of the employee arising out of such injury where there is no change in the employee's physical condition, after the findings and award.

3. On a showing that the employee's earning capacity has increased after such findings and award.

#### **A.R.S. § 23-1061. Notice of accident; form of notice; claim for compensation; reopening; payment of compensation**

H. On a claim that has been previously accepted, an employee may reopen the claim to secure an increase or rearrangement of compensation or additional benefits by filing with the commission a petition requesting the reopening of the employee's claim upon the basis of a new, additional or

previously undiscovered temporary or permanent condition, which petition shall be accompanied by a statement from a physician setting forth the physical condition of the employee relating to the claim. A claim shall not be reopened if the initial claim for compensation was previously denied by a notice of claim status or determination by the commission and the notice or determination was allowed to become final and no exception applies under section 23-947 excusing a late filing to request a hearing. A claim shall not be reopened because of increased subjective pain if the pain is not accompanied by a change in objective physical findings. A claim shall not be reopened solely for additional diagnostic or investigative medical tests, but expenses for any reasonable and necessary diagnostic or investigative tests that are causally related to the injury shall be paid by the employer or the employer's insurance carrier. Expenses for reasonable and necessary medical and hospital care and laboratory work shall be paid by the employer or the employer's insurance carrier if the claim is reopened as provided by law and if these expenses are incurred within fifteen days of the date that the petition to reopen is filed. The payment for such reasonable and necessary medical, hospital and laboratory work expense shall be paid for by the employer or the employer's insurance carrier if the claim is reopened as provided by law and if such expenses are incurred within fifteen days of the filing of the petition to reopen. Surgical benefits are not payable for any period prior to the date of filing a petition to reopen, except that surgical benefits are payable for a period prior to the date of filing the petition to reopen not to exceed seven days if a bona fide medical emergency precludes the employee from filing a petition to reopen prior to the surgery. No monetary compensation is payable for any period prior to the date of filing the petition to reopen.

#### **A.R.S. § 23-1062.03. Evidence-based medical treatment guidelines**

The commission shall develop and implement a process for the use of evidence-based medical treatment guidelines, where appropriate, to treat injured workers no later than December 31, 2014. The commission shall provide a progress report to the governor, the president of the senate and the speaker of the house of representatives describing the status of the development and implementation of this process no later than the end of each calendar year beginning on December 31, 2012, and ending on December 31, 2014. If the commission requires additional time beyond December 31, 2014, to develop and implement this process, then the commission shall include in its 2014 report a projected timetable to complete the process.

#### **A.R.S. § 23-1065. Special fund; purposes; investment committee**

A. The industrial commission may direct the payment into the state treasury of not to exceed one per cent of all premiums received by private insurance carriers during the immediately preceding calendar year. The same percentage shall be assessed against self-insurers based on the total cost to the self-insured employer as provided in section 23-961, subsection G. Such assessments shall be computed on the same premium basis as provided for in section 23-961, subsections G, H, I, J and K and shall be no more than is necessary to keep the special fund actuarially sound. Such payments shall be placed in a special fund within the administrative fund to provide, at the discretion of the commission, such additional awards as may be necessary to enable injured employees to accept the benefits of any law of this state or of the United States, or both jointly, for promotion of vocational rehabilitation of persons with disabilities in industry.

B. In claims involving an employee who has a preexisting industrially-related permanent physical impairment of the type specified in section 23-1044, subsection B and who thereafter suffers an additional permanent physical impairment of the type specified in such subsection, the claim involving the subsequent impairment is eligible for reimbursement, as provided by subsection D of this section, according to the following:

1. The employer in whose employ the subsequent impairment occurred or its insurance carrier is solely responsible for all temporary disability compensation to which the employee is entitled and for an amount equal to the permanent disability compensation provided by section 23-1044, subsection B for the subsequent impairment. If the employee is determined to have sustained no loss of earning capacity after the medically stationary date, the employer or carrier shall pay him as a vocational rehabilitation bonus the amount calculated under this paragraph as a lump sum, which shall be a credit against any permanent compensation benefits awarded in any subsequent proceeding. The amount of the vocational rehabilitation bonus for which the employer or carrier is responsible under this paragraph shall be calculated solely on physical, medically rated permanent impairment and not on occupational or other factors.

2. If the commission determines that the employee is entitled to compensation for loss of earning capacity under section 23-1044, subsection C or permanent total disability under section 23-1045, subsection B, the total amount of permanent benefits for which the employer or carrier is solely responsible under paragraph 1 of this subsection shall be expended first, with monthly payments made according to the loss of earning capacity or permanent total disability award. The employer or carrier and the special fund are equally responsible for the remaining amount of compensation for loss of earning capacity under section 23-1044, subsection C or permanent total disability under section 23-1045, subsection B. This paragraph shall not be construed as requiring payment of any benefits under section 23-1044, subsection B in any case in which an employee is entitled to benefits for loss of earning capacity under section 23-1044, subsection C or permanent total disability benefits under section 23-1045, subsection B.

C. In claims involving an employee who has a preexisting physical impairment that is not industrially-related and, whether congenital or due to injury or disease, is of such seriousness as to constitute a hindrance or obstacle to employment or to obtaining reemployment if the employee becomes unemployed, and the impairment equals or exceeds a ten per cent permanent impairment evaluated in accordance with the American medical association guides to the evaluation of permanent impairment, and the employee thereafter suffers an additional permanent impairment not of the type specified in section 23-1044, subsection B, the claim involving the subsequent impairment is eligible for reimbursement, as provided by subsection D of this section, under the following conditions:

1. The employer in whose employ the subsequent impairment occurred or its carrier is solely responsible for all temporary disability compensation to which the employee is entitled.
2. The employer had knowledge of the permanent impairment at the time the employee was hired, or that the employee continued in employment after the employer acquired such knowledge.
3. The employee's preexisting impairment is due to one or more of the following:

- (a) Epilepsy.
- (b) Diabetes.
- (c) Cardiac disease.
- (d) Arthritis.
- (e) Amputated foot, leg, arm or hand.
- (f) Loss of sight of one or both eyes or a partial loss of uncorrected vision of more than seventy-five per cent bilaterally.
- (g) Residual disability from poliomyelitis.
- (h) Cerebral palsy.
- (i) Multiple sclerosis.
- (j) Parkinson's disease.
- (k) Cerebral vascular accident.
- (l) Tuberculosis.
- (m) Silicosis.
- (n) Psychoneurotic disability following treatment in a recognized medical or mental institution.
- (o) Hemophilia.
- (p) Chronic osteomyelitis.
- (q) Hyperinsulinism.
- (r) Muscular dystrophies.
- (s) Arteriosclerosis.
- (t) Thrombophlebitis.
- (u) Varicose veins.
- (v) Heavy metal poisoning.
- (w) Ionizing radiation injury.
- (x) Compressed air sequelae.
- (y) Ruptured intervertebral disk.

4. The employer or carrier and the special fund are equally responsible for the amount of compensation for loss of earning capacity under section 23-1044, subsection C or permanent total disability under section 23-1045, subsection B.

D. The employer or insurance carrier shall notify the commission of its intent to claim reimbursement for an eligible claim under subsection B or C of this section not later than the time the employer or insurance carrier notifies the commission pursuant to section 23-1047, subsection A. Upon receiving notice the commission may expend funds from the special fund created by this section for travel and discovery procedures and for the employment of such independent legal, medical, rehabilitation, claims or labor market consultants or experts as may be deemed necessary by the commission to assist in the determination of the liability of the special fund, if any, under subsection B or C of this section. In the event there is any dispute regarding liability to the special fund pursuant to subsection B or C of this section, the commission shall not delay the issuance of a permanent award pursuant to section 23-1047, subsection B.

E. If the special fund created by this section is determined to be liable under either subsection B or C of this section, the employer or insurance carrier that is primarily liable shall pay the entire amount of the award to the injured employee and the commission shall by rule provide for the reimbursement of the employer or insurance carrier on an annual basis. In any case arising out of subsection B or C of this section, the written approval of the special fund is required for the compromise of any claim made pursuant to section 23-1023. In any such case, written approval shall not be unreasonably withheld by the special fund, carrier, self-insured employer or other person responsible for the payment of compensation. Failure to obtain the written approval of the special fund shall not cause the injured worker to lose any benefits but ends the special fund's liability for reimbursement and makes the employer or carrier solely responsible for the payment of the remaining benefits.

F. The employer or insurance carrier shall make its claim for reimbursement to the commission no later than November 1 each year, for payments made pursuant to subsection B or C of this section during the twelve months prior to October 1 each year. Claims shall be paid before December 31 each year. If the total annual reserved liabilities of the special fund obligated under subsections B and C of this section exceed six million dollars, as determined by the annual actuarial study performed pursuant to subsection I of this section, the commission, after notice and a hearing, may levy an additional assessment under subsection A of this section of up to one-half per cent to meet such liabilities. Any insurance carrier or employer who may be adversely affected by the additional assessment may at any time prior to the sixtieth day after such additional assessment is ordered file a complaint challenging the validity of the additional assessment in the superior court in Maricopa county for a judicial review of the additional assessment. On judicial review the determination of the commission shall be upheld if supported by substantial evidence in the record considered as a whole.

G. In the event the injured employee is awarded additional compensation, under subsection A of this section, the commission retains jurisdiction to amend, alter or change the award upon a change in the physical condition of the injured employee resulting from the injury.

H. On receiving notice that the special fund may be liable under this chapter, the commission may spend monies from the special fund established by this section for expenses that are necessary to assist in the processing, payment or determination of liability of the fund. These expenses may

include travel, discovery procedures and employing any legal, medical, rehabilitation, claims or labor market consultant, examiner or expert.

I. The commission shall cause an annual actuarial study of the special award fund to be made by a qualified actuary who is a member of the society of actuaries. The actuary shall make specific recommendations for maintaining the fund on a sound actuarial basis. The actuarial study shall be completed on or before September 1.

J. The special fund of the commission consists of all monies from premiums and assessments, except penalties assessed pursuant to this chapter, received and paid into the fund, property and securities acquired by the use of monies in the fund, interest earned on monies in the fund and other monies derived from the sale, use or lease of properties belonging to the fund. The special fund created by this section shall be administered by the director of the industrial commission, subject to the authority of the industrial commission. The director of the commission with approval of the investment committee, in the administration of the special fund, may provide loans, subject to repayment, budgetary review and legislative appropriation, to the administrative fund for the purposes and subject to section 23-1081, acquire real property and acquire or construct a building or other improvements on the real property as may be necessary to house, contain, furnish, equip and maintain offices and space for departmental and operational facilities of the commission. The commission when using space constructed pursuant to this section shall make equal payments of rent on a semiannual basis, which shall be deposited in the special fund. The investment committee shall determine the amount of the rent, which must be at least equal to or greater than that determined by the joint committee on capital review for buildings of similar design and construction as provided by section 41-792.01.

K. There is established an investment committee consisting of the director and the chairman of the commission and three persons knowledgeable in investments and economics appointed by the governor. Of the members appointed by the governor, one shall be a professional in the investment business, one shall represent workers' compensation insurers and one shall represent self-insurers. The term of members appointed by the governor is three years, which shall begin on July 1 and end on June 30 three years later. The committee shall prescribe by rule investment policies and supervise the investment activities of the special fund.

L. Each member of the investment committee, other than the director of the commission, is eligible to receive from the special fund:

1. Compensation of fifty dollars for each day while in actual attendance at meetings of the investment committee.

2. Reimbursement for expenses pursuant to title 38, chapter 4, article 2.

M. The investment committee shall meet at least once every month.

N. The investment committee shall periodically review and assess the investment strategy.

O. The investment committee, by resolution, may invest and reinvest the surplus or reserves in the funds established under this chapter in any legal investments authorized under section 38-718.

P. In addition to the investments authorized under section 38-718, the investment committee may approve the investment in real property and improvements on real property to house and maintain offices of the commission, including spaces for its departmental and operational facilities. Title to the real estate and improvements on the real estate vests in the special fund of the commission, and the assets become part of the fund as provided by this section.

Q. The investment committee may appoint a custodian for the safekeeping of all or any portion of the investments owned by the special fund of the commission and may register stocks, bonds and other investments in the name of a nominee. Except for investments held by a custodian or in the name of a nominee, all securities purchased pursuant to subsection O of this section shall promptly be deposited with the state treasurer as custodian thereof, who shall collect the dividends, interest and principal thereof, and pay, when collected, into the special fund. The state treasurer shall pay all vouchers drawn for the purchase of securities. The director may sell any of the securities as the director deems appropriate, if authorized by resolution of the investment committee, and the proceeds therefrom shall be payable to the state treasurer for the account of the special fund upon delivery of the securities to the purchaser or the purchaser's agent.

**A.R.S. § 23-1067. Commutation of compensation to lump sum payment**

A. The commission may allow commutation of the compensation awarded pursuant to section 23-1044, subsection B to a lump sum payment of not to exceed twenty-five thousand dollars, with or without the consent of the carrier liable for the commutation, under such rules, regulations and system of computation as it devises for obtaining the present value of the compensation.

B. The commission may allow commutation of compensation pursuant to section 23-1044, subsection C, and section 23-1045, subsections B, C and D, to a lump sum of not to exceed twenty-five thousand dollars for commutation requests made before July 1, 1987, fifty thousand dollars for commutation requests made from and after June 30, 1987 but before July 1, 2007 and one hundred fifty thousand dollars for commutation requests made from and after June 30, 2007, with the consent of the carrier liable to pay the claim, under such rules, regulations and system of computation as it devises for obtaining the present value of the compensation.

**A.R.S. § 23-1069. Attorney's fees; payment; time limitation**

A. In proceedings before the commission in which an attorney employed by the claimant has rendered services reasonably necessary in processing the claim, the commission shall, upon application filed by the attorney or the claimant prior to a final disposition of the case, set a reasonable attorney's fee and shall provide for the payment thereof from the award, in installments or otherwise, as the commission determines proper in view of the award made, and shall further provide for the payment of the attorney's fee direct to the attorney. The commission shall charge the amount of the payment against the award to the claimant.

B. The attorney's fee provided for in subsection A shall be not more than twenty-five per cent up to ten years from the date of the award. In cases involving solely loss of earning capacity, the maximum shall be twenty-five per cent up to five years from the date of the final award. When the payment of the award to the claimant is made in installments, or in other than a lump sum manner,

in no event may an amount in excess of twenty-five per cent of any one such installment payment be withheld for the attorney's fee.

C. The reasonableness of the attorney's fee set pursuant to subsection A shall be reviewable upon the application of the claimant or the attorney in the same manner as other awards of the commission.

**A.R.S. § 23-1071. Notice by employees with disabilities of absence from locality or state; failure to give notice; change of doctor**

A. No employee may leave the state of Arizona for a period exceeding two weeks while the necessity of having medical treatment continues, without the written approval of the commission. Any employee leaving the state of Arizona for a period exceeding two weeks without such approval will forfeit the employee's right to compensation during such time, as well as the employee's right to reimbursement for the employee's medical expenses, and any aggravation of the employee's disability, by reason of the violation of this section, will not be compensated. If an administrative law judge approves an employee's request to leave this state after the request for written approval was initially denied by the commission, the employee is entitled to any forfeited compensation and medical benefits from the date the employee first requested the written approval.

**A.R.S. § 23-1073. Processing of prior claims**

The commission appointed pursuant to the provisions of chapter 1 of this title shall process all claims for injuries or disabling conditions which occurred prior to January 1, 1969 to the entry of a final award in accordance with the procedure and benefit levels in effect prior to January 1, 1969. Petitions to reopen filed subsequent to January 1, 1969 shall be processed in accordance with the procedural provisions of this chapter.

**A.R.S. § 41-1037. General permits; issuance of traditional permit**

A. If an agency proposes a new rule or an amendment to an existing rule that requires the issuance of a regulatory permit, license or agency authorization, the agency shall use a general permit if the facilities, activities or practices in the class are substantially similar in nature unless any of the following applies:

1. A general permit is prohibited by federal law.
2. The issuance of an alternative type of permit, license or authorization is specifically authorized by state statute.
3. The issuance of a general permit is not technically feasible or would not meet the applicable statutory requirements.
4. The issuance of a general permit would result in additional regulatory requirements or costs being placed on the permit applicant.
5. The permit, license or authorization is issued pursuant to section 8-126, 8-503, 8-505, 23-504, 36-592, 36-594.01, 36-595, 36-596, 36-596.54, 41-1967.01 or 46-807.

6. The permit, license or authorization is issued pursuant to title V of the clean air act.

B. The agency retains the authority to revoke an applicant's ability to operate under a general permit and to require the applicant to obtain a traditional permit if the applicant is in substantial noncompliance with the applicable requirements for the general permit.

**A.R.S. § 41-1056. Review by agency**

J. If an agency fails to submit its report, including a revised report, pursuant to subsection A or C of this section, or file an extension before the due date of the report or if it files an extension and does not submit its report within the extension period, the rules scheduled for review expire and the council shall:

1. Cause a notice to be published in the next register that states the rules have expired and are no longer enforceable.

2. Notify the secretary of state that the rules have expired and that the rules are to be removed from the code.

3. Notify the agency that the rules have expired and are no longer enforceable.

**A.R.S. § 41-1091. Substantive policy statements; directory**

A. An agency shall file substantive policy statements pursuant to section 41-1013, subsection B.

B. An agency shall ensure that the first page of each substantive policy statement includes the following notice:

This substantive policy statement is advisory only. A substantive policy statement does not include internal procedural documents that only affect the internal procedures of the agency and does not impose additional requirements or penalties on regulated parties or include confidential information or rules made in accordance with the Arizona administrative procedure act. If you believe that this substantive policy statement does impose additional requirements or penalties on regulated parties you may petition the agency under section 41-1033, Arizona Revised Statutes, for a review of the statement.

C. The agency shall publish at least annually a directory summarizing the subject matter of all currently applicable rules and substantive policy statements. The agency shall keep copies of this directory and all of its substantive policy statements at one location. The directory, rules and substantive policy statements and any materials incorporated by reference in the rules or substantive policy statements shall be open to public inspection at the office of the agency director.

**A.R.S. § 41-1091.01. Posting substantive policy statement and rules**

An agency shall post on the agency's website:

1. The full text of each rule currently in use or the website address and location of the full text of each rule currently in use.

2. Each substantive policy statement currently in use, including its full text, if practicable.



**DEPARTMENT OF REVENUE (R19-0908)**

Title 15, Chapter 2, Department of Revenue - Income and Withholding Tax Section



# GOVERNOR'S REGULATORY REVIEW COUNCIL

## ATTORNEY MEMORANDUM - FIVE-YEAR REVIEW REPORT

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**MEETING DATE:** September 4th, 2019

**TO:** Members of the Governor's Regulatory Review Council (Council)

**FROM:** Council Staff

**DATE:** July 25th, 2019

**SUBJECT: ARIZONA DEPARTMENT OF REVENUE (F19-0908)**  
Title 15, Chapter 2, Department of Revenue - Income and Withholding Tax

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### **Summary**

This five year review report (5YRR) from the Arizona Department of Revenue (Department) relates to all of the rules in Title 15, Chapter 2, regarding Income and Withholding Tax.

The Department did not complete the course of action indicated in the agency's previous 5YRR for these rules. In the previous 5YRR, the Department considered taking action on 10 rules in Chapter 2. The Department allowed 4 of the rules to expire and did not make the proposed changes to the remaining 6 rules. The Department indicates in this report that it believed it did not have proper justification to seek an exemption from the rulemaking moratorium and thus did not request an exemption. Therefore, it did not make the proposed changes to Chapter 2.

### **Proposed Action**

The Department proposes no action for the majority of the rules in Chapter 2. However, the Department anticipates taking action on the following rules:

- **R15-2A-202 (Items not Deductible in Computing Taxable Income):** The Department proposes to amend this rule by specifying the process of determining expenses and by removing an outdated reference to a repealed statute. If granted an exception from the rulemaking moratorium, the Department anticipates opening the rulemaking process by June 2020.
- **R15-2B-101 (Payment Schedule; Rates; Election by Employee):** The Department proposes to amend this rule by removing an outdated subsection of the rule. If granted an exception from the rulemaking moratorium, the Department anticipates opening the rulemaking process by June 2020.
- **R15-2C-101 (Payment of Estimated Income Tax by Individuals):** The Department proposes to amend this rule by providing specificity to subsections of the rule, updating an outdated statutory reference, and adding language regarding the use of credit cards. If granted an exception from the rulemaking moratorium, the Department anticipates opening the rulemaking process by June 2020.
- **R15-2C-601 (Income of a Non-resident):** The Department proposes to amend this rule by providing specificity with respect to calculations and referencing definitions in other rules. Additionally, the Department proposes to remove wording such as “should” and “must.” If granted an exception from the rulemaking moratorium, the Department anticipates opening the rulemaking process by June 2020.
- **R15-2D-302 (Corporate Net Operating Loss):** The Department proposes to amend this rule to reflect current statutory changes. Additionally, the Department proposes to remove wording such as “should” and “must.” If granted an exception from the rulemaking moratorium, the Department anticipates opening the rulemaking process by June 2020.

1. **Has the agency analyzed whether the rules are authorized by statute?**

Yes. The Department cites to both general and specific authority for the rules.

2. **Summary of the agency’s economic impact comparison and identification of stakeholders:**

The Department indicates that the economic impacts of Chapter 2 do not differ significantly from what was originally determined in the economic, small business, and consumer impact statements (EIS) from the most recent rulemakings in 1999, 2000, 2001, 2004, and 2009. An EIS was not available for every rule; however, the Department notes that statutes create the primary economic impact of the rules.

The stakeholders include the Department, individual taxpayers, businesses, and tax-exempt organizations. The rules provide a framework for income taxation for any entity in Arizona.

3. **Has the agency analyzed the costs and benefits of the rulemaking and determined that the rules impose the least burden and costs to those who are regulated?**

Yes. The Department indicates that the rules under review provide the least intrusive and least costly method of achieving the regulatory objective.

4. **Has the agency received any written criticisms of the rules over the last five years?**

No. The Department did not receive any written criticisms of the rules over the last five years.

5. **Has the agency analyzed the rules' clarity, conciseness, and understandability, consistency with other rules and statutes, and effectiveness?**

Yes. The Department indicates that most of the rules in Chapter 2 are clear, concise, and understandable. However, the Department indicates that the following rules could be revised to increase their clarity, conciseness, and understandability:

- **R15-2A-202:** The Department indicates that this rule references a repealed statute and uses the passive voice instead of the active voice.
- **R15-2B-101:** The Department indicates that this rule contains a section on the minimum withholding percentage for employees which is outdated because this percentage no longer exists.

The Department indicates that all of the rules within Chapter 2 are consistent with other statutes and rules.

The Department indicates that most of the rules within Chapter 2 are effective in achieving their objectives. However, the Department recognizes that the following rules are ineffective:

- **R15-2A-202:** The Department indicates that this rule is ineffective because it fails to provide adequate guidance for the determination of expenses related to non-taxable income.
- **R15-2C-101:** The Department indicates that this rule is generally effective but could be more specific regarding application of refunds to the subsequent year's estimated tax and the method for determining specific tax considerations.
- **R15-2C-601:** The Department indicates that this rule is generally effective but should be more specific regarding income derived from a taxpayer's business that operates both in and across state lines.
- **R15-2D-302:** The Department indicates that this rule should be updated to reflect recent statutory changes.

6. **Has the agency analyzed the current enforcement status of the rules?**

Yes. The Department indicates that most of the rules in Chapter 2 are enforced as written. However, the Department states that the following rule is not enforced as written:

- **R15-2B-101:** The Department indicates that subsection J of this rule is outdated because of statutory changes and cannot be enforced as written.

7. **Are the rules more stringent than corresponding federal law and, if so, is there statutory authority to exceed the requirements of federal law?**

No. The Department indicates that the rules are not more stringent than federal law.

8. **For rules adopted after July 29, 2010, do the rules require a permit or license and, if so, does the agency comply with A.R.S. § 41-1037?**

Not applicable. The Department indicates that no rules adopted after July 29, 2010 require the issuance of a regulatory permit, license, or agency authorization.

9. **Conclusion**

Although not all of the rules under review are clear, concise, understandable, and effective, the Department identifies several options to increase their clarity, conciseness, understandability, and effectiveness.

As indicated above, the Department intends to amend the following rules: R15-2A-202, R15-2B-101, R15-2C-101, R15-2C-601, and R15-2D-302. If the Department's request for an exemption to the rulemaking moratorium is granted, it anticipates initiating the rulemaking process to make these amendments by June 2020. Council staff recommends approval of this report.



July 11, 2019

*Douglas A. Ducey*  
**Governor**

Ms. Nicole Sornsin  
Chair  
Governor's Regulatory Review Council  
Arizona Department of Administration  
100 North 15th Avenue  
Suite 305  
Phoenix, Arizona 85007

*Carlton Woodruff*  
**Interim Director**

Dear Ms. Sornsin:

The enclosed report is a summarization of the five-year rule review undertaken by the Department of Revenue covering the administrative rules in Title 15, Chapter 2. The review was conducted pursuant to A.R.S. § 41-1056. The Department certifies that it is in compliance with A.R.S. § 41-1091.

The Department anticipates the submission of requests for an exception to the rulemaking moratorium for the following five rules. If the exception is granted, the Department intends to open the rulemaking process in June 2020. The Department hopes to incorporate some of the language in these rules into statute so the rules may be rescinded. The Arizona Legislature should be adjourned sine die by June 2020 so the Department will know how to proceed at that time. Two additional factors in the selection of this date are that the Department does not have dedicated rule writers and the Department's publically available income tax forms and instructions are updated annually for statutory compliance.

R15-2A-202 Items not Deductible in Computing Taxable Income

R15-2B-101 Payment Schedule; Rates; Election by Employee

R15-2C-101 Payment of Estimated Income Tax by Individuals

R15-2C-601 Income of a Non-resident

R15-2D-302 Corporate Net Operating Loss

The Department has chosen to rescind the following rules:

R15-2C-206 Partnership Income or Loss (rescinded on April 11, 2017)

R15-2C-207 Income-producing Property-Different Basis (rescinded on April 11, 2017)

R15-2C-210 Individual Net Operating Losses (rescinded on April 11, 2017)

R15-2C-304 Lottery Winnings (rescinded on April 11, 2017)

R15-2C-401 Optional Standard Deduction (rescinded on November 14, 2017)

R15-2C-501 Credit for Net Income Taxes Paid to Another State or Country by an Arizona Resident (rescinded on November 14, 2017)

R15-2C-603 Credit for Income Taxes Paid to Another State or Country by a Nonresident (rescinded on November 14, 2017)

R15-2E-101 Feeder Organization Not Exempt from Tax (rescinded on July 19, 2018)

R15-2E-201 Denial of Exemption (rescinded on July 19, 2018)

R15-2E-202 Determination of Reasonable Accumulation of Income (rescinded on July 19, 2018)

R15-2E-203 Procedure to Recover Exempt Status (rescinded on July 19, 2018)

R15-2E-301 Returns of Tax-exempt Organizations (rescinded on July 19, 2018)

The Department has chosen not to review the following rule and allow it to expire:

R15-2F-101 Fiduciary Returns

If you have any questions, please contact me at 602-716-6471 or via email [rwilson@azdor.gov](mailto:rwilson@azdor.gov)

Thank you for your consideration.

Sincerely,

Rory Wilson  
Tax Policy Lead Counsel  
Arizona Department of Revenue

Enclosures

**ARIZONA DEPARTMENT OF REVENUE**

FIVE-YEAR-REVIEW REPORT  
INCOME AND WITHHOLDING TAX RULES

TITLE 15  
CHAPTER 2

for the  
GOVERNOR'S REGULATORY REVIEW COUNCIL

Submitted July 11, 2019

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## INFORMATION THAT IS IDENTICAL WITHIN GROUPS OF RULES

This report summarizes the result of a review of the rules promulgated by the Department of Revenue to assist the public and the Department in interpreting and applying the income tax statutes. The following information is identical for groups of rules in Title 15, Chapter 2. Because this information is the same for each rule in the group, under A.A.C. R1-6-112(B) it is discussed only once and is not included in the analysis of individual rules.

### 1. Authorization

#### General Statute Authorizing the Rules:

The Department of Revenue's general rulemaking authority is provided by A.R.S. § 42-1005(A)(1), which authorizes the Director of the Department of Revenue to make administrative rules as necessary and proper to effectively administer the Department and enforce Title 43.

#### Specific Authorization for Rules:

A. A.R.S. § 43-102 is the specific statute on which the following rules are based.

R15-2C-201 Additions to and Subtractions from Arizona Gross Income

R15-2C-211 Amounts Already Deducted

R15-2C-306 Income Previously Recognized

B. A.R.S. § 43-1021 is the specific statute on which the following rule is based.

R15-2C-201 Additions to and Subtractions from Arizona Gross Income

C. A.R.S. § 43-1022 is the specific statute on which the following rules are based.

R15-2C-201 Additions to and Subtractions from Arizona Gross Income

R15-2C-206 Partnership Income or Loss

R15-2C-207 Income-producing Property – Different Basis

R15-2C-301 Retirement Benefits, Annuities, Pensions

R15-2C-305 Social Security and Railroad Retirement Benefits

- D. A.R.S. § 43-1091 is the specific statute on which the following rules are based.
- R15-2C-601 Income of a Non-resident
  - R15-2C-604 Nonresident Members of Professional Athletic Teams
  - R15-2C-605 Nonresident Professional Athletes Who Are Not Team Members
- E. A.R.S. § 43-1137 is the specific statute on which the following rules are based.
- R15-2D-504 Interest
  - R15-2D-505 Dividends
- F. A.R.S. § 43-1140 is the specific statute on which the following rules are based.
- R15-2D-601 General
  - R15-2D-602 Property Used for the Production of Business Income
  - R15-2D-603 Property Factor Numerator
- G. A.R.S. § 43-1141 is the specific statute on which the following rules are based.
- R15-2D-604 Valuation of Owned Property
  - R15-2D-605 Valuation of Rented Property
- H. A.R.S. § 43-1143 is the specific statute on which the following rules are based.
- R15-2D-701 General
  - R15-2D-702 Payroll Factor Denominator
  - R15-2D-703 Payroll Factor Numerator
- I. A.R.S. § 43-1145 is the specific statute on which the following rules are based.

R15-2D-801 General

R15-2D-803 Sales Factor Numerator

J. A.R.S. § 43-1146 is the specific statute on which the following rules are based.

R15-2D-804 Property Delivered or Shipped to a Purchaser within this State

R15-2D-805 Sales of Tangible Personal Property to the United States Government

K. A.R.S. § 43-1148 is the specific statute on which the following rules are based.

R15-2D-405 Intercompany Eliminations

R15-2D-507 Proration of Deductions

R15-2D-901 General

R15-2D-902 Special Provisions for the Property Factor

R15-2D-903 Special Provisions for the Sales Factor

L. A.R.S. § 43-1149 is the specific statute on which the following rules are based.

R15-2D-508 Consistency and Uniformity in Reporting

R15-2D-607 Consistency and Uniformity in Reporting

R15-2D-705 Consistency and Uniformity in Reporting

R15-2D-807 Consistency and Uniformity in Reporting

### **3. Effectiveness of the Rules in Achieving Their Objectives**

The following rules effectively meet their stated objectives.

R15-2A-103 Time for Filing Returns

R15-2A-104 Returns Filed by Persons Outside the United States

R15-2B-101 Payment Schedule; Rates; Election by Employee

R15-2B-102	Employment Excluded from Withholding
R15-2B-201	Refund of Excess Withholding
R15-2C-201	Additions and Subtractions to Arizona Gross Income
R15-2C-211	Amounts Already Deducted
R15-2C-301	Retirement Benefits, Annuities, Pensions
R15-2C-305	Social Security and Railroad Retirement Benefits
R15-2C-306	Income Previously Recognized
R15-2C-307	Exemption for Blind Persons
R15-2C-502	Property Tax Credit
R15-2C-503	Renewable Energy Production Tax Credit
R15-2C-602	Income from Intangible Personal Property
R15-2C-604	Nonresident Members of Professional Athletic Teams
R15-2C-605	Nonresident Professional Athletes Who Are Not Team Members
R15-2D-101	Definitions
R15-2D-303	Domestic International Sales Corporation (DISC)
R15-2D-305	Deferred Exploration Expenses
R15-2D-306	Amortization of Property Used for Atmospheric and Water Pollution Control
R15-2D-307	Amortization of Child Care Facilities
R15-2D-401	Unitary Business and Combined Returns
R15-2D-403	Taxable in Another State
R15-2D-404	Apportionment Formula
R15-2D-405	Intercompany Eliminations

R15-2D-501	General
R15-2D-502	Rents From Real and Tangible Personal Property
R15-2D-503	Gains or Losses From Sales of Assets
R15-2D-504	Interest
R15-2D-505	Dividends
R15-2D-506	Royalties
R15-2D-507	Proration of Deductions
R15-2D-508	Consistency and Uniformity in Reporting
R15-2D-601	General
R15-2D-602	Property Used for the Production of Business Income
R15-2D-603	Property Factor Numerator
R15-2D-604	Valuation of Owned Property
R15-2D-605	Valuation of Rented Property
R15-2D-606	Averaging of Monthly Property Values
R15-2D-607	Consistency and Uniformity in Reporting
R15-2D-701	General
R15-2D-702	Payroll Factor Denominator
R15-2D-703	Payroll Factor Numerator
R15-2D-704	Compensation Paid in this State: Definitions
R15-2D-705	Consistency and Uniformity in Reporting
R15-2D-801	General
R15-2D-803	Sales Factor Numerator
R15-2D-804	Property Delivered or Shipped to a Purchaser within this State

R15-2D-805	Sales of Tangible Personal Property to the United States Government
R15-2D-806	Sales other than Sales of Tangible Personal Property in this State
R15-2D-807	Consistency and Uniformity in Reporting
R15-2D-901	General
R15-2D-902	Special Provisions for the Property Factor
R15-2D-903	Special Provisions for the Sales Factor
R15-2D-1001	Environmental Technology Facility Tax Credit
R15-2D-1002	Renewable Energy Production Tax Credit
R15-2G-101	Partnerships

#### **4. Consistency with Other Statutes and Rules**

The following rules are consistent with statutes and other rules.

R15-2A-103	Time for Filing Returns
R15-2A-104	Returns Filed by Persons Outside the United States
R15-2A-202	Items not Deductible in Computing Taxable Income
R15-2B-101	Payment Schedule; Rates; Election by Employee
R15-2B-102	Employment Excluded from Withholding
R15-2B-201	Refund of Excess Withholding
R15-2C-101	Payment of Estimated Income Tax by Individuals
R15-2C-201	Additions and Subtractions to Arizona Gross Income
R15-2C-211	Amounts Already Deducted
R15-2C-301	Retirement Benefits, Annuities, Pensions

R15-2C-305	Social Security and Railroad Retirement Benefits
R15-2C-306	Income Previously Recognized
R15-2C-307	Exemption for Blind Persons
R15-2C-502	Property Tax Credit
R15-2C-503	Renewable Energy Production Tax Credit
R15-2C-601	Income of a Non-resident
R15-2C-602	Income from Intangible Personal Property
R15-2C-604	Nonresident Members of Professional Athletic Teams
R15-2C-605	Nonresident Professional Athletes Who Are Not Team Members
R15-2D-101	Definitions
R15-2D-302	Corporate Net Operating Loss
R15-2D-303	Domestic International Sales Corporation (DISC)
R15-2D-305	Deferred Exploration Expenses
R15-2D-306	Amortization of Property Used for Atmospheric and Water Pollution Control
R15-2D-307	Amortization of Child Care Facilities
R15-2D-401	Unitary Business and Combined Returns
R15-2D-403	Taxable in Another State
R15-2D-404	Apportionment Formula
R15-2D-405	Intercompany Eliminations
R15-2D-501	General
R15-2D-502	Rents From Real and Tangible Personal Property
R15-2D-503	Gains or Losses From Sales of Assets

R15-2D-504	Interest
R15-2D-505	Dividends
R15-2D-506	Royalties
R15-2D-507	Proration of Deductions
R15-2D-508	Consistency and Uniformity in Reporting
R15-2D-601	General
R15-2D-602	Property Used for the Production of Business Income
R15-2D-603	Property Factor Numerator
R15-2D-604	Valuation of Owned Property
R15-2D-605	Valuation of Rented Property
R15-2D-606	Averaging of Monthly Property Values
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R15-2D-701	General
R15-2D-702	Payroll Factor Denominator
R15-2D-703	Payroll Factor Numerator
R15-2D-704	Compensation Paid in this State: Definitions
R15-2D-705	Consistency and Uniformity in Reporting
R15-2D-801	General
R15-2D-803	Sales Factor Numerator
R15-2D-804	Property Delivered or Shipped to a Purchaser within this State
R15-2D-805	Sales of Tangible Personal Property to the United States Government
R15-2D-806	Sales other than Sales of Tangible Personal Property in this State

- R15-2D-807 Consistency and Uniformity in Reporting
- R15-2D-901 General
- R15-2D-902 Special Provisions for the Property Factor
- R15-2D-903 Special Provisions for the Sales Factor
- R15-2D-1001 Environmental Technology Facility Tax Credit
- R15-2D-1002 Renewable Energy Production Tax Credit
- R15-2G-101 Partnerships

**5. Agency Enforcement Policy**

The following rules are reflected in established policy and procedures and are consistently and fairly enforced.

- R15-2A-103 Time for Filing Returns
- R15-2A-104 Returns Filed by Persons Outside the United States
- R15-2A-202 Items not Deductible in Computing Taxable Income
- R15-2B-102 Employment Excluded from Withholding
- R15-2B-201 Refund of Excess Withholding
- R15-2C-101 Payment of Estimated Income Tax by Individuals
- R15-2C-201 Additions and Subtractions to Arizona Gross Income  
Basis
- R15-2C-211 Amounts Already Deducted
- R15-2C-301 Retirement Benefits, Annuities, Pensions
- R15-2C-305 Social Security and Railroad Retirement Benefits
- R15-2C-306 Income Previously Recognized
- R15-2C-307 Exemption for Blind Persons

R15-2C-502	Property Tax Credit
R15-2C-503	Renewable Energy Production Tax Credit
R15-2C-601	Income of a Non-resident
R15-2C-602	Income from Intangible Personal Property
R15-2C-604	Nonresident Members of Professional Athletic Teams
R15-2C-605	Nonresident Professional Athletes Who Are Not Team Members
R15-2D-101	Definitions
R15-2D-302	Corporate Net Operating Loss
R15-2D-303	Domestic International Sales Corporation (DISC)
R15-2D-305	Deferred Exploration Expenses
R15-2D-306	Amortization of Property Used for Atmospheric and Water Pollution Control
R15-2D-307	Amortization of Child Care Facilities
R15-2D-401	Unitary Business and Combined Returns
R15-2D-403	Taxable in Another State
R15-2D-404	Apportionment Formula
R15-2D-405	Intercompany Eliminations
R15-2D-501	General
R15-2D-502	Rents From Real and Tangible Personal Property
R15-2D-503	Gains or Losses From Sales of Assets
R15-2D-504	Interest
R15-2D-505	Dividends

R15-2D-506	Royalties
R15-2D-507	Proration of Deductions
R15-2D-508	Consistency and Uniformity in Reporting
R15-2D-601	General
R15-2D-602	Property Used for the Production of Business Income
R15-2D-603	Property Factor Numerator
R15-2D-604	Valuation of Owned Property
R15-2D-605	Valuation of Rented Property
R15-2D-606	Averaging of Monthly Property Values
R15-2D-607	Consistency and Uniformity in Reporting
R15-2D-701	General
R15-2D-702	Payroll Factor Denominator
R15-2D-703	Payroll Factor Numerator
R15-2D-704	Compensation Paid in this State: Definitions
R15-2D-705	Consistency and Uniformity in Reporting
R15-2D-801	General
R15-2D-803	Sales Factor Numerator
R15-2D-804	Property Delivered or Shipped to a Purchaser within this State
R15-2D-805	Sales of Tangible Personal Property to the United States Government
R15-2D-806	Sales other than Sales of Tangible Personal Property in this State
R15-2D-807	Consistency and Uniformity in Reporting
R15-2D-901	General

- R15-2D-902 Special Provisions for the Property Factor
- R15-2D-903 Special Provisions for the Sales Factor
- R15-2D-1001 Environmental Technology Facility Tax Credit
- R15-2D-1002 Renewable Energy Production Tax Credit
- R15-2G-101 Partnerships

**6. Clarity, Conciseness, and Understandability**

The following rules are clear, concise, and understandable.

- R15-2A-103 Time for Filing Returns
- R15-2A-104 Returns Filed by Persons Outside the United States
- R15-2B-102 Employment Excluded from Withholding
- R15-2B-201 Refund of Excess Withholding
- R15-2C-101 Payment of Estimated Income Tax by Individuals
- R15-2C-201 Additions and Subtractions to Arizona Gross Income
- R15-2C-211 Amounts Already Deducted
- R15-2C-301 Retirement Benefits, Annuities, Pensions
- R15-2C-305 Social Security and Railroad Retirement Benefits
- R15-2C-306 Income Previously Recognized
- R15-2C-307 Exemption for Blind Persons
- R15-2C-502 Property Tax Credit
- R15-2C-503 Renewable Energy Production Tax Credit
- R15-2C-601 Income of a Non-resident
- R15-2C-602 Income from Intangible Personal Property

R15-2C-604	Nonresident Members of Professional Athletic Teams
R15-2C-605	Nonresident Professional Athletes Who Are Not Team Members
R15-2D-101	Definitions
R15-2D-302	Corporate Net Operating Loss
R15-2D-303	Domestic International Sales Corporation (DISC)
R15-2D-305	Deferred Exploration Expenses
R15-2D-306	Amortization of Property Used for Atmospheric and Water Pollution Control
R15-2D-307	Amortization of Child Care Facilities
R15-2D-401	Unitary Business and Combined Returns
R15-2D-403	Taxable in Another State
R15-2D-404	Apportionment Formula
R15-2D-405	Intercompany Eliminations
R15-2D-501	General
R15-2D-502	Rents From Real and Tangible Personal Property
R15-2D-503	Gains or Losses From Sales of Assets
R15-2D-504	Interest
R15-2D-505	Dividends
R15-2D-506	Royalties
R15-2D-507	Proration of Deductions
R15-2D-508	Consistency and Uniformity in Reporting
R15-2D-601	General
R15-2D-602	Property Used for the Production of Business Income

R15-2D-603	Property Factor Numerator
R15-2D-604	Valuation of Owned Property
R15-2D-605	Valuation of Rented Property
R15-2D-606	Averaging of Monthly Property Values
R15-2D-607	Consistency and Uniformity in Reporting
R15-2D-701	General
R15-2D-702	Payroll Factor Denominator
R15-2D-703	Payroll Factor Numerator
R15-2D-704	Compensation Paid in this State: Definitions
R15-2D-705	Consistency and Uniformity in Reporting
R15-2D-801	General
R15-2D-803	Sales Factor Numerator
R15-2D-804	Property Delivered or Shipped to a Purchaser within this State
R15-2D-805	Sales of Tangible Personal Property to the United States Government
R15-2D-806	Sales other than Sales of Tangible Personal Property in this State
R15-2D-807	Consistency and Uniformity in Reporting
R15-2D-901	General
R15-2D-902	Special Provisions for the Property Factor
R15-2D-903	Special Provisions for the Sales Factor
R15-2D-1001	Environmental Technology Facility Tax Credit
R15-2D-1002	Renewable Energy Production Tax Credit
R15-2G-101	Partnerships

## **7. Written Criticisms Received within the Last 5 Years**

The Department has not received any written criticisms of any of the rules during the past five years.

## **8. Economic Impact**

- A. The following rules were adopted in one package. The economic impact of the rules has not differed significantly from that submitted in June 2001 when these rules were last amended. A copy of the June 2001 Economic Impact Statement is attached. The economic impact for the rules estimated minimal costs related to the public hearing and publishing the rules. "Minimal" is defined as an impact of less than \$1,000 in costs or benefits.

R15-2A-103 Time for Filing Returns

R15-2A-104 Returns Filed by Persons Outside the United States

- B. The following rules were adopted in one package. The economic impact of the rules has not differed significantly from that submitted in June 2001 when these rules were last amended. A copy of the June 2001 Economic Impact Statement is attached. The economic impact for the rules estimated minimal costs related to the public hearing and publishing the rules. "Minimal" is defined as an impact of less than \$1,000 in costs or benefits.

R15-2C-201 Additions and Subtractions to Arizona Gross Income

R15-2C-211 Amounts Already Deducted

R15-2C-305 Social Security and Railroad Retirement Benefits

R15-2C-306 Income Previously Recognized

R15-2C-307 Exemption for Blind Persons

- C. The following rules were adopted in one package. The economic impact of the rules has not differed significantly from that submitted in November 2000 when these rules were adopted. A copy of the Economic Impact Statement is attached. The economic impact for the rules estimated minimal costs related to the public hearing and publishing the rules. "Minimal" is defined as an impact of less than \$1,000 in costs or benefits.

- R15-2C-604 Nonresident Members of Professional Athletic Teams
- R15-2C-605 Nonresident Professional Athletes Who Are Not Team Members

D. The following rules were adopted in one package. The economic impact of the rules has not differed significantly from that submitted in October 2001 when these rules were last amended. A copy of the October 2001 Economic Impact Statement is attached. The economic impact for the rules estimated minimal costs related to the public hearing and publishing the rules. "Minimal" is defined as an impact of less than \$1,000 in costs or benefits.

- R15-2D-101 Definitions
- R15-2D-401 Unitary Business and Combined Returns
- R15-2D-403 Taxable in Another State
- R15-2D-404 Apportionment Formula
- R15-2D-405 Intercompany Eliminations
- R15-2D-501 General
- R15-2D-502 Rents From Real and Tangible Personal Property
- R15-2D-503 Gains or Losses From Sales of Assets
- R15-2D-504 Interest
- R15-2D-505 Dividends
- R15-2D-506 Royalties
- R15-2D-507 Proration of Deductions
- R15-2D-508 Consistency and Uniformity in Reporting
- R15-2D-601 General
- R15-2D-602 Property Used for the Production of Business Income
- R15-2D-603 Property Factor Numerator
- R15-2D-604 Valuation of Owned Property

R15-2D-605	Valuation of Rented Property
R15-2D-606	Averaging of Monthly Property Values
R15-2D-607	Consistency and Uniformity in Reporting
R15-2D-701	General
R15-2D-702	Payroll Factor Denominator
R15-2D-703	Payroll Factor Numerator
R15-2D-704	Compensation Paid in this State: Definitions
R15-2D-705	Consistency and Uniformity in Reporting
R15-2D-801	General
R15-2D-803	Sales Factor Numerator
R15-2D-804	Property Delivered or Shipped to a Purchaser within this State
R15-2D-805	Sales of Tangible Personal Property to the United States Government
R15-2D-806	Sales other than Sales of Tangible Personal Property in this State
R15-2D-807	Consistency and Uniformity in Reporting
R15-2D-901	General
R15-2D-902	Special Provisions for the Property Factor
R15-2D-903	Special Provisions for the Sales Factor

- E. The following rules were adopted in one package. The economic impact of the rules has not differed significantly from that submitted in October 2000 when these rules were last amended. A copy of the October 2000 Economic Impact Statement is attached. The economic impact for the rules estimated minimal costs related to the public hearing and publishing the rules. "Minimal" is defined as an impact of less than \$1,000 in costs or benefits.

R15-2D-305	Deferred Exploration Expenses
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R15-2D-306 Amortization of Property Used for Atmospheric and Water Pollution Control

R15-2D-307 Amortization of Child Care Facilities

R15-2D-1001 Environmental Technology Facility Tax Credit

- F. The following rules were adopted in one package. The economic impact of the rules has not differed significantly from that submitted in September 2011 when these rules were adopted. A copy of the September 2011 Economic Impact Statement is attached. The economic impact for the rules estimated minimal costs related to the public hearing and publishing the rules. "Minimal" is defined as an impact of less than \$1,000 in costs or benefits.

R15-2C-503 Renewable Energy Production Tax Credit

R15-2D-1002 Renewable Energy Production Tax Credit

## **9. Business Competitiveness Analysis**

No analysis regarding the income and withholding tax rules impacts on business competitiveness in this state compared with the impact on businesses in other states has been submitted to the Department within the last five years.

## **10. Previous-Five-Year Review Report**

In the previous five year review the Department considered proposed action for 10 different rules. 4 of these rules were allowed to expire. Due to the rules moratorium those anticipated amendments were not made. The Department did not seek an exception to the rules moratorium because it did not have proper justification to do so under the current or previous Executive Orders.

## **11. Costs vs. Benefits**

The income and withholding tax rules impose the least burden and costs to the regulated public, including paperwork and other compliance costs necessary to achieve the underlying regulatory objective because the Department's review shows the income and withholding tax rules are consistent with statutes, rules and enforcement policies that results in significantly less burden on the regulated public. No written comments, complaints, or suggestions have been received from the public regarding the existing income and withholding tax rules within the last five years.

## **12. Stringency Compared with Federal Law**

The Department has determined after analysis that the income and withholding tax rules are not more stringent than the United States internal revenue code of 1986, as amended and in effect on January 1, 2019 unless there is statutory authority to exceed the requirements of that federal law.

## **13. Compliance with A.R.S. § 41-1037**

No income or withholding tax rules were adopted after July 29, 2010 which require the issuance of a regulatory permit, license or agency authorization.

## **14. Proposed Action**

1. The Department does not propose to take any action on the following rules at this time.

R15-2A-103 Time for Filing Returns

R15-2A-104 Returns Filed by Persons Outside the United States

R15-2B-101 Payment Schedules; Rates; Election by Employee

R15-2B-102 Employment Excluded from Withholding

R15-2B-201 Refund of Excess Withholding

R15-2C-201 Additions and Subtractions to Arizona Gross Income

R15-2C-211 Amounts Already Deducted

R15-2C-301 Retirement Benefits, Annuities, Pensions

R15-2C-305 Social Security and Railroad Retirement Benefits

R15-2C-306 Income Previously Recognized

R15-2C-307 Exemption for Blind Persons

R15-2C-502 Property Tax Credit

R15-2C-503 Renewable Energy Production Tax Credit

R15-2C-602	Income from Intangible Personal Property
R15-2C-604	Nonresident Members of Professional Athletic Teams
R15-2C-605	Nonresident Professional Athletes Who Are Not Team Members
R15-2D-101	Definitions
R15-2D-303	Domestic International Sales Corporation (DISC)
R15-2D-305	Deferred Exploration Expenses
R15-2D-306	Amortization of Property Used for Atmospheric and Water Pollution Control
R15-2D-307	Amortization of Child Care Facilities
R15-2D-401	Unitary Business and Combined Returns
R15-2D-403	Taxable in Another State
R15-2D-404	Apportionment Formula
R15-2D-405	Intercompany Eliminations
R15-2D-501	General
R15-2D-502	Rents From Real and Tangible Personal Property
R15-2D-503	Gains or Losses From Sales of Assets
R15-2D-504	Interest
R15-2D-505	Dividends
R15-2D-506	Royalties
R15-2D-507	Proration of Deductions
R15-2D-508	Consistency and Uniformity in Reporting
R15-2D-601	General
R15-2D-602	Property Used for the Production of Business Income

R15-2D-603	Property Factor Numerator
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R15-2D-702	Payroll Factor Denominator
R15-2D-703	Payroll Factor Numerator
R15-2D-704	Compensation Paid in this State: Definitions
R15-2D-705	Consistency and Uniformity in Reporting
R15-2D-801	General
R15-2D-803	Sales Factor Numerator
R15-2D-804	Property Delivered or Shipped to a Purchaser within this State
R15-2D-805	Sales of Tangible Personal Property to the United States Government
R15-2D-806	Sales other than Sales of Tangible Personal Property in this State
R15-2D-807	Consistency and Uniformity in Reporting
R15-2D-901	General
R15-2D-902	Special Provisions for the Property Factor
R15-2D-903	Special Provisions for the Sales Factor
R15-2D-1001	Environmental Technology Facility Tax Credit
R15-2D-1002	Renewable Energy Production Tax Credit
R15-2G-101	Partnerships

## ANALYSIS OF INDIVIDUAL RULES

### **R15-2A-103. Time for Filing Returns**

1. Specific Authorization: A.R.S. § 43-325 is the specific statute on which the rule is based.
2. Objective: The rule has two objectives. The first objective is to provide guidance to taxpayers with respect to the time for filing fractional year returns and returns for deceased individuals. The second objective is to prescribe when a return is considered timely filed when the return is filed pursuant to a filing extension, by mail, or when the due date falls on a weekend or holiday.

### **R15-2A-104. Returns Filed by Persons Outside the United States**

1. Specific Authorization: A.R.S. § 43-328 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to provide guidance to taxpayers with respect to filing income tax returns when taxpayers are out of the country and it is impossible or impractical to file a timely return.

### **R15-2A-202. Items not Deductible in Computing Taxable Income**

1. Specific Authorization: A.R.S. § 43-961 is the specific statute on which the rule is based.
2. Objective: The objective of the rule is to explain which items are not deductible in computing Arizona taxable income.
3. Effectiveness: The rule does not provide adequate guidance for the determination of expenses related to nontaxable income.
6. Clarity, Conciseness, and Understandability: The rule contains a reference to a repealed statute and is not in the active voice.
8. Economic Impact: Documentation of the predicted economic impact at the time the rule was adopted is not available. Currently, the rule should have minimal economic impact since the rule only interprets and clarifies the statute and does not impose any additional duties on the taxpayer. “Minimal” means having an impact of \$1,000 or less in costs or benefits.

14. Proposed Action: The Department proposes to amend the rule to provide specificity with respect to the determination of expenses related to nontaxable income and to remove a reference to a repealed statute. The Department will reach out to the Governor's Office for a possible exception to the rulemaking moratorium. If the exception is granted the Department anticipates opening the rulemaking process by June 2020.

#### **R15-2B-101. Payment Schedule; Rates; Election by Employee**

1. Specific Authorization: A.R.S. § 43-401 is the specific statute on which the rule is based.
2. Objective: The objective of the rule is to explain how to determine which withholding payment schedule to use.
5. Enforcement: This rule is fairly and consistently enforced except that subsection J refers to the minimum withholding percentage which no longer exists due to a change in A.R.S. § 43-401.
6. Clarity, Conciseness, and Understandability: The rule contains a section on the minimum withholding percentage for employees; however there is no longer a minimum withholding percentage for employees.
8. Economic Impact: Documentation at the time the rule was adopted indicated that there would be some economic impact for the State because funds being remitted more frequently would generate investment income. No quantifiable amounts were given for the preceding impacts. Currently, it is estimated that, as was predicted at the time the rule was adopted, the economic impact of most sections of the rule is minimal. "Minimal" is defined as having an economic impact of \$1,000 or less in costs or benefits.
14. Proposed Action: The Department proposes to amend the rule by removing subsection J of the rule which refers to the minimum withholding percentage for employees which no longer exists. The Department will reach out to the Governor's Office for a possible exception to the rulemaking moratorium. If the exception is granted the Department anticipates opening the rulemaking process by June 2020.

#### **R15-2B-102. Employment Excluded from Withholding**

1. Specific Authorization: The rule is based on A.R.S. § 43-403.
2. Objective: The objective of the rule is to explain when employment is excluded from the withholding provisions of the statutes.

8. Economic Impact: Documentation of projected economic impact at the time the rule was adopted is not available. Currently, the rule should have minimal impact on taxpayers since it is explanatory in nature and does not impose any additional requirements beyond those imposed by statute. “Minimal” means having an impact of \$1,000 or less in costs or benefits.

#### **R15-2B-201. Refund of Excess Withholding**

1. Specific Authorization: The rule is based on A.R.S. § 43-432.
2. Objective: The objective of the rule is to explain the procedure to be followed by the surviving spouse or personal representative of an estate in order to obtain a refund of excess tax withheld when the taxpayer died.
8. Economic Impact: Documentation for the predicted economic impact at the time the rule was adopted is not available. Currently, the rule has a minimal economic impact on taxpayers through its requirement that the person filing for a refund on behalf of a deceased taxpayer attach an additional form to the tax return. “Minimal” means having an economic impact of \$1,000 or less in costs or benefits.

#### **R15-2C-101. Payment of Estimated Income Tax by Individuals**

1. Specific Authorization: A.R.S. § 43-581 specifically authorizes the Department to prescribe rules for the payment of estimated tax which provide for estimated payments in a manner similar to the manner prescribed by the Internal Revenue Code.
2. Objective: The objective of the rule is to set forth how taxpayers can determine who must pay estimated tax and when the estimated payments must be made.
3. Effectiveness: The rule is generally effective in meeting the stated objectives. However, the rule needs to be more specific with respect to the application of a refund to the subsequent year’s estimated tax and the method of determining the amount of tax considered due for purposes of this section when married taxpayers change from a joint or separate filing method. The rule should also note that estimated taxes can now be paid by credit card through [www.az.taxes.gov](http://www.az.taxes.gov).
8. Economic Impact: When the rule was adopted, it was predicted that prescribing the method of making estimated payments would have no economic impact because the computation does not increase or decrease the taxpayer’s tax liability, the math involved is simple, and the data required for the computation

should be readily available in the taxpayer's records. Currently, the impact should be minimal for the reasons given when the rule was adopted. "Minimal" means having an economic impact of \$1,000 or less in costs or benefits.

14. Proposed Action: The Department proposes to amend the rule to provide specificity with respect to the application of a refund to the subsequent year's estimated tax, the method of determining the amount of tax considered due for purposes of this section when married taxpayers change from joint to separate filing method, and to update a statutory reference. The Department also proposes to amend the rule by adding language that estimated taxes can now be paid by credit card through [www.aztaxes.gov](http://www.aztaxes.gov). The Department will reach out to the Governor's Office for a possible exception to the rulemaking moratorium. If the exception is granted the Department anticipates opening the rulemaking process by June 2020.

#### **R15-2C-201. Additions to and Subtractions from Arizona Gross Income**

2. Objective: The objective of the rule is to give taxpayers an overview of how Arizona individual income taxes are computed.

#### **R15-2C-211. Amounts Already Deducted**

2. Objective: The objective of the rule is to explain how to treat amounts previously deducted on the Arizona return when they flow through from the federal return due to timing differences.

#### **R15-2C-301. Retirement Benefits, Annuities, Pensions**

2. Objective: The objective of the rule is to explain how the \$2,500 subtraction for certain government pensions applies.
8. Economic Impact: This rule was adopted in a package following the Tax Reform Act of 1990 (Laws 1990, 3rd S.S., Chapter 3). The original economic impact of both the Act and the rules was projected to enhance the state's general fund by over \$200 million. The original rule adoption package does not give a separate breakdown for the impact of each rule. However, since the rules clarify and explain statute rather than impose new requirements, the impact of the rule alone is estimated to be minimal. "Minimal" is defined as an impact of less than \$1,000 in costs or benefits.

#### **R15-2C-305. Social Security and Railroad Retirement Benefits**

2. Objective: The objective of the rule is to clarify the treatment of social security benefits and Tier I railroad retirement benefits that are included in federal adjusted gross income.

#### **R15-2C-306. Income Previously Recognized**

2. Objective: The objective of the rule is to address the subtraction for income that was previously recognized for Arizona purposes when that income is included later in federal adjusted gross income.

#### **R15-2C-307. Exemption for Blind Persons**

1. Specific Authorization: A.R.S. § 43-1023 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to provide additional explanation for the statutory provision granting exemptions to taxpayers for those situations delineated in the title of the rule.

#### **R15-2C-502. Property Tax Credit**

1. Specific Authorization: A.R.S. § 43-1072 is the specific statute on which this rule is based.
2. Objective: The objectives of this rule are to provide a definition of adjusted gross income for determining eligibility for the property tax credit, to clarify the calculation of specific income items to be included in that adjusted gross income, and to delineate the documentation required to substantiate the credit.
8. Economic Impact: The economic impact of this rule has not changed significantly since its adoption or since the rule was last amended in August 2005. Copies of both economic impact statements are attached. The economic impact for the rule estimated minimal costs related to the rule. "Minimal" is defined as an impact of less than \$1,000 in costs or benefits.

#### **R15-2C-503 Renewable Energy Production Tax Credit**

1. Specific Authorization: A.R.S. § 43-1083.02 is the specific statute on which this rule is based.

2. Objective: The objective of this rule is to delineate the documentation required in the application for claiming the renewable energy production tax credit.

#### **R15-2C-601. Income of a Non-resident**

2. Objective: The objective of this rule is to delineate and describe the types of income that a non-resident must include in determining Arizona gross income and how to determine the amount of that income.
3. Effectiveness: The rule is generally effective in meeting the stated objectives. However, the rule needs to be more specific with respect to the determination of income includable in Arizona gross income when the income is derived from a taxpayer's business that operates both within and outside Arizona.
8. Economic Impact: Documentation regarding the estimated economic impact of this rule when it was originally adopted is not available. However, the rule only provides an interpretation of the application of the statute. The estimated impact on taxpayers and small businesses is minimal. The rule provides some indirect savings in the costs of preparing returns by giving guidance in how to determine the amounts to be reported, but the additional record-keeping may also occasion some additional cost. "Minimal" means having an impact of less than \$1,000 in costs or benefits.
14. Proposed Action: The Department proposes to amend the rule to provide specificity with respect to the calculation of Arizona income derived from a multistate business and reference the unitary business to the definition in R152D101. The Department will also amend the rule to conform to the standards of the Governor's Regulatory Review Council and remove language like "should" and "must". The Department will reach out to the Governor's Office for a possible exception to the rulemaking moratorium. If the exception is granted the Department anticipates opening the rulemaking process by June 2020.

#### **R15-2C-602. Income from Intangible Personal Property**

1. Specific Authorization: A.R.S. § 43-1092 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to clarify and explain the provisions in the statute.
8. Economic Impact: The projected economic impact at the time that the rule was adopted is not available. Currently, the rule should have minimal impact on taxpayers because it merely explains the terms used in the statute. "Minimal" means having an impact of less than \$1,000 in costs or benefits.

**R15-2C-604. Nonresident Members of Professional Athletic Teams**

2. Objective: The objective of this rule is to delineate and describe the types of income that non-resident members of professional athletic teams must include in determining Arizona gross income and how to determine the amount of that income.

**R15-2C-605. Nonresident Professional Athletes Who Are Not Team Members**

2. Objective: The objective of this rule is to delineate and describe the types of income that a non-resident professional athlete, who is not a member of a team, must include in determining Arizona gross income and how to determine the amount of that income.

**R15-2D-101 Definitions**

1. Specific Authorization: A.R.S. § 43-1101 is the specific statute on which this rule is based.
2. Objective: The objective of this rule is to provide additional definitions of terms used to determine income of a multistate business.

**R15-2D-302 Corporate Net Operating Loss**

1. Specific Authorization: A.R.S. § 43-1123 is the specific statute on which this rule is based.
2. Objective: The objective of this rule is to provide corporate taxpayers with guidance in computing the net operating loss subtraction.
3. Effectiveness: The rule should also be updated to reflect recent statutory changes.
8. Economic Impact: The impact statement prepared on the adoption of the rule predicted that the Department would experience savings in time and cost of responding to taxpayer inquiries because of the additional guidance the rule provides. The statement also provided that small businesses were not exempt from the reporting requirements of the rule and that the rule had no direct impact on consumers. The Department believes the statement is still valid and results in minimal costs. "Minimal" is defined as an impact of less than \$1,000 in costs or benefits.

14. Proposed Action: The Department proposes to amend the rule to reflect a statutory change which now allows net operating losses created after December 31, 2011 to be carried forward for 20 years, replacing the previous 5 year carryforward limitation. The Department will also amend the rule to conform to the standards of the Governor's Regulatory Review Council and remove language like "should" and "must". The Department will reach out to the Governor's Office for a possible exception to the rulemaking moratorium. If the exception is granted the Department anticipates opening the rulemaking process by June 2020.

**R15-2D-303 Domestic International Sales Corporation (DISC)**

1. Specific Authorization: A.R.S. § 43-1125 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to provide guidance to taxpayers regarding the income taxation of Domestic International Sales Corporations (DISC) and their shareholders.
8. Economic Impact: The economic impact of this rule has not differed significantly from that submitted in June 2001 when this rule was last amended. A copy of the June 2001 Economic Impact Statement is attached. The economic impact for the rule estimated minimal costs related to the public hearing and publishing the rule. "Minimal" is defined as an impact of less than \$1,000 in costs or benefits.

**R15-2D-305 Deferred Exploration Expenses**

1. Specific Authorization: A.R.S. § 43-1127 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to explain how to calculate the deduction for deferred exploration expenses currently allowed by A.R.S. § 43-1127.

**R15-2D-306 Amortization of Property Used for Atmospheric and Water Pollution Control**

1. Specific Authorization: A.R.S. § 43-1129 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to provide guidance to corporate taxpayers regarding the requirements for claiming amortization of property used for atmospheric and water pollution control.

#### **R15-2D-307      Amortization of Child Care Facilities**

1. Specific Authorization: A.R.S. § 43-1130 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to establish the criteria for taxpayers operating child care facilities to take the amortization deduction allowed by A.R.S. § 43-1130.

#### **R15-2D-401      Unitary Business and Combined Returns**

1. Specific Authorization: A.R.S. § 43-942 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to provide guidance to corporate taxpayers regarding the requirements for determining whether a group of affiliated corporations is conducting a unitary business and the necessity of filing a combined return.

#### **R15-2D-403      Taxable in Another State**

1. Specific Authorization: A.R.S. § 43-1133 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to clarify when a taxpayer's income is taxable in another state for purposes of requiring apportionment or allocation of income.

#### **R15-2D-404      Apportionment Formula**

1. Specific Authorization: A.R.S. § 43-1139 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to clarify that business income shall be apportioned to Arizona using an apportionment formula.

#### **R15-2D-405      Intercompany Eliminations**

2. Objective: The objective of the rule is to clarify the treatment of intercompany transactions of members of a consolidated or combined group.

**R15-2D-501      General**

1.     Specific Authorization: A.R.S. § 43-1131 is the specific statute on which this rule is based.
2.     Objective: The objective of this rule is to provide guidance in the determination of business and nonbusiness income or loss.

**R15-2D-502      Rents From Real and Tangible Personal Property**

1.     Specific Authorization: A.R.S. § 43-1135 is the specific statute on which this rule is based.
2.     Objective: The objective of this rule is to provide guidance in the determination of business and nonbusiness rental income or loss.

**R15-2D-503      Gains or Losses From Sales of Assets**

1.     Specific Authorization: A.R.S. § 43-1136 is the specific statute on which this rule is based.
2.     Objective: The objective of this rule is to provide guidance in the determination of business and nonbusiness gain or loss from the sale of assets.

**R15-2D-504      Interest**

2.     Objective: The objective of this rule is to provide guidance in the determination of business and nonbusiness interest income.

**R15-2D-505      Dividends**

2.     Objective: The objective of this rule is to provide guidance in the determination of business and nonbusiness dividend income.

**R15-2D-506      Royalties**

1.     Specific Authorization: A.R.S. § 43-1138 is the specific statute on which this rule is based.

2. Objective: The objective of this rule is to provide guidance in the determination of business and nonbusiness royalty income.

#### **R15-2D-507 Proration of Deductions**

2. Objective: The objective of this rule is to provide for the proration of expenses among the classes of income to which they apply.

#### **R15-2D-508 Consistency and Uniformity in Reporting**

2. Objective: The objective of the rule is to require a taxpayer to report income and deductions in a uniform and consistent manner.

#### **R15-2D-601 General**

2. Objective: The objective of the rule is to identify general property that should or should not be included in the property factor as part of the apportionment formula.

#### **R15-2D-602 Property Used for the Production of Business Income**

2. Objective: The objective of the rule is to identify specific property that should or should not be included in the property factor as part of the apportionment formula.

#### **R15-2D-603 Property Factor Numerator**

2. Objective: The objective of the rule is to identify the property that should be included in the Arizona numerator of the property factor as part of the apportionment formula.

#### **R15-2D-604 Valuation of Owned Property**

2. Objective: The objective of the rule is to explain how property is to be valued for purposes of the property factor.

#### **R15-2D-605 Valuation of Rented Property**

2. Objective: The objective of the rule is to explain how rented property is to be valued for purposes of the property factor.

#### **R15-2D-606      Averaging of Monthly Property Values**

1. Specific Authorization: A.R.S. § 43-1142 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to explain how to determine the average value of property for purposes of the property factor.

#### **R15-2D-607      Consistency and Uniformity in Reporting**

2. Objective: The objective of the rule is to require a taxpayer to compute the property factor in a uniform and consistent manner.

#### **R15-2D-701      General**

2. Objective: The objective of the rule is to identify compensation that should or should not be included in the payroll factor as part of the apportionment formula.

#### **R15-2D-702      Payroll Factor Denominator**

2. Objective: The objective of the rule is to identify compensation that should or should not be included in the denominator of the payroll factor as part of the apportionment formula.

#### **R15-2D-703      Payroll Factor Numerator**

2. Objective: The objective of the rule is to identify the compensation that should be included in the Arizona numerator of the payroll factor as part of the apportionment formula.

#### **R15-2D-704      Compensation Paid in this State: Definitions**

1. Specific Authorization: A.R.S. § 43-1144 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to define terms used to determine whether compensation is paid in this state for purposes of the payroll factor.

**R15-2D-705 Consistency and Uniformity in Reporting**

2. Objective: The objective of the rule is to require a taxpayer to compute the payroll factor in a uniform and consistent manner.

**R15-2D-801 General**

2. Objective: The objective of the rule is to identify sales that should or should not be included in the sales factor as part of the apportionment formula.

**R15-2D-803 Sales Factor Numerator**

2. Objective: The objective of the rule is to identify sales that should be included in the numerator of the sales factor as part of the apportionment formula.

**R15-2D-804 Property Delivered or Shipped to a Purchaser within this State**

2. Objective: The objective of the rule is to identify property that is considered to be delivered or shipped to a purchaser in the state.

**R15-2D-805 Sales of Tangible Personal Property to the United States Government**

2. Objective: The objective of the rule is to identify sales that are considered to be sales to the United States government.

**R15-2D-806 Sales other than Sales of Tangible Personal Property in this State**

1. Specific Authorization: A.R.S. § 43-1147 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to identify sales that should be included in the numerator of the sales factor as part of the apportionment formula when the sales are other than sales of tangible personal property.

**R15-2D-807 Consistency and Uniformity in Reporting**

2. Objective: The objective of the rule is to require a taxpayer to compute the sales factor in a uniform and consistent manner.

**R15-2D-901      General**

2. Objective: The objective of the rule is to provide for alternate apportionment provisions when the standard provisions cannot be reasonably applied.

**R15-2D-902      Special Provisions for the Property Factor**

2. Objective: The objective of the rule is to provide alternate property factor provisions when the standard apportionment provisions cannot be reasonably applied.

**R15-2D-903      Special Provisions for the Sales Factor**

2. Objective: The objective of the rule is to provide alternate sales factor provisions when the standard apportionment provisions cannot be reasonably applied.

**R15-2D-1001      Environmental Technology Facility Tax Credit**

1. Specific Authorization: A.R.S. § 43-1169 is the specific statute on which this rule is based.
2. Objective: The objective of this rule is to provide record keeping requirements for documents and records necessary to substantiate the credit.

**R15-2D-1002      Renewable Energy Production Tax Credit**

1. Specific Authorization: A.R.S. § 43-1164.03 is the specific statute on which this rule is based.
2. Objective: The objective of this rule is to delineate the documentation required in the application for claiming the renewable energy production tax credit.

**R15-2G-101      Partnerships**

1. Specific Authorization: A.R.S. § 43-1411 is the specific statute on which this rule is based.
2. Objective: The objective of the rule is to state the requirement that a partnership file an information return.

8. Economic Impact: The economic impact of this rule has not differed significantly from that submitted in June 2001 when this rule was last amended. A copy of the June 2001 Economic Impact Statement is attached. The economic impact for the rule estimated minimal costs related to the public hearing and publishing the rule. "Minimal" is defined as an impact of less than \$1,000 in costs or benefits.

# Arizona Administrative CODE

15 A.A.C. 2 Supp. 18-3

www.azsos.gov

This Chapter contains rule Sections that expired in the *Arizona Administrative Code* between the dates of July 1, 2018 through September 30, 2018

## Title 15



### TITLE 15. REVENUE

#### CHAPTER 2. DEPARTMENT OF REVENUE - INCOME AND WITHHOLDING TAX SECTION

The table of contents on the first page contains quick links to the referenced page numbers in this Chapter. Refer to the notes at the end of a Section to learn about the history of a rule as it was published in the *Arizona Administrative Register*.

Sections, Parts, Exhibits, Tables or Appendices codified in this supplement. The list provided contains quick links to the updated rules.

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#### Questions about the expired rules? Contact:

Council: The Governor's Regulatory Review Council  
Name: GRRC  
Address: 100 N. 15th Ave #305  
Phoenix, AZ 85007  
Telephone: (602) 542-2058

#### The release of this Chapter in Supp. 18-3 replaces Supp. 17-4, 34 pages

Please note that the Chapter you are about to replace may have rules still in effect after the publication date of this supplement. Therefore, all superseded material should be retained in a separate binder and archived for future reference.

## PREFACE

Under Arizona law, the Department of State, Office of the Secretary of State (Office), accepts state agency rule filings and is the publisher of Arizona rules. The Office of the Secretary of State does not interpret or enforce rules in the *Administrative Code*. Questions about rules should be directed to the state agency responsible for the promulgation of the rule.

Scott Cancelosi, Director  
ADMINISTRATIVE RULES DIVISION

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### RULES

The definition for a rule is provided for under A.R.S. § 41-1001. “‘Rule’ means an agency statement of general applicability that implements, interprets, or prescribes law or policy, or describes the procedures or practice requirements of an agency.”

### THE ADMINISTRATIVE CODE

The *Arizona Administrative Code* is where the official rules of the state of Arizona are published. The *Code* is the official codification of rules that govern state agencies, boards, and commissions.

The *Code* is separated by subject into titles. Titles are divided into chapters. A chapter includes state agency rules. Rules in chapters are divided into Articles, then Sections. The “R” stands for “rule” with a sequential numbering and lettering outline separated into subsections.

Rules are codified quarterly in the *Code*. Supplement release dates are printed on the footers of each chapter.

First Quarter: January 1 - March 31

Second Quarter: April 1 - June 30

Third Quarter: July 1 - September 30

Fourth Quarter: October 1 - December 31

For example, the first supplement for the first quarter of 2018 is cited as Supp. 18-1.

Please note: The Office publishes by chapter, not by individual rule section. Therefore there might be only a few sections codified in each chapter released in a supplement. Historical notes at the end of a section provide an effective date and information when a rule was last updated.

### AUTHENTICATION OF PDF CODE CHAPTERS

The Office began to authenticate chapters of the *Administrative Code* in Supp. 18-1 to comply with A.R.S. § 41-1012(B) and A.R.S. § 5302(1), (2)(d) through (e), and (3)(d) through (e).

A certification verifies the authenticity of each *Code* chapter posted as it is released by the Office of the Secretary of State. The authenticated pdf of the *Code* includes an integrity mark with a certificate ID. Users should check the validity of the signature, especially if the pdf has been downloaded. If the digital signature is invalid it means the document’s content has been compromised.

### HOW TO USE THE CODE

Rules may be in effect before a supplement is released by the Office. Therefore, the user should refer to issues of the *Arizona Administrative Register* for recent updates to rule Sections.

### ARIZONA REVISED STATUTE REFERENCES

The Arizona Revised Statutes (A.R.S.) are available online at the Legislature’s website, [www.azleg.gov](http://www.azleg.gov). An agency’s authority

note to make rules is often included at the beginning of a chapter. Other Arizona statutes may be referenced in rule under the A.R.S. acronym.

### SESSION LAW REFERENCES

Arizona Session Law references in a chapter can be found at the Secretary of State’s website, under Services-> Legislative Filings.

### EXEMPTIONS FROM THE APA

It is not uncommon for an agency to be exempt from the steps outlined in the rulemaking process as specified in the Arizona Administrative Procedures Act, also known as the APA (Arizona Revised Statutes, Title 41, Chapter 6, Articles 1 through 10). Other agencies may be given an exemption to certain provisions of the Act.

An agency’s exemption is written in law by the Arizona State Legislature or under a referendum or initiative passed into law by Arizona voters.

When an agency files an exempt rulemaking package with our Office it specifies the law exemption in what is called the preamble of rulemaking. The preamble is published in the *Register* online at [www.azsos.gov/rules](http://www.azsos.gov/rules), click on the *Administrative Register* link.

Editor’s notes at the beginning of a chapter provide information about rulemaking sections made by exempt rulemaking. Exempt rulemaking notes are also included in the historical note at the end of a rulemaking Section.

The Office makes a distinction to certain exemptions because some rules are made without receiving input from stakeholders or the public. Other exemptions may require an agency to propose exempt rules at a public hearing.

### EXEMPTIONS AND PAPER COLOR

At one time the office published exempt rules on either blue or green paper. Blue meant the authority of the exemption was given by the Legislature; green meant the authority was determined by a court order. In 2001 the Office discontinued publishing rules using these paper colors.

### PERSONAL USE/COMMERCIAL USE

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*Rhonda Paschal, managing rules editor, assisted with the editing of this chapter.*



Administrative Rules Division
The Arizona Secretary of State electronically publishes each A.A.C. Chapter with a digital certificate. The certificate-based signature displays the date and time the document was signed and can be validated in Adobe Acrobat Reader.

TITLE 15. REVENUE

CHAPTER 2. DEPARTMENT OF REVENUE - INCOME AND WITHHOLDING TAX SECTION

(Authority: A.R.S. § 43-101 et seq.)

Editor's Note: The Department of Revenue recodified this Chapter at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000. The rescinded Chapter, which contains the former codification and Historical Notes, is on file in the Office of the Secretary of State (Supp. 00-2).

Chapter 2 consisting of Articles 1 through 14 adopted effective December 22, 1981.

Former Chapter 2 consisting of Article 1 repealed effective December 22, 1981.

SUBCHAPTER A. GENERAL AND ADMINISTRATIVE

ARTICLE 1. DEFINITIONS AND GENERAL PROVISIONS

Table with 2 columns: Section, Description. Includes R15-2A-101 (Repealed), R15-2A-102 (Repealed), R15-2A-103 (Time for Filing Returns), R15-2A-104 (Returns Filed by Persons Outside the United States).

ARTICLE 2. GENERAL ACCOUNTING PROVISIONS

Table with 2 columns: Section, Description. Includes R15-2A-201 (Repealed), R15-2A-202 (Items not Deductible in Computing Taxable Income).

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Table with 2 columns: Section, Description. Includes R15-2B-101 (Payment Schedule; Rates; Election by Employee), R15-2B-102 (Employment Excluded from Withholding).

ARTICLE 2. WITHHOLDING AS PAYMENT OF TAX FOR EMPLOYEE

Table with 2 columns: Section, Description. Includes R15-2B-201 (Refund of Excess Withholding).

SUBCHAPTER C. INDIVIDUALS

ARTICLE 1. PAYMENT AND COLLECTION OF TAX

Table with 2 columns: Section, Description. Includes R15-2C-101 (Payment of Estimated Income Tax by Individuals).

Table with 2 columns: Section, Description. Includes R15-2C-306 (Income Previously Recognized), R15-2C-307 (Exemption for Blind Persons), R15-2C-308 (Repealed), R15-2C-309 (Repealed).

ARTICLE 2. ADDITIONS TO ARIZONA GROSS INCOME

Table with 2 columns: Section, Description. Includes R15-2C-201 (Additions to and Subtractions from Arizona Gross Income), R15-2C-202 (Expired), R15-2C-203 (Expired), R15-2C-204 (Expired), R15-2C-205 (Expired), R15-2C-206 (Expired), R15-2C-207 (Expired), R15-2C-208 (Repealed), R15-2C-209 (Repealed), R15-2C-210 (Expired), R15-2C-211 (Amounts Already Deducted).

ARTICLE 4. EXPIRED

Table with 2 columns: Section, Description. Includes R15-2C-401 (Expired).

ARTICLE 5. CREDITS

Table with 2 columns: Section, Description. Includes R15-2C-501 (Expired), R15-2C-502 (Property Tax Credit), R15-2C-503 (Renewable Energy Production Tax Credit).

ARTICLE 3. SUBTRACTIONS FROM ARIZONA GROSS INCOME

Table with 2 columns: Section, Description. Includes R15-2C-301 (Retirement Benefits, Annuities, Pensions), R15-2C-302 (Repealed), R15-2C-303 (Repealed), R15-2C-304 (Expired), R15-2C-305 (Social Security and Railroad Retirement Benefits).

ARTICLE 6. NONRESIDENTS

Table with 2 columns: Section, Description. Includes R15-2C-601 (Income of a Non-resident), R15-2C-602 (Income from Intangible Personal Property), R15-2C-603 (Expired), R15-2C-604 (Nonresident Members of Professional Athletic Teams), R15-2C-605 (Nonresident Professional Athletes Who Are Not Team Members).

ARTICLE 7. REPEALED

Article 7, consisting of Sections R15-2C-701 through R15-2C-705 repealed by exempt rulemaking at 14 A.A.R. 4249, effective October 24, 2008 (Supp. 08-4).

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*Article 10, consisting of Section R15-2D-1001, adopted by final rulemaking at 6 A.A.R. 4105, effective October 4, 2000 (Supp. 00-4).*

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**ARTICLE 11. REPEALED**

*Article 11, consisting of Sections R15-2D-1101 through R7-2D-1105 repealed by exempt rulemaking at 14 A.A.R. 4253, effective October 24, 2008 (Supp. 08-4).*

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## CHAPTER 2. DEPARTMENT OF REVENUE - INCOME AND WITHHOLDING TAX SECTION

## SUBCHAPTER A. GENERAL AND ADMINISTRATIVE

## ARTICLE 1. DEFINITIONS AND GENERAL PROVISIONS

## R15-2A-101. Repealed

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 653, effective January 11, 2001 (Supp. 01-1).

## R15-2A-102. Repealed

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 2885, effective June 13, 2001 (Supp. 01-2).

## R15-2A-103. Time for Filing Returns

- A. Generally, a taxpayer shall file an income tax return on or before the 15th day of the fourth full calendar month following the close of the taxable year. This requirement is subject to the following exceptions:
1. The final income tax return of a decedent shall be filed on or before the 15th day of the fourth month following the close of the 12-month period that began with the first day of the taxable year in which the decedent died.
  2. The Department may prescribe a later time for filing a return for a fractional part of a year upon a showing by the taxpayer of unusual circumstances.
  3. A corporation liquidating all its assets and ceasing operations during any taxable year may file a return with the Department for that year immediately after liquidation and shall report the income of the corporation for the part of the year during which the corporation was engaged in business.
  4. Under A.R.S. § 43-1126, a corporation taxable as an S corporation under the Internal Revenue Code shall file its income tax return with the Department on or before the 15th day of the third month following the close of the taxable year.
  5. Under A.R.S. § 43-1241, an organization, otherwise exempt under A.R.S. § 43-1201, having unrelated business income shall file its income tax return with the Department on or before the 15th day of the fifth month following the close of the taxable year.
- B. The due date for filing an income tax return with the Department is the date on or before which a return is required to be filed under A.R.S. Title 43 or the last day of the period covered by a filing extension granted by the Department. When the due date falls on Saturday, Sunday, or a legal holiday, the due date for filing the income tax return with the Department is the business day following the Saturday, Sunday, or legal holiday.
- C. An income tax return that is placed in the United States mail, properly addressed with postage paid, is deemed filed on the date of the postmark stamped on the envelope. For purposes of this subsection, the terms "United States mail" and "postmark" have the meaning in A.R.S. § 1-218(E).

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2885, effective June 13, 2001 (Supp. 01-2).

## R15-2A-104. Returns Filed by Persons Outside the United States

- A. If a taxpayer is outside the United States and is unable to file an Arizona individual income tax return or perform any act required by A.R.S. Title 43, the taxpayer may request that the Department disregard the period in which the taxpayer was unable to comply by filing a written request with the Department within 30 days after returning to the United States that:
1. Explains the reasons why the taxpayer was unable to file the income tax return or perform the required act,
  2. Indicates the time period in which the taxpayer was unable to file the income tax return or perform the required act, and
  3. Includes the income tax return and any applicable tax payment.
- B. The taxpayer shall mail the request required under subsection (A) to the Arizona Department of Revenue, Out-of-Country Waiver, 1600 West Monroe, Phoenix, Arizona 85007.
- C. The Department may extend the request period under subsection (A) if circumstances exist that prevent the taxpayer from filing the request within the 30-day period.
- D. A taxpayer may request an extension to file the income tax return required in subsection (A)(3) if:
1. The other requirements in subsection (A), including payment of the estimated tax due, are met, and
  2. The taxpayer provides documentation of the taxpayer's inability to file the income tax return by the 30-day requirement.
- E. If the Department determines that it was impossible or impracticable for the taxpayer to timely file an income tax return or perform the required act, the Department shall relieve the taxpayer from the interest and penalties accruing from the failure to file a timely return or perform the required act.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2885, effective June 13, 2001 (Supp. 01-2).

## ARTICLE 2. GENERAL ACCOUNTING PROVISIONS

## R15-2A-201. Repealed

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Repealed by final rulemaking at 7 A.A.R. 2885, effective June 13, 2001 (Due to clerical error Section not shown as repealed until Supp. 08-4).

## R15-2A-202. Items not Deductible in Computing Taxable Income

- A. Personal and family expenses. Insurance paid on a dwelling owned and occupied by a taxpayer is a personal expense and not deductible. Premiums paid for life insurance by the insured are not deductible. In the case of a professional man who rents a property for residential purposes but incidentally receives clients, patients, or caller there in connection with his professional work (his place of business being elsewhere), no part of the rent is deductible as a business expense. However, if he uses part of the house for his office, such portion of the rent as is properly attributable to such office is deductible. If the father is entitled to the services of his minor children, any allowances that he gives them whether said to be in consideration of services or otherwise are not allowable deductions in his return of income. Generally, attorneys' fees paid in a suit for divorce or separate maintenance are not deductible. However, the part of an attorney's fee paid in a divorce or separate

CHAPTER 2. DEPARTMENT OF REVENUE - INCOME AND WITHHOLDING TAX SECTION

maintenance proceeding that is properly attributable to the production or collection of amounts of includible in gross income is deductible. Amounts paid as alimony or allowance for support on divorce or separation are not deductible except as otherwise provided. The cost of equipment of an Army officer to the extent only that it is especially required by his profession and does not merely take the place of articles required in civilian life is deductible. Accordingly, the cost of a sword is an allowable deduction, but the cost of a uniform is not. See Section 43-1049 for deduction of extraordinary medical expenses including amounts paid for accident or health insurance.

**B. Amounts allocable to non-includible income**

1. Class of non-includible income
  - a. This Section applies to income that is not required to be included in Arizona adjusted gross income or Arizona taxable income. Examples of such non-includible income would be interest exempt from the Arizona income tax by the Constitution or federal or state law, or the income of a corporation which was derived from sources outside this state. The fact that a person's otherwise taxable income may be reduced by allowable deductions and personal exemptions will not render such income subject to this provision.
  - b. The object is to segregate non-includible income from the taxable income in order that a double exemption may not be obtained through the reduction of taxable income by expenses and other items incurred in the production of items of non-includible income. Accordingly, just as certain items of income are excluded from the computation of Arizona gross income and Arizona taxable income by Sections 43-1022 and 43-1122, Section 43-961 excludes from the computation of deductions all items referable to the production of non-includible income as above defined.
2. Determination of amounts allocable to a class of exempt income
  - a. No deduction may be allowed for the amount of any item or part thereof allocable to a class or classes of exempt income, or other income not includible in Arizona adjusted gross income or Arizona taxable income.
 

Example: Expenses paid or incurred for the production or collection of income that is wholly exempt from income taxes such as interest or dividends of a type not includible in gross income are not deductible expenses. Items or parts of such items directly attributable to any class or classes of exempt income shall be allocated to that, and items or parts of such items directly attributable to any class or classes of taxable income shall not be allocated to that.
  - b. If an item is indirectly attributable both to taxable income and to non-includible income, a reasonable proportion of it determined in the light of the facts and circumstances in each case shall be allocated to each. Apportionments must in all cases be reasonable.
3. Statement of items of non-includible incomes-records
  - a. A taxpayer receiving any class of non-includible income or holding any property or engaging in any activity the income from which is non-includible

shall submit with his return as a part of it an itemized statement in detail showing:

- i. the amount of each class of such non-includible income and
  - ii. the amount of items or parts of items allocated to each such class (the amount allocated by apportionment being shown separately) as required by subsection (B)(2) of this subsection.
- b. If an item is apportioned between a class of non-includible income and a class of taxable income, the statement shall show the basis of the apportionment. Such statement shall also recite that each deduction claimed in the return is not in any way referable to non-includible income.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2).

**SUBCHAPTER B. WITHHOLDING  
ARTICLE 1. WITHHOLDING BY EMPLOYER**

**R15-2B-101. Payment Schedule; Rates; Election by Employee**

**A.** An employer shall determine its Arizona withholding payment schedule for each calendar quarter by calculating the average amount of Arizona income taxes withheld in the 4 preceding calendar quarters. The employer shall calculate this average at the beginning of each calendar quarter by adding the actual amount withheld in each of the 4 preceding calendar quarters and then dividing that sum by 4.

1. If the average amount of Arizona income taxes withheld in the 4 preceding calendar quarters does not exceed \$1,500, the employer shall make its Arizona withholding payments on a quarterly basis.

Example:

An employer determines its Arizona withholding payment schedule for the 4th calendar quarter of 1999 as follows:

3rd quarter of 1999 withholding	\$1,100
2nd quarter of 1999 withholding	\$1,600
1st quarter of 1999 withholding	\$1,000
4th quarter of 1998 withholding	\$1,200
Total withholding	\$4,900
Divide by	4
Average withholding	\$1,225

The 4 quarter average of Arizona income taxes withheld does not exceed \$1,500. Therefore, the employer shall make its Arizona withholding payments on a quarterly basis.

2. If the average amount of Arizona income taxes withheld in the 4 preceding calendar quarters exceeds \$1,500, the employer shall make its Arizona withholding payments at the same time as the employer is required to make its federal withholding deposits.

Example:

An employer determines its Arizona withholding payment schedule for the 3rd calendar quarter of 1999 as follows:

2nd quarter of 1999 withholding	\$1,800
1st quarter of 1999 withholding	\$1,400
4th quarter of 1998 withholding	\$1,900
3rd quarter of 1998 withholding	\$1,300
Total withholding	\$6,400
Divide by	4
Average withholding	\$1,600

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The 4 quarter average of Arizona income taxes withheld exceeds \$1,500. Therefore, the employer shall make its Arizona withholding payments at the same time as its federal withholding deposits.

- B.** An employer that purchases an existing business shall determine its Arizona withholding payment schedule for each calendar quarter by calculating the average amount withheld in the 4 preceding calendar quarters as follows:
  - 1. For the 1st quarter of withholding, the employer shall calculate the previous owner's average amount of Arizona income taxes withheld in the 4 preceding calendar quarters.
  - 2. For the 2nd through 4th quarters of withholding, the employer shall calculate the average amount withheld in the 4 preceding calendar quarters by combining its prior quarters of withholding with the previous owner's quarters of withholding.
  - 3. For subsequent quarters of withholding, the employer shall add the amounts it withheld in the 4 preceding calendar quarters and then divide that sum by 4.
- C.** A newly formed business shall determine its Arizona withholding payment schedule as follows:
  - 1. For the 1st quarter of withholding, the employer shall make its Arizona withholding payments on a quarterly basis.
  - 2. For the 2nd quarter of withholding, the employer shall determine its Arizona withholding payment schedule based on the amount withheld in the 1st quarter of withholding.
  - 3. For the 3rd quarter of withholding, the employer shall determine its Arizona withholding payment schedule by adding the amounts withheld in the 1st and 2nd quarters and dividing by 2.
  - 4. For the 4th quarter of withholding, the employer shall determine its Arizona withholding payment schedule by adding the amounts withheld in the 1st, 2nd, and 3rd quarters and dividing by 3.
  - 5. For subsequent quarters of withholding, the employer shall determine its Arizona withholding payment schedule by adding the amounts withheld in the 4 preceding calendar quarters and dividing by 4.
- D.** If 2 or more employers consolidate their business activities to form 1 entity, the new employer shall determine its Arizona withholding payment schedule based on the combined withholding of the prior employers for the preceding 4 calendar quarters. Any prior employer with fewer than 4 full quarters of withholding activity shall annualize the amounts withheld and divide by 4. The new employer shall determine its Arizona withholding payment schedule by combining this amount with the quarterly averages of the other prior employers with 4 full quarters of withholding activity.
- E.** The employer shall complete the quarterly reconciliation required by A.R.S. § 43-401 by filing the quarterly tax return prescribed by the Department.
- F.** For calendar years beginning after December 31, 1997, an employer may make its Arizona withholding payments on an annual basis if all of the following conditions are met:
  - 1. The employer has established a history of withholding activity by filing the quarterly tax return required by subsection (E) for at least the 4 preceding calendar quarters.
  - 2. The employer's withholding liability was an amount greater than zero for at least 1 of the 4 preceding calendar quarters.
  - 3. The average amount of Arizona income taxes withheld by the employer in the 4 preceding calendar quarters does not exceed \$200. The employer will meet this average

withholding requirement if the total amount withheld in the 4 preceding calendar quarters is \$800 or less.

- 4. The employer has timely filed the quarterly tax return and has timely made its Arizona withholding payments for at least 3 of the 4 preceding calendar quarters.
- 5. The employer has filed the quarterly tax return for all preceding calendar quarters and does not have a balance due (tax, penalty, or interest) for any preceding calendar quarter.
- 6. The employer has filed the annual reconciliation tax return required by A.R.S. § 43-412 for all preceding calendar years and has timely filed the annual reconciliation tax return for the preceding calendar year.
- G.** An employer that makes its Arizona withholding payments on an annual basis under subsection (F), shall file the annual tax return required by A.R.S. § 43-401 on the form prescribed by the Department. The form shall contain all the information required by A.R.S. § 43-412. The employer shall make its annual Arizona withholding payment by February 28 of the year following the year for which the report was made.
- H.** An employer that makes its Arizona withholding payments on an annual basis under subsection (F), may continue to make its Arizona withholding payments on an annual basis for the succeeding calendar year if both of the following conditions are met:
  - 1. The average amount of Arizona income taxes withheld by the employer in the 4 preceding calendar quarters does not exceed \$200.
 

Example 1:  
An employer determines whether the average amount of Arizona income taxes withheld in the 4 preceding calendar quarters does not exceed \$200 as follows:

4th quarter of 1999 withholding	\$200
3rd quarter of 1999 withholding	\$200
2nd quarter of 1999 withholding	\$250
1st quarter of 1999 withholding	\$150
Total withholding	\$800
Divide by	4
Average withholding	\$200

The average amount of Arizona income taxes withheld in the 4 preceding calendar quarters does not exceed \$200. Therefore, the employer may make its Arizona withholding payments on an annual basis for the succeeding calendar year, if the employer also meets the condition stated in subsection (H)(2).

Example 2:  
An employer determines whether the average amount of Arizona income taxes withheld in the 4 preceding calendar quarters does not exceed \$200 as follows:

4th quarter of 1999 withholding	\$200
3rd quarter of 1999 withholding	\$400
2nd quarter of 1999 withholding	\$250
1st quarter of 1999 withholding	\$150
Total withholding	\$1,000
Divide by	4
Average withholding	\$250

The average amount of Arizona income taxes withheld in the 4 preceding calendar quarters exceeds \$200. Therefore, the employer may not make its Arizona withholding payments on an annual basis for the succeeding calendar year.
  - 2. The employer has timely filed the annual tax return and has timely made its annual Arizona withholding payment as prescribed by subsection (G) for the preceding calendar year.

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- I. If the employer does not meet the conditions prescribed by subsection (H):
1. The employer shall determine its Arizona withholding payment schedule for succeeding calendar quarters as prescribed by subsection (A); and
  2. The employer shall file the quarterly tax return for succeeding calendar quarters as prescribed by subsection (E).
- J. An employer shall determine the applicable rate of withholding for each employee as follows:
1. If an employee whose annual compensation is less than \$15,000 elects the minimum withholding rate, that rate shall apply until 1 of the following situations occurs:
    - a. Until the employee has 12 full months of work history with the employer, the employer shall determine the employee's annualized compensation at the end of each month. The employer may use any method of annualization that accurately reflects the employee's annual compensation. If the employer determines that the employee's annualized compensation is \$15,000 or more, the employer shall adjust the employee's rate of withholding beginning the next full pay period following the determination. The employer shall adjust the rate to the minimum rate prescribed by A.R.S. § 43-401, unless the employee elects a higher prescribed rate of withholding for the employee's annual compensation. The employer shall apply the minimum rate of withholding until the employee has been employed for 12 full months, unless the employee elects a higher prescribed rate of withholding for the employee's annual compensation. After 12 full months of employment, the employer shall determine the rate under subsection (J)(1)(b);
    - b. If the employee has 12 full months of work history with the employer, the employer shall determine the employee's total compensation for the 12-month period. If the records for that period show that the employee earned \$15,000 or more, the employer shall adjust the rate of withholding beginning the next full pay period following the determination. The employer shall adjust the rate to the minimum rate prescribed by A.R.S. § 43-401, unless the employee elects a higher prescribed rate of withholding for the employee's annual compensation. The employer shall apply this rate of withholding through the end of the calendar year, unless the employee elects a higher prescribed rate of withholding for the employee's annual compensation. At the end of that calendar year and at the end of each succeeding calendar year, the employer shall redetermine the employee's total annual compensation. If the employee's annual compensation for the preceding year changes the employee's rate of withholding, the rate change shall begin the next full pay period following the determination; or
    - c. If the employee receives a salary increase that makes the employee's annualized compensation \$15,000 or more, the employer shall adjust the employee's rate of withholding to the minimum rate prescribed by A.R.S. § 43-401, beginning the next full pay period following the receipt of the increase by the employee.
  2. An employee who has elected a withholding rate higher than the minimum prescribed withholding rate may later elect to reduce the rate to a lower prescribed rate for the employee's annual compensation.
- Historical Note**  
Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2).
- R15-2B-102. Employment Excluded from Withholding**
- A. An employer shall not withhold Arizona income taxes from:
1. Wages paid to an employee of a common carrier when that employee is a nonresident of Arizona and regularly performs services inside and outside the state.
  2. Wages paid for domestic service in a private home. Generally, service of a household nature in or about a private home includes services rendered by cooks, maids, butlers, valets, housekeepers, gardeners, caretakers, companions, child-care providers (baby-sitter, governess, nanny), grooms, and chauffeurs of automobiles for family use. If the home is used primarily for the purpose of supplying board or lodging to the public as a business enterprise, it ceases to be a private home. The compensation paid for the services listed above is not exempt from withholding if performed in or about rooming or lodging houses, boarding houses, clubs, hotels, motels, bed-and-breakfasts, hospitals, charitable institutions, or commercial offices or establishments. Services that are not ordinarily part of household duties and that involve the use of skilled or specialized training are not domestic services. Compensation paid for services performed as a private secretary even though performed in the employer's home is not exempt from withholding.
  3. Wages paid by employers for casual labor not in the course of the employer's trade or business. "Casual labor not in the course of the employer's trade or business" means services that do not promote or advance the trade or business of the employer. The term does not include services performed for a corporation. For example, casual labor includes the labor performed by a carpenter employed by an individual to do incidental work on the individual's house. If that individual employed a carpenter to do incidental work in a factory operated by the individual, the work would be in the course of the individual's trade or business. The compensation paid for that labor is not exempt from withholding. Seasonal employment of sales clerks during any peak sales periods of a business is subject to withholding.
  4. Wages paid for part-time or seasonal agricultural labor. Wages paid to part-time or seasonal employees whose services to the employer consist solely of labor in connection with the planting, cultivating, harvesting, or field packing of seasonal agricultural crops are not subject to withholding. Wages paid to employees whose principal duties are to operate any mechanically driven device in these agricultural operations are subject to withholding. An employee is part-time or seasonal agricultural employee if:
    - a. The employer hires the employee to help in 1 of the steps in the development of a seasonal agricultural crop;
    - b. The employee does not perform any other services for the same employer; and
    - c. The employee understands, at the date of employment, that the employee's job will end on or before the completion of that step.
- B. Wages paid to a nonresident of Arizona engaged in any phase of motion picture production are not subject to withholding if the employee qualifies for a credit for taxes paid to the

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employee's state of residency or domicile. Before payment of the wages is due, the employer shall apply for an exemption by having the employee complete the withholding exemption certificate prescribed by the Department. The employer shall submit the completed certificate for each employee with the next quarterly return required by R15-2B-101(E).

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Correction to manifest typographical error, under subsection R15-2B-102(A)(2), "used" corrected to "use" as adopted at 5 A.A.R. 3766 (Supp. 08-4).

**ARTICLE 2. WITHHOLDING AS PAYMENT OF TAX FOR EMPLOYEE****R15-2B-201. Refund of Excess Withholding**

If a refund for an overpayment of income tax withheld is payable to a deceased taxpayer, the surviving spouse or other claimant shall attach the form prescribed by the Department to the deceased taxpayer's income tax return to establish the claimant's right to the refund.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2).

**SUBCHAPTER C. INDIVIDUALS****ARTICLE 1. PAYMENT AND COLLECTION OF TAX****R15-2C-101. Payment of Estimated Income Tax by Individuals**

- A.** Individual taxpayers subject to Arizona income tax who reasonably expect to have Arizona gross income of more than \$75,000.00 in the current tax year or had Arizona gross income of more than \$75,000.00 in the preceding tax year are subject to the provisions in this rule. For tax years ending on or before 12/31/92, the requirement to make estimated payments is based on Arizona gross income of more than \$100,000.00.
1. The requirement to make estimated tax payments is based on the Arizona gross income of each individual taxpayer.
  2. All taxpayers, whether classified as a nonresident or a resident, shall be subject to the estimated payment requirements.
  3. Nonresidents shall use the definition of Arizona gross income pursuant to A.R.S. § 43-1091 for purposes of determining if estimated tax payments are required.
  4. Individual taxpayers, moving into or out of Arizona during a tax year resulting in a change of residency status, shall use the definition of Arizona gross income in A.R.S. § 43-1001, allocated pursuant to A.R.S. § 43-1097, for purposes of determining if estimated tax payments are required for the portion of the year in which they are Arizona residents.
- B.** In projecting current Arizona gross income, the taxpayer shall use ordinary business care and prudence in determining if Arizona estimated tax payments are required.
1. The reasonableness of the projection of Arizona gross income shall depend on the facts of each case and the burden of proof rests on the taxpayer to substantiate that penalty and interest shall not be imposed for non-payment, late payment, or underpayment of estimated tax.
  2. The taxpayer may request a waiver from the requirement to make estimated payments for 1 or more payment periods in the current year by attaching a written statement to the individual's income tax return for that year.
    - a. The waiver is available only if the individual taxpayer did not have Arizona gross income over \$75,000.00 in the preceding tax year and cannot rea-

sonably project that Arizona gross income for the current year exceeds \$75,000.00. (\$100,000.00 for tax years ending on or before 12/31/92).

- b. The statement shall include the reason why Arizona gross income could not have reasonably been projected for 1 or more payment periods during the current tax year.
- C.** Other than as provided in subsection (D), Arizona estimated tax payments shall be paid in 4 equal installments on or before due dates established by the Internal Revenue Code.
1. For purposes of this rule, Arizona withholding shall be considered an estimated payment which is paid equally on each due date, unless the taxpayer establishes otherwise.
  2. The sum of Arizona estimated tax payments, when combined with the taxpayer's Arizona withholding for the current year, shall equal the lesser of:
    - a. At least 90% of the Arizona tax liability for the current year; or
    - b. 100% of the Arizona tax liability, as shown on the personal income tax return for the preceding taxable year. This clause shall apply only if the individual is required to file and does file an Arizona personal income tax return for the preceding taxable year pursuant to the provisions under A.R.S. § 43-301.
- D.** Those taxpayers qualifying under the following circumstances may make Arizona estimated tax payments in other than 4 equal installments.
1. There shall be no requirement to make the 4th estimated tax payment if the taxpayer files an Arizona tax return, covering a calendar year, on or before January 31 of the year following the tax year or, for a fiscal year taxpayer, on or before the last day of the month following the close of the fiscal year, and the taxpayer pays in full the amount stated on the return as payable.
  2. An individual who reports as a farmer or fisherman on the federal income tax return is only required to make 1 installment for a taxable year. The due date for such installment shall be January 15th of the year following a calendar tax year or the 15th day of the 1st month after the end of a fiscal year. There shall be no requirement to make this payment if, on or before March 1 of the year following a calendar tax year or on or before the 1st day of the 3rd month after the end of a fiscal year, the taxpayer files an Arizona income tax return for the tax year and pays in full the amount stated on the return as payable.
  3. An individual who elects to be treated as a nonresident alien on the federal income tax return may make 3 estimated payments.
    - a. Payment shall be made on or before due dates established by the Internal Revenue Code.
    - b. The amount of the 1st required payment shall be 50% of the total estimated tax liability for the tax year. The 2nd and 3rd payments shall each be 25% of the total estimated tax liability.
  4. A taxpayer may be able to reduce the amount of 1 or more required installments if income is not received evenly throughout the tax year. A taxpayer who uses the annualization method for determining the amount of the required installments on the federal individual income tax return may also use the annualization method on the Arizona personal income tax return. A taxpayer electing to use the annualization method for Arizona purposes shall use the method as delineated on the Arizona return and in the accompanying instructions. If the taxpayer elects to

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use the annualization method for 1 due date in a tax year, the taxpayer shall use that method for all due dates for that tax year.

5. A taxpayer, due to the provisions in subsection (B) of this rule, may not be required to make 4 equal payments of estimated tax. Such a taxpayer shall be liable for the payment of estimated tax beginning no later than the 1st due date after the taxpayer establishes that the Arizona gross income requirement is applicable.
  - a. If the taxpayer is 1st liable for the payment of estimated tax beginning in the 2nd payment period, such payment shall equal 50% of the total liability for the current tax year. If the liability occurs in the 3rd payment period, such payment shall equal 75% of the total liability for the current tax year. Subsequent payments shall equal 25% each.
  - b. The total of these payments shall equal the amount pursuant to subsection (C) of this rule.
- E. Effective 7/17/93, a penalty shall be assessed on the underpayment amount for each payment period pursuant to A.R.S. § 42-136(O). The underpayment amount is the difference between the estimated payment required to be made and the estimated payment actually paid. Penalty and interest shall be assessed for each underpayment amount for the number of days that amount remains unpaid.
  1. For the purpose of computing penalty and interest, a payment shall be applied to the quarter designated by the taxpayer regardless of any outstanding underpayment balance on an earlier installment. Any overpayment of the quarterly amount shall be applied to outstanding estimated payment balances, beginning with the oldest outstanding balance, unless otherwise designated by the taxpayer.
  2. Penalty and interest, on late payment, non-payment or underpayment amounts of estimated tax, shall stop accruing at the earlier of the date of payment of the underpaid amount or of the original due date of the income tax return for the tax year in which the estimated payment is required.
- F. Payments of estimated tax shall be made by check, cashier's check, certified check, money order, U.S. currency, or by the application of an overpayment from a prior tax return.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2).

**ARTICLE 2. ADDITIONS TO ARIZONA GROSS INCOME****R15-2C-201. Additions to and Subtractions from Arizona Gross Income**

The starting point in calculating Arizona adjusted gross income is federal adjusted gross income calculated under the Internal Revenue Code. The taxpayer shall make additions to or subtractions from Arizona gross income under A.R.S. §§ 43-1021 and 43-1022 to calculate Arizona adjusted gross income.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2). Section heading corrected at request of the Department, Office File No. M12-227, filed June 6, 2012 (Supp. 12-1).

**R15-2C-202. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(J) at 21 A.A.R. 465, effective October 28, 2014 (Supp. 15-1).

**R15-2C-203. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section expired under A.R.S. § 41-1056(E) at 10 A.A.R. 5220, effective October 31, 2004 (Supp. 04-4).

**R15-2C-204. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(J) at 21 A.A.R. 465, effective October 28, 2014 (Supp. 15-1).

**R15-2C-205. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(E) at 10 A.A.R. 5220, effective October 31, 2004 (Supp. 04-4).

**R15-2C-206. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(J) at 23 A.A.R. 1044, effective April 11, 2017 (Supp. 17-2).

**R15-2C-207. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(J) at 23 A.A.R. 1044, effective April 11, 2017 (Supp. 17-2).

**R15-2C-208. Repealed****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2).

**R15-2C-209. Repealed****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2).

**R15-2C-210. Expired**

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**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(J) at 23 A.A.R. 1044, effective April 11, 2017 (Supp. 17-2).

**R15-2C-211. Amounts Already Deducted**

A taxpayer shall not deduct the same expense twice in computing Arizona taxable income.

1. If a taxpayer includes an expense item in determining the current year's federal adjusted gross income or federal taxable income for the taxable year, the taxpayer shall not include that expense item a second time in determining Arizona taxable income for the same taxable year.
2. If a taxpayer deducted an expense item in an Arizona individual income tax return and deducts the expense item again in a subsequent return in computing either federal adjusted gross income or Arizona taxable income, the taxpayer shall add back the expense item to determine Arizona adjusted gross income.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2).

**ARTICLE 3. SUBTRACTIONS FROM ARIZONA GROSS INCOME****R15-2C-301. Retirement Benefits, Annuities, Pensions**

An individual is allowed to subtract up to \$2,500.00 per taxable year from Arizona gross income for income received from sources as delineated in A.R.S. § 43-1022(2)(a) and (b).

1. An individual receiving income from more than 1 such source shall only subtract a total of \$2,500.00 for all such income received during the taxable year.
2. The amount allowed as a subtraction is calculated per individual. The allowable subtraction for a married-filing- joint return when both spouses receive income from 1 or more such sources is determined based on the actual amount of income which is received by each individual but not to exceed \$2,500.00 per individual.
3. The aggregate subtraction allowed for purposes of individuals filing married-filing-separate returns shall not exceed the limitations as delineated in this rule.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2).

**R15-2C-302. Repealed****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2).

**R15-2C-303. Repealed****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2).

**R15-2C-304. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(J) at 23 A.A.R. 1044, effective April 11, 2017 (Supp. 17-2).

**R15-2C-305. Social Security and Railroad Retirement Benefits**

- A. Under A.R.S. § 43-1022, a taxpayer shall subtract from Arizona gross income the amount of Social Security and Tier 1 Railroad Retirement benefits taxable under Internal Revenue Code § 86 that is included in federal adjusted gross income.
- B. In accordance with 45 U.S.C. 231(m), a taxpayer shall subtract from Arizona gross income the amount of benefits provided under the Railroad Retirement Act of 1974 that is included in federal adjusted gross income and not subtracted under subsection (A).

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2).

**R15-2C-306. Income Previously Recognized**

A taxpayer shall not include the same income item twice in computing Arizona taxable income.

1. If a taxpayer includes an income item in determining federal adjusted gross income or federal taxable income for a taxable year, the taxpayer shall not include that income a second time in determining Arizona taxable income for the same taxable year.
2. If a taxpayer included an income item in an Arizona income tax return and includes the same income item again in the computation of either federal adjusted gross income or Arizona taxable income in a subsequent return, the taxpayer shall subtract the income item included for the second time in the subsequent return to determine Arizona adjusted gross income.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2).

**R15-2C-307. Exemption for Blind Persons**

- A. If both a husband and wife are blind or partially blind and they elect to file a joint return, they may claim a total of 2 exemptions under A.R.S. § 43-1023(A). For purposes of this Section, "partially blind" means an individual whose vision is no better than 20/200 in the better eye with correcting lenses or who has a field of vision of 20 degrees or less.
- B. If a taxpayer or the taxpayer's spouse dies during the taxable year and the decedent was blind or partially blind on the date of death, the decedent is eligible for the exemption under A.R.S. § 43-1023(A).
- C. If a taxpayer or the taxpayer's spouse for whom the taxpayer is claiming an exemption under A.R.S. § 43-1023(A)(2) is partially blind on the last day of the taxable year, the taxpayer shall obtain a statement from a licensed optometrist or a physician skilled in diseases of the eye. The taxpayer shall keep the statement for the taxpayer's records. The statement shall certify that the person claiming the exemption or on whose behalf the exemption is claimed:
  1. Has vision no better than 20/200 in the better eye with correcting lenses, or

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2. Has a field of vision of 20 degrees or less.
- D.** If the taxpayer's vision is not likely to improve beyond the condition listed in subsection (C), the taxpayer may obtain a statement certified by a licensed optometrist or a physician skilled in diseases of the eye to this effect instead of the annual statement required under subsection (C). The taxpayer shall keep the statement for the taxpayer's records.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2).

**R15-2C-308. Repealed****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2).

**R15-2C-309. Repealed****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 2889, effective June 13, 2001 (Supp. 01-2).

**ARTICLE 4. EXPIRED****R15-2C-401. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section expired under A.R.S. § 41-1056(J) at 23 A.A.R. 3427, effective November 14, 2017 (Supp. 17-4).

**ARTICLE 5. CREDITS****R15-2C-501. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 11 A.A.R. 2441, effective August 6, 2005 (Supp. 05-2). Section expired under A.R.S. § 41-1056(J) at 23 A.A.R. 3427, effective November 14, 2017 (Supp. 17-4).

**R15-2C-502. Property Tax Credit**

- A.** The following definitions apply for purposes of this Section:
1. "Adjusted gross income" means the sum of all income not specifically excluded in A.R.S. § 43-1072 whether or not subject to Arizona income tax, except those items that A.R.S. § 43-1072 specifically includes in income.
  2. "Member of the household" means a claimant and any other person residing with the claimant in the homestead during the taxable year, whether or not the person is related to, or a dependent of, the claimant.
- B.** Household income determines eligibility for, and amount of, a property tax credit. A claimant shall arrive at household income by combining the separately determined income of each member of the household.
- C.** For purposes of arriving at adjusted gross income for each member of the household, all of the following apply:
1. Income from business or farm activities is net income or loss from business or farm activities, determined in the same manner as income or loss reportable for federal income tax purposes;

2. Income from rents or royalties is gross income from rent or royalty activities less deductions, determined in the same manner as income or loss reportable for federal income tax purposes; and
3. Income from capital gains is the net capital gains and losses for each member of the household. Net losses are limited to \$1,500 for each household member.

- D.** There shall be only one claimant under this Section per household per year.
- E.** If a claimant files a property tax credit claim, the claimant shall attach the following documents to the claim, as applicable:
1. If the claimant owns a home, a copy of the property tax statement indicating the amount of taxes paid for the tax year, the property tax bill stamped "paid," or copies of cancelled checks for taxes paid and a copy of the property tax bill;
  2. If the claimant is a resident of a nursing home or a renter, a copy of the completed Arizona Form 201;
  3. If the claimant owns a mobile home and pays rent on the mobile home space, a copy of the completed Arizona Form 201 and a copy of the property tax statement indicating the amount of taxes paid on the mobile home for the tax year, the property tax bill stamped "paid," or copies of cancelled checks for taxes paid and a copy of the property tax bill;
  4. If the claimant is a shareholder of a cooperative corporation or a condominium association, a statement of the claimant's pro rata share of the assessed property taxes for the tax year and a copy of either:
    - a. The mortgage company statement of the corporation or association indicating the total amount of property taxes paid for the tax year; or
    - b. A copy of the tax bill of the corporation or association stamped "paid;" or
  5. If the claimant received Title 16 Supplemental Security Income payments, a statement from the Social Security Administration indicating the amount of payments for the current tax year.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 11 A.A.R. 2441, effective August 6, 2005 (Supp. 05-2).

**R15-2C-503. Renewable Energy Production Tax Credit**

- A.** For each year for which an owner of a qualified energy generator plans to claim a renewable energy production tax credit, the owner shall file one of the following applications:
1. An initial application in accordance with subsection (B) for:
    - a. Energy produced in 2011 for which an owner of a qualified energy generator plans to claim a credit on the 2011 tax return filed in 2012, and
    - b. Energy produced after 2011 for which an owner of a qualified energy generator did not have a place on the prior year's Credit Authorization List for the renewable energy production tax credit under A.R.S. § 43-1083.02(G).
  2. A renewal application in accordance with subsection (C) for an owner of a qualified energy generator that did have a place on the prior year's Credit Authorization List for the renewable energy production tax credit under A.R.S. § 43-1083.02(G).
- B.** An initial application shall include the following information:
1. The information required by A.R.S. § 43-1083.02(F).

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2. The business structure of the applicant.
  3. If the credit will be passed through to shareholders or partners, a list including the name, taxpayer identification number, and ownership percentage of each shareholder or partner. If the tax year end is other than December 31, and the shareholders or partners, or ownership percentages change, the applicant shall update the list for the tax year end by the due date of the applicant's Arizona return, including extensions.
  4. The applicant's tax year end.
  5. The name of the contact person, his or her title, telephone number and fax number.
  6. If the applicant has any affiliates or subsidiaries, a list of the affiliates and subsidiaries, including the name, address, taxpayer identification number, and percentage of ownership. The applicant may substitute a federal Form 851, or other federal form with the required information, for this list.
  7. Self-assigned name or identification number of the qualified energy generator.
  8. Assessor's parcel number or numbers of the land on which the qualified energy generator is located or, if not available, the legal description.
  9. The centrally valued property tax identification number for the personal property on the land.
  10. The type of qualified energy resource used to generate electricity. If the qualified energy resource is biomass, the type of biomass.
  11. The generating capacity of the qualified energy generator.
  12. The number of kilowatt-hours of electricity produced for the calendar year.
  13. Printouts for the calendar year from the production meter located at the qualified energy generator that:
    - a. Measures the output from the qualified energy generator, and
    - b. Provides the output information to a grid-tied energy management system.
  14. A signed affidavit in which the applicant states that the information contained in the application is true and correct under penalty of perjury and that the qualified energy generator for which the applicant is claiming the credit did not produce electricity prior to 2011.
- C.** A renewal application shall include the information required by subsections (B)(1) through (6) and (B)(12) through (14). In addition, where the information required by subsections (B)(7) through (11) has changed since the prior year's application, the applicant shall provide the new information on the renewal application.
- D.** Copies of invoices or receipts from the electricity purchaser, verifying kilowatt-hours sold, shall be made available to the Department upon request.
- E.** If an owner owns more than one qualified energy generator, the owner shall submit a separate application for each qualified energy generator.
- F.** Each application shall be mailed separately in its own envelope by United States Postal Service Express Mail to: Arizona Department of Revenue, Renewable Energy Production Tax Credit Program, P.O. Box 25248, Phoenix, AZ 85002. Notwithstanding A.R.S. § 1-218(E)(1), the Department shall not accept applications through any other delivery method for purposes of this Section and A.R.S. § 43-1083.02.
- G.** For each initial application received in accordance with subsections (B) and (F), the Department shall assign a priority placement number that reflects the date and time on the Express Mail label, without regard to which time zone mailing took place.
- H.** If the Department receives more than one initial application in accordance with subsection (G) that it would assign the same priority placement number based on date and time on the Express Mail label, then the order received shall be determined by a random drawing of affected applications.
- I.** If the Department denies an application or approves a smaller amount of credit than the amount requested on the application, the Department's decision is an appealable agency action as defined in A.R.S. § 41-1092(3) and the applicant may appeal the decision under subsection (J) and A.R.S. Title 41, Chapter 6, Article 10.
- J.** To appeal a decision made under subsection (I), the applicant shall file a petition, in accordance with A.A.C. R15-10-105(B) and A.R.S. § 41-1092.03(B), within 30 days of receipt of the Department's decision.
- K.** For each decision made under subsection (I), the Department shall reserve the portion of the cap that the applicant would have been entitled to if the Department had approved the application in full, up to the generator cap limit, until the applicant waives or exhausts the appeal rights in subsection (J).
- L.** For the cap reserved under subsection (K), once the applicant waives or exhausts the appeal rights in subsection (J), the Department shall certify the cap to the next eligible applicant on the Credit Authorization List, until the full cap is certified.
- M.** In addition to the definitions provided in A.R.S. § 43-1083.02, unless the context provides otherwise, the following definitions apply to this Section and to implementation of A.R.S. § 43-1083.02:
1. "Cap" means the annual tax credit limit of \$20 million in A.R.S. §§ 43-1164.03(G) and 43-1083.02(G).
  2. "Generator cap" means the annual tax credit limit of \$2 million per qualified energy generator in A.R.S. §§ 43-1164.03(G) and 43-1083.02(G).

**Historical Note**

New Section made by final rulemaking at 18 A.A.R. 600, effective April 8, 2012 (Supp. 12-1).

**ARTICLE 6. NONRESIDENTS****R15-2C-601. Income of a Non-resident**

- A.** Gross income
1. Non-residents of the state are required to include in the Arizona gross income only that portion of their federal adjusted gross income which is relevant in determining the amount of net income derived from sources within this state.
  2. The gross income of a non-resident of the state who is a member of a partnership, pool, or syndicate includes the member's distributive share of the net income of the partnership, pool, or syndicate in addition to any other income from sources within this state to the extent that the member's distributive share is derived from sources within this state.
  3. A non-resident beneficiary of an estate or trust must include in gross income, income from the estate or trust which is deductible by the estate or trust and which is derived from sources within this state.
- B.** Income from sources within this state includes:
1. Income from real or tangible personal property located in this state.
  2. Income from a business, trade, or profession carried on within this state.
  3. Income from stocks, bonds, notes, bank deposits, and other intangible personal property having a business or taxable situs in this state.
  4. Rentals or royalties for the use of or for the privilege of using in this state patents, copyrights, secret processes

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and formulas, good will, trade marks, trade brands, franchises, and other like property having a taxable or business situs in this state.

- C. Income from real or tangible personal property. Income of a non-resident from sources within this state includes rents from real or tangible personal property in this state, gains realized from the sale or transfer of such property regardless of where the sale or transfer is consummated, and any other type of income derived from the ownership, control, or management of real and tangible personal property located in this state irrespective of whether a trade, business, or profession is carried on within this state.
- D. Income from a business, trade, or profession
1. If a non-resident's business, trade, or profession is carried on entirely without the state, no portion of the gross income therefrom should be reported. If, on the other hand, the non-resident's business, trade, or profession is conducted wholly within the state, the entire gross income therefrom must be reported.
  2. If the non-resident's business, trade, or profession is conducted partly within and partly without the state, and the part within the state is so separate and distinct from and unconnected with the part without the state that the net income from the part within the state can be determined without regard to the part without the state, only the gross income from the business, trade, or profession within the state should be reported. Thus, if a non-resident operates hotels both in this state and elsewhere for example, he should report only the gross income from the hotels in this state.
  3. Unitary business
    - a. The gross income from the entire business, trade, or profession must be reported if a business, trade, or profession carried on within this state is an integral part of a unitary business carried on both within and without the state, or if the part within the state is so connected with the part without the state that the net income from the part within the state cannot be accurately determined independently of the part without the state. Thus, if a non-resident engaged in the business of manufacturing and selling goods for example maintains a factory outside this state and sales offices in this state or vice versa, he must report the gross income from the entire business.
    - b. The net income from sources within this state subject to the tax imposed by the law should be determined by subtracting from gross income the deductions allowed by the law and by apportioning the remaining net income to sources within and without the state in the manner described in subsection (D)(4).
  4. Every non-resident who conducts a business, trade, or profession within and without the state of the character described in subsection (D)(3) should accompany his return with a schedule of statement showing the following:
    - a. The total value of real and tangible personal property
      - i. Within the state
      - ii. Within and without the state
    - b. The total wages, salaries, and other compensation paid for personal services performed
      - i. Within the state
      - ii. Within and without the state
    - c. The total gross sales or charges for personal services performed
      - i. Within the state
      - ii. Within and without the state
    - d. "Total gross sales within the state" shall include all sales relating to Arizona business even though the sales may be subject to confirmation at an out-of-state office and even though title may actually pass at some point outside of this state. Such sales shall include all sales where the product sold is to be used in Arizona. The value of real and tangible personal property generally should be determined by taking the average of the value of such property at the beginning of the taxable year and at the end of the taxable year. Only property used in the business, trade, or profession should be included.
    - e. Generally, the amount of net income from a business, trade, or profession of the character described in (D)(3) above which is derived from sources within the state may be determined by taking that portion of the total net income equal to the average percentage of subsections (D)(4)(a)(i), (b)(i) and (c)(i) to subsections (D)(4)(a)(ii), (b)(ii) and (c)(ii) respectively as shown by the schedule or statement accompanying the return.
    - f. The use of the foregoing factors shall not be exclusive, and, if the Department believes that the net income from sources within this state cannot properly be determined by the above method, it may require additional factors to be used in making the allocation such as purchases or expenses of manufacture. If a non-resident taxpayer believes that the net income from sources within this state cannot properly be determined by the above method, he may employ another method after 1st receiving the consent of the Department.
    - g. Wages, salaries and other compensation for personal services performed in this state
      - i. The gross income from commissions earned by a non-resident traveling salesman, agent, or other employee for services performed or sales made whose compensation depends directly on the volume of business transacted by him includes that proportion of the compensation received which the volume of business transacted by that employee with this state bears to the total volume of business transacted by him within and without the state.
      - ii. Non-resident actors, singers, performers, entertainers, wrestlers, boxers, etc., must include in gross income as income from sources within this state the gross amount received for performances in this state.
      - iii. Non-resident attorneys, physicians, accountants, engineers, etc., even though not regularly engaged in carrying on their professions in this state, must include in gross income as income from sources within this state the entire amount of fees or compensation for services performed in this state on behalf of their clients.
      - iv. If non-resident employees including officers of corporations but excluding employees mentioned in subsection (D)(4)(g)(i) above are employed continuously in this state for a definite portion of any taxable year, the gross income of the employees from sources within this state includes the total compensation for the period employed in this state.

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- v. If non-resident employees are employed in this state at intervals throughout the year, as would be the case if employed in operating trains, boats, planes, motor buses, truck, etc., between this state and other states, and foreign countries, and are paid on a daily, weekly, or monthly basis; the gross income from sources within this state includes that portion of the total compensation for personal services which the total amount of working time within this state bears to the total amount of working time both within and without the state. If the employees are paid on a mileage basis, the gross income from sources within this state includes that portion of the total compensation for personal services which the number of miles traversed in this state bears to the total number of miles traversed within and without the state. If the employees are paid on some other basis, the total compensation for personal services must be apportioned between this state and other states and foreign countries in such a manner as to allocate to this state that portion of the total compensation which is reasonably attributable to personal services performed in this state.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Correction to manifest typographical error, under subsection R15-2C-601(D)(4)(d), deleted "0" between "sales" and "within" (Supp. 08-4).

**R15-2C-602. Income from Intangible Personal Property**

- A. Income of non-residents from rentals or royalties for the use of or for the privilege of using patents, copyrights, secret processes and formulas, goodwill, trademarks, trade brands, franchises, and other like property in this state is taxable if such intangible property has a business situs in this state within the meaning of subsection (C) below.
- B. Income of non-residents from intangible personal property such as shares of stock in corporations, bonds, notes, bank deposits and other indebtedness is taxable as income from sources within this state only if the property has a situs for taxation in this state. However, if a non-resident buys or sells stocks, bonds, and other such property in this state or places orders with brokers in this state to buy or sell such property regularly, systematically, and continuously as to constitute doing business in this state, the profit or gain derived from such activity is taxable as income from a business carried on here irrespective of the situs of the property for taxation.
- C. Business situs of intangible personal property
1. Intangible personal property has a business situs in this state if it is employed as capital in this state or possession and control of the property has been localized in connection with a business, trade, or profession in this state so that the substantial use of the property and the value attached to it become an asset of the business, trade, or profession in this state.  
Example: If a non-resident pledges stocks, bonds, or other intangible personal property in this state as security for the payment of indebtedness, taxes, etc., incurred in connection with a business in this state, the property has a business situs here. Again, if a non-resident maintains a branch office here and a bank account on which the agent in charge of the branch office may draw for the payment of expenses in connection with the activities in this state, the bank account has a business situs here.
  2. If intangible personal property of a non-resident has acquired a business situs here, the entire income from the sale thereof is income from sources within this state and is taxable to the non-resident regardless of where the sale is consummated.
- D. Transactions in this state extending over a period of less than 6 months shall not constitute doing business within this state.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2).

**R15-2C-603. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 11 A.A.R. 2441, effective August 6, 2005 (Supp. 05-2). Section expired under A.R.S. § 41-1056(J) at 23 A.A.R. 3427, effective November 14, 2017 (Supp. 17-4).

**R15-2C-604. Nonresident Members of Professional Athletic Teams**

- A. The Arizona source income of a nonresident individual who is a member of a professional athletic team includes that portion of the individual's total compensation for services rendered as a member of the professional athletic team during a taxable year which the number of duty days spent within Arizona rendering services for the team in any manner during the taxable year bears to the total number of duty days spent both within and without Arizona during the taxable year. Duty days shall be included in the taxable year in which they occur.
- B. Travel days that do not involve a game, practice, team meeting, promotional caravan or other similar team event in Arizona are not considered duty days spent in Arizona. However, these travel days shall be considered in the total duty days spent both within and without Arizona.
- C. For purposes of this Section:
1. The term "professional athletic team" includes, but is not limited to, any professional baseball, basketball, football, soccer, or hockey team.
  2. The term "member of a professional athletic team" includes employees who are active players, players on the disabled list, and any other persons required to travel and who travel with and perform services for a professional athletic team on a regular basis. This includes, but is not limited to, coaches, managers, trainers, and broadcasters.
  3. The term "duty days" includes:
    - a. All days during a taxable year from the beginning of a professional athletic team's 1st regular game of the season through the last game in which the team competes or is scheduled to compete except:
      - i. If a person joins a team during the period described in subsection (C)(3)(a), the person's duty days shall begin on the day the person joins the team. Conversely, if a person leaves a team during the period described in subsection (C)(3)(a), the person's duty days shall end on the day the person leaves the team. If a person switches teams during the taxable year, a separate duty day calculation shall be made for the period the person is with each team.
      - ii. Days for which a member of a professional athletic team is not compensated and is not rendering services for the team in any manner,

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including days when the member is suspended without pay and prohibited from performing any services for the team, shall not be treated as duty days.

- b. Days that do not fall within the period described in subsection (C)(3)(a) on which a member of a professional athletic team renders a service for a team, except practice days and exhibition games before the 1st regular game of the season (for example, participation in instructional leagues, the "Pro Bowl," or promotional events). Rendering a service includes conducting training after the 1st regular game of the season and rehabilitation activities, but only if conducted at the team facilities.
- c. Game days (except exhibition games, practice days, and days spent at team meetings after the 1st regular game of the season), promotional events, and days served with the team through all post-season games in which the team competes or is scheduled to compete.
- d. Days on the disability list. However, days for which a member of a professional athletic team is on the disabled list and does not conduct rehabilitation activities at team facilities in Arizona and is not otherwise rendering services for the team in Arizona, shall not be considered duty days spent in Arizona.
- e. The provisions of this subsection can be illustrated by the following examples:

Example 1: Player A, a member of a professional athletic team, is a nonresident of Arizona. Player A's contract for the team requires A to report to the team's training camp and to participate in all exhibition, regular season, and playoff games. Player A has a contract that covers seasons that occur during year1/year2 and year2/year3. Player A's contract provides that A receives \$500,000 for the year1/year2 season and \$600,000 for the year2/year3 season. Assuming player A receives \$550,000 from the contract during taxable year 2 (\$250,000 for one-half the year1/year2 season and \$300,000 for one-half the year2/year3 season), the portion of the compensation received by player A for taxable year 2, attributable to Arizona, is determined by multiplying the compensation player A receives during the taxable year (\$550,000) by a fraction, the numerator of which is the total number of duty days player A spends rendering services for the team in Arizona during taxable year 2 (attributable to both the year1/year2 season and the year2/year3 season) and the denominator of which is the total number of player A's duty days spent both within and without Arizona for the entire taxable year.

Example 2: Player B, a member of a professional athletic team, is a nonresident of Arizona. During the season, B is injured and is unable to render services for B's team. While B is undergoing medical treatment at a clinic, which is not a team facility, but is located in Arizona, B's team travels to Arizona for a game. The number of days B's team spends in Arizona for practice, games, meetings, and other activities, while B is present at the clinic, are not considered duty days spent in Arizona for B for that taxable year for purposes of this Section, but the days are included within total duty days spent both within and without Arizona.

Example 3: Player C, a member of a professional athletic team, is a nonresident of Arizona. During the season, C is injured and is unable to render services for C's team. C performs rehabilitation exercises at the team facilities in Arizona as well as at personal facilities in Arizona. The days C performs rehabilitation exercises in the team facilities are duty days spent in Arizona for C for that taxable year for purposes of this Section. However, days C spends at personal facilities in Arizona are not duty days spent in Arizona for C for the taxable year for purposes of this Section, but these days are included within total duty days spent both within and without Arizona.

Example 4: Player D, a member of a professional athletic team, is a nonresident of Arizona. During the season, D travels to Arizona to participate in the annual all-star game as a representative of D's team. The number of days D spends in Arizona for practice, the game, meetings, etc., are duty days spent in Arizona for D for the taxable year for purposes of this Section, as well as being included within total duty days spent both within and without Arizona.

Example 5: Assume the same facts as given in example 4, except that player D is not participating in the all-star game and is not rendering services for D's team in any manner. Instead D is travelling to and attending the game solely as a spectator. The number of days D spends in Arizona for the game are not duty days spent in Arizona for purposes of this Section. However, these days are included within total duty days spent both within and without Arizona.

4. The term "total compensation for services rendered as a member of a professional athletic team" means the total compensation received during the taxable year for services rendered from the beginning of the official pre-season training period through the last game in which the team competes or is scheduled to compete during the taxable year. Total compensation includes compensation received for services that are rendered during the taxable year on a date that does not fall within this period (for example, participation in instructional leagues, the "Pro Bowl," or promotional events).
5. For purposes of subsection (C)(4) total compensation includes, but is not limited to, salaries, wages, bonuses as described in subsection (C)(6), and any other type of compensation paid during the taxable year to a member of a professional athletic team for services performed during the year. Total compensation does not include strike benefits, severance pay, termination pay, contract or option year buy-out payments, expansion or relocation payments, or any other payments not related to services rendered for the team.
6. For purposes of this Section, "bonuses" included in "total compensation for services rendered as a member of a professional athletic team" subject to the allocation described in subsection (A) are:
  - a. Bonuses earned as a result of play (for example, performance bonuses) during the season, including bonuses paid for championship, playoff or "bowl" games played by the team, or for selection to all-star league or other honorary positions; and
  - b. Bonuses paid for signing a contract, unless all of the following conditions are met:
    - i. The payment of the signing bonus is not conditional upon the signee playing any games for

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- the team, or performing any subsequent services for the team, or even making the team;
- ii. The signing bonus is payable separately from the salary and any other compensation; and
  - iii. The signing bonus is nonrefundable.

- D. If it is demonstrated that the method provided under this Section does not fairly and equitably apportion compensation, the Department may allow the member of a professional athletic team to apportion and allocate compensation under an alternative method prescribed by the Department as long as the prescribed method results in a fair and equitable apportionment. A nonresident member of a professional athletic team may submit a proposal for an alternative method to apportion compensation if the nonresident member demonstrates that the method provided under this Section does not fairly and equitably apportion compensation. The proposed method must be fully explained in the nonresident member's Arizona nonresident personal income tax return.
- E. This Section is effective January 1, 2001.

**Historical Note**

New Section adopted by final rulemaking at 6 A.A.R. 4504, effective January 1, 2001 (Supp. 00-4).

**R15-2C-605. Nonresident Professional Athletes Who Are Not Team Members**

Individual nonresident professional athletes who are not members of a professional athletic team and whose income is event-oriented (for example, golfers, tennis players, boxers, and jockeys) shall allocate to Arizona income earned in Arizona and expenses allowable in arriving at federal adjusted gross income that are allocable to the Arizona source income.

Example: A professional golfer comes into Arizona to compete in a tournament. The golfer wins \$150,000 prize money based on success in the tournament. The golfer must report the \$150,000 to Arizona as Arizona income. The golfer may subtract expenses that are allowable in arriving at federal adjusted gross income and that are incurred in winning the \$150,000.

**Historical Note**

New Section adopted by final rulemaking at 6 A.A.R. 4504, effective November 7, 2000 (Supp. 00-4).

**ARTICLE 7. REPEALED****R15-2C-701. Repealed****Historical Note**

New Section made by exempt rulemaking at 7 A.A.R. 5715, effective November 29, 2001 (Supp. 01-4).  
Repealed by exempt rulemaking at 14 A.A.R. 4249, effective October 24, 2008 (Supp.08-4).

**R15-2C-702. Repealed****Historical Note**

New Section made by exempt rulemaking at 7 A.A.R. 5715, effective November 29, 2001 (Supp. 01-4).  
Repealed by exempt rulemaking at 14 A.A.R. 4249, effective October 24, 2008 (Supp.08-4).

**R15-2C-703. Repealed****Historical Note**

New Section made by exempt rulemaking at 7 A.A.R. 5715, effective November 29, 2001 (Supp. 01-4).  
Repealed by exempt rulemaking at 14 A.A.R. 4249, effective October 24, 2008 (Supp.08-4).

**R15-2C-704. Repealed****Historical Note**

New Section made by exempt rulemaking at 7 A.A.R. 5715, effective November 29, 2001 (Supp. 01-4).  
Repealed by exempt rulemaking at 14 A.A.R. 4249, effective October 24, 2008 (Supp.08-4).

**R15-2C-705. Repealed****Historical Note**

New Section made by exempt rulemaking at 7 A.A.R. 5715, effective November 29, 2001 (Supp. 01-4).  
Repealed by exempt rulemaking at 14 A.A.R. 4249, effective October 24, 2008 (Supp.08-4).

**SUBCHAPTER D. CORPORATIONS****ARTICLE 1. GENERAL****R15-2D-101. Definitions**

In addition to the definitions provided in A.R.S. §§ 43-104, 43-1101, and 43-1131, the following definitions apply to this Subchapter:

“Allocation” means the assignment of nonbusiness income to a particular state.

“Apportionment” means the division of business income between states by the use of a formula that contains apportionment factors.

“Arizona affiliated group” has the same meaning as prescribed in A.R.S. § 43-947(I).

“Business activity” means transactions and activity occurring in the regular course of a particular trade or business of a taxpayer.

“Combined return” means a corporate income tax return filed by a group of commonly owned corporations or businesses that constitute a unitary business, except that a combined return does not include either a foreign corporation that is not itself subject to a tax imposed by A.R.S. Title 43, or an insurance company that is exempt under A.R.S. § 43-1201.

“Consolidated return” means a corporate income tax return filed by an Arizona affiliated group under A.R.S. § 43-947.

“Employee” means any officer of a corporation; or any individual who, under the usual common-law rules applicable in determining the employer-employee relationship, has the status of an employee.

“Incidental to” means occurring in, or associated with, the normal, typical, or customary operations of the particular trade or business under consideration.

“Sales” means all gross receipts derived by a taxpayer from transactions and activity in the regular course of a trade or business and includes all gross receipts of the taxpayer not allocated under A.R.S. §§ 43-1134 through 43-1138.

“Unitary business” means an entity, group of entities, or components of an entity whose basic operations are substantially integrated and interdependent. The determination of whether an entity, group of entities, or components of an entity constitute a unitary business is made under R15-2D-401.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**ARTICLE 2. ADDITIONS TO ARIZONA GROSS INCOME****R15-2D-201. Repealed**

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**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 654, effective January 11, 2001 (Supp. 01-1).

**ARTICLE 3. SUBTRACTIONS FROM ARIZONA GROSS INCOME****R15-2D-301. Repealed****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 654, effective January 11, 2001 (Supp. 01-1).

**R15-2D-302. Corporate Net Operating Loss**

- A. The following definitions apply for purposes of this rule:
1. "Arizona adjusted income" means Arizona gross income of the taxpayer adjusted by the additions and subtractions as delineated in A.R.S. Title 43, Chapter 11, Article 3, except as provided in subsections (B) and (E) of this rule.
  2. "Arizona gross income" means federal taxable income for the taxable year.
  3. "Arizona net operating loss" means Arizona adjusted income which is a negative amount.
  4. "Taxable year" means taxable year as defined in statute.
- B. In calculating the Arizona net operating loss, the taxpayer shall not include:
1. An Arizona net operating loss carryforward,
  2. A net operating loss incurred by the taxpayer prior to doing business in Arizona; or,
  3. A net operating loss from a prior period if such loss was incurred by another corporation or group of corporations, prior to a merger, consolidation, or reorganization with the taxpayer, to the extent that Arizona adjusted income, earned after the merger, consolidation, or reorganization, is not attributable to the same entity which incurred the net operating loss.
    - a. A net operating loss, incurred by a separate corporation required to file a combined return, may be carried forward against that portion of the combined income which is related to the former separate corporation.
    - b. The portion of any combined net operating loss which is related to a separate corporation which is determined to not be includible in the unitary group may be carried forward against income of that corporation computed on a separate basis.
    - c. The portion of the combined income or loss which is related to the separate corporation shall be determined by computing a ratio based on the property, payroll, and sales factors of the separate corporation to the combined group's total property, payroll, and sales factors. This ratio shall be multiplied by the combined net income or loss subject to apportionment resulting in the net income or loss attributable to the separate corporation.
    - d. If the separate corporation operates both within and without Arizona, the Arizona portion of the separate corporation's income or loss shall be computed by multiplying the income attributable to that separate corporation by the corporation's ratio of Arizona property, payroll, and sales factors to the corporation's total property payroll and sales factors plus any income or loss allocable to Arizona.

- C. An Arizona net operating loss may be carried forward to each of the 5 succeeding taxable years of the taxpayer.
  1. An Arizona net operating loss, or any part thereof, which is not used during the 5 succeeding taxable years, shall be lost to the taxpayer.
  2. A taxpayer shall not carryback an Arizona net operating loss.
  3. Arizona net operating loss carryforwards shall be reduced by the amount of Arizona adjusted income incurred in any of the 5 succeeding taxable years.
  4. For purposes of determining the 5-year carryforward limitation, each Arizona net operating loss carryover shall be applied separately to Arizona adjusted income in the order in which the Arizona net operating loss was incurred.
  5. The aggregate of all Arizona net operating loss carryforwards meeting the 5-year carryforward limitation may be applied to any Arizona adjusted income incurred in a taxable year.
- D. A taxpayer claiming an Arizona net operating loss carryforward shall file a statement with the corporate income tax return for the taxable year in which the Arizona net operating loss carryforward is claimed. The statement shall include a detailed schedule showing the computation of the Arizona net operating loss carryforward.
- E. In calculating and applying an Arizona net operating loss, a multistate taxpayer shall be subject to:
  1. The provisions of A.R.S. Title 43, Chapter 11, Article 4;
  2. The statutory provisions regarding the Arizona net operating loss; and
  3. The provisions of this rule.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2).

**R15-2D-303. Domestic International Sales Corporation (DISC)**

- A. For purposes of this Section, "DISC" means a corporation that elects to be treated as a DISC under Internal Revenue Code § 992. The Arizona gross income of a DISC is the DISC's federal taxable income computed as if the DISC were a corporation that had not elected to be treated as a DISC. A DISC that meets the combined return filing requirements of R15-2D-401 shall file as part of a combined return unless:
1. The DISC is a foreign corporation that is not subject to Arizona income tax, or
  2. The corporation with which the DISC would otherwise be required to file a combined return is a member of an Arizona affiliated group as defined in A.R.S. § 43-947.
- B. For purposes of subsections (B) and (C), "deducted amount" means the amount of commissions, rentals, and other amounts paid or accrued to a DISC that is deducted in computing federal taxable income. A corporation that directly or indirectly owns or controls 50% or more of the voting stock of a DISC shall add to Arizona gross income the entire deducted amount, unless either subsection (B)(1) or (B)(2) applies.
1. If the corporation and the DISC file as part of the same Arizona combined return, no addition to Arizona gross income is required.
  2. If the DISC is taxable in Arizona and subsection (B)(1) does not apply, the addition to Arizona gross income is the deducted amount minus the quotient of the DISC's Arizona taxable income attributable to the deducted amount divided by the corporation's apportionment ratio computed under A.R.S. § 43-1139. In no case shall the addition to Arizona gross income be less than zero.

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Example: Corporation A owns 60% of the voting stock of a DISC. Corporation A has a 50% Arizona apportionment ratio and the DISC has a 10% Arizona apportionment ratio for the taxable year. Corporation A and the DISC are not required to file a combined return. Corporation A pays the DISC commissions of \$100,000 and deducts this amount on its federal income tax return. The DISC's Arizona taxable income attributable to the commission is \$10,000 (\$100,000 x 10%). Therefore, Corporation A's addition to Arizona gross income for the DISC commissions is \$80,000 (\$100,000 - (\$10,000 ÷ .50)).

- C. A corporation that deducts the interest charge required under Internal Revenue Code § 995(f) in determining federal taxable income for the taxable year shall add to Arizona gross income the amount of the interest charge deducted, unless subsection (C)(1), (C)(2), or (C)(3) applies.
1. If the corporation and a DISC file as part of the same Arizona combined return for the taxable year in which the corporation reports DISC income related to the interest charge, the corporation shall not add the interest charge to Arizona gross income.
  2. If the interest charge is attributable to the deducted amount that the corporation is required to add to Arizona gross income under subsection (B), the corporation shall not add the interest charge to Arizona gross income.
  3. If the interest charge is attributable to income of a DISC, the dividends of which are includible in the corporation's Arizona taxable income, the corporation shall not add the interest charge to Arizona gross income.
- Example: Corporation B owns 30% of a DISC that is not a foreign corporation. If the DISC dividends are includible in the Arizona taxable income of Corporation B, the interest charge is not added to Corporation B's Arizona gross income.
- D. The Department shall not adjust DISC transactions that comply with the inter-company pricing provisions of Internal Revenue Code § 994.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2896, effective June 13, 2001 (Supp. 01-2).

**R15-2D-304. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section expired under A.R.S. § 41-1056(E) at 10 A.A.R. 5220, effective October 31, 2004 (Supp. 04-4).

**R15-2D-305. Deferred Exploration Expenses**

- A. A taxpayer may elect to subtract a ratable portion of deferred exploration expenses added to income under A.R.S. § 43-1121. To make the election, a taxpayer shall attach a statement to the return for the applicable taxable year. The taxpayer shall disclose the following in the statement:
1. The amount of exploration expenses subject to the election; and
  2. The name, location, and nature of the ore or mineral deposit to which the election relates.
- B. A taxpayer may make an election under this Section at any time before the expiration of the period for filing a claim for credit or refund for the taxable year the election is to be effective. An election made under this Section is binding for the taxable year unless the taxpayer revokes the election to deduct exploration expenses under Internal Revenue Code § 617. If

the taxpayer revokes the federal election, the taxpayer shall file Arizona amended income tax returns to reflect the changes in federal taxable income and Arizona taxable income that result from the revocation of the election.

- C. Except as provided by subsection (D), a taxpayer shall compute the subtraction for a ratable portion of deferred exploration expenses by using the following formula:

$$A = B \times [C / (C + D)]$$

The above variables are defined as follows:

"A" is the deferred exploration expense subtraction allowable for the taxable year,

"B" is the total deferred exploration expenses reduced by the amount of deferred exploration expenses subtracted in prior taxable years,

"C" is the number of units of ore or mineral sold during the taxable year from the mine or deposit for which the deferred exploration expenses were incurred, and

"D" is the number of units of ore or mineral remaining at the end of the taxable year to be recovered and sold from the mine or deposit for which the deferred exploration expenses were incurred.

- D. A taxpayer that has elected to recapture and capitalize exploration expenses under Internal Revenue Code § 617(b)(1)(A) shall reduce the amount computed under subsection (C) by the amount of the federal depletion deducted for the current taxable year that is allocable to the amount of Arizona deferred exploration expenses. A taxpayer shall not reduce the amount computed under subsection (C) to less than zero. A taxpayer shall compute the amount of the federal depletion deduction allocable to the Arizona deferred exploration expenses by multiplying the federal depletion deduction that relates to the mineral interest for which the exploration expenses were incurred by the ratio of the Arizona deferred exploration expenses to the total federal adjusted basis of the mineral interest before any depletion deduction. A taxpayer shall make the computation under this subsection for each subsequent taxable year until the cumulative amount of subtractions for deferred exploration expenses for all taxable years equals the total amount of exploration expenses that were deferred. The amount of the federal depletion deduction allocable to the deferred exploration expenses shall be considered a subtraction of deferred exploration expenses for purposes of computing:

1. The variable B in the formula under subsection (C) for subsequent taxable years,
  2. The Arizona adjusted basis under subsection (I), and
  3. The cumulative amount of subtractions for deferred exploration expenses.
- E. A taxpayer that has elected to recapture and capitalize exploration expenses under Internal Revenue Code § 617(b)(1)(A) and not to defer up to \$75,000 of exploration expenses under A.R.S. § 43-1121, shall add to Arizona gross income the amount of federal depletion deducted for the current taxable year that is allocable to the exploration expenses not deferred. A taxpayer shall compute the amount of the federal depletion deduction allocable to the exploration expenses not deferred by multiplying the federal depletion deduction that relates to the mineral interest for which the exploration expenses were incurred by the ratio of the exploration expenses not deferred to the total federal adjusted basis of the mineral interest before any depletion deduction. A taxpayer shall make the adjustment under this subsection for each subsequent taxable year until the cumulative adjustments for all taxable years equal the total amount of exploration expenses not deferred.
- F. For purposes of computing the subtraction under subsection (C), a taxpayer shall estimate the number of recoverable units of ore or mineral according to an accepted industry method.

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The taxpayer shall revise the estimate if, before the close of the current taxable year, it is determined, as the result of further discovery, development, or operation, that the remaining units are materially greater or less than the units previously estimated. The revised estimate shall be used for the current taxable year and subsequent taxable years until it is determined that another revision is required.

- G. A taxpayer that leases an ore or mineral deposit and retains a royalty interest in the ore or mineral deposit may subtract the ratable portion of related deferred exploration expenses as computed under subsection (C).
- H. If a taxpayer abandons an ore or mineral interest, the taxpayer may subtract the related unamortized deferred exploration expenses in the taxable year of abandonment. For purposes of this subsection, a taxpayer has abandoned an ore or mineral interest during the taxable year if all of the following conditions exist:
  1. The taxpayer has discontinued all operations and activities with respect to the ore or mineral interest.
  2. The taxpayer has no intention of exploring, developing, or otherwise using the ore or mineral interest in the future.
  3. The taxpayer has no intention of selling, exchanging, or otherwise disposing of the ore or mineral interest.
- I. A taxpayer that sells property for which exploration expenses were incurred shall report the difference between the federal adjusted basis of the property and the Arizona adjusted basis of the property in the year of the sale. If the Arizona adjusted basis exceeds the federal adjusted basis, a subtraction from income for the excess is required. If the federal adjusted basis exceeds the Arizona adjusted basis, an addition to income for the excess is required. The Arizona adjusted basis of the property is computed as follows:
  1. The federal adjusted basis, plus
  2. The exploration expenses added to income under A.R.S. § 43-1121, minus
  3. The subtraction from income for the federal exploration expense recapture under A.R.S. § 43-1122, minus
  4. The total subtractions from income for deferred exploration expenses allowed under this Section.
- J. A taxpayer shall not include the amount of mine exploration expenses that were not deferred under A.R.S. § 43-1121 in computing the subtraction from income for the recapture of mine exploration expenses under A.R.S. § 43-1122.
- K. Under A.R.S. § 43-1122, a taxpayer may elect to subtract a ratable portion of deferred exploration expenses related to oil, gas, or geothermal resources. A taxpayer shall make the election and compute the subtraction in the same manner as the election related to ore and mineral property.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed; new Section adopted by final rulemaking at 6 A.A.R. 4105, effective October 4, 2000 (Supp. 00-4).

**R15-2D-306. Amortization of Property Used for Atmospheric and Water Pollution Control**

- A. A taxpayer may elect to amortize, over a 60-month period, the adjusted basis of any device, machinery, or equipment that is certified by the Arizona Department of Environmental Quality as property that collects and controls atmospheric and water pollutants and contaminants at their source. The amortization subtractions allowed for the 60-month period are in lieu of the federal depreciation and amortization related to the pollution control property. The related federal depreciation and amortization deducted in computing federal taxable income is an

addition to income under A.R.S. § 43-1121. The adjusted basis for purposes of amortization is the basis for determining depreciation under Internal Revenue Code § 167 on the date the pollution control property is placed in service. The adjusted basis does not include land or buildings.

- B. A taxpayer that elects to amortize pollution control property shall include a statement in the original or amended return for the taxable year of election. The taxpayer shall identify in the statement each piece of property subject to the election, the month the property is placed in service, the adjusted basis of the property, and the date of certification by the Arizona Department of Environmental Quality.
- C. The amortization period is 60 consecutive months beginning with the month the property is placed in service. If the property is disposed of or retired from service before the end of the 60-month period, the amortization period ends with the month of disposition or retirement. The monthly amortization allowable is computed by dividing the adjusted basis of the property at the beginning of the amortization period by 60. The total amortization subtraction for a particular taxable year is the sum of the amortization for each month of the amortization period that falls within the taxable year.
- D. A taxpayer may elect to discontinue the amortization election before the end of the 60-month amortization period.
  1. A taxpayer shall include a statement in the original or amended return for the taxable year that the election to discontinue amortization is effective. The taxpayer shall identify in the statement each piece of property for which the election to discontinue amortization applies and the last month of amortization.
  2. Generally, a taxpayer is not required to make the addition to income referred to in subsection (A) for the months following the election to discontinue amortization. However, an addition to income is required for the federal depreciation or amortization that exceeds the adjusted basis not previously recovered through depreciation or amortization. For example, a taxpayer elects to discontinue amortization after 48 months. If the property had an adjusted basis of \$100,000 at the beginning of the amortization period, the adjusted basis remaining to be recovered is \$20,000 (\$100,000 minus the previous amortization of \$80,000). If federal depreciation for the property is \$10,000 per year for 10 years, an addition to income of \$10,000 per year is required beginning with the third taxable year following the election to discontinue amortization.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed; new Section adopted by final rulemaking at 6 A.A.R. 4105, effective October 4, 2000 (Supp. 00-4).

**R15-2D-307. Amortization of Child Care Facilities**

- A. The following definitions apply for purposes of amortization of child care facilities under A.R.S. § 43-1130 and this Section:
  1. "Child care facility" means a facility as defined under A.R.S. § 36-881.
  2. "Employee" means any person employed by a taxpayer that owns a child care facility.
  3. "Property" means a child care facility and its related equipment of a character subject to depreciation.
- B. For purposes of qualifying for the 24-month amortization period under A.R.S. § 43-1130(B), a child care facility is considered to be primarily for the children of employees of the taxpayer if the required ratio is at least 80% for the taxable

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year during which the property is placed in service. The taxpayer shall maintain a required ratio of at least 80% for the subsequent taxable years that include part of the 24-month amortization period.

1. "Required ratio" means:
    - a. The total daily attendance of employee children for the taxable year, divided by
    - b. The total daily attendance of all children for the taxable year.
  2. For purposes of computing the required ratio, the employees of all joint owners of a child care facility are considered to be employees of each of the joint owners.
- C.** To elect either the 24-month or the 60-month amortization period, a taxpayer shall attach to the income tax return for the taxable year during which the property is placed in service a written statement that contains all of the following information:
1. A clear description of the property.
  2. The date of expenditure or the period during which the expenditures were made for the property.
  3. The date the property was placed in service.
  4. The amount of the expenditure.
  5. The amortization period elected.
  6. The annual amortization deduction claimed with respect to the property.
- D.** A taxpayer may make an election under this Section at any time before the expiration of the period for filing a claim for credit or refund for the taxable year that the property is placed in service.
- E.** A taxpayer may revoke an election made under this Section at any time before the expiration of the period for filing a claim for credit or refund for the taxable year that the property is placed in service. A taxpayer that revokes an election made under this Section shall attach a statement to an amended income tax return for the taxable year that the election was made. The taxpayer shall identify in the statement the property for which the revocation is effective.
- F.** The amortization period begins with the month the property is placed in service. A taxpayer shall compute the monthly amortization allowable by dividing the cost of the property by the number of months in the amortization period. The total amortization subtraction for a particular taxable year is the sum of the amortization for each month of the amortization period that falls within the taxable year.
1. If the amortization election is terminated as provided under subsection (H), the taxpayer shall prorate the amortization for the month during which the termination occurs, based on the ratio of the number of days in the month that are before the termination date to the total number of days in the month.
  2. If a taxpayer qualified for the 24-month amortization in the preceding taxable year and fails to meet the 80% requirement under subsection (B) in the current taxable year, the last month of the preceding taxable year is the final month of amortization.
- G.** A taxpayer shall treat additions or improvements to an existing item of amortized property as a separate item of property. A taxpayer may treat 2 or more items of property as a single item of property if the items are placed in service within the same month.
- H.** The amortization election made with respect to an item of property is terminated as of the earliest date on which either of the following occurs:
1. The specific use of the item of property in connection with the operation of a child care facility is discontinued.

2. The child care facility no longer meets applicable requirements in this Section.

- I.** Under A.R.S. § 43-1121, a taxpayer that elects to amortize child care facility property shall add to Arizona gross income the related federal depreciation or amortization deducted under Internal Revenue Code § 167 or 188. If the Arizona amortization election is terminated, the taxpayer may recover the remaining unamortized cost of the property by reducing the addition to income required under A.R.S. § 43-1121.
1. The amount of the reduction for the taxable year of termination is the amount of the related federal depreciation and amortization allocable to the portion of the taxable year after the termination date.
  2. The amount of the reduction for taxable years subsequent to the taxable year of termination is the amount of the related federal depreciation and amortization.
  3. The taxpayer may reduce the addition to income in the taxable year of termination and subsequent taxable years until the cumulative reductions equal the unamortized cost of the property.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed; new Section adopted by final rulemaking at 6 A.A.R. 4105, effective October 4, 2000 (Supp. 00-4).

**ARTICLE 4. MULTISTATE DIVISION OF INCOME****R15-2D-401. Unitary Business and Combined Returns**

- A.** An entity, group of entities, or components of an entity is not a unitary business for apportionment purposes unless there is actual substantial interdependence and integration of the basic operations of the business carried on in more than one taxing jurisdiction. The potential to operate an entity or a component as part of the unitary business is not dispositive.
- B.** The determination of whether the operations of a taxpayer constitute a unitary business is based on economic substance and not form. Therefore, a unitary business may consist of part of a corporation, one corporation, or many corporations. If the unitary business consists of more than one corporation, the corporations comprising the unitary business shall file a combined return apportioning the business income of the corporations using a single apportionment formula.
- C.** The main reason for defining a business as unitary is that its components in various states are so tied together at the basic operational level that it is difficult to determine the state in which profits are earned. Centralized top-level management, financing, accounting, insurance and benefit programs, or overhead functions by a home office are not sufficient for a business to be unitary without further analysis of the basic operations of the components.
- D.** The following are necessary threshold characteristics for components of an entity, an entity, or a group of entities to be considered a unitary business:
1. The entities comprising the unitary business are owned or controlled, directly or indirectly, by the same interests that collectively own more than 50 percent of the voting stock,
  2. The entities or components share common management, and
  3. The entities or components have reconciled accounting systems.
- E.** The presence of the three characteristics listed in subsection (D) is not sufficient for a business to be considered unitary without evidence of substantial operational integration. Factors that indicate operational integration include the following:
1. The same or similar business conducted by components;

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2. Vertical development of a product by components, such as manufacturing, distribution, and sales;
  3. Horizontal development of a product by components, such as sales, service, repair, and financing;
  4. Transfer of materials, goods, products, and technological data and processes between components;
  5. Sharing of assets by components;
  6. Sharing or exchanging of operational employees by components;
  7. Centralized training of operational employees;
  8. Centralized mass purchasing of inventory, materials, equipment, and technology;
  9. Centralized development and distribution of technology relating to the day-to-day operations of the components;
  10. Use of common trademark or logo at the basic operational level;
  11. Centralized advertising with impact at the basic operational level;
  12. Exclusive sales-purchase agreements between components;
  13. Price differentials between components as compared to unrelated businesses;
  14. Sales or leases between components; and
  15. Any other integration between components at the basic operational level.
- F.** Not all of the factors listed in subsection (E) need be present in every unitary business.
- G.** A manufacturing, producing, or mercantile type of business is not a unitary business unless there is a substantial transfer of material, products, goods, technological data and processes, or machinery and equipment between the branches, divisions, subsidiaries, or affiliates.
1. A transfer of 20 percent of the total goods annually manufactured, produced, or purchased as inventory for processing or sale, or both, by the transferor, or 20 percent of the total goods annually acquired for processing or sale, or both, by the transferee is presumptive evidence of a unitary business.
  2. A smaller percentage of goods transferred may be indicative of a unitary business if other characteristics indicating substantial operational integration are present.
- H.** In a unitary service business, the operations of the various components or entities of the business are integrated and interrelated by their involvement with the central office or parent in delivering substantially the same service. The day-to-day operations of the components or entities use the same procedures and technologies that are developed, organized, purchased, or prescribed by the central office or parent. There usually is an exchange of employees among the components or entities and centralized training of employees.
- I.** A taxpayer may have more than one unitary business. In this case, it is necessary to determine the business income attributable to each separate unitary business. The income of each business is apportioned using an apportionment formula that considers the in-state and out-of-state factors of the business.
- J.** Generally, a conglomerate composed of diverse businesses is not a single unitary business. However, a line or lines of business within the conglomerate may be a unitary business if the operations of the components of the line or lines are integrated and interrelated.
- K.** All members of a combined return shall determine income using the same accounting period.
1. If the members of a combined return have different accounting periods, the accounting period to be used by the members shall be determined as follows:
    - a. If the combined return includes the common parent corporation, the parent's accounting period is used.
    - b. If the combined return does not include the common parent corporation, the accounting period of a member that has a presence in Arizona shall be used. The same group member's accounting period shall be used consistently from year to year.
  2. Each member of a combined return that uses an accounting period that is different from the common accounting period determined in subsection (K)(1), shall use one of the following methods to determine the income to be included in the common accounting period:
    - a. Determine income and related deductions using actual book or accounting entries for the relevant period.
    - b. Determine income based on the number of months falling within the required common accounting period. For example, if one member uses a calendar year, and the common accounting period ends October 31, 1981, the member will include 2/12 of the income for the year ended December 31, 1980, and 10/12 of the income for the year ended December 31, 1981. Estimates may be necessary if this proration method involves a member's year that ends subsequent to the common accounting period.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-402. Repealed****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 654, effective January 11, 2001 (Supp. 01-1).

**R15-2D-403. Taxable in Another State**

- A.** A taxpayer is subject to the allocation and apportionment provisions of A.R.S. §§ 43-1131 through 43-1148 if it has income from business activity that is taxable both within and without this state. A taxpayer's income from business activity is taxable without this state if the taxpayer, by reason of the business activity, is taxable in another state under either one of the two tests specified in A.R.S. § 43-1133. A taxpayer is not taxable in another state with respect to a particular trade or business merely because the taxpayer conducts activities in that other state pertaining to the production of nonbusiness income or business activities relating to a separate trade or business.
- B.** A taxpayer is "subject to" one of the taxes specified in A.R.S. § 43-1133(1) if it carries on business activities in a state and that state imposes one of the taxes on the taxpayer. Any taxpayer that asserts that it is subject to one of the taxes specified in A.R.S. § 43-1133(1) in another state shall furnish to the Department upon its request evidence to support that assertion. The Department may request that the evidence include proof that the taxpayer has filed the requisite tax return in the other state and has paid any taxes imposed under the laws of the other state. The taxpayer's failure to produce this proof may be taken into account in determining whether the taxpayer is subject to one of the taxes specified in A.R.S. § 43-1133(1) in the other state.
1. A taxpayer that voluntarily files and pays one or more of the taxes specified in A.R.S. § 43-1133(1) when not required to do so by the laws of the other state or pays a

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minimal fee for qualification, organization, or the privilege of doing business in that state is not "subject to" one of the taxes specified in A.R.S. § 43-1133(1) if the taxpayer:

- a. Does not engage in business activity in that state; or
  - b. Engages in some business activity, not sufficient for nexus, and the minimum tax bears no relationship to the taxpayer's business activity within that state.
2. The concept of taxability in another state is based upon the premise that every state in which the taxpayer is engaged in business activity may impose an income tax even though every state does not do so. In states that do not impose an income tax, other types of taxes may be imposed as a substitute. Therefore, the Department shall consider only those taxes enumerated in A.R.S. § 43-1133(1) that are basically revenue raising rather than regulatory measures in determining whether the taxpayer is "subject to" one of the taxes in another state.

Example 1: State A requires all nonresident corporations that qualify or register in State A to pay to the Secretary of State an annual license fee or tax for the privilege of doing business in the state regardless of whether the privilege is in fact exercised. The amount paid is determined according to the total authorized capital stock of the corporation; the rates are progressively higher by bracketed amounts. The statute sets a minimum fee of \$50 and a maximum fee of \$500. Failure to pay the tax bars a corporation from using the state courts for enforcement of its rights. State A also imposes a corporation income tax. Nonresident Corporation X is qualified in State A and pays the required fee to the Secretary of State but does not carry on any business activity in State A (although it may use the courts of State A). Corporation X is not "taxable" in State A.

Example 2: The facts are the same as example one except that Corporation X is subject to and pays the corporation income tax. Payment is prima facie evidence that Corporation X is "subject to" the net income tax of State A and is "taxable" in State A.

Example 3: State B requires all nonresident corporations qualified or registered in State B to pay to the Secretary of State an annual permit fee or tax for doing business in the state. The base of the fee or tax is the sum of outstanding capital stock, and surplus and undivided profits. The fee or tax base attributable to State B is determined by a three-factor apportionment formula. Nonresident Corporation X, which operates a plant in State B, pays the required fee or tax to the Secretary of State. Corporation X is "taxable" in State B.

Example 4: State A has a corporation franchise tax measured by net income for the privilege of doing business in that state. Corporation X files a return based on its business activity in the state but the amount of computed liability is less than the minimum tax. Corporation X pays the minimum tax. Corporation X is subject to State A's corporation franchise tax.

- C. A.R.S. § 43-1133(2) applies if the taxpayer's business activity is sufficient to give the state jurisdiction to impose a net income tax by reason of the business activity. Jurisdiction to tax is not present if the state is prohibited from imposing the tax by reason of the provisions of Public Law 86-272, 15 U.S.C.A. §§ 381-384.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended

by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4). Correction to manifest typographical error, under subsection R15-2D-403(B), deleted "2" between "A.R.S." and "§" as adopted at 5 A.A.R. 3766 (Supp. 08-4).

**R15-2D-404. Apportionment Formula**

- A. All business income of each trade or business of the taxpayer shall be apportioned to this state by use of the apportionment formula in A.R.S. § 43-1139. The elements of the apportionment formula are the property factor, the payroll factor, and the sales factor of the trade or business of the taxpayer.
- B. A unitary business that files a combined return shall use an apportionment formula that combines the property, payroll, and sales figures of all of the unitary group members before calculating the factors.
- C. An Arizona affiliated group that files a consolidated return shall use an apportionment formula that combines the property, payroll, and sales figures of all of the members of the Arizona affiliated group before calculating the factors.
- D. This Section does not apply to a taxpayer engaged in air commerce that apportions its income in accordance with A.R.S. § 43-1139(B).

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-405. Intercompany Eliminations**

Members of a combined or consolidated return shall eliminate intercompany amounts included in the group's income, expense, and apportionment factors when necessary to avoid distortion of the group's Arizona taxable income.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**ARTICLE 5. BUSINESS AND NONBUSINESS INCOME****R15-2D-501. General**

- A. For purposes of administration, the income of a taxpayer is business income unless clearly classifiable as nonbusiness income.
- B. The classification of income by labels, such as manufacturing income, compensation for services, sales income, interest, dividends, rents, royalties, gains, operating income, or nonoperating income, is of no aid in determining whether income is business or nonbusiness income. Income of any type or class and from any source is business income if it arises from transactions and activity occurring in the regular course of a trade or business. Accordingly, the critical elements in determining whether income is "business income" or "nonbusiness income" are the transactions and activity of a particular trade or business. In general, all transactions and activity of a taxpayer that are the result of or incidental to the operations of a particular trade or business of the taxpayer are transactions and activity arising in the regular course of, and constitute integral parts of, a trade or business.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended

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by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-502. Rents From Real and Tangible Personal Property**

Rental income from real and tangible personal property is business income if the property with respect to which the rental income is received is used in the taxpayer's trade or business or is incidental to the trade or business and is includable in the property factor.

Example 1: The taxpayer operates a multistate car rental business. The income from the car rentals is business income.

Example 2: The taxpayer is engaged in the heavy construction business in which it uses equipment such as cranes, tractors, and earth-moving vehicles. The taxpayer makes short-term leases of the equipment when particular pieces of equipment are not needed on any particular project. The rental income is business income.

Example 3: The taxpayer operates a multistate chain of men's clothing stores. The taxpayer purchases a five-story office building for use in connection with its trade or business. It uses the street floor as one of its retail stores and the second and third floors for its general corporate headquarters. The remaining two floors are leased to others. The rental of the two floors is incidental to the operation of the taxpayer's trade or business. The rental income is business income.

Example 4: The taxpayer operates a multistate chain of grocery stores. It purchases as an investment an office building in another state with surplus funds and leases the entire building to others. The net rental income is not business income of the grocery store trade or business. Therefore, the net rental income is nonbusiness income.

Example 5: The taxpayer operates a multistate chain of men's clothing stores. The taxpayer invests in a 20-story office building and uses the street floor as one of its retail stores and the second floor for its general corporate headquarters. The remaining 18 floors are leased to others. The rental of the 18 floors is not incidental to but rather is separate from the operation of the taxpayer's trade or business. The net rental income is not business income of the clothing store trade or business. Therefore, the net rental income is nonbusiness income.

Example 6: The taxpayer constructed a plant for use in its multistate manufacturing business and 20 years later the plant was closed and put up for sale. The plant was rented for a temporary period from the time it was closed by the taxpayer until it was sold 18 months later. The rental income is business income and the gain on the sale of the plant is business income.

Example 7: The taxpayer operates a multistate chain of grocery stores. It owned an office building that it occupied as its corporate headquarters. Because of inadequate space, the taxpayer acquired a new and larger building elsewhere for its corporate headquarters. The old building was rented to an investment company under a five-year lease. Upon expiration of the lease, the taxpayer sold the building at a gain (or loss). The net rental income received over the lease period is nonbusiness income and the gain (or loss) on the sale of the building is nonbusiness income.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-503. Gains or Losses From Sales of Assets**

Gain or loss from the sale, exchange, or other disposition of tangible or intangible personal property or real property constitutes business income if the property while owned by the taxpayer was used in the taxpayer's trade or business. However, if the property was used for the production of nonbusiness income or otherwise was removed from the property factor, in accordance with Article 6, before its sale, exchange, or other disposition, the gain or loss constitutes nonbusiness income.

Example 1: In conducting its multistate manufacturing business, the taxpayer systematically replaces automobiles, machines, and other equipment used in the business. The gains or losses resulting from those sales constitute business income.

Example 2: The taxpayer constructed a plant for use in its multistate manufacturing business and 20 years later sold the property at a gain while it was in operation by the taxpayer. The gain is business income.

Example 3: Same as example two except that the plant was closed and put up for sale but was not in fact sold until a buyer was found 18 months later. The gain is business income.

Example 4: Same as example two except that the plant was rented while being held for sale. The rental income is business income and the gain on the sale of the plant is business income.

Example 5: The taxpayer operates a multistate chain of grocery stores. It owned an office building that it occupied as its corporate headquarters. Because of inadequate space, the taxpayer acquired a new and larger building elsewhere for its corporate headquarters. The old building was rented to an unrelated investment company under a five-year lease. Upon expiration of the lease, the taxpayer sold the building at a gain (or loss). The gain (or loss) on the sale is nonbusiness income and the rental income received over the lease period is nonbusiness income.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-504. Interest**

Interest income is business income if the intangible property with respect to which the taxpayer receives interest arises out of or is created in the regular course of the taxpayer's trade or business operations or if the purpose for acquiring and holding the intangible property is related to or incidental to the trade or business operations.

Example 1: The taxpayer operates a multistate chain of department stores, selling for cash and on credit. The taxpayer receives service charges, interest, or time-price differentials and the like with respect to installment sales and revolving charge accounts. These amounts are business income.

Example 2: The taxpayer conducts a multistate manufacturing business. During the year the taxpayer receives a federal income tax refund and collects a judgment against a debtor of the business. Both the tax refund and the judgment bear interest. The interest income is business income.

Example 3: The taxpayer is engaged in a multistate manufacturing and wholesaling business. In connection with that business, the taxpayer maintains special accounts to cover items such as worker's compensation claims, rain and storm damage, and machinery replacement. The moneys in those accounts are invested at interest. Similarly, the taxpayer temporarily invests funds intended for payment of federal, state,

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and local tax obligations. The interest income is business income.

Example 4: The taxpayer is engaged in a multistate money order and traveler's check business. In addition to the fees received in connection with the sale of the money orders and traveler's checks, the taxpayer earns interest income by investing the funds pending their redemption. The interest income is business income.

Example 5: The taxpayer is engaged in a multistate manufacturing and selling business. The taxpayer usually has working capital totaling \$200,000 that it regularly invests in short-term, interest-bearing securities. The interest income is business income.

Example 6: In January, the taxpayer sells all of the stock of a subsidiary for \$20,000,000. The funds are placed in an interest-bearing account pending a decision by management as to how the funds are to be used. The interest income is nonbusiness income.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-505. Dividends**

Dividends are business income if the stock with respect to which the taxpayer receives dividends arises out of or was acquired in the regular course of the taxpayer's trade or business operations or if the purpose for acquiring and holding the stock is related to or incidental to the trade or business operations.

Example 1: The taxpayer operates a multistate chain of stock brokerage houses. During the year, the taxpayer receives dividends on stock that it owns. The dividends are business income.

Example 2: The taxpayer is engaged in a multistate manufacturing and wholesaling business. In connection with that business, the taxpayer maintains special accounts to cover items such as worker's compensation claims, rain and storm damage, and machinery replacement. A portion of the moneys in those accounts is invested in interest-bearing bonds. The remainder is invested in various common stocks listed on national stock exchanges. Both the interest income and any dividends are business income.

Example 3: The taxpayer and several unrelated corporations own all of the stock of a corporation whose business operations consist solely of acquiring and processing materials for delivery to the corporate owners. The taxpayer acquired the stock to obtain a source of supply of materials used in its manufacturing business. The dividends are business income.

Example 4: The taxpayer is engaged in a multistate heavy construction business. Much of its construction work is performed for agencies of the federal government and various state governments. Under state and federal laws applicable to contracts for these agencies, a contractor must have adequate bonding capacity, as measured by the ratio of its current assets (cash and marketable securities) to current liabilities. To maintain an adequate bonding capacity, the taxpayer holds various stocks and interest-bearing securities. Both the interest income and any dividends received are business income.

Example 5: The taxpayer receives dividends from the stock of its subsidiary or affiliate, which acts as the marketing agency for products manufactured by the taxpayer. The dividends are business income.

Example 6: The taxpayer is engaged in a multistate glass manufacturing business. It also holds a portfolio of stock and interest-bearing securities, the acquisition and holding of which are unrelated to the manufacturing business. The dividends and interest income received are nonbusiness income.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-506. Royalties**

Patent and copyright royalties are business income if the patent or copyright with respect to which the taxpayer receives royalties arises out of or is created in the regular course of the taxpayer's trade or business operations or if the purpose for acquiring and holding the patent or copyright is related to the trade or business operations. Other royalties and licensing fees are business income if the property or licensing agreement that generates the income arises out of or is created in the regular course of the taxpayer's trade or business operations or if the purpose for acquiring and holding the property or license agreement is related to or incidental to the trade or business operations.

Example 1: The taxpayer is engaged in the multistate business of manufacturing and selling industrial chemicals. In connection with that business the taxpayer obtained patents on certain of its products. The taxpayer licensed the production of the chemicals in foreign countries, in return for which the taxpayer receives royalties. The royalties received by the taxpayer are business income.

Example 2: The taxpayer is engaged in the music publishing business and holds copyrights on numerous songs. The taxpayer acquires the assets of a smaller publishing company, including music copyrights. The taxpayer later uses these acquired copyrights in its business. Any royalties received on these copyrights are business income.

Example 3: The same as example two, except that the acquired company also held the patent on a type of phonograph needle. The taxpayer does not manufacture or sell phonographs or phonograph equipment. Any royalties received on the patent are nonbusiness income.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-507. Proration of Deductions**

In most cases an allowable deduction of a taxpayer will be applicable only to the business income arising from a particular trade or business or to a particular item of nonbusiness income. In some cases an allowable deduction may apply to the business incomes of more than one trade or business or to several items of nonbusiness income. In these cases the deduction shall be prorated among the trades or businesses and the items of nonbusiness income in a manner that fairly distributes the deduction among the classes of income to which it applies.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-508. Consistency and Uniformity in Reporting**

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- A. If a taxpayer departs from or modifies the manner in which income has been classified as business income or nonbusiness income, or the manner of prorating any related deduction, in Arizona returns for prior years, the taxpayer shall disclose in the return for the current year the nature and extent of the modification.
- B. If the returns or reports filed by a taxpayer for all states to which the taxpayer reports under the Uniform Division of Income for Tax Purposes Act are not uniform in the classification of income as business or nonbusiness income, or the application or proration of any related deduction, the taxpayer shall disclose the nature and extent of the variance upon request by the Department.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**ARTICLE 6. PROPERTY FACTOR****R15-2D-601. General**

- A. The property factor, as defined in A.R.S. § 43-1140, for each trade or business of a taxpayer includes all real and tangible personal property owned or rented by the taxpayer and used during the tax period in the regular course of the trade or business. The term “real and tangible personal property” includes land, buildings, machinery, stocks of goods, equipment, but does not include coin or currency.
- B. A taxpayer shall exclude from the property factor property used in connection with the production of nonbusiness income.
- C. Property used both in the regular course of a taxpayer’s trade or business and in the production of nonbusiness income is included in the property factor only to the extent the property is used in the regular course of the taxpayer’s trade or business. The method of determining that portion of the value to be included in the property factor will depend upon the facts of each case.
- D. The property factor includes the average value of property includable in the factor.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-602. Property Used for the Production of Business Income**

- A. A taxpayer shall include in the property factor property that is used, available for use, or capable of being used during the tax period in the regular course of the taxpayer’s trade or business.
- B. A taxpayer shall include in the property factor property held as reserves or standby facilities or property held as a reserve source of materials. For example, a plant temporarily idle or raw material reserves not currently being processed are includable in the factor.
- C. A taxpayer shall exclude from the property factor property or equipment under construction during the tax period, except inventoriable goods in process, until the property or equipment is used in the regular course of the taxpayer’s trade or business. If the property or equipment is partially used in the regular course of the taxpayer’s trade or business while under construction, the value of the property to the extent used shall be included in the property factor.
- D. Property used in the regular course of the trade or business of the taxpayer remains in the property factor until its permanent

withdrawal is established by an identifiable event such as its conversion to the production of nonbusiness income, its sale, or the lapse of an extended period of time (normally, five years) during which the property is held for sale.

Example 1: The taxpayer closes its manufacturing plant in State X and holds the property for sale. The property remains vacant until its sale one year later. The value of the manufacturing plant is included in the property factor until the plant is sold.

Example 2: Same as example one except that the property is rented until the plant is sold. The plant is included in the property factor until the plant is sold.

Example 3: The taxpayer closes its manufacturing plant and leases the building under a five-year lease. The plant is included in the property factor until the lease begins.

Example 4: The taxpayer operates a chain of retail grocery stores. Taxpayer closes Store A, which is then remodeled into three small retail stores such as a dress shop, dry cleaning, and barber shop, which are leased to unrelated parties. The property is removed from the property factor on the date the remodeling of Store A begins.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-603. Property Factor Numerator**

The numerator of the property factor is the average value of the real and tangible personal property owned or rented by a taxpayer and used in this state during the tax period in the regular course of the taxpayer’s trade or business.

1. Property in transit between locations of the taxpayer to which it belongs is considered to be at its destination for purposes of the property factor.
2. Property in transit between a buyer and seller that is included by a taxpayer in the denominator of its property factor in accordance with its regular accounting practices is included in the numerator according to the state of destination.
3. The value of mobile or movable property such as construction equipment, trucks, or leased electronic equipment that is located within and without this state during the tax period is determined for purposes of the numerator of the property factor on the basis of total time within the state during the tax period.
4. An automobile assigned to a traveling employee is included in the numerator of the property factor of the state to which the employee’s compensation is assigned under the payroll factor or in the numerator of the property factor of the state in which the automobile is licensed.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-604. Valuation of Owned Property**

- A. Property owned by a taxpayer is valued at its original cost. Generally, “original cost” means the basis of the property for federal income tax purposes (before any federal adjustments) at the time of acquisition by the taxpayer and adjusted by subsequent capital additions or improvements to the property and partial disposition of the property, by reason of sale, exchange,

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abandonment, or other similar event. However, capitalized intangible drilling and development costs are included in the property factor whether or not they have been expensed for either federal or state tax purposes.

Example 1: The taxpayer acquires a factory building in this state at a cost of \$500,000 and, 18 months later, expends \$100,000 for major remodeling of the building. The taxpayer files its return for the current taxable year on the calendar-year basis. The taxpayer claims a depreciation deduction in the amount of \$22,000 with respect to the building on the return for the current taxable year. The value of the building includable in the numerator and the denominator of the property factor is \$600,000; the depreciation deduction is not taken into account in determining the value of the building for purposes of the property factor.

Example 2: During the current taxable year, Corporation X merges into Corporation Y in a tax-free reorganization under the Internal Revenue Code. At the time of the merger, Corporation X owns a factory that it built five years earlier at a cost of \$1,000,000. Corporation X has been depreciating the factory at the rate of two percent per year, and its basis to Corporation X, at the time of the merger is \$900,000. Because the property is acquired by Corporation Y in a transaction in which, under the Internal Revenue Code, its basis to Corporation Y is the same as its basis to Corporation X, Corporation Y includes the property in its property factor at Corporation X's original cost, without adjustment for depreciation, \$1,000,000.

Example 3: Corporation Y acquires the assets of Corporation X in a liquidation by which Corporation Y is entitled to use its stock cost as the basis of the Corporation X assets under Internal Revenue Code § 334(b)(2). Under these circumstances, Corporation Y's cost of the assets is the purchased price of the Corporation X stock, prorated over the Corporation X assets.

- B. If the original cost of property is unascertainable, the property is included in the property factor at its fair market value as of the date of acquisition by the taxpayer.
- C. Inventory of stock of goods is included in the property factor in accordance with the valuation method used for federal income tax purposes.
- D. Property acquired by gift or inheritance is included in the property factor at its basis for determining depreciation for federal income tax purposes.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-605. Valuation of Rented Property**

- A. Property rented by a taxpayer is valued at eight times its net annual rental rate. The net annual rental rate for any item of rented property is the annual rental rate paid by the taxpayer for the property, less the aggregate annual subrental rates paid by subtenants of the taxpayer. Subrents are not deducted when the subrents constitute business income because the taxpayer uses the property that produces the subrents in the regular course of a trade or business of the taxpayer when it is producing the subrent income; accordingly, there is no reduction in its value. If the adjustment for subrents produces a negative or inaccurate value of rented property, the special provisions in R15-2D-902 apply.

Example 1: The taxpayer receives subrents from a bakery concession in a food market operated by the taxpayer. Because the subrents are business income they are not deducted from rent paid by the taxpayer for the food market.

Example 2: The taxpayer rents a five-story office building primarily for use in its multistate business, uses three floors for its offices and subleases two floors to various other businesses and persons such as professionals and shops. The rental of the two floors is incidental to the operation of the taxpayer's trade or business. Because the subrents are business income, they are not deducted from the rent paid by the taxpayer.

Example 3: The taxpayer rents a 20-story office building and uses the lower two stories for its general corporation headquarters. The remaining 18 floors are subleased to others. The rental of the 18 floors is not incidental to but rather is separate from the operation of the taxpayer's trade or business. Because the subrents are nonbusiness income they are deducted from the rent paid by the taxpayer.

- B. "Annual rental rate" means the amount paid as rental for property for a 12-month period.
  1. If property is rented for less than a 12-month period, the rent paid for the actual period of rental is the "annual rental rate" for the tax period.
  2. If a taxpayer has rented property for a term of 12 or more months and the current tax period covers a period of less than 12 months (due, for example, to a reorganization or change of accounting period), the taxpayer shall annualize the rent paid for the short tax period. If the rental term is for less than 12 months, the rent is not annualized beyond its term.

Example 1: Taxpayer A ordinarily files its returns based on a calendar year and merges into Taxpayer B on April 30. The net rent paid under a lease with five years remaining is \$2,500 a month. The rent for the tax period January 1 to April 30 is \$10,000. After the rent is annualized the net rent is \$30,000 (\$2,500 x 12).

Example 2: Same facts as in example one except that the lease would have terminated on August 31. In this case, the annualized rent is \$20,000 (\$2,500 x 8).

- 3. A taxpayer shall not annualize rent when the rental term is on a month-to-month basis.
- C. "Annual rent" means the actual sum of money or other consideration payable, directly or indirectly, by a taxpayer or for its benefit for the use of property and includes:
  1. Any amount payable for the use of real or tangible personal property, or any part of the property, whether designated as a fixed sum of money or as a percentage of sales, profits, or otherwise.
 

Example: A taxpayer, under the terms of a lease, pays a lessor \$1,000 per month as a base rental and at the end of year pays the lessor one percent of its gross sales of \$400,000. The annual rent is \$16,000 (\$12,000 plus one percent of \$400,000 or \$4,000).
  2. Any amount payable as additional rent or instead of rents, such as interest, taxes, insurance, repairs, or any other items that are required to be paid by the terms of the lease or other arrangement, not including amounts paid as service charges, such as utilities or janitor services. If a payment includes rent and other charges unsegregated, the

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amount of rent is determined by consideration of the relative values of the rent and the other items.

Example 1: A taxpayer, under the terms of a lease, pays the lessor \$12,000 a year rent plus taxes in the amount of \$2,000 and interest on a mortgage in the amount of \$1,000. The annual rent is \$15,000.

Example 2: A taxpayer stores part of its inventory in a public warehouse. The total charge for the year is \$1,000 of which \$700 is for the use of storage space and \$300 for inventory insurance, handling and shipping charges, and C.O.D. collections. The annual rent is \$700.

- D. "Annual rent" does not include:
  1. Incidental day-to-day expenses, such as hotel or motel accommodations and daily rental of automobiles; and
  2. Royalties based on extraction of natural resources, whether represented by delivery or purchase. For purposes of this subsection, a royalty includes any consideration conveyed or credited to a holder of an interest in property that constitutes a sharing of current or future production of natural resources from the property, irrespective of the method of payment or how the consideration may be characterized, whether as a royalty, advance royalty, rental, or otherwise.
- E. For purposes of the property factor, leasehold improvements are treated as property owned by a taxpayer regardless of whether the taxpayer is entitled to remove the improvements or the improvements revert to the lessor upon expiration of the lease. The original cost of leasehold improvements are included in the property factor.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-606. Averaging of Monthly Property Values**

The Department may require or allow averaging of monthly values if that method is required to properly reflect the average value of a taxpayer's property for the tax period. The Department shall not require the averaging of monthly values if that method has a de minimis effect on a taxpayer's Arizona tax liability for the tax period.

1. Averaging of monthly values will generally be required if substantial fluctuations in the values of the property exist during the tax period or if property is acquired after the beginning of the tax period or disposed of before the end of the tax period.

Example: The monthly value of the taxpayer's property is as follows:

January	\$2,000	July	\$15,000
February	\$2,000	August	\$17,000
March	\$3,000	September	\$23,000
April	\$3,500	October	\$25,000
May	\$4,500	November	\$13,000
June	\$10,000	December	\$2,000
Subtotal	\$25,000	Subtotal	\$95,000
		Total	\$120,000

The average monthly value of the taxpayer's property includable in the property factor for the income year is \$10,000 (120,000 divided by 12).

2. Rented property is averaged by determining the net annual rental rate of the property.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-607. Consistency and Uniformity in Reporting**

- A. If a taxpayer departs from or modifies the manner of valuing property, or of excluding or including property in the property factor, used in Arizona returns for prior years, the taxpayer shall disclose in the return for the current year the nature and extent of the modification.
- B. If the returns or reports filed by a taxpayer with all states to which the taxpayer reports under the Uniform Division of Income for Tax Purposes Act are not uniform in the valuation of property or in the exclusion or inclusion of property in the property factor, the taxpayer shall disclose the nature and extent of the variance upon request by the Department.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**ARTICLE 7. PAYROLL FACTOR**

**R15-2D-701. General**

- A. The payroll factor, as defined in A.R.S. § 43-1143, for each trade or business of a taxpayer includes the total amount paid by the taxpayer in the regular course of its trade or business for compensation during the tax period.
  1. The total amount "paid" to employees is determined upon the basis of the taxpayer's accounting method.
    - a. If the taxpayer has adopted the accrual method of accounting, all compensation properly accrued is deemed to have been paid.
    - b. Notwithstanding the taxpayer's method of accounting, compensation paid to employees may, at the election of the taxpayer, be included in the payroll factor by use of the cash method if the taxpayer is required to report the compensation under that method for unemployment compensation purposes.
  2. The compensation of any employee for activities that are connected with the production of nonbusiness income is excluded from the payroll factor.

Example 1: The taxpayer uses some of its employees in the construction of a storage building which, upon completion, is used in the regular course of the taxpayer's trade or business. The wages paid to those employees are treated as a capital expenditure by the taxpayer. The amount of those wages is included in the payroll factor.

Example 2: The taxpayer owns various securities that it holds as an investment separate and apart from its trade or business. The management of the taxpayer's investment portfolio is the only duty of Mr. X, an employee. The salary paid to Mr. X is excluded from the payroll factor.

3. Payments made to an independent contractor or any other person not properly classifiable as an employee are excluded from the payroll factor.
4. Only amounts paid directly to employees are included in the payroll factor. Amounts considered paid directly include the value of board, rent, housing, lodging, and other benefits or services furnished to employees by the taxpayer in return for personal services, provided that the amounts constitute income to the recipient under the

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Internal Revenue Code. In the case of employees not subject to the Internal Revenue Code, such as those employed in foreign countries, the determination of whether benefits or services would constitute income to the employees shall be made as though the employees were subject to the Internal Revenue Code.

- B.** Generally, a person is considered to be an employee if the person is treated by the taxpayer as an employee for purposes of the payroll taxes imposed by the Federal Insurance Contributions Act. However, because certain individuals are included within the term “employees” in the Federal Insurance Contributions Act who are not employees under the usual common-law rules, a taxpayer may establish that a person who is treated as an employee for purposes of the Federal Insurance Contributions Act is not an employee for purposes of this Section.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-702. Payroll Factor Denominator**

The denominator of the payroll factor is the total compensation paid by the taxpayer everywhere during the tax period. Therefore, compensation paid to employees whose services are performed entirely in a state where the taxpayer is immune from taxation is included in the denominator of the payroll factor.

Example: A taxpayer has employees in its state of legal domicile (State A) and is taxable in State B. In addition, the taxpayer has other employees whose services are performed entirely in State C where the taxpayer is immune from taxation under the provisions of Public Law 86-272. The compensation paid to the employees in State C is assigned to State C where the services are performed (included in the denominator but not the numerator of the payroll factor) even though the taxpayer is not taxable in State C.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-703. Payroll Factor Numerator**

The numerator of the payroll factor is the total compensation paid in this state during the tax period by the taxpayer for compensation. The tests in A.R.S. § 43-1144 for determining whether compensation is paid in this state are derived from the Model Unemployment Compensation Act. Accordingly, if the taxpayer includes compensation paid to employees in the payroll factor by use of the cash method of accounting or if the taxpayer is required to report the compensation under this method for unemployment compensation purposes, the Department shall presume that the total wages reported by the taxpayer to this state for unemployment compensation purposes constitute compensation paid in this state except for compensation excluded under this Article. The presumption may be overcome by evidence satisfactory to the Department that an employee’s compensation is not properly reportable to this state for unemployment compensation purposes.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-704. Compensation Paid in this State: Definitions**

For the purpose of determining whether compensation is paid in this state under this Article and A.R.S. § 43-1144, the following definitions apply:

1. “Incidental” means any service that is temporary or transitory in nature or rendered in connection with an isolated transaction.
2. “Place from which the service is directed or controlled” means the site from which the power to direct or control is exercised by the taxpayer.
3. “Base of operations” means the site of more or less permanent nature from which the employee starts work and to which the employee customarily returns in order to:
  - a. Receive instructions from the taxpayer,
  - b. Receive communications from the taxpayer’s customers or other persons,
  - c. Replenish stock or other materials,
  - d. Repair equipment, or
  - e. Perform any other functions necessary to the exercise of the trade or profession.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-705. Consistency and Uniformity in Reporting**

- A.** If the taxpayer departs from or modifies the treatment of compensation paid used in Arizona returns for prior years, the taxpayer shall disclose in the return for the current year the nature and extent of the modification.
- B.** If the returns or reports filed by a taxpayer with all states to which the taxpayer reports under the Uniform Division of Income for Tax Purposes Act are not uniform in the treatment of compensation paid, the taxpayer shall disclose the nature and extent of the variance upon request by the Department.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**ARTICLE 8. SALES FACTOR****R15-2D-801. General**

- A.** The following are provisions for determining “sales” under A.R.S. § 43-1145:
  1. In the case of a taxpayer engaged in manufacturing and selling or purchasing and reselling goods or products, “sales” includes all gross receipts from the sales of the goods or products (or other property of a kind that would properly be included in the inventory of the taxpayer if on hand at the close of the tax period) held by the taxpayer primarily for sale to customers in the ordinary course of its trade or business. For purposes of this subsection, “gross receipts” means gross sales less returns and allowances and includes all interest income, service charges, carrying charges, or time-price differential charges incidental to the sales. Federal and state excise taxes (including sales taxes) are included as part of the receipts if the taxes are passed on to the buyer or included as part of the selling price of the product.
  2. In the case of cost-plus-fixed-fee contracts, such as the operation of a government-owned plant for a fee, “sales” includes the entire reimbursed cost plus the fee.
  3. In the case of a taxpayer engaged in providing services, such as the operation of an advertising agency or the performance of equipment service contracts or research and

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development contracts, "sales" includes the gross receipts from the performance of the services including fees, commissions, and similar items.

4. In the case of a taxpayer engaged in renting or licensing the use of real or tangible property, "sales" includes the gross receipts from these activities.
  5. In the case of a taxpayer engaged in the sale, assignment, or licensing the use of intangible personal property such as patents and copyrights, "sales" includes the gross receipts from these activities.
  6. If a taxpayer derives receipts from the sale of equipment used in its business, those receipts constitute "sales." For example, a truck express company owns a fleet of trucks and sells its trucks under a regular replacement program. The gross receipts from the sales of the trucks are included in the sales factor.
- B.** In some cases certain gross receipts are disregarded in determining the sales factor so that the apportionment formula will operate fairly to apportion to this state the income of the taxpayer's trade or business. See R15-2D-903.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-802. Repealed****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 654, effective January 11, 2001 (Supp. 01-1).

**R15-2D-803. Sales Factor Numerator**

The numerator of the sales factor is the gross receipts attributable to this state and derived by the taxpayer from transactions and activity in the regular course of its trade or business. All interest income, service charges, carrying charges, or time-price differential charges incidental to the gross receipts are included regardless of the place where the accounting records are maintained or the location of the contract or other evidence of indebtedness.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-804. Property Delivered or Shipped to a Purchaser within this State**

- A.** Property is deemed to be delivered or shipped to a purchaser within this state if the recipient is located in this state, even though the property is ordered from outside this state.
- Example: The taxpayer, with inventory in State A, sells \$100,000 of its products to a purchaser with branch stores in several states, including this state. The order for the purchase is placed by the purchaser's central purchasing department, located in State B. The taxpayer ships \$25,000 of the purchase order directly to purchaser's branch store in this state. The branch store in this state is the "purchaser within this state" with respect to \$25,000 of the taxpayer's sales.
- B.** Property is delivered or shipped to a purchaser within this state if the shipment terminates in this state, even though the property is subsequently transferred by the purchaser to another state.

Example: The taxpayer makes a sale to a purchaser who maintains a central warehouse in this state at which all merchandise purchases are received. The purchaser reships the goods to its branch stores in other states for sale. All of the taxpayer's products shipped to the purchaser's warehouse in this state constitute property delivered or shipped to a purchaser within this state.

- C.** The term "purchaser within this state" includes the ultimate recipient of the property if the taxpayer in this state, at the designation of the purchaser, delivers to or has the property shipped to the ultimate recipient within this state.

Example: A taxpayer in this state sells merchandise to a purchaser in State A. The taxpayer directs the manufacturer or supplier of the merchandise in State B to ship the merchandise to the purchaser's customer in this state according to purchaser's instructions. The sale by the taxpayer is "in this state."

- D.** If property being shipped by a seller from the state of origin to a consignee in another state is diverted while en route to a purchaser in this state, the sales are in this state.

Example: The taxpayer, a produce grower in State A, begins shipment of perishable produce to the purchaser's place of business in State B. While en route, the produce is diverted to the purchaser's place of business in this state in which the taxpayer is subject to tax. The sale by the taxpayer is in this state.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-805. Sales of Tangible Personal Property to the United States Government**

Sales of tangible personal property to the United States Government are not included in the numerator of the sales factor. For the purposes of this Section, only sales for which the United States Government makes direct payment to the seller under the terms of a contract constitute sales to the United States Government. Thus, as a general rule, sales by a subcontractor to a prime contractor, who has the contract with the United States Government, do not constitute sales to the United States Government.

Example 1: A taxpayer contracts with General Services Administration to deliver X number of trucks that are paid for by the United States Government. The sale is a sale to the United States Government.

Example 2: The taxpayer, as a subcontractor to a prime contractor with the National Aeronautics and Space Administration, contracts to build a component of a rocket for \$1,000,000. The sale by the subcontractor to the prime contractor is not a sale to the United States Government.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-806. Sales other than Sales of Tangible Personal Property in this State**

This Section provides for the inclusion in the numerator of the sales factor of gross receipts from transactions other than sales of tangible personal property (including transactions with the United States Government). Under this Section, gross receipts are attributed to this state if the income-producing activity that gives rise to the receipts is performed wholly within this state. Also, gross receipts

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are attributed to this state if, with respect to a particular item of income, the income-producing activity is performed within and without this state but the greater proportion of the income-producing activity is performed in this state rather than in any other state, based on costs of performance.

1. The term "income-producing activity" applies to each separate item of income and means the transactions and activities directly engaged in by a taxpayer in the regular course of its trade or business for the ultimate purpose of obtaining gains or profit. Income-producing activity does not include transactions and activities performed on behalf of a taxpayer, such as those conducted on its behalf by an independent contractor. Accordingly, "income-producing activity" includes but is not limited to the following:
  - a. The rendering of personal services by employees or the use of tangible and intangible property by the taxpayer in performing a service;
  - b. The sale, rental, leasing, licensing, or other use of real property;
  - c. The rental, leasing, licensing, or other use of tangible personal property; and
  - d. The sale, licensing, or other use of intangible personal property. The mere holding of intangible personal property is not, of itself, an income-producing activity.
2. The term "costs of performance" means direct costs determined in a manner consistent with generally accepted accounting principles and in accordance with accepted conditions or practices in the trade or business of the taxpayer.
3. The following are special provisions for determining when receipts from the income-producing activities described are in this state:
  - a. Gross receipts from the sale, lease, rental, or licensing of real property are in this state if the real property is located in this state.
  - b. Gross receipts from the rental, lease, or licensing of tangible personal property are in this state if the property is located in this state. The rental, lease, licensing, or other use of tangible personal property in this state is an income-producing activity separate from the rental, lease, licensing, or other use of the same property while located in another state; consequently, if property is within and without this state during the rental, lease, or licensing period, gross receipts attributable to this state are measured by the ratio of the time the property is physically present or is used in this state to the total time the property is present or used anywhere during that period.  
Example: The taxpayer is the owner of 10 railroad cars. During the year, the total of the days during which each railroad car is present in this state is 50 days. The receipts attributable to the use of each of the railroad cars in this state are a separate item of income and shall be determined as follows:  

$$[(10 \times 50) \div (10 \times 365)] \times \text{Total Receipts} = \text{Receipts Attributable to this State}$$
  - c. Gross receipts for the performance of personal services are attributable to this state to the extent the services are performed in this state. If services relating to a single item of income are performed partly within and partly without this state, the gross receipts from the performance of the services are attributable to this state only if the greater proportion of the services is performed in this state, based on

costs of performance. Usually, if services are performed partly within and partly without this state, the services performed in each state constitute a separate income-producing activity; in such a case the gross receipts from the performance of services attributable to this state are measured by the ratio of the time spent performing the services in this state to the total time spent performing the services everywhere. Time spent performing services includes the amount of time expended in the performance of a contract or other obligation that gives rise to the gross receipts. Personal service not directly connected with the performance of the contract or other obligation, such as time expended in negotiating the contract, is excluded from the computations.

Example 1: The taxpayer, a road show, gives theatrical performances at various locations in State X and in this state during the tax period. All gross receipts from performances given in this state are attributed to this state.

Example 2: The taxpayer, a public opinion survey corporation, conducts a poll by means of its employees in State X and in this state for the sum of \$9,000. The project required 600 hours to obtain the basic data and prepare the survey report. The taxpayer expended 200 of the 600 hours in this state. The receipts attributable to this state are \$3,000  $[(200 \div 600) \times \$9,000]$ .

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-807. Consistency and Uniformity in Reporting**

- A. If the taxpayer departs from or modifies the basis for excluding or including gross receipts in the sales factor used in Arizona returns for prior years, the taxpayer shall disclose in the return for the current year the nature and extent of the modification.
- B. If the returns or reports filed by the taxpayer with all states to which the taxpayer reports under the Uniform Division of Income for Tax Purposes Act are not uniform in the inclusion or exclusion of gross receipts, the taxpayer shall disclose the nature and extent of the variance upon request by the Department.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**ARTICLE 9. DEPARTURE FROM STANDARD APPORTIONMENT AND ALLOCATION PROVISIONS****R15-2D-901. General**

- A. A.R.S. § 43-1148 permits a departure from the allocation and apportionment provisions only in limited cases. A.R.S. § 43-1148 may be invoked only if unusual fact situations produce incongruous results under the apportionment and allocation provisions contained in A.R.S. Title 43, Chapter 11, Article 4.
- B. If a departure from the allocation and apportionment provisions referred to in subsection (A) includes a change in the number of factors, the denominator of the apportionment ratio shall be adjusted to reflect the change.  
Example 1: If two equally weighted factors are used, the denominator is two.

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Example 2: If two factors are used and one of the factors is double weighted, the denominator is three.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-902. Special Provisions for the Property Factor**

The following special provisions apply to the property factor of the apportionment formula:

1. If the subrents taken into account in determining the net annual rental rate under R15-2D-605 produce a negative or inaccurate value for any item of property, the Department shall require and the taxpayer shall use another method that will properly reflect the value of the rented property. In no case, however, shall the value be less than an amount that bears the same ratio to the annual rental rate paid by the taxpayer for the property as the fair market value of that portion of the property used by the taxpayer bears to the total fair market value of the rented property.

Example: The taxpayer rents a 10-story building at an annual rental rate of \$1,000,000. Taxpayer occupies two stories and sublets eight stories for \$1,000,000 a year. The net annual rental rate of the taxpayer shall not be less than 2/10ths of the taxpayer's annual rental rate for the entire year, or \$200,000.

2. If property owned by others is used by the taxpayer at no charge or rented by the taxpayer for a nominal rate, the net annual rental rate for the property shall be determined on the basis of a reasonable market rental rate for the property.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**R15-2D-903. Special Provisions for the Sales Factor**

The following special provisions apply to the sales factor of the apportionment formula:

1. If substantial amounts of gross receipts arise from an incidental or occasional sale of a fixed asset used in the regular course of the taxpayer's trade or business, those gross receipts are excluded from the sales factor. For example, gross receipts from the sale of a factory or plant are excluded.
2. Insubstantial amounts of gross receipts, arising from incidental or occasional transactions or activities, may be excluded from the sales factor, unless their exclusion would materially affect the amount of income apportioned to this state. For example, the taxpayer ordinarily may include or exclude from the sales factor gross receipts from transactions such as the sale of office furniture, business automobiles, or other similar items.
3. If the income-producing activity with respect to business income from intangible personal property can be readily identified, the income is included in the denominator of the sales factor and, if the income-producing activity occurs in this state, in the numerator of the sales factor as well. For example, usually the income-producing activity can be readily identified with respect to interest income received on deferred payments on sales of tangible property and income from the sale, licensing, or other use of intangible personal property. If business income from

intangible property cannot readily be attributed to any particular income-producing activity of the taxpayer, the income is not assigned to the numerator of the sales factor for any state and is excluded from the denominator of the sales factor. For example, if business income in the form of dividends received on stock, royalties received on patents or copyrights, or interest received on bonds, debentures, or government securities results from the mere holding of the intangible personal property by the taxpayer, the dividends and interest shall be excluded from the denominator of the sales factor.

4. Items of income that are not subject to taxation under A.R.S. Title 43 or judicial decision is excluded from the sales factor. Examples of these items include controlled corporation dividends, gross-up dividends, Subpart F dividends, and interest from federal obligations.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 4973, effective October 5, 2001 (Supp. 01-4).

**ARTICLE 10. CREDITS****R15-2D-1001. Environmental Technology Facility Tax Credit**

- A. A taxpayer claiming a tax credit for a qualified environmental technology facility under A.R.S. § 43-1169 shall retain records as required by A.R.S. § 42-1105. In addition, a taxpayer shall retain the following records to substantiate the tax credit:
  1. A copy of the completed application packet submitted to the Arizona Department of Commerce.
  2. The certificate of qualification issued by the Arizona Department of Commerce.
  3. A copy of the memorandum of understanding entered into with the Arizona Department of Commerce.
  4. A copy of each of the environmental technology annual qualification reports filed with the Arizona Department of Commerce.
  5. A schedule showing the amount of credit claimed for each taxable year and the amount used for each taxable year.
  6. The source documents that support the amount and date of capital expenditures made in constructing a qualified environmental technology facility.
- B. A taxpayer shall retain the records specified in subsection (A) for the period in which the Department may issue a deficiency assessment for any taxable year that the taxpayer claims a credit or a carryover credit. A taxpayer may retain source documents in a machine-sensible format or through microfilm or microfiche, if the information is retrievable on request by Department personnel.
- C. In addition to the recapture of previously used credits required by subsections (G) and (H) of A.R.S. § 43-1169, a taxpayer shall reduce the amount of any unused carryover credit related to amounts spent to construct a qualified environmental technology facility as follows:
  1. If, before the facility is placed in service, the taxpayer abandons construction or changes plans in a manner that no longer qualifies as an environmental technology manufacturing, producing, or processing facility under A.R.S. § 41-1514.02, the total unused carryover credit is reduced to zero.
  2. If, within five years after being placed in service, the facility ceases for any reason to operate as an environmental technology manufacturing, producing, or processing facility as described in A.R.S. § 41-1514.02, the total

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unused carryover credit is reduced by the applicable percentage in A.R.S. § 43-1169(H).

**Historical Note**

New Section adopted by final rulemaking at 6 A.A.R. 4105, effective October 4, 2000 (Supp. 00-4).

**R15-2D-1002. Renewable Energy Production Tax Credit**

**A.** For each year for which an owner of a qualified energy generator plans to claim a renewable energy production tax credit, the owner shall file one of the following applications:

1. An initial application in accordance with subsection (B) for:
  - a. Energy produced in 2011 for which an owner of a qualified energy generator plans to claim a credit on the 2011 tax return filed in 2012, and
  - b. Energy produced after 2011 for which an owner of a qualified energy generator did not have a place on the prior year's Credit Authorization List for the renewable energy production tax credit under A.R.S. § 43-1164.03(G).
2. A renewal application in accordance with subsection (C) for an owner of a qualified energy generator that did have a place on the prior year's Credit Authorization List for the renewable energy production tax credit under A.R.S. § 43-1164.03(G).

**B.** An initial application shall include the following information:

1. The information required by A.R.S. § 43-1164.03(F).
2. The business structure of the applicant.
3. If the credit will be passed through to shareholders or partners, a list including the name, taxpayer identification number, and ownership percentage of each shareholder or partner. If the tax year end is other than December 31, and the shareholders or partners, or ownership percentages change, the applicant shall update the list for the tax year end by the due date of the applicant's Arizona return, including extensions.
4. The applicant's tax year end.
5. The name of the contact person, his or her title, telephone number and fax number.
6. If the applicant has any affiliates or subsidiaries, a list of the affiliates and subsidiaries, including the name, address, taxpayer identification number, and percentage of ownership. The applicant may substitute a federal Form 851, or other federal form with the required information, for this list.
7. Self-assigned name or identification number of the qualified energy generator.
8. Assessor's parcel number or numbers of the land on which the qualified energy generator is located or, if not available, the legal description.
9. The centrally valued property tax identification number for the personal property on the land.
10. The type of qualified energy resource used to generate electricity. If the qualified energy resource is biomass, the type of biomass.
11. The generating capacity of the qualified energy generator.
12. The number of kilowatt-hours of electricity produced for the calendar year.
13. Printouts for the calendar year from the production meter located at the qualified energy generator that:
  - a. Measures the output from the qualified energy generator, and
  - b. Provides the output information to a grid-tied energy management system.
14. A signed affidavit in which the applicant states that the information contained in the application is true and cor-

rect under penalty of perjury and that the qualified energy generator for which the applicant is claiming the credit did not produce electricity prior to 2011.

- C.** A renewal application shall include the information required by subsections (B)(1) through (6) and (B)(12) through (14). In addition, where the information required by subsections (B)(7) through (11) has changed since the prior year's application, the applicant shall provide the new information on the renewal application.
- D.** Copies of invoices or receipts from the electricity purchaser, verifying kilowatt-hours sold, shall be made available to the Department upon request.
- E.** If an owner owns more than one qualified energy generator, the owner shall submit a separate application for each qualified energy generator.
- F.** Each application shall be mailed separately in its own envelope by United States Postal Service Express Mail to: Arizona Department of Revenue, Renewable Energy Production Tax Credit Program, P.O. Box 25248, Phoenix, AZ 85002. Notwithstanding A.R.S. § 1-218(E)(1), the Department shall not accept applications through any other delivery method for purposes of this Section and A.R.S. § 43-1164.03.
- G.** For each initial application received in accordance with subsections (B) and (F), the Department shall assign a priority placement number that reflects the date and time on the Express Mail label, without regard to which time zone mailing took place.
- H.** If the Department receives more than one initial application in accordance with subsection (G) that it would assign the same priority placement number based on date and time on the Express Mail label, then the order received shall be determined by a random drawing of affected applications.
- I.** If the Department denies an application or approves a smaller amount of credit than the amount requested on the application, the Department's decision is an appealable agency action as defined in A.R.S. § 41-1092(3) and the applicant may appeal the decision under subsection (J) and A.R.S. Title 41, Chapter 6, Article 10.
- J.** To appeal a decision made under subsection (I), the applicant shall file a petition, in accordance with A.A.C. R15-10-105(B) and A.R.S. § 41-1092.03(B), within 30 days of receipt of the Department's decision.
- K.** For each decision made under subsection (I), the Department shall reserve the portion of the cap that the applicant would have been entitled to if the Department had approved the application in full, up to the generator cap limit, until the applicant waives or exhausts the appeal rights in subsection (J).
- L.** For the cap reserved under subsection (K), once the applicant waives or exhausts the appeal rights in subsection (J), the Department shall certify the cap to the next eligible applicant on the Credit Authorization List, until the full cap is certified.
- M.** In addition to the definitions provided in A.R.S. § 43-1164.03, unless the context provides otherwise, the following definitions apply to this Section and to implementation of A.R.S. § 43-1164.03:
  1. "Cap" means the annual tax credit limit of \$20 million in A.R.S. §§ 43-1164.03(G) and 43-1083.02(G).
  2. "Generator cap" means the annual tax credit limit of \$2 million per qualified energy generator in A.R.S. §§ 43-1164.03(G) and 43-1083.02(G).

**Historical Note**

New Section made by final rulemaking at 18 A.A.R. 603, effective April 8, 2012 (Supp. 12-1).

**ARTICLE 11. REPEALED****R15-2D-1101. Repealed**

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**Historical Note**

New Section made by exempt rulemaking at 7 A.A.R. 5720, effective November 29, 2001 (Supp. 01-4).  
Repealed by exempt rulemaking at 14 A.A.R. 4253, effective October 24, 2008 (Supp. 08-4).

**R15-2D-1102. Repealed****Historical Note**

New Section made by exempt rulemaking at 7 A.A.R. 5720, effective November 29, 2001 (Supp. 01-4).  
Repealed by exempt rulemaking at 14 A.A.R. 4253, effective October 24, 2008 (Supp. 08-4).

**R15-2D-1103. Repealed****Historical Note**

New Section made by exempt rulemaking at 7 A.A.R. 5720, effective November 29, 2001 (Supp. 01-4).  
Repealed by exempt rulemaking at 14 A.A.R. 4253, effective October 24, 2008 (Supp. 08-4).

**R15-2D-1104. Repealed****Historical Note**

New Section made by exempt rulemaking at 7 A.A.R. 5720, effective November 29, 2001 (Supp. 01-4).  
Repealed by exempt rulemaking at 14 A.A.R. 4253, effective October 24, 2008 (Supp. 08-4).

**R15-2D-1105. Repealed****Historical Note**

New Section made by exempt rulemaking at 7 A.A.R. 5720, effective November 29, 2001 (Supp. 01-4).  
Repealed by exempt rulemaking at 14 A.A.R. 4253, effective October 24, 2008 (Supp. 08-4).

**SUBCHAPTER E. EXPIRED****ARTICLE 1. EXPIRED****R15-2E-101. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2326, effective May 14, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(J) at 24 A.A.R. 2431, effective July 19, 2018 (Supp. 18-3).

**ARTICLE 2. EXPIRED****R15-2E-201. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2326, effective May 14, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(J) at 24 A.A.R. 2431, effective July 19, 2018 (Supp. 18-3).

**R15-2E-202. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2326, effective May 14, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(J) at 24 A.A.R. 2431, effective July 19, 2018 (Supp. 18-3).

**R15-2E-203. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2326, effective May 14, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(J) at 24 A.A.R. 2431, effective July 19, 2018 (Supp. 18-3).

**ARTICLE 3. EXPIRED****R15-2E-301. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2326, effective May 14, 2001 (Supp. 01-2). Section expired under A.R.S. § 41-1056(J) at 24 A.A.R. 2431, effective July 19, 2018 (Supp. 18-3).

**SUBCHAPTER F. ESTATES AND TRUSTS****ARTICLE 1. RETURNS****R15-2F-101. Fiduciary Returns**

- A.** In cases in which the gross income of the estate or trust is \$5,000 or more, a copy of the will or trust instrument sworn to by the fiduciary as a true and complete copy must be filed with the fiduciary return of the estate or trust together with a statement by the fiduciary indicating the provisions of the will or trust instrument which in his opinion determine the extent to which the income of the estate or trust is taxable to the estate or trust, the beneficiaries, or the grantor respectively. However, if a copy of the will or trust instrument and statement relating to the provisions of the will or trust instrument have once been filed, they need not be filed again if the fiduciary return contains a statement showing when they were filed. If the trust instrument is amended in any way after such copies have been filed, a copy of the amendment must be filed with the return for the taxable year in which the amendment was made. In addition, the fiduciary must attach a statement to the copy of the amendment indicating the effect, if any, in his opinion of such amendment on the extent to which the income of the estate or trust is taxable to the estate or trust, the beneficiaries, or the grantor, respectively.
- B.** A certificate that all taxes due or to become due from the decedent or estate for whom a fiduciary acts have been paid or secured will not be issued unless all the following requirements are complied with:
1. A return must be filed by or on behalf of the decedent and for the estate for each taxable year in which the respective incomes of the decedent or estate exceeded the requirements for filing returns.
  2. Although it is possible that no tax will become due from an estate for the year in which it is distributed, since all the income of the estate may be either properly paid or credited to the beneficiaries and hence deductible, a return for each year must be filed at the time the certificate is requested, regardless of the amount of gross or net income for such year. Such return must disclose all income to be distributed to beneficiaries upon the final distribution of the estate as well as income property paid or credited to beneficiaries during the year covered by the return and prior to final distribution.
  3. A statement under declaration of perjury must be made by the fiduciary on the request for certificate, regarding the status of returns filed by or on behalf of the decedent or for the estate for the 4 taxable years immediately preceding the date a certificate is requested. The statement

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required should indicate the years for which returns were filed or indicate the years for which the gross and net incomes were less than the amount necessary to require the filing of returns. If additional information is required, a supplemental statement will be requested.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2).

**R15-2F-102. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section expired under A.R.S. § 41-1056(E) at 11 A.A.R. 618, effective October 31, 2004 (Supp. 05-1).

**R15-2F-103. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section expired under A.R.S. § 41-1056(E) at 11 A.A.R. 618, effective October 31, 2004 (Supp. 05-1).

**ARTICLE 2. IMPOSITION OF TAX ON ESTATES AND TRUSTS****R15-2F-201. Expired****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section expired under A.R.S. § 41-1056(E) at 10 A.A.R. 5220, effective October 31, 2004 (Supp. 04-4).

**SUBCHAPTER G. PARTNERSHIPS  
ARTICLE 1. TAXATION OF PARTNERSHIPS****R15-2G-101. Partnerships****A.** For purposes of this Section:

1. "Distributive share of the partnership" means a partner's share, as determined under the partnership agreement, of the items enumerated in A.R.S. § 43-1412.
2. "Arizona distributive share of the partnership" means the amount computed in subsection (A)(1), subject to the allocation and apportionment provisions of A.R.S. §§ 43-1131 through 43-1148.

**B.** A partnership is not subject to income tax but shall file a return of income for information purposes.**C.** In computing taxable income:

1. A resident partner shall include the resident partner's distributive share of the partnership.
2. A nonresident partner shall include the nonresident partner's Arizona distributive share of the partnership.

**Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Amended by final rulemaking at 7 A.A.R. 2898, effective June 13, 2001 (Supp. 01-2).

**R15-2G-102. Repealed****Historical Note**

Recodified at 6 A.A.R. 2308, filed in the Office of the Secretary of State June 2, 2000 (Supp. 00-2). Section repealed by final rulemaking at 7 A.A.R. 2898, effective June 13, 2001 (Supp. 01-2).

#### 42-1005. Powers and duties of director

A. The director shall be directly responsible to the governor for the direction, control and operation of the department and shall:

1. Make such administrative rules as he deems necessary and proper to effectively administer the department and enforce this title and title 43.
2. On or before November 15 of each year issue a written report to the governor and legislature concerning the department's activities during the year. In any election year a copy of this report shall be made available to the governor-elect and to the legislature-elect.
3. On or before December 15 of each year issue a supplemental report which shall also contain proposed legislation recommended by the department for the improvement of the system of taxation in the state.
4. In addition to the report required by paragraph 2 of this subsection, on or before November 15 of each year issue a written report to the governor and legislature detailing the approximate costs in lost revenue for all state tax expenditures in effect at the time of the report. For the purpose of this paragraph, "tax expenditure" means any tax provision in state law which exempts, in whole or in part, any persons, income, goods, services or property from the impact of established taxes including deductions, subtractions, exclusions, exemptions, allowances and credits.
5. Annually, on or before January 10, prepare and submit to the legislature a report containing a summary of all the revisions made to the internal revenue code during the preceding calendar year.
6. Provide such assistance to the governor and the legislature as they may require.
7. Delegate such administrative functions, duties or powers as he deems necessary to carry out the efficient operation of the department.

B. The director may enter into an agreement with the taxing authority of any state which imposes a tax on or measured by income to provide that compensation paid in that state to residents of this state is exempt in that state from liability for income tax, the requirement for filing a tax return and withholding tax from compensation. Compensation paid in this state to residents of that state is reciprocally exempt from the requirements of title 43.

### 43-102. Declaration of intent

A. It is the intent of the legislature by the adoption of this title to accomplish the following objectives:

1. To adopt the provisions of the federal internal revenue code relating to the measurement of adjusted gross income for individuals, to the end that adjusted gross income reported each taxable year by an individual to the internal revenue service shall be the identical sum reported to this state, subject only to modifications contained in this title.
  2. To adopt the provisions of the federal internal revenue code relating to the measurement of taxable income for corporations, trusts, estates and partnerships, to the end that taxable income reported each taxable year by a corporation, trust, estate or partnership to the internal revenue service shall be the identical sum reported to this state, subject only to modifications contained in this title.
  3. To achieve the results in paragraphs 1 and 2 by the application of the various provisions of the federal internal revenue code relating to the definitions of income, exceptions, deductions, accounting methods, taxation of individuals, corporations, trusts, estates and partnerships, basis and other pertinent provisions relating to gross income as defined, resulting in an amount called adjusted gross income for individuals and taxable income for corporations, trusts, estates and partnerships in the internal revenue code.
  4. To impose on each resident of this state a tax measured by taxable income wherever derived.
  5. To impose on each nonresident and each corporation with a business situs in this state a tax measured by taxable income which is the result of activity within or derived from sources within this state.
- B. Nothing contained in this title shall be construed to require a taxpayer to include an item of income or permit a taxpayer to deduct an expense item more than once in computing Arizona taxable income.

43-325. Time for filing returns

Unless otherwise indicated:

1. Returns made on the basis of the calendar year shall be filed on or before the fifteenth day of April following the close of the calendar year.
2. Returns made on the basis of a fiscal year shall be filed on or before the fifteenth day of the fourth month following the close of the fiscal year.
3. For taxable years beginning from and after December 31, 2015, partnership returns are due on or before the fifteenth day of the third month following the close of the taxable year.

43-328. Returns filed by persons outside the United States

If it is determined by the department, under regulations prescribed by it, that by reason of an individual being outside the United States, it is impossible or impractical to perform any one or more of the acts specified in this title, then in determining under this title whether the act was performed within the prescribed time, in respect of any liability for taxes, interest or penalties affected by the failure to perform the act within such time and in determining the amount of any credit or refund, including interest, affected by such failure, there shall be disregarded the period such person was thus unable to conform to the provisions of this title.

#### 43-401. Withholding tax; rates; election by employee

A. Except as provided by subsections B and H of this section, every employer at the time of the payment of wages, salary, bonus or other emolument to any employee whose compensation is for services performed within this state shall deduct and retain from the compensation an amount prescribed by tables adopted by the department.

B. An employer may voluntarily elect to not withhold tax during December by notifying:

1. The department on a form prescribed by the department.
2. The employer's employees in writing in a manner prescribed by the department.

C. If the amount collected and payable by the employer to the department in each of the preceding four calendar quarters did not exceed an average of one thousand five hundred dollars, the amount collected shall be paid to the department on or before April 30, July 31, October 31 and January 31 for the preceding calendar quarter. If the amount exceeded one thousand five hundred dollars in each of the preceding four calendar quarters, the employer shall pay to the department the amount the employer deducts and retains pursuant to this section at the same time as the employer is required to make deposits of federal tax pursuant to section 6302 of the internal revenue code. On or before April 30, July 31, October 31 and January 31 each year, the employer shall reconcile the amounts payable during the preceding calendar quarter in a manner prescribed by the department, except that if the full amount collected and payable is paid timely to the department under this subsection, the employer may reconcile the amounts on or before May 10, August 10, November 10 and February 10 each year. The department by rule may allow and determine which employers qualify for annual payments of withholding taxes, with an annual report by the employer pursuant to section 43-412, subsection B, if the qualifying employer has established sufficient payment history to indicate that the employer is current and in good standing pursuant to standards established by rule. For any business that has not had a withholding certificate for the four preceding consecutive quarters, the quarterly average shall be computed in a manner prescribed by the department.

D. If an employer fails to make a timely monthly payment because prior to that reporting period it reported on a quarterly basis instead of on a monthly basis, the department shall notify the employer that it is out of compliance with this section. Notwithstanding section 42-1125, the department shall not assess a penalty against an employer for failing to make a timely monthly payment if the employer had filed and remitted all taxes due on a quarterly basis and brings all filings and payments into current compliance within thirty days after being notified by the department.

E. Each employee shall elect the amount authorized by subsection A of this section to be withheld for application toward the employee's state income tax liability. The election provided under this subsection shall be exercised by each employee, in writing on a form prescribed by the department. The election shall be made within five days of employment. Each employer shall notify the employees of the election made available under this subsection and shall have election forms available at all times. Each form shall be completed in triplicate, with one copy each for the department, the employer and the employee. The employer shall file a copy of each completed form with the department. Any employee failing to complete an election form as prescribed shall be deemed to have elected the withholding percentage prescribed by the department.

F. Before July 1 of each year, each employer who chooses to not withhold tax pursuant to subsection B of this section shall notify each employee that:

1. State income taxes will not be withheld from compensation in December.
2. The employee may elect to change the rate of withholding tax prescribed by this section to compensate for the resulting change in annual withholdings from the employee's compensation.

G. At an employee's written request, the employer may agree to reduce the amount withheld under this section by the amount of credit that the employee represents to the employer that the employee will qualify for and be entitled to under sections 43-1088, 43-1089, 43-1089.01 and 43-1089.03. The employee's request must include the name and address of the qualifying charitable organization, qualified school tuition organization or public school. Within thirty days after agreeing to the employee's request, the employer shall reduce the withholding amount by the amount of the credit, but not below zero, prorated for the number of pay periods remaining in the employee's taxable year after the employee makes the request. If an employer agrees to reduce the withholding amount pursuant to this subsection, the following apply:

1. Within fifteen days after the end of each calendar quarter, the employer must pay the entire amount of the reduction in withholding tax for that quarter to the designated charitable organization, school tuition organization or public school. These payments are considered to be on the employee's behalf, and not the employer's, for the purposes of qualifying for the income tax credits under sections 43-1088, 43-1089, 43-1089.01 and 43-1089.03.
  2. The employee is responsible and accountable for the accuracy and the amount of reduction in withholding tax and the payments to the charitable organization, school tuition organization or public school.
  3. The employer is responsible and accountable to the charitable organization, school tuition organization or public school, to the employee and to the department for actually making the required payments.
  4. Within thirty days after the end of each calendar year, or within fifteen days after the termination of employment, the employer must furnish to each electing employee a statement of the amount withheld and paid on behalf of the employee during that year.
- H. An employer shall not withhold tax on the wages of the employer's nonresident employees who are in this state on a temporary basis for the purpose of performing disaster recovery from a declared disaster during a disaster period as defined in section 42-1130.

### 43-403. Employment excluded from withholding

A. No amount shall be deducted or retained from:

1. Wages or salary paid to an employee of a common carrier when such employee is a nonresident of this state as defined in section 43-104 and regularly performs services both within and without this state.

2. Wages paid for domestic service in a private home.

3. Wages paid for casual labor not in the course of the employer's trade or business.

4. Wages paid to part-time or seasonal employees whose services to the employer consist solely of labor in connection with the planting, cultivating, harvesting or field packing of seasonal agricultural crops, except such employees whose principal duties are operating any mechanically-driven device in such operations.

5. Wages or salary paid to a nonresident of this state who is:

(a) An employee of an individual, fiduciary, partnership, corporation or limited liability company having property, payroll and sales in this state, or of a related entity having more than fifty per cent direct or indirect common ownership.

(b) Physically present in this state for less than sixty days in a calendar year for the purpose of performing a service that will benefit the employer or the related entity. For purposes of determining the number of days of service in this state, days spent in the following activities are not included:

(i) In transit.

(ii) Engaging in personal activities.

(iii) Participating in training or professional development activities or attending meetings that are not directly connected to the Arizona operations of the employer or the related entity.

6. Wages or salary paid to a nonresident who is in this state on a temporary basis for the purpose of performing disaster recovery from a declared disaster during a disaster period as defined in section 42-1130.

B. In addition to the exemptions from the withholding provisions contained in subsection A of this section, because of the temporary nature of such employment, no amount shall be deducted or retained from wages paid to a nonresident of this state engaged in any phase of motion picture production when, prior to the time of payment of such wages, an application is made by the employer to the department, on forms prescribed by the department, for an exemption from the withholding provisions of this section and the department determines that the nonresident would be allowed a credit under section 43-1096 against all of the taxes upon such wages imposed by this chapter.

C. Subsection A, paragraph 5 of this section does not apply to a nonresident employee who is in this state solely for athletic or entertainment purposes.

D. Notwithstanding subsection A, paragraph 5 of this section:

1. The nonresident employee may elect to have withholding deducted in the manner prescribed by section 43-401, subsection E and the employer shall withhold tax pursuant to that election.

2. The employer may elect to withhold tax from the nonresident employee before the sixty-day limitation has elapsed.

### 43-432. Refund for excess withholding

A. When the total amount withheld under section 43-401 exceeds the amount of the tax on the employee's entire taxable income as computed under this title, the department shall, after auditing the annual return filed by the employee in accordance with chapter 3 of this title, and without requiring a filing of a refund claim as provided in section 42-1106, subsection A, refund the amount of the excess withheld, subject to setoff for debts pursuant to section 42-1122. Failure of the department to make such refund shall not limit the right of the taxpayer to file a claim for a refund as provided in chapter 6, article 1 of this title. If the excess tax withheld is less than one dollar, no refund shall be made unless specifically requested by the taxpayer at the time such return is filed. In no event shall any excess be allowed as a credit against any tax accruing on a return filed for a year subsequent to the year during which such excess was withheld, the provisions of chapter 6 of this title notwithstanding.

B. The department may make separate refunds of withheld taxes upon request by a husband or wife who has filed a joint return, the refund payable to each spouse being proportioned to the gross earnings of each shown by the information returns filed by the employer or otherwise shown to the satisfaction of the department. If a taxpayer entitled to a refund under this subsection dies, the department may certify to the department of administration that the refund be made to the taxpayer's duly appointed executor, administrator or personal representative.

### 43-581. Payment of estimated tax; penalty; forms

A. An individual who is subject to the tax imposed by this title and whose Arizona gross income, as defined by section 43-1001, or as described by section 43-1091 in the case of nonresidents, for the taxable year exceeds seventy-five thousand dollars or one hundred fifty thousand dollars if a joint return is filed and whose Arizona gross income was greater than seventy-five thousand dollars in the preceding taxable year or one hundred fifty thousand dollars in the preceding taxable year if a joint return is filed shall make payments of estimated tax during the individual's taxable year. The amount of the payments of estimated tax shall be an amount that reasonably reflects a taxpayer's Arizona income tax liability that will be unpaid at the end of the taxpayer's taxable year. This amount shall be paid in four installments on or before the due dates established by the internal revenue code and shall total, when combined with the taxpayer's withholding tax, at least ninety percent of the tax due for the current taxable year or one hundred percent of the tax due for the preceding taxable year.

B. Any other individual who is subject to the tax imposed by this title may make payments of estimated tax during the individual's taxable year. The amount of any estimated tax payments for the taxable year shall be an amount that reasonably reflects a taxpayer's Arizona income tax liability that will be unpaid at the end of the taxpayer's taxable year.

C. The department shall prescribe rules for the payments of estimated tax that shall provide for estimated payments in a manner similar to the manner prescribed in the internal revenue code.

D. If the taxpayer does not pay the estimated tax required by subsection A of this section on or before the prescribed dates, there is assessed and the department shall collect a penalty on the unpaid amount as prescribed by section 42-1125, subsection Q. No penalties or interest shall be assessed or collected if either of the following applies:

1. The estimated tax payments made pursuant to this section are allowable exceptions under section 6654 of the internal revenue code.
2. The taxpayer's Arizona income tax liability due on the taxpayer's return is less than one thousand dollars. For the purposes of this paragraph, "Arizona income tax liability due on the taxpayer's return" means the amount of tax due on the return minus the amount of Arizona income tax withheld and tax credits claimed by the taxpayer.

E. The department shall make available suitable forms and instructions to taxpayers who make estimated tax payments pursuant to this article.

43-942. Allocation in the case of controlled corporations

A. In any case of two or more corporations owned or controlled directly or indirectly by the same interests, the department may distribute, apportion or allocate gross income, deductions, credits or allowances between or among such taxpayers, if it determines that such distributions, apportionment or allocation is necessary in order to prevent evasion of taxes or clearly to reflect the income of any such taxpayer.

B. For the purpose of enforcing this section, the department may require the filing of a combined report and such other information as it deems necessary unless the taxpayer has elected or is required to file a consolidated return pursuant to section 43-947.

#### 43-961. Items not deductible in computation of taxable income

In computing taxable income no deduction shall in any case be allowed in respect of:

1. Personal, living or family expenses, except medical expenses allowed pursuant to section 43-1042.
2. With respect to financial institutions, as defined in section 6-101, that portion of any amount otherwise allowable as an interest expense deduction pursuant to the internal revenue code and determined by dividing the total of the amount of interest income received on obligations of the United States, this state or any political subdivision of this state by the sum of tax exempt interest as defined in section 103 of the internal revenue code plus gross income determined pursuant to the internal revenue code, and by multiplying the result thus obtained by any interest deduction allowed pursuant to section 163 or 591 of the internal revenue code without regard to the application of section 265 of the internal revenue code, and by adding to such result an amount equal to ten per cent of the total of the amount of interest income received on obligations of the United States, this state or any political subdivision of this state. The total amount disallowed by operation of this paragraph shall be reduced to the extent such disallowance would cause the tax payable by the financial institution under this title to exceed the total of gross income determined pursuant to the internal revenue code, plus the amount of interest income received on obligations of any state, territory or possession of the United States, or any political subdivision thereof, located outside this state, less the amount of interest income received on obligations of the United States.
3. Any amount paid or accrued on indebtedness incurred or continued to purchase a single premium life insurance or endowment contract. For the purposes of this paragraph, if substantially all the premiums of a life insurance or endowment contract are paid within a period of four years from the date on which such contract is purchased, such contract shall be considered a single premium life insurance or endowment contract.
4. Expenses attributable to Arizona gross income derived from illegal activities nor shall any deductions be allowed to any taxpayer on any of his Arizona gross income derived from any other activities which tend to promote or to further, or are connected or associated with, such illegal activities.
5. Any amount, not otherwise provided for by this section, that would otherwise be allowable as a deduction or an adjustment, which is allocable to one or more classes of income, whether or not any amount of income of that class or classes is received or accrued, and that is not required to be included in a person's Arizona adjusted gross income or Arizona taxable income.

### 43-1021. Addition to Arizona gross income

In computing Arizona adjusted gross income, the following amounts shall be added to Arizona gross income:

1. A beneficiary's share of the fiduciary adjustment to the extent that the amount determined by section 43-1333 increases the beneficiary's Arizona gross income.
2. An amount equal to the ordinary income portion of a lump sum distribution that was excluded from federal adjusted gross income pursuant to the special rule for individuals who attained fifty years of age before January 1, 1986 under Public Law 99-514, section 1122(h)(3).
3. The amount of interest income received on obligations of any state, territory or possession of the United States, or any political subdivision thereof, located outside the state of Arizona, reduced, for taxable years beginning from and after December 31, 1996, by the amount of any interest on indebtedness and other related expenses that were incurred or continued to purchase or carry those obligations and that are not otherwise deducted or subtracted in arriving at Arizona gross income.
4. The excess of a partner's share of partnership taxable income required to be included under chapter 14, article 2 of this title over the income required to be reported under section 702(a)(8) of the internal revenue code.
5. The excess of a partner's share of partnership losses determined pursuant to section 702(a)(8) of the internal revenue code over the losses allowable under chapter 14, article 2 of this title.
6. Any amount of agricultural water conservation expenses that were deducted pursuant to the internal revenue code for which a credit is claimed under section 43-1084.
7. The amount by which the depreciation or amortization computed under the internal revenue code with respect to property for which a credit was taken under section 43-1080 exceeds the amount of depreciation or amortization computed pursuant to the internal revenue code on the Arizona adjusted basis of the property.
8. The amount by which the adjusted basis computed under the internal revenue code with respect to property for which a credit was claimed under section 43-1080 and that is sold or otherwise disposed of during the taxable year exceeds the adjusted basis of the property computed under section 43-1080.
9. The amount by which the depreciation or amortization computed under the internal revenue code with respect to property for which a credit was taken under either section 43-1081 or 43-1081.01 exceeds the amount of depreciation or amortization computed pursuant to the internal revenue code on the Arizona adjusted basis of the property.
10. The amount by which the adjusted basis computed under the internal revenue code with respect to property for which a credit was claimed under section 43-1074.02, 43-1081 or 43-1081.01 and that is sold or otherwise disposed of during the taxable year exceeds the adjusted basis of the property computed under section 43-1074.02, 43-1081 or 43-1081.01, as applicable.
11. The deduction referred to in section 1341(a)(4) of the internal revenue code for restoration of a substantial amount held under a claim of right.
12. The amount by which a net operating loss carryover or capital loss carryover allowable pursuant to section 1341(b)(5) of the internal revenue code exceeds the net operating loss carryover or capital loss carryover allowable pursuant to section 43-1029, subsection F.
13. Any wage expenses deducted pursuant to the internal revenue code for which a credit is claimed under section 43-1087 and representing net increases in qualified employment positions for employment of temporary assistance for needy families recipients.

14. The amount of any depreciation allowance allowed pursuant to section 167(a) of the internal revenue code to the extent not previously added.

15. The amount of a nonqualified withdrawal, as defined in section 15-1871, from a college savings plan established pursuant to section 529 of the internal revenue code that is made to a distributee to the extent the amount is not included in computing federal adjusted gross income, except that the amount added under this paragraph shall not exceed the difference between the amount subtracted under section 43-1022 in prior taxable years and the amount added under this section in any prior taxable years.

16. The amount of discharge of indebtedness income that is deferred and excluded from the computation of federal adjusted gross income in the current taxable year pursuant to section 108(i) of the internal revenue code as added by section 1231 of the American recovery and reinvestment act of 2009 (P.L. 111-5).

17. The amount of any previously deferred original issue discount that was deducted in computing federal adjusted gross income in the current year pursuant to section 108(i) of the internal revenue code as added by section 1231 of the American recovery and reinvestment act of 2009 (P.L. 111-5), to the extent that the amount was previously subtracted from Arizona gross income pursuant to section 43-1022, paragraph 22.

18. If a subtraction is or has been taken by the taxpayer under section 43-1024, in the current or a prior taxable year for the full amount of eligible access expenditures paid or incurred to comply with the requirements of the Americans with disabilities act of 1990 (P.L. 101-336) or title 41, chapter 9, article 8, any amount of eligible access expenditures that is recognized under the internal revenue code, including any amount that is amortized according to federal amortization schedules, and that is included in computing taxable income for the current taxable year.

19. For taxable years beginning from and after December 31, 2017, the amount of any net capital loss included in Arizona gross income for the taxable year that is derived from the exchange of one kind of legal tender for another kind of legal tender. For the purposes of this paragraph:

(a) "Legal tender" means a medium of exchange, including specie, that is authorized by the United States Constitution or Congress for the payment of debts, public charges, taxes and dues.

(b) "Specie" means coins having precious metal content.

### 43-1022. Subtractions from Arizona gross income

In computing Arizona adjusted gross income, the following amounts shall be subtracted from Arizona gross income:

1. The amount of exemptions allowed by section 43-1023.
2. Benefits, annuities and pensions in an amount totaling not more than two thousand five hundred dollars received from one or more of the following:
  - (a) The United States government service retirement and disability fund, the United States foreign service retirement and disability system and any other retirement system or plan established by federal law.
  - (b) The Arizona state retirement system, the corrections officer retirement plan, the public safety personnel retirement system, the elected officials' retirement plan, an optional retirement program established by the Arizona board of regents under section 15-1628, an optional retirement program established by a community college district board under section 15-1451 or a retirement plan established for employees of a county, city or town in this state.
3. A beneficiary's share of the fiduciary adjustment to the extent that the amount determined by section 43-1333 decreases the beneficiary's Arizona gross income.
4. Interest income received on obligations of the United States, less any interest on indebtedness, or other related expenses, and deducted in arriving at Arizona gross income, which were incurred or continued to purchase or carry such obligations.
5. The excess of a partner's share of income required to be included under section 702(a)(8) of the internal revenue code over the income required to be included under chapter 14, article 2 of this title.
6. The excess of a partner's share of partnership losses determined pursuant to chapter 14, article 2 of this title over the losses allowable under section 702(a)(8) of the internal revenue code.
7. The amount allowed by section 43-1025 for contributions during the taxable year of agricultural crops to charitable organizations.
8. The portion of any wages or salaries paid or incurred by the taxpayer for the taxable year that is equal to the amount of the federal work opportunity credit, the empowerment zone employment credit, the credit for employer paid social security taxes on employee cash tips and the Indian employment credit that the taxpayer received under sections 45A, 45B, 51(a) and 1396 of the internal revenue code.
9. The amount of prizes or winnings less than five thousand dollars in a single taxable year from any of the state lotteries established and operated pursuant to title 5, chapter 5.1, article 1.
10. The amount of exploration expenses that is determined pursuant to section 617 of the internal revenue code, that has been deferred in a taxable year ending before January 1, 1990 and for which a subtraction has not previously been made. The subtraction shall be made on a ratable basis as the units of produced ores or minerals discovered or explored as a result of this exploration are sold.
11. The amount included in federal adjusted gross income pursuant to section 86 of the internal revenue code, relating to taxation of social security and railroad retirement benefits.
12. To the extent not already excluded from Arizona gross income under the internal revenue code, compensation received for active service as a member of the reserves, the national guard or the armed forces of the United States, including compensation for service in a combat zone as determined under section 112 of the internal revenue code.

13. The amount of unreimbursed medical and hospital costs, adoption counseling, legal and agency fees and other nonrecurring costs of adoption not to exceed three thousand dollars. In the case of a husband and wife who file separate returns, the subtraction may be taken by either taxpayer or may be divided between them, but the total subtractions allowed both husband and wife shall not exceed three thousand dollars. The subtraction under this paragraph may be taken for the costs that are described in this paragraph and that are incurred in prior years, but the subtraction may be taken only in the year during which the final adoption order is granted.
14. The amount authorized by section 43-1027 for the taxable year relating to qualified wood stoves, wood fireplaces or gas fired fireplaces.
15. The amount by which a net operating loss carryover or capital loss carryover allowable pursuant to section 43-1029, subsection F exceeds the net operating loss carryover or capital loss carryover allowable pursuant to section 1341(b)(5) of the internal revenue code.
16. Any amount of qualified educational expenses that is distributed from a qualified state tuition program determined pursuant to section 529 of the internal revenue code and that is included in income in computing federal adjusted gross income.
17. Any item of income resulting from an installment sale that has been properly subjected to income tax in another state in a previous taxable year and that is included in Arizona gross income in the current taxable year.
18. The amount authorized by section 43-1030 relating to holocaust survivors.
19. For property placed in service:
  - (a) In taxable years beginning before December 31, 2012, an amount equal to the depreciation allowable pursuant to section 167(a) of the internal revenue code for the taxable year computed as if the election described in section 168(k)(2)(D)(iii) of the internal revenue code had been made for each applicable class of property in the year the property was placed in service.
  - (b) In taxable years beginning from and after December 31, 2012 through December 31, 2013, an amount determined in the year the asset was placed in service based on the calculation in subdivision (a) of this paragraph. In the first taxable year beginning from and after December 31, 2013, the taxpayer may elect to subtract the amount necessary to make the depreciation claimed to date for the purposes of this title the same as it would have been if subdivision (c) of this paragraph had applied for the entire time the asset was in service. Subdivision (c) of this paragraph applies for the remainder of the asset's life. If the taxpayer does not make the election under this subdivision, subdivision (a) of this paragraph applies for the remainder of the asset's life.
  - (c) In taxable years beginning from and after December 31, 2013 through December 31, 2015, an amount equal to the depreciation allowable pursuant to section 167(a) of the internal revenue code for the taxable year as computed as if the additional allowance for depreciation had been ten percent of the amount allowed pursuant to section 168(k) of the internal revenue code.
  - (d) In taxable years beginning from and after December 31, 2015 through December 31, 2016, an amount equal to the depreciation allowable pursuant to section 167(a) of the internal revenue code for the taxable year as computed as if the additional allowance for depreciation had been fifty-five percent of the amount allowed pursuant to section 168(k) of the internal revenue code.
  - (e) In taxable years beginning from and after December 31, 2016, an amount equal to the depreciation allowable pursuant to section 167(a) of the internal revenue code for the taxable year as computed as if the additional allowance for depreciation had been the full amount allowed pursuant to section 168(k) of the internal revenue code.
20. With respect to property that is sold or otherwise disposed of during the taxable year by a taxpayer that complied with section 43-1021, paragraph 14 with respect to that property, the amount of depreciation that has

been allowed pursuant to section 167(a) of the internal revenue code to the extent that the amount has not already reduced Arizona taxable income in the current or prior taxable years.

21. The amount contributed during the taxable year to college savings plans established pursuant to section 529 of the internal revenue code to the extent that the contributions were not deducted in computing federal adjusted gross income. The amount subtracted shall not exceed:

(a) Two thousand dollars for a single individual or a head of household.

(b) Four thousand dollars for a married couple filing a joint return. In the case of a husband and wife who file separate returns, the subtraction may be taken by either taxpayer or may be divided between them, but the total subtractions allowed both husband and wife shall not exceed four thousand dollars.

22. The amount of any original issue discount that was deferred and not allowed to be deducted in computing federal adjusted gross income in the current taxable year pursuant to section 108(i) of the internal revenue code as added by section 1231 of the American recovery and reinvestment act of 2009 (P.L. 111-5).

23. The amount of previously deferred discharge of indebtedness income that is included in the computation of federal adjusted gross income in the current taxable year pursuant to section 108(i) of the internal revenue code as added by section 1231 of the American recovery and reinvestment act of 2009 (P.L. 111-5), to the extent that the amount was previously added to Arizona gross income pursuant to section 43-1021, paragraph 16.

24. The portion of the net operating loss carryforward that would have been allowed as a deduction in the current year pursuant to section 172 of the internal revenue code if the election described in section 172(b)(1)(H) of the internal revenue code had not been made in the year of the loss that exceeds the actual net operating loss carryforward that was deducted in arriving at federal adjusted gross income. This subtraction only applies to taxpayers who made an election under section 172(b)(1)(H) of the internal revenue code as amended by section 1211 of the American recovery and reinvestment act of 2009 (P.L. 111-5) or as amended by section 13 of the worker, homeownership, and business assistance act of 2009 (P.L. 111-92).

25. For taxable years beginning from and after December 31, 2013, the amount of any net capital gain included in federal adjusted gross income for the taxable year derived from investment in a qualified small business as determined by the Arizona commerce authority pursuant to section 41-1518.

26. An amount of any net long-term capital gain included in federal adjusted gross income for the taxable year that is derived from an investment in an asset acquired after December 31, 2011, as follows:

(a) For taxable years beginning from and after December 31, 2012 through December 31, 2013, ten percent of the net long-term capital gain included in federal adjusted gross income.

(b) For taxable years beginning from and after December 31, 2013 through December 31, 2014, twenty percent of the net long-term capital gain included in federal adjusted gross income.

(c) For taxable years beginning from and after December 31, 2014, twenty-five percent of the net long-term capital gain included in federal adjusted gross income. For the purposes of this paragraph, a transferee that receives an asset by gift or at the death of a transferor is considered to have acquired the asset when the asset was acquired by the transferor. If the date an asset is acquired cannot be verified, a subtraction under this paragraph is not allowed.

27. If an individual is not claiming itemized deductions pursuant to section 43-1042, the amount of premium costs for long-term care insurance, as defined in section 20-1691.

28. The amount of eligible access expenditures paid or incurred during the taxable year to comply with the requirements of the Americans with disabilities act of 1990 (P.L. 101-336) or title 41, chapter 9, article 8 as provided by section 43-1024.

29. For taxable years beginning from and after December 31, 2017, the amount of any net capital gain included in Arizona gross income for the taxable year that is derived from the exchange of one kind of legal tender for another kind of legal tender. For the purposes of this paragraph:

(a) "Legal tender" means a medium of exchange, including specie, that is authorized by the United States Constitution or Congress for the payment of debts, public charges, taxes and dues.

(b) "Specie" means coins having precious metal content.

30. Benefits, annuities and pensions received as retired or retainer pay of the uniformed services of the United States in amounts as follows:

(a) For taxable years through December 31, 2018, an amount totaling not more than two thousand five hundred dollars.

(b) For taxable years beginning from and after December 31, 2018, an amount totaling not more than three thousand five hundred dollars.

### 43-1023. Exemptions for blind persons, persons over sixty-five years of age and dependents

A. A taxpayer is allowed an exemption of one thousand five hundred dollars:

1. For a taxpayer who is blind or if either the taxpayer's central visual acuity does not exceed 20/200 in the better eye with correcting lenses or the taxpayer's visual acuity is greater than 20/200 but is accompanied by a limitation in the fields of vision such that the widest diameter of the visual field subtends an angle no greater than twenty degrees.

2. For the taxpayer's spouse if a separate return is made by the taxpayer, if the spouse is blind, as defined in paragraph 1 of this subsection, has no Arizona adjusted gross income for the calendar year in which the taxable year of the taxpayer begins and is not the dependent of another taxpayer. For the purposes of this paragraph, the determination of whether the spouse is blind shall be made at the close of the taxable year of the taxpayer. If the spouse dies during such taxable year, the determination shall be made as of the time of the spouse's death.

B. A taxpayer is allowed an exemption of two thousand three hundred dollars for:

1. Each dependent of the taxpayer, as defined in section 43-1001.

2. Each person age sixty-five or older regardless of the person's relationship to the taxpayer:

(a) If the taxpayer pays more than one-fourth of the total cost of maintaining such person in a nursing care institution or residential care institution licensed pursuant to title 36, chapter 4, or an assisted living facility provider of a type certified pursuant to title 11, chapter 2, article 7, if such payments exceed eight hundred dollars in the taxable year.

(b) If the taxpayer otherwise makes payments exceeding eight hundred dollars in the taxable year for home health care or other types of medical care.

3. For taxable years beginning from and after December 31, 2003, each birth for which a certificate of birth resulting in stillbirth has been issued pursuant to section 36-330 if the child otherwise would have been a member of the taxpayer's household. The taxpayer may claim the exemption under this paragraph only in the taxable year in which the stillbirth occurred.

C. For taxable years beginning from and after December 31, 1998, a resident taxpayer is allowed an exemption of ten thousand dollars for each parent or ancestor of a parent of the taxpayer, who is age sixty-five or older, who requires assistance with activities of daily living and who lives in the taxpayer's principal residence for the entire taxable year, if the taxpayer pays more than one-half of the person's total support and maintenance costs. An exemption under this subsection is in lieu of an exemption under subsection B of this section for the same person.

D. A taxpayer shall not take more than one exemption for the same person under either subsection B or C of this section.

E. A taxpayer is allowed an exemption of two thousand one hundred dollars:

1. If the taxpayer has attained the age of sixty-five before the close of the taxable year filing a separate or joint return and the taxpayer is not claimed as a dependent by another taxpayer.

2. For the taxpayer's spouse if the spouse has attained the age of sixty-five before the close of the taxable year, a joint return is filed and the spouse is not a dependent of another taxpayer.

43-1072. Earned credit for property taxes; residents sixty-five years of age or older; definitions

A. There shall be allowed to each resident a credit against the taxes imposed by this title for a taxable year for property taxes accrued or rent, or both, paid in that taxable year, in accordance with subsection B of this section, if all of the following apply:

1. Such resident attained the age of sixty-five years prior to or during the taxable year or such resident is a recipient of public monies under title 16 of the social security act, as amended.

2. Such person paid either property taxes or rent during the taxable year.

3. Such person either:

(a) Did not live with a spouse or any other persons and had an income from all sources in the taxable year of less than three thousand seven hundred fifty-one dollars.

(b) Lived with a spouse or one or more persons and the combined income from all sources in the taxable year of all persons residing in the residence was less than five thousand five hundred one dollars.

B. The credit allowed under this section is the amount of property taxes actually paid during the taxable year or the amount computed as follows, whichever is less:

1. For a person eligible under subsection A, paragraph 3, subdivision (a) of this section, according to the following table:

Household Income Tax Credit

\$ 0-1,750	\$502
1,751-1,850	479
1,851-1,950	457
1,951-2,050	435
2,051-2,150	412
2,151-2,250	390
2,251-2,350	368
2,351-2,450	345
2,451-2,550	323
2,551-2,650	301
2,651-2,750	279
2,751-2,850	256
2,851-2,950	234
2,951-3,050	212
3,051-3,150	189

3,151-3,250	167
3,251-3,350	145
3,351-3,450	123
3,451-3,550	100
3,551-3,650	78
3,651-3,750	56

2. For a person eligible under subsection A, paragraph 3, subdivision (b) of this section, according to the following table:

Household Income Tax Credit

\$ 0-2,500	\$502
2,501-2,650	479
2,651-2,800	457
2,801-2,950	435
2,951-3,100	412
3,101-3,250	390
3,251-3,400	368
3,401-3,550	345
3,551-3,700	323
3,701-3,850	301
3,851-4,000	279
4,001-4,150	256
4,151-4,300	234
4,301-4,450	212
4,451-4,600	189
4,601-4,750	167
4,751-4,900	145
4,901-5,050	123
5,051-5,200	100
5,201-5,350	78

5,351-5,500

56

C. The owner or lessor of property leased or rented solely for residential purposes, on request, shall furnish to the tenants of the property a written statement of the percentage of rental payments that are attributable to property tax for purposes of this section.

D. Disposition of the claimant's allowable credit shall be as provided below:

1. If the allowable amount of such claim exceeds the income taxes otherwise due on the claimant's income, the amount of the claim not used as an offset against income taxes, after audit by the department, shall be paid in the same manner as a refund granted under chapter 6, article 1 of this title. Refunds made pursuant to this paragraph are subject to setoff under section 42-1122.

2. The amount of any claim otherwise payable for credit for property taxes accrued or rent may be applied by the department against any liability outstanding on the books of the department against the claimant or against the claimant's spouse who was a member of the claimant's household in the taxable year.

E. The department shall make available suitable forms with instructions for claimants. Claimants who certify on the prescribed form that they have no income tax liability for the taxable year shall not be required to file an individual income tax return. The claim shall be in such form as the department may prescribe but shall require the social security numbers of persons who were allowed to claim as dependents for the taxes imposed by this title claimants filing pursuant to this section. The claimant shall also submit a copy of the claimant's property tax statement or a suitable representation of the statement as prescribed by the department. The department shall audit a sufficient number of claims to enforce the provisions of this chapter.

F. No claim with respect to property taxes or with respect to rent shall be allowed or paid unless the claim is actually filed on or before April 15 for the next preceding calendar year. The department may, upon request, grant for a period of not to exceed six months an extension of time for filing the claim.

G. Only one claimant per household per year shall be entitled to a tax credit pursuant to this section.

H. In this section, unless the context otherwise requires:

1. "Claimant" means a person who has filed a claim for credit under this section and was a resident of this state during the entire taxable year. In the case of a claim for rent, the claimant shall have rented property in this state during the entire taxable year except as otherwise provided by this section. If two individuals of a household are able to meet the qualifications for a claimant, they may determine between them as to whom the claimant shall be. If they are unable to agree, the matter shall be referred to the department and its decision shall be final. If a homestead is occupied by two or more individuals and more than one individual is able to qualify as a claimant, and some or all of the qualified individuals are not related, the individuals may determine among them as to whom the claimant shall be. If they are unable to agree, the matter shall be referred to the department, and its decision shall be final.

2. "Gross rent" means rental paid for the right of occupancy of a homestead or space rental paid to a landlord for the parking of a mobile home. If the department is satisfied that the gross rent charge was paid solely for purposes of receiving a credit pursuant to this section, it shall not allow a claim.

3. "Homestead" means the principal dwelling, whether owned or rented by the claimant. "Homestead" may also include a mobile home and the land upon which it is located.

4. "Household" means the household of the claimant and such other persons as resided with the claimant in the claimant's homestead during the taxable year.

5. "Household income" means all income received by all persons of a household in a taxable year while members of the household.

6. "Income" means the sum of the following:

- (a) Adjusted gross income as defined by the department.
- (b) The amount of capital gains excluded from adjusted gross income.
- (c) Nontaxable strike benefits.
- (d) Nontaxable interest received from the federal government or any of its instrumentalities.
- (e) Payments received from a retirement program paid by this state or any of its political subdivisions.
- (f) Payments received from a retirement program paid by the United States through any of its agencies, instrumentalities or programs, except as provided in subsection I of this section.
- (g) The gross amount of any pension or annuity not otherwise exempted except as provided in subsection I of this section.

7. "Property taxes" means property taxes levied on a claimant's homestead in this state in any taxable year. For purposes of this paragraph, property taxes are "levied" when the tax roll is delivered to the county treasurer for collection. If a claimant and the claimant's household own their homestead part of the taxable year and rent it or different homesteads for the rest of the same year, provided property taxes were levied on the homestead which was owned by the claimant and the claimant's household, such claimant shall be eligible for a credit pursuant to this section.

I. Income as defined in subsection H, paragraph 6, subdivisions (f) and (g) of this section shall not include monies received from cash public assistance and relief, relief granted under the provisions of this section, railroad retirement benefits, payments received under the federal social security act (49 Stat. 620), payments received under Arizona state unemployment insurance laws, payments received from veterans' disability pensions, payments received as workers' compensation, the gross amount of "loss of time" insurance, and gifts from nongovernmental sources or surplus foods or other relief in kind supplied by a governmental agency.

### 43-1083.02. Renewable energy production tax credit; definitions

A. A credit is allowed against the taxes imposed by this title for the production of electricity using renewable energy resources.

B. The taxpayer is eligible for the credit:

1. If the taxpayer holds title to a qualified energy generator that first produces electricity from and after December 31, 2010 and before January 1, 2021.

2. For ten consecutive calendar years beginning with the calendar year in which the qualified energy generator begins producing electricity that is transmitted through a transmission facility to a grid connection with a public or private electric transmission or distribution utility system. That same date applies with respect to that generator until the expiration of the ten-year period regardless of whether the generator is sold to another taxpayer or goes out of production before the expiration of the ten-year period.

C. The credit authorized by this section is based on the electricity that is generated by a qualified energy generator during a calendar year. For a taxpayer that files on a fiscal year basis, the credit shall be claimed on the return for the taxable year in which the calendar year ends.

D. Subject to subsection G of this section, the amount of the credit is:

1. One cent per kilowatt-hour of the first two hundred thousand megawatt-hours of electricity produced by a qualified energy generator in the calendar year using a wind or biomass derived qualified energy resource.

2. The following amounts for electricity produced by a qualified energy generator using a solar light derived or solar heat derived qualified energy resource:

(a) Four cents per kilowatt-hour in the first calendar year in which the qualified energy generator produces electricity.

(b) Four cents per kilowatt-hour in the second calendar year in which the qualified energy generator produces electricity.

(c) Three and one-half cents per kilowatt-hour in the third calendar year in which the qualified energy generator produces electricity.

(d) Three and one-half cents per kilowatt-hour in the fourth calendar year in which the qualified energy generator produces electricity.

(e) Three cents per kilowatt-hour in the fifth calendar year in which the qualified energy generator produces electricity.

(f) Three cents per kilowatt-hour in the sixth calendar year in which the qualified energy generator produces electricity.

(g) Two cents per kilowatt-hour in the seventh calendar year in which the qualified energy generator produces electricity.

(h) Two cents per kilowatt-hour in the eighth calendar year in which the qualified energy generator produces electricity.

(i) One and one-half cents per kilowatt-hour in the ninth calendar year in which the qualified energy generator produces electricity.

(j) One cent per kilowatt-hour in the tenth calendar year in which the qualified energy generator produces electricity.

E. To qualify for the purposes of this section, an energy generator may be located within one mile of an existing qualified energy generator only if the owner of the energy generator or the owner's corporate affiliates are not the owner of or the corporate affiliate of the owner of the existing qualified energy generator.

F. To be eligible for the credit under this section, the taxpayer must apply to the department, on a form prescribed by the department, for certification of the credit. The department shall only accept applications beginning January 2 through January 31 of the year following the calendar year for which the credit is being requested. The application shall include:

1. The name, address and social security number or federal employer identification number of the applicant.
2. The location of the taxpayer's facility that produces electricity using renewable energy resources for which the credit is claimed.
3. The amount of the credit that is claimed.
4. The date the qualified energy generator began producing commercially marketable amounts of electricity.
5. Any additional information that the department requires.

G. The department shall review each application under subsection F of this section and certify to the taxpayer the amount of the credit that is authorized. The amount of the credit for any calendar year shall not exceed two million dollars per facility that produces electricity using renewable energy resources. Credits are allowed under this section and section 43-1164.03 on a first come, first served basis. The department shall not authorize tax credits under this section and section 43-1164.03 that exceed in the aggregate a total of twenty million dollars for any calendar year. The first time that a taxpayer submits a qualified application for a qualified energy generator under subsection F of this section, the department shall add the taxpayer's name to a credit authorization list that is maintained in the order in which qualified applications are first received by the department on behalf of the qualified energy generator. A taxpayer's position on the credit authorization list shall be determined in the first year the taxpayer submits an application under subsection F of this section for the qualified energy generator. The taxpayer's position on the credit authorization list for a particular qualified energy generator shall remain unchanged for the ten years that are specified in subsection B, paragraph 2 of this section or until a year in which the taxpayer fails to submit a timely application under subsection F of this section or otherwise fails to comply with this section. If a taxpayer is removed from the credit authorization list for a qualified energy generator, the taxpayer may establish a new position on the credit authorization list in a subsequent year by filing a timely application for a qualified energy generator that qualifies for the credit. If an application is received that, if authorized, would require the department to exceed the twenty million dollar limit, the department shall grant the applicant only the remaining credit amount that would not exceed the twenty million dollar limit. After the department authorizes twenty million dollars in tax credits, the department shall deny any subsequent applications that are received for that calendar year. The department shall not authorize any additional tax credits that exceed the twenty million dollar limit even if the amounts that have been certified to any taxpayer were not claimed or a taxpayer otherwise fails to meet the requirements to claim the additional credit.

H. Co-owners of a qualified energy generator, including partners in a partnership, members of a limited liability company and shareholders of an S corporation as defined in section 1361 of the internal revenue code, may each claim the pro rata share of the credit allowed under this section based on ownership interest. The total of the credits allowed all such owners of the qualified energy generator may not exceed the amount that would have been allowed for a sole owner of the generator.

I. If the allowable tax credit for a taxpayer exceeds the taxes otherwise due under this title on the claimant's income, or if there are no taxes due under this title, the amount of the claim not used to offset taxes under this

title may be carried forward for not more than five consecutive taxable years as a credit against subsequent years' income tax liability.

J. The department shall adopt rules and publish and prescribe forms and procedures as necessary to effectuate the purposes of this section.

K. For the purposes of this section:

1. "Biomass" means organic material that is available on a renewable or recurring basis, including:

(a) Forest-related materials, including mill residues, logging residues, forest thinnings, slash, brush, low-commercial value materials or undesirable species, salt cedar and other phreatophyte or woody vegetation removed from river basins or watersheds and woody material harvested for the purpose of forest fire fuel reduction or forest health and watershed improvement.

(b) Agricultural-related materials, including orchard trees, vineyard, grain or crop residues, including straws and stover, aquatic plants and agricultural processed coproducts and waste products, including fats, oils, greases, whey and lactose.

(c) Animal waste, including manure and slaughterhouse and other processing waste.

(d) Solid woody waste materials, including landscape or right-of-way tree trimmings, rangeland maintenance residues, waste pallets, crates and manufacturing, construction and demolition wood wastes, excluding pressure-treated, chemically-treated or painted wood wastes and wood contaminated with plastic.

(e) Crops and trees planted for the purpose of being used to produce energy.

(f) Landfill gas, wastewater treatment gas and biosolids, including organic waste byproducts generated during the wastewater treatment process.

2. "Qualified energy generator" means a facility that has at least five megawatts generating capacity, that is located on land in this state owned or leased by the taxpayer, that produces electricity using a qualified energy resource and that sells that electricity to an unrelated entity, unless the electricity is sold to a public service corporation.

3. "Qualified energy resource" means a resource that generates electricity through the use of only the following energy sources:

(a) Solar light.

(b) Solar heat.

(c) Wind.

(d) Biomass.

43-1091. Gross income of a nonresident

A. In the case of nonresidents, Arizona gross income includes only that portion of federal adjusted gross income which represents income from sources within this state.

B. Income of a nonresident from the wages or salary received by the nonresident employee who is in this state on a temporary basis for the purpose of performing disaster recovery from a declared disaster during a disaster period as defined in section 42-1130 is not considered income from sources within this state.

43-1092. Intangible income of a nonresident

A. Except as provided in subsection B of this section, income of nonresidents from stocks, bonds, notes or other intangible personal property is not income from sources within this state unless the property has acquired a business situs within this state, except that if a nonresident buys or sells such property in this state or places orders with brokers within this state to buy or sell such property so regularly, systematically and continuously as to constitute doing business in this state, the profit or gain derived from such activity is income from sources within this state irrespective of the situs of the property. However, in no case shall transactions extending over a period of less than six months be deemed to constitute doing business in this state.

B. Any income received by nonresidents which is derived from a small business corporation making an election pursuant to section 43-1126 shall be considered taxable income of this state.

### 43-1101. Definitions

In this chapter, unless the context otherwise requires:

1. "Arizona gross income" of a corporation means its federal taxable income for the taxable year.
2. "Arizona taxable income" of a corporation means its Arizona gross income adjusted by the modifications specified in article 3 of this chapter.
3. "Domestic corporation" means a corporation created or organized in the United States or under the laws of the United States or of any state of the United States or the District of Columbia.
4. "Federal taxable income" means the taxable income of a corporation computed pursuant to the internal revenue code.
5. "Foreign corporation" means any of the following:
  - (a) A corporation which is not a domestic corporation.
  - (b) A domestic corporation with less than twenty per cent of its property, payroll and sales in the United States for the three year period ending with the close of the taxable year of the corporation preceding the current taxable year, or for such part of that period as the corporation has been in existence.
  - (c) A domestic corporation that has derived eighty per cent or more of its federal gross income for the three year period immediately preceding the close of the taxable year, or for such part of that period as the corporation has been in existence, from sources in the Commonwealth of Puerto Rico or any other possession of the United States except the Virgin Islands if sixty per cent, for taxable years beginning in calendar year 1984, or sixty-five per cent, for taxable years beginning after calendar year 1984, or more of the domestic corporation's federal gross income for that period, or part of that period as the corporation has been in existence, was derived from the active conduct of a trade or business in the Commonwealth of Puerto Rico or any other possession of the United States except the Virgin Islands.
6. "Net income" means Arizona taxable income.
7. "Person" and "taxpayer" means a corporation.

43-1123. Net operating loss; definition

A. For the purposes of this section, "net operating loss" means:

1. In the case of a taxpayer who has a net operating loss for the taxable year within the meaning of section 172(c) of the internal revenue code, the amount of the net operating loss increased by the subtractions specified in section 43-1122, except the subtraction allowed in section 43-1122, paragraph 12, and reduced by the additions specified in section 43-1121.

2. In the case of a taxpayer not described in paragraph 1 of this subsection, any excess of the subtractions specified in section 43-1122, except the subtraction allowed in section 43-1122, paragraph 12, over the sum of the Arizona gross income plus the additions specified in section 43-1121.

B. If for any taxable year the taxpayer has a net operating loss:

1. Such net operating loss shall be a net operating loss carryover for:

(a) Each of the five succeeding taxable years for net operating losses arising in taxable periods through December 31, 2011.

(b) Each of the twenty succeeding taxable years for net operating losses arising in taxable periods beginning from and after December 31, 2011.

2. The carryover in the case of each such succeeding taxable year, other than the first succeeding taxable year, shall be the excess, if any, of the amount of such net operating loss over the sum of the taxable income for each of the intervening years computed by determining the net operating loss subtraction for each intervening taxable year, without regard to such net operating loss or to the net operating loss for any succeeding taxable year.

C. The amount of the net operating loss subtraction shall be the aggregate of the net operating loss carryovers to the taxable year.

43-1125. Domestic international sales corporation

A domestic international sales corporation, commonly referred to as "disc", as defined in section 992 of the internal revenue code shall be taxed pursuant to the provisions of this chapter without regard to the provisions of sections 991 through 996 of the internal revenue code.

### 43-1127. Deferred exploration expenses

The amount of exploration expenses added to Arizona gross income pursuant to section 43-1121, paragraph 12 may be subtracted on a ratable basis as the units of produced ores or minerals discovered or explored by reason of such expenditures are sold. An election made for any taxable year shall be binding for that year.

**43-1129. Amortization of expenses incurred in acquisition of pollution control devices; depreciation**

A. Any taxpayer may elect to amortize the adjusted basis of any device, machinery or equipment for the collection and control at the source of atmospheric and water pollutants and contaminants based upon a period of sixty months. In computing Arizona taxable income, such amortization shall be allowed as a subtraction ratably over the period allowed under this subsection beginning with the month in which such device, machinery or equipment is completed or acquired and is placed in service by the taxpayer. This election shall be indicated by the taxpayer in an appropriate statement in the taxpayer's income tax return for the taxable year of the acquisition or completion and placement in service of such devices, machinery or equipment. An election to discontinue amortization with respect to the remainder of the amortization period is permitted and shall be indicated by an appropriate statement in the taxpayer's income tax return for the taxable year of discontinuance.

B. If the taxpayer does not elect to amortize pursuant to subsection A, there shall be allowed a deduction for normal exhaustion, wear and tear of property. The amount of such deduction shall be computed pursuant to the provisions of section 167 of the internal revenue code.

C. In determining the adjusted basis for the purposes of subsection A, such device, machinery or equipment upon certification by the department of environmental quality as a device, machinery or equipment for the collection and control at the source of atmospheric and water pollutants and contaminants shall include only an amount that is properly attributable to the construction, reconstruction, remodeling, installation or acquisition of such device, machinery or equipment as certified by the department of environmental quality.

43-1130. Amortization of the cost of child care facilities

A. At the election of any corporate taxpayer operating a child care facility for the purpose of making profit, any expenditure made to purchase, construct, renovate or remodel child care facilities or equipment shall be allowable as a subtraction ratably over a period of sixty months, beginning with the month in which the property is placed in service.

B. At the election of a taxpayer operating a child care facility within this state primarily for the children of employees of the taxpayer, any expenditure made to acquire, construct, renovate or remodel the child care facility or equipment is allowable as a subtraction ratably over a period of twenty-four months beginning with the month in which the property is placed in service.

C. The subtraction provided by this section shall be in lieu of any allowance for the exhaustion, wear and tear of such property used in a trade or business or of property held for the production of income, including a reasonable allowance for obsolescence pursuant to section 167 or 188 of the internal revenue code.

D. In the case of a partnership, joint venture or other pooled investment or joint ownership of child care property each participating corporate owner may claim the pro rata share of the subtraction based on the corporate ownership interest in the property. The total of the subtractions allowed all such owners of the property shall not exceed the amount that would have been allowed for a sole owner of the property.

### 43-1131. Definitions

As used in this article, unless the context otherwise requires:

1. "Business income" means income arising from transactions and activity in the regular course of the taxpayer's trade or business and includes income from tangible and intangible property if the acquisition, management and disposition of the property constitute integral parts of the taxpayer's regular trade or business operations.
2. "Commercial domicile" means the principal place from which the trade or business of the taxpayer is directed or managed.
3. "Compensation" means wages, salaries, commissions and any other form of remuneration paid to employees for personal services.
4. "Nonbusiness income" means all income other than business income.
5. "Sales" means all gross receipts of the taxpayer not allocated under this article.
6. "State" means any state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, any territory or possession of the United States and any foreign country or political subdivision thereof.
7. "Taxpayer" means any person subject to the tax imposed by this title.

43-1133. Taxability in other state

For purposes of allocation and apportionment of income under this article, a taxpayer is taxable in another state if either of the following applies:

1. In that state he is subject to a net income tax, a franchise tax measured by net income, a franchise tax for the privilege of doing business or a corporate stock tax.
2. That state has jurisdiction to subject the taxpayer to a net income tax regardless of whether, in fact, the state does or does not.

43-1135. Net rents and royalties

A. Net rents and royalties from real property located in this state are allocable to this state.

B. Net rents and royalties from tangible personal property are allocable to this state either:

1. If and to the extent that the property is utilized in this state.

2. In their entirety if the taxpayer's commercial domicile is in this state and the taxpayer is not organized under the laws of or taxable in the state in which the property is utilized.

C. The extent of utilization of tangible personal property in a state is determined by multiplying the rents and royalties by a fraction, the numerator of which is the number of days of physical location of the property in the state during the rental or royalty period in the taxable year and the denominator of which is the number of days of physical location of the property everywhere during all rental or royalty periods in the taxable year. If the physical location of the property during the rental or royalty period is unknown or unascertainable by the taxpayer, tangible personal property is utilized in the state in which the property was located at the time the rental or royalty payer obtained possession.

43-1136. Capital gains and losses

- A. Capital gains and losses from sales of real property located in this state are allocable to this state.
- B. Capital gains and losses from the sales of tangible personal property are allocable to this state if either:
  - 1. The property had a situs in this state at the time of the sale.
  - 2. The taxpayer's commercial domicile is in this state and the taxpayer is not taxable in the state in which the property had a situs.
- C. Capital gains and losses from sales of intangible personal property are allocable to this state if the taxpayer's commercial domicile is in this state.

43-1137. Interest and dividends

Interest and dividends are allocable to this state if the taxpayer's commercial domicile is in this state unless the interest or dividend constitutes business income.

43-1138. Patent and copyright royalties

A. Patent and copyright royalties are allocable to this state either:

1. If and to the extent that the patent or copyright is utilized by the payer in this state.
2. If and to the extent that the patent or copyright is utilized by the payer in a state in which the taxpayer is not taxable and the taxpayer's commercial domicile is in this state.

B. A patent is utilized in a state to the extent that it is employed in production, fabrication, manufacturing or other processing in the state or to the extent that a patented product is produced in the state. If the basis of receipts from patent royalties does not permit allocation to states or if the accounting procedures do not reflect states of utilization, the patent is utilized in the state in which the taxpayer's commercial domicile is located.

C. A copyright is utilized in a state to the extent that printing or other publication originates in the state. If the basis of receipts from copyright royalties does not permit allocation to states or if the accounting procedures do not reflect states of utilization, the copyright is utilized in the state in which the taxpayer's commercial domicile is located.

### 43-1139. Allocation of business income

A. Except as provided in subsection B of this section, the taxpayer shall elect to apportion all business income to this state for taxable years beginning from and after:

1. December 31, 2006 through December 31, 2007 by either:

(a) Multiplying the income by a fraction, the numerator of which is the property factor plus the payroll factor plus two times the sales factor, and the denominator of which is four.

(b) Multiplying the income by a fraction, the numerator of which is two times the property factor plus two times the payroll factor plus six times the sales factor, and the denominator of which is ten.

2. December 31, 2007 through December 31, 2008 by either:

(a) Multiplying the income by a fraction, the numerator of which is the property factor plus the payroll factor plus two times the sales factor, and the denominator of which is four.

(b) Multiplying the income by a fraction, the numerator of which is one and one-half times the property factor plus one and one-half times the payroll factor plus seven times the sales factor, and the denominator of which is ten.

3. December 31, 2008 through December 31, 2013 by either:

(a) Multiplying the income by a fraction, the numerator of which is the property factor plus the payroll factor plus two times the sales factor, and the denominator of which is four.

(b) Multiplying the income by a fraction, the numerator of which is the property factor plus the payroll factor plus eight times the sales factor, and the denominator of which is ten.

4. December 31, 2013 through December 31, 2014 by either:

(a) Multiplying the income by a fraction, the numerator of which is the property factor plus the payroll factor plus two times the sales factor, and the denominator of which is four.

(b) Multiplying the income by a fraction, the numerator of which is seven and one-half times the property factor plus seven and one-half times the payroll factor plus eighty-five times the sales factor, and the denominator of which is one hundred.

5. December 31, 2014 through December 31, 2015 by either:

(a) Multiplying the income by a fraction, the numerator of which is the property factor plus the payroll factor plus two times the sales factor, and the denominator of which is four.

(b) Multiplying the income by a fraction, the numerator of which is five times the property factor plus five times the payroll factor plus ninety times the sales factor, and the denominator of which is one hundred.

6. December 31, 2015 through December 31, 2016 by either:

(a) Multiplying the income by a fraction, the numerator of which is the property factor plus the payroll factor plus two times the sales factor, and the denominator of which is four.

(b) Multiplying the income by a fraction, the numerator of which is two and one-half times the property factor plus two and one-half times the payroll factor plus ninety-five times the sales factor, and the denominator of which is one hundred.

7. December 31, 2016 by either:

(a) Multiplying the income by a fraction, the numerator of which is the property factor plus the payroll factor plus two times the sales factor, and the denominator of which is four.

(b) Multiplying the income by the sales factor.

B. All business income of a taxpayer engaged in air commerce shall be apportioned to this state by multiplying the income by a fraction, the numerator of which is the revenue aircraft miles flown within this state for flights beginning or ending in this state and the denominator of which is the total revenue aircraft miles flown by the taxpayer's aircraft everywhere. This subsection applies to each taxpayer, including a combined group filing a combined return or an affiliated group electing to file a consolidated return under section 43-947, if fifty per cent or more of that taxpayer's gross income is derived from air commerce. For the purposes of this subsection:

1. "Air commerce" means transporting persons or property for hire by aircraft in interstate, intrastate or international transportation.

2. "Revenue aircraft miles flown" has the same meaning prescribed by the United States department of transportation uniform system of accounts and reports for large certificated air carriers (14 Code of Federal Regulations part 241).

### 43-1140. Property factor

The property factor is a fraction, the numerator of which is the average value of the taxpayer's real and tangible personal property owned or rented and used in this state during the tax period and the denominator of which is the average value of all the taxpayer's real and tangible personal property owned or rented and used during the tax period other than real and tangible personal property used by either:

1. A foreign corporation which is not itself subject to the tax imposed by this title, unless the corporation is subject to the tax as a member of an Arizona affiliated group, as defined in section 43-947.
2. An insurance company that is exempt from tax under section 43-1201.

#### 43-1141. Valuation of property.

Property owned by the taxpayer is valued at its original cost. Property rented by the taxpayer is valued at eight times the net annual rental rate. Net annual rental rate is the annual rental rate paid by the taxpayer less any annual rental rate received by the taxpayer from subrentals.

43-1142. Average value of property.

The average value of property shall be determined by averaging the values at the beginning and ending of the tax period, but the department may require the averaging of monthly values during the tax period if reasonably required to reflect properly the average value of the taxpayer's property.

### 43-1143. Payroll factor

The payroll factor is a fraction, the numerator of which is the total amount paid in this state during the tax period by the taxpayer for compensation, and the denominator of which is the total compensation paid everywhere during the tax period other than compensation paid by either:

1. A foreign corporation which is not itself subject to the tax imposed by this title, unless the corporation is subject to the tax as a member of an Arizona affiliated group, as defined in section 43-947.
2. An insurance company that is exempt from tax under section 43-1201.

43-1144. Compensation paid in state

Compensation is paid in this state if any of the following apply:

1. The individual's service is performed entirely within this state.
2. The individual's service is performed both within and without the state, but the service performed without the state is incidental to the individual's service within the state.
3. Some of the service is performed in the state and the base of operations or, if there is no base of operations, the place from which the service is directed or controlled is in the state, or the base of operations or the place from which the service is directed or controlled is not in any state in which some part of the service is performed, but the individual's residence is in this state.

#### 43-1145. Sales factor

The sales factor is a fraction, the numerator of which is the total sales of the taxpayer in this state during the tax period, and the denominator of which is the total sales of the taxpayer everywhere during the tax period other than sales of either:

1. A foreign corporation which is not itself subject to the tax imposed by this title, unless the corporation is subject to the tax as a member of an Arizona affiliated group, as defined in section 43-947.
2. An insurance company that is exempt from tax under section 43-1201.

43-1146. Situs of sales of tangible personal property.

Sales of tangible personal property are considered to be in this state if the property is delivered or shipped to a purchaser, other than the United States government, within this state regardless of the F.O.B. point or other conditions of the sale.

43-1147. Situs of sales of other than tangible personal property; definitions

(L13, Ch. 236, sec. 10. Eff. until 1/1/20)

A. Except as provided by subsection B of this section, sales, other than sales of tangible personal property, are in this state if either of the following applies:

1. The income producing activity is performed in this state.
2. The income producing activity is performed both in and outside this state and a greater proportion of the income producing activity is performed in this state than in any other state, based on costs of performance.

B. For taxable years beginning from and after December 31, 2013, a multistate service provider may elect to treat sales from services as being in this state based on a combination of income producing activity sales and market sales. If the election under this subsection is made pursuant to subsection C of this section, the sales of services that are in this state shall be determined for taxable years beginning from and after:

1. December 31, 2013 through December 31, 2014 by the sum of the following:

- (a) Eighty-five per cent of the market sales.
- (b) Fifteen per cent of the income producing activity sales.

2. December 31, 2014 through December 31, 2015 by the sum of the following:

- (a) Ninety per cent of the market sales.
- (b) Ten per cent of the income producing activity sales.

3. December 31, 2015 through December 31, 2016 by the sum of the following:

- (a) Ninety-five per cent of the market sales.
- (b) Five per cent of the income producing activity sales.

4. December 31, 2016 by one hundred per cent of the market sales.

C. A multistate service provider may elect to treat sales from services as being in this state under subsection B of this section as follows:

1. The election must be made on the taxpayer's timely filed original income tax return. The election is:

- (a) Effective retroactively for the full taxable year of the income tax return on which the election is made.
- (b) Binding on the taxpayer for at least five consecutive taxable years, regardless of whether the taxpayer no longer meets the percentage threshold of a multistate service provider during that time period, except as provided by paragraph 2 of this subsection. To continue with the election after the five consecutive taxable years, the taxpayer must meet the qualifications to be considered a multistate service provider and renew the election for another five consecutive taxable years.

2. During the election period, the election may be terminated as follows:

- (a) Without the permission of the department on the acquisition or merger of the taxpayer.
- (b) With the permission of the department before the expiration of five consecutive taxable years.

D. For a multistate service provider under subsection E, paragraph 3, subdivision (b) of this section, an election under subsection B of this section is limited to the treatment of sales for educational services.

E. For the purposes of this section:

1. "Income producing activity sales" means the total sales from services that are sales in this state under subsection A of this section.
2. "Market sales" means the total sales from services for which the purchaser received the benefit of the service in this state.
3. "Multistate service provider" means either:
  - (a) A taxpayer that derives more than eighty-five per cent of its sales from services provided to purchasers who receive the benefit of the service outside this state in the taxable year of election, and includes all taxpayers required to file a combined report pursuant to section 43-942 and all members of an affiliated group included in a consolidated return pursuant to section 43-947. In calculating the eighty-five per cent, sales to students receiving educational services at campuses physically located in this state shall be excluded from the calculation.
  - (b) A taxpayer that is a regionally accredited institution of higher education with at least one university campus in this state that has more than two thousand students residing on the campus, and includes all taxpayers required to file a combined report pursuant to section 43-942 and all members of an affiliated group included in a consolidated return pursuant to section 43-947.
4. "Received the benefit of the service in this state" means the services are received by the purchaser in this state. If the state where the services are received cannot be readily determined, the services are considered to be received at the home of the customer or, in the case of a business, the office of the customer from which the services were ordered in the regular course of the customer's trade or business. If the ordering location cannot be determined, the services are considered to be received at the home or office of the customer to which the services were billed.
5. "Sales for educational services" means tuition and fees required for enrollment and fees required for courses of instruction, transcripts and graduation.

43-1148. Apportionment by department

A. If the allocation and apportionment provisions of this article do not fairly represent the extent of the taxpayer's business activity in this state, the taxpayer may petition for or the department may require, in respect to all or any part of the taxpayer's business activity, if reasonable, any of the following:

1. Separate accounting, except with respect to an Arizona affiliated group, as defined in section 43-947.
2. The exclusion of any one or more of the factors.
3. The inclusion of one or more additional factors which will fairly represent the taxpayer's business activity in this state.
4. The employment of any other method to effectuate an equitable allocation and apportionment of the taxpayer's income, other than disallowing a properly elected consolidated return.

B. If the department, in the exercise of its discretion, determines that an adjustment is necessary pursuant to subsection A of this section, it may, in its discretion, authorize such an adjustment for a period of not less than one taxable year.

43-1149. [Interpretation](#)

This article shall be so construed as to effectuate its general purpose to make uniform the law of those states which enact it.

### 43-1164.03. Renewable energy production tax credit; definitions

A. A credit is allowed against the taxes imposed by this title for the production of electricity using renewable energy resources.

B. The taxpayer is eligible for the credit:

1. If the taxpayer holds title to a qualified energy generator that first produces electricity from and after December 31, 2010 and before January 1, 2021.

2. For ten consecutive calendar years beginning with the calendar year in which the qualified energy generator begins producing electricity that is transmitted through a transmission facility to a grid connection with a public or private electric transmission or distribution utility system. That same date applies with respect to that generator until the expiration of the ten-year period regardless of whether the generator is sold to another taxpayer or goes out of production before the expiration of the ten-year period.

C. The credit authorized by this section is based on the electricity that is generated by a qualified energy generator during a calendar year. For a taxpayer that files on a fiscal year basis, the credit shall be claimed on the return for the taxable year in which the calendar year ends.

D. Subject to subsection G of this section, the amount of the credit is:

1. One cent per kilowatt-hour of the first two hundred thousand megawatt-hours of electricity produced by a qualified energy generator in the calendar year using a wind or biomass derived qualified energy resource.

2. The following amounts for electricity produced by a qualified energy generator using a solar light derived or solar heat derived qualified energy resource:

(a) Four cents per kilowatt-hour in the first calendar year in which the qualified energy generator produces electricity.

(b) Four cents per kilowatt-hour in the second calendar year in which the qualified energy generator produces electricity.

(c) Three and one-half cents per kilowatt-hour in the third calendar year in which the qualified energy generator produces electricity.

(d) Three and one-half cents per kilowatt-hour in the fourth calendar year in which the qualified energy generator produces electricity.

(e) Three cents per kilowatt-hour in the fifth calendar year in which the qualified energy generator produces electricity.

(f) Three cents per kilowatt-hour in the sixth calendar year in which the qualified energy generator produces electricity.

(g) Two cents per kilowatt-hour in the seventh calendar year in which the qualified energy generator produces electricity.

(h) Two cents per kilowatt-hour in the eighth calendar year in which the qualified energy generator produces electricity.

(i) One and one-half cents per kilowatt-hour in the ninth calendar year in which the qualified energy generator produces electricity.

(j) One cent per kilowatt-hour in the tenth calendar year in which the qualified energy generator produces electricity.

E. To qualify for the purposes of this section, an energy generator may be located within one mile of an existing qualified energy generator only if the owner of the energy generator or the owner's corporate affiliates are not the owner of or the corporate affiliate of the owner of the existing qualified energy generator.

F. To be eligible for the credit under this section, the taxpayer must apply to the department, on a form prescribed by the department, for certification of the credit. The department shall only accept applications beginning January 2 through January 31 of the year following the calendar year for which the credit is being requested. The application shall include:

1. The name, address and social security number or federal employer identification number of the applicant.
2. The location of the taxpayer's facility that produces electricity using renewable energy resources for which the credit is claimed.
3. The amount of the credit that is claimed.
4. The date the qualified energy generator began producing commercially marketable amounts of electricity.
5. Any additional information that the department requires.

G. The department shall review each application under subsection F of this section and certify to the taxpayer the amount of the credit that is authorized. The amount of the credit for any calendar year shall not exceed two million dollars per facility that produces electricity using renewable energy resources. Credits are allowed under this section and section 43-1083.02 on a first come, first served basis. The department shall not authorize tax credits under this section and section 43-1083.02 that exceed in the aggregate a total of twenty million dollars for any calendar year. The first time that a taxpayer submits a qualified application for a qualified energy generator under subsection F of this section, the department shall add the taxpayer's name to a credit authorization list that is maintained in the order in which qualified applications are first received by the department on behalf of the qualified energy generator. A taxpayer's position on the credit authorization list shall be determined in the first year the taxpayer submits an application under subsection F of this section for the qualified energy generator. The taxpayer's position on the credit authorization list for a particular qualified energy generator shall remain unchanged for the ten years that are specified in subsection B, paragraph 2 of this section or until a year in which the taxpayer fails to submit a timely application under subsection F of this section or otherwise fails to comply with this section. If a taxpayer is removed from the credit authorization list for a qualified energy generator, the taxpayer may establish a new position on the credit authorization list in a subsequent year by filing a timely application for a qualified energy generator that qualifies for the credit. If an application is received that, if authorized, would require the department to exceed the twenty million dollar limit, the department shall grant the applicant only the remaining credit amount that would not exceed the twenty million dollar limit. After the department authorizes twenty million dollars in tax credits, the department shall deny any subsequent applications that are received for that calendar year. The department shall not authorize any additional tax credits that exceed the twenty million dollar limit even if the amounts that have been certified to any taxpayer were not claimed or a taxpayer otherwise fails to meet the requirements to claim the additional credit.

H. Co-owners of a qualified energy generator, including corporate partners in a partnership and members of a limited liability company, may each claim the pro rata share of the credit allowed under this section based on ownership interest. The total of the credits allowed all such owners of the qualified energy generator may not exceed the amount that would have been allowed for a sole owner of the generator.

I. If the allowable tax credit for a taxpayer exceeds the taxes otherwise due under this title on the claimant's income, or if there are no taxes due under this title, the amount of the claim not used to offset taxes under this

title may be carried forward for not more than five consecutive taxable years as a credit against subsequent years' income tax liability.

J. The department shall adopt rules and publish and prescribe forms and procedures as necessary to effectuate the purposes of this section.

K. For the purposes of this section:

1. "Biomass" means organic material that is available on a renewable or recurring basis, including:

(a) Forest-related materials, including mill residues, logging residues, forest thinnings, slash, brush, low-commercial value materials or undesirable species, salt cedar and other phreatophyte or woody vegetation removed from river basins or watersheds and woody material harvested for the purpose of forest fire fuel reduction or forest health and watershed improvement.

(b) Agricultural-related materials, including orchard trees, vineyard, grain or crop residues, including straws and stover, aquatic plants and agricultural processed coproducts and waste products, including fats, oils, greases, whey and lactose.

(c) Animal waste, including manure and slaughterhouse and other processing waste.

(d) Solid woody waste materials, including landscape or right-of-way tree trimmings, rangeland maintenance residues, waste pallets, crates and manufacturing, construction and demolition wood wastes, excluding pressure-treated, chemically-treated or painted wood wastes and wood contaminated with plastic.

(e) Crops and trees planted for the purpose of being used to produce energy.

(f) Landfill gas, wastewater treatment gas and biosolids, including organic waste byproducts generated during the wastewater treatment process.

2. "Qualified energy generator" means a facility that has at least five megawatts generating capacity, that is located on land in this state owned or leased by the taxpayer, that produces electricity using a qualified energy resource and that sells that electricity to an unrelated entity, unless the electricity is sold to a public service corporation.

3. "Qualified energy resource" means a resource that generates electricity through the use of only the following energy sources:

(a) Solar light.

(b) Solar heat.

(c) Wind.

(d) Biomass.

### 43-1169. Credit for construction costs of qualified environmental technology facility

- A. A credit is allowed against the taxes imposed by this title for expenses incurred in constructing a qualified environmental technology manufacturing, producing or processing facility as described in section 41-1514.02. The amount of the credit is equal to ten per cent of the amount spent during the taxable year to construct the facility, including land acquisition, improvements, building improvements, machinery and equipment, but not exceeding seventy-five per cent of the tax liability under this title for the taxable year determined without applying the credit.
- B. Amounts qualifying for the credit under this section must be includible in the taxpayer's adjusted basis for the facility. The adjusted basis of any asset with respect to which the taxpayer has claimed a credit shall be reduced by the amount of credit claimed with respect to that asset. This credit does not affect the deductibility for depreciation or amortization of the remaining adjusted basis of the asset.
- C. A taxpayer may claim a credit under this section with respect to new qualifying construction within ten years after the start of the facility's initial construction, but a credit is not allowed under this section for any amount spent more than ten years after the start of the facility's initial construction.
- D. A taxpayer qualifies for the credit under this section if the taxpayer owns the facility or leases the facility or any component of the facility for a term of five or more years.
- E. If the allowable tax credit exceeds seventy-five per cent of the taxes otherwise due under this title on the claimant's income, or if there are no taxes due under this title, the amount of the claim not used to offset taxes under this title may be carried forward for not more than fifteen taxable years as a credit against subsequent years' income tax liability.
- F. Co-owners of a business, including partners in a partnership, may each claim only the pro rata share of the credit allowed under this section based on the ownership interest. The total of the credits allowed all such owners may not exceed the amount that would have been allowed for a sole owner of the business.
- G. If either of the following circumstances occurs with respect to a qualified environmental technology manufacturing, producing or processing facility, the tax imposed by this title for the taxable year in which the circumstance occurs shall be increased by the full amount of all credits previously allowed under this section with respect to that facility:
1. The taxpayer abandons construction before the facility is placed in service.
  2. Before the facility is placed in service, the taxpayer changes plans in such a manner as to no longer qualify as an environmental technology manufacturing, producing or processing facility under section 41-1514.02.
- H. If, within five years after being placed in service, an operating environmental technology manufacturing, producing or processing facility with respect to which a credit has been allowed under this section ceases for any reason to operate as an environmental technology manufacturing, producing or processing facility as described in section 41-1514.02, the tax imposed by this title for the taxable year shall be increased by an amount determined by multiplying the full amount of all credits previously allowed under this section with respect to that facility by a percentage determined as follows:
1. If the facility was placed in service less than one year before ceasing to operate as an environmental technology manufacturing, producing or processing facility, one hundred per cent.
  2. If the facility was placed in service at least one year but not more than two years before ceasing to operate as an environmental technology manufacturing, producing or processing facility, eighty per cent.
  3. If the facility was placed in service at least two years but less than three years before ceasing to operate as an environmental technology manufacturing, producing or processing facility, sixty per cent.

4. If the facility was placed in service at least three years but less than four years before ceasing to operate as an environmental technology manufacturing, producing or processing facility, forty per cent.
  5. If the facility was placed in service at least four years but less than five years before ceasing to operate as an environmental technology manufacturing, producing or processing facility, twenty per cent.
- I. The department by rule shall prescribe record keeping requirements for taxpayers who claim a credit under this section.

43-1411. [Partnership, individual partnership liability](#).

An individual carrying on a business in partnership shall be liable for income tax only in his individual capacity.

**ARIZONA DEPARTMENT OF FINANCIAL INSTITUTIONS (F19-0906)**

Title 20, Chapter 4, Article 9, Mortgage Brokers; Article 18, Mortgage Bankers; and Article 19, Commercial Mortgage Brokers



# GOVERNOR'S REGULATORY REVIEW COUNCIL

## ATTORNEY MEMORANDUM - FIVE-YEAR REVIEW REPORT

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**MEETING DATE:** September 4, 2019

**TO:** Members of the Governor's Regulatory Review Council (Council)

**FROM:** Council Staff

**DATE:** August 9, 2019

**SUBJECT:** ARIZONA DEPARTMENT OF FINANCIAL INSTITUTIONS (F19-0906)  
Title 20, Chapter 4, Article 9, Mortgage Brokers; Article 18, Mortgage Bankers;  
and Article 19, Commercial Mortgage Brokers

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This Five Year Review Report (5YRR) from the Department of Financial Institutions (Department) relates to rules in Title 20, Chapter 4. The rules cover the following:

- **Articles 9** (Mortgage Brokers);
- **Article 18** (Mortgage Bankers); and
- **Article 19** (Commercial Mortgage Bankers).

In the previous 5YRR for these rules, the Department indicated it would amend seven of its rules; R20-4-907, R20-4-915, R20-4-917, R20-4-1806, R20-4-1905, and R20-4-1907. The Department indicated it would seek advice from legal counsel before submitting a rulemaking. This proposed course of action was not completed. In this report, the Department states that it no longer feels the previous proposed course of action is necessary and that those rules are effective, clear, and concise.

### **Proposed Action**

The Department plans to amend R20-4-917 (Recordkeeping Requirements), R20-4-1806 (Recordkeeping Requirements), and R20-4-1807 (Providing Copies of Records) to update citations to federal law. The Department also plans to amend R20-4-1804 (Requirements for a

Person Intended to Oversee a Branch Office) to establish effective timeframes for designating a change in branch oversight designation after further advisement from its legal counsel. The Department intends to seek an exemption to the rulemaking moratorium, and if granted, will make these amendments by the end of 2020.

1. **Has the agency analyzed whether the rules are authorized by statute?**

Yes, the Department cites to both general and specific authority for these rules.

2. **Summary of the agency's economic impact comparison and identification of stakeholders:**

The Department indicates that the economic impact of Articles 9, 18, and 19 do not differ significantly from what was originally determined in the economic, small business, and consumer impact statement (EIS) from the most recent rulemaking in June 2014.

The stakeholders include the Department, financial institutions, private businesses, and the public.

3. **Has the agency analyzed the costs and benefits of the rulemaking and determined that the rules impose the least burden and costs to those who are regulated?**

The Department states that the rules under review in Articles 9, 18, and 19 provide the least intrusive and least costly method of achieving their regulatory objectives. The Department further states that the protection afforded to Arizona citizens and businesses by ensuring the safety and soundness of state-licensed institutions outweighs any costs that the rules under review may impose.

4. **Has the agency received any written criticisms of the rules over the last five years?**

No, the Department indicates that it did not receive any written criticisms of the rules over the last five years.

5. **Has the agency analyzed the rules' clarity, conciseness, and understandability, consistency with other rules and statutes, and effectiveness?**

Yes, the Department indicates the rules are clear, concisess, understandable, effective, and consistent with other rules and statues.

6. **Has the agency analyzed the current enforcement status of the rules?**

Yes, the Department indicates the rules are enforced as written.

7. **Are the rules more stringent than corresponding federal law and, if so, is there statutory authority to exceed the requirements of federal law?**

No. The Department indicates the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the Secure and Fair Enforcement for Mortgage Licensing Act of 2008, the Real Estate Settlement Procedures Act, and the Consumer Credit Protection Act are all applicable to the subject of these rules. The Department states that the rules in Articles 9, 18, and 19 are not more stringent than these federal statutes or related federal regulations.

8. **For rules adopted after July 29, 2010, do the rules require a permit or license and, if so, does the agency comply with A.R.S. § 41-1037?**

Yes. The Department indicates three of the rules were adopted after July 29, 2010: R20-4-927, R20-4-928, R20-181.

The Department believes A.R.S. § 41-1037 does not apply to R20-4-927 and R20-4-1813 because they do not require issuance of any form of regulatory permits.

The Department believes the exception in A.R.S. § 1037(A)(2) applies to R20-4-928.

9. **Conclusion**

Council staff finds that these rules are mostly clear, concise, understandable, and effective. As mentioned above, the Department plans to amend R20-4-917, R20-4-1806, R20-4-1807 and R20-4-1804. It will request an exemption from the rulemaking moratorium to do so by the end of 2020. It does not plan to amend any of the other rules under review. Council staff recommends approval of this report.

# ARIZONA

## DEPARTMENT OF FINANCIAL INSTITUTIONS

Keith A. Schraad  
Interim Superintendent

Douglas A. Ducey  
Governor

June 28, 2019

VIA EMAIL: [grrc@azdoa.gov](mailto:grrc@azdoa.gov)  
Ms. Nicole Sornsins, Chair  
Governor's Regulatory Review Council  
100 North 15th Avenue, Suite 305  
Phoenix, Arizona 85007

**RE: Five-Year Review Report: Department of Financial Institutions, Title 20,  
Chapter 4, Articles 9, 18 and 19**

Dear Ms. Sornsins:

Please find enclosed the Five-Year Review Report of the Department of Financial Institutions for Title 20, Chapter 4, Articles 9, 18 and 19.

I hereby certify that the Department of Financial Institutions complies with A.R.S. § 41-1091.

For questions about this report, please contact Stephen Briggs at 602-771-2778 or [sbriggs@azdfi.gov](mailto:sbriggs@azdfi.gov).

Sincerely,



Scott B. Greenberg  
Interim Deputy Superintendent  
Department of Financial Institutions

Cc: Keith Schraad  
Stephen Briggs

FIVE-YEAR REVIEW REPORT  
*A.A.C. Title 20, Chapter 4, Articles 9, 18 and 19*  
*June 2019*

## **Information that is identical for all the rules; exceptions**

This section presents information that is applicable to all the rules within the scope of this report except where specifically noted. Where information is the same for all the rules, information is only provided in this section and is not provided in the “Analysis of Individual Rules” section that follows.

### **1. Authorization for each rule.**

Arizona Revised Statutes ("A.R.S.") § 6-123(2), which provides general rulemaking authority to the Superintendent of the Department of Financial Institutions (“Department”), applies to all the rules covered by this report. In the “Analysis of Individual Rules” section, we identify the specific statute on which each rule is based.

### **2. Objective of each rule.**

Each rule has a different objective, described in the “Analysis of Individual Rules” section.

### **3. Are the rules effective in achieving their objectives? Yes**

The objectives of the rules are effectively fulfilled except as to R20-4-917, R20-4-1806, and R20-4-1807 (see “Analysis of Individual Rules” section). To determine effectiveness, we analyzed the rules contained in this report against the Department’s governing statutes. There have been no substantive changes to the rules since the previous five-year rule review, and the Department has determined effectiveness through analysis and practice that the rules achieve their regulatory purpose.

### **4. Are the rules consistent with other rules and statutes? Yes**

The rules are consistent with the Department's governing statutes found in Title 6, Arizona Revised Statutes.

### **5. Are the rules enforced as written? Yes**

The rules are enforced through the established policies and procedures prescribed by the rules and statutes. All rules are consistently and fairly enforced. The Department has had no substantive problems with enforcing the rules as written.

### **6. Are the rules clear, concise, and understandable? Yes**

The Department believes the rules are adequately clear, concise and understandable. The Department would consider pursuing specific rules amendments upon changes to the statutes underlying those rules.

### **7. Has the agency received written criticism of the rules within the last five years? No**

The Department has not received any written criticisms of any of the rules in Article 9, 18, or 19 since the previous five-year review report.

### **8. Economic, small business, and consumer impact comparison:**

The Department identified no substantive change in the economic impact of the rules on small business or consumers since their currently effective text was approved by GRRC. These rules have had no adverse economic impact on the Department, the regulated community or the public.

**Article 9. Mortgage Brokers**

Since the last rule review, the license counts have reflected steady growth in this market.

	June 1, 2014	June 11, 2019
# of Licensed Mortgage Brokers	343	503
# of Licensed Branches	311	582

**Article 18. Mortgage Bankers**

Since the last rule review, the license counts have reflected steady growth in this market.

	June 2, 2014	June 11, 2019
# of Licensed Mortgage Bankers	335	513
# of Licensed Branches	1,247	2,760

**Article 19. Commercial Mortgage Brokers**

Since the last rule review, the license counts have reflected steady growth in this market.

	June 2, 2014	June 11, 2019
# of Licensed Commercial Mortgage Brokers	55	67

**9. Has the agency received any business competitiveness analyses of the rules? No**

The Department did not receive any analysis in the past five years regarding the impact of the rules on this state's business competitiveness as compared to business competitiveness of other states.

**10. Has the agency completed the course of action indicated in the agency's previous five-year review report? No**

This group of rules was the subject of a normal five-year rule review submitted to G.R.R.C in June 2014. In that review, the Department noted seven rules within Articles 9, 18 and 19 for which the Department was going to seek further advisement from legal counsel; however, the Department no longer feels that the previous course of action is needed and the rules are effective, clear and concise.

**11. A determination that the probable benefits of the rule outweigh within this state the probable costs of the rule, and the rule imposes the least burden and cost to regulated persons by the rule, including paperwork and other compliance costs, necessary to achieve the underlying regulatory objective.**

The benefits of the rules in Articles 9, 18 and 19 outweigh the probable costs of the rules and impose the least burden and cost on regulated persons necessary to achieve the regulatory objective of protecting Arizona citizens and businesses by ensuring the safety and soundness of state-licensed institutions and individuals. The rules covering the subject matter are necessary to fulfill the agency's mission.

**12. Are the rules more stringent than corresponding federal laws? No**

No rules in this report were found to be more stringent than related federal rules or statutes. The Department analyzed Arizona Revised Statutes Title 6, and applicable federal law including the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the Secure and Fair Enforcement for Mortgage Licensing Act of 2008, the Real Estate Settlement Procedures Act, and the Consumer Credit Protection Act.

**13. For rules adopted after July 29, 2010 that require the issuance of a regulatory permit, license, or agency authorization, a determination as to whether the rules are in compliance with the general permit requirements of A.R.S. § 41-1037 or an explanation as to why the agency believes an exception applies.**

Three of the rules reviewed were adopted after July 29, 2010:

- R20-4-927 was established pursuant to Laws 2011, Chapter 11.
- R20-4-928 was implemented pursuant to Laws 2011, Chapter 172.
- R20-4-1813 was established pursuant to Laws 2009, Chapter 139.

The Department believes A.R.S. § 41-1037 does not apply to R20-4-927 and R20-4-1813, which do not require issuance of any form of regulatory permit, but instead, facilitate converting a person's license from one license type to another. The Department believes the exception in A.R.S. § 41-1037(A)(2), which allows for the issuance of an alternative type of permit, license or authorization if specifically authorized in state statute, applies to R20-4-928.

**14. Proposed course of action.**

With the exceptions of R20-4-917, R20-4-1806, and R20-4-1807, for which courses of actions are addressed in the "Analysis of Individual Rules" section, the Department has no course of action planned for rulemaking on the articles in this five-year rule review.

## **Analysis of Individual Rules**

### **R20-4-903 Exemption for an Entity Regulated by an Agency of this State, Other States, or by the United States**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-902(A)(1).

**2. Objective**

The objective of the rule is to clarify the persons exempted under A.R.S. § 6-902(A)(1) and the level of regulation required to qualify those persons for the exemption.

### **R20-4-906 Equivalent and Related Experience**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-903(C)(1).

**2. Objective**

The objective of the rule is to clarify the types and duration of experience allowed by statute to substitute for the requirement of three years' experience as a mortgage broker pursuant to A.R.S. § 6-903(C)(1).

### **R20-4-907 Course of Study**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-903(C)(2).

**2. Objective**

The objective of the rule is to specify the subject matter included in a course of study that satisfies the statute, and to clarify the manner by which vendors shall obtain the Superintendent's approval of a course of study.

**14. Course of Action**

In the previous review of this rule, the Department indicated that it would amend this rule as advised by legal counsel. After further review of the rule, the Department has determined that the rule is clear and effective in its purpose.

**R20-4-911 Qualified Replacement Responsible Individual**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-903(H) and (I).

**2. Objective**

The objective of the rule is to specify time limits imposed on a licensee to fully qualify its replacement responsible individual, and to clarify the time period within which a licensee shall cure the failure of its replacement responsible individual to qualify.

**R20-4-912 Restrictions on the Term of a Cash Alternative**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-903(M).

**2. Objective**

The objective of the rule is to specify the minimum term of a certificate of deposit or investment certificate placed with the Superintendent as an alternative to a surety bond.

**R20-4-915 Requirements for a Person Intended to Oversee a Branch Office**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-904(H).

**2. Objective**

The objective of the rule is to clarify the language of the statute requiring a licensee to designate a person to oversee the operations of each licensed branch office.

**14. Course of Action**

In the previous review of this rule, the Department indicated that it would amend this rule if advised from legal counsel. After further review of the rule, the Department has determined that the rule is clear and effective in its purpose.

**R20-4-916 Notification of Change of Address**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-904(H).

**2. Objective**

The objective of the rule is to specify the form and timing of the address change notice required by statute.

### **R20-4-917 Recordkeeping Requirements**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-906(A).

#### **2. Objective**

The objective of the rule is to specify the records a licensee is required to have available.

#### **3. Effectiveness**

The rule could be made more effective by clarifying that copies of records are to be generated by the licensee for the examiner in a timely manner. The rule is clear in stating this expectation, but staff has found that licensees struggle to follow the rule. Furthermore, the rule could be made more effective by amending (B)(6)(b) and (B)(6)(g) to add “closing disclosure” directly after “settlement statement” in both subparagraphs of the rule.

#### **14. Course of Action**

The Department plans on amending this rule to update necessary citations to federal law after further advisement from legal counsel. The Department will request an exemption to Executive Order 2019-01 and if granted, will update the references to federal law within the rule by the end of 2020.

### **R20-4-919 Deposit of Monies Received by a Mortgage Broker**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-906(C).

#### **2. Objective**

The objective of the rule is to specify the time frame allowed by the statute's requirement that escrow funds be deposited "immediately."

### **R20-4-920 Requirements for the Testing Committee**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-908.

#### **2. Objective**

The objective of the rule is to specify the methods used to appoint and administer the statutory testing committee.

### **R20-4-921 Authorizations to Complete Blank Spaces**

#### **1. Authorization:**

The authority for the rule derives from A.R.S. § 6-909(A).

#### **2. Objective**

The objective of the rule is to specify a legally sufficient form of notice that may be used to advise a borrower of its rights when asked to sign a lending document containing blank spaces.

### **R20-4-922 Determining Loan Amounts**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-909(D) and (G).

**2. Objective**

The objective of the rule is to specify what constitutes a mortgage loan amount as it relates to the statute.

**R20-4-923 Delay or Cause Delay**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-909(E).

**2. Objective**

The objective of the rule is to clarify the scope of the statutory prohibition on delaying or causing delay in the closing of a loan.

**R20-4-924 Receipt and Disbursement of Monies**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-909(K).

**2. Objective**

The objective of the rule is to clarify the scope of the statutory prohibition on receiving or disbursing monies.

**R20-4-925 Waiver of Examination and Course of Study**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-903(U).

**2. Objective**

The objective of the rule is to clarify that the Superintendent's statutory waiver extends to the applicant's or licensee's responsible individual.

**R20-4-926 Acquisition of Additional Interest in Licensee by Majority Owner**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-903(R).

**2. Objective**

The objective of the rule is to clarify the circumstances under which mere notice to the Superintendent will satisfy the Department, in spite of statutory criteria required for consent to an acquisition of an interest.

**R20-4-927 Conversion to Commercial Mortgage Broker License**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-913.

**2. Objective**

The objective of the rule is to establish the process that allows for a mortgage broker to convert their license to a commercial mortgage broker license.

### **R20-4-928 Certificate of Exemption Application and Renewal**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-912.

#### **2. Objective**

The objective of the rule is to establish the fees and the process for applying for and renewing a certificate of exemption.

### **R20-4-1801 Exemption for an Entity Regulated by an Agency of this State, Other States, or by the United States**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-942.

#### **2. Objective**

The objective of the rule is to clarify the persons exempted under A.R.S. § 6-942(A)(1) and the level of regulation required to qualify those persons for the exemption.

### **R20-4-1802 Equivalent and Related Experience**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-943.

#### **2. Objective**

The objective of the rule is to clarify the types and duration of experience allowed by statute to substitute for A.R.S. § 6-943(C)(1) requirement of three years' experience in the business of making mortgage banking loans.

### **R20-4-1803 Restrictions on the Term of a Cash Alternative to a Surety Bond**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-943(M).

#### **2. Objective**

The objective of the rule is to specify the minimum term of a certificate of deposit or investment certificate placed with the Superintendent as an alternative to a surety bond.

### **R20-4-1804 Requirements for a Person Intended to Oversee a Branch Office**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-944(E).

#### **2. Objective**

The objective of the rule is to clarify the language of the statute requiring a licensee to designate a person to oversee the operations of each licensed branch office.

#### **3. Effectiveness**

Department staff noted that the rule could be made more effective by establishing a timeframe for a change in the designation of branch oversight when a change occurs. The Department will continue to evaluate the appropriateness of pursuing this approach.

**14. Course of Action**

The Department plans on amending this rule to establish effective timeframes for designating a change in branch oversight designation after further advisement from legal counsel. If amendments are necessary, the Department will request an exception to Executive Order 2019-01 and if granted, will update the references to federal law by the end of 2020.

**R20-4-1805 Notification of Change of Address**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-944(E).

**2. Objective**

The objective of the rule is to specify the form and timing of the notice required by statute.

**R20-4-1806 Recordkeeping Requirements**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-946(A).

**2. Objective**

The objective of the rule is to specify the records a licensee is required to have available.

**3. Effectiveness**

The rule could be made more effective by clarifying that copies of records are to be generated by the licensee for the examiner in a timely manner. The rule is clear in stating this expectation, but staff has found that licensees struggle to follow the rule. Furthermore, the rule could be made more effective by amending (B)(6)(b) to add: *The closing disclosure*.

**14. Course of Action**

The Department plans on amending this rule to update necessary citations to federal law after further advisement from legal counsel. The Department will request an exemption to Executive Order 2019-01 and if granted, will update the references to federal law within the rule by the end of 2020.

**R20-4-1807 Providing Copies of Records**

**1. Authorization**

The authority of this rule derives from A.R.S. §§ 6-906 and 6-946.

**2. Objective**

The objective of the rule is to specify the requirement of a mortgage banker to supply copies of documents to a mortgage broker for loans closed in the name of the mortgage broker so the mortgage broker can comply with recordkeeping requirements prescribed by A.R.S § 6-906.

**3. Effectiveness**

The rule could be made more effective by amending this rule to add “The closing disclosure requirements” as an additional document copy that a mortgage banker would provide to the mortgage broker.

**14. Course of Action**

The Department plans on amending this rule to update necessary citations to federal law after

further advisement from legal counsel. The Department will request an exemption to Executive Order 2019-01 and if granted, will update the references to federal law within the rule by the end of 2020.

#### **R10-4-1808 Authorization to Complete Blank Spaces**

##### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-947(A).

##### **2. Objective**

The objective of the rule is to specify a legally sufficient form of notice that may be used to advise a borrower of its rights when asked to sign a lending document containing blank spaces.

#### **R10-4-1809 Determining Loan Amounts**

##### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-947(E) and (K).

##### **2. Objective**

The objective of the rule is to specify what constitutes a mortgage banking loan amount as it relates to the statute.

#### **R20-4-1810 Delay or Cause Delay**

##### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-947(F).

##### **2. Objective**

The objective of the rule is to clarify the scope of the statutory prohibition on delaying or causing delay in the closing of a loan.

#### **R20-4-1811 Impound Accounts**

##### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-946(D).

##### **2. Objective**

The objective of the rule is to limit the amount of money a mortgage banker may retain as a "cushion" against unanticipated payments from the impound account.

#### **R20-4-1812 Acquisition of Additional Interest in Licensee by Majority Owner**

##### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-944(A).

##### **2. Objective**

The objective of the rule is to clarify the requirement and timeframes within which a person that owns a majority of a mortgage banker's outstanding voting interests must report acquisitions of additional voting interest.

### **R20-4-1813 Conversion to Mortgage Broker License**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-949.

#### **2. Objective**

The objective of the rule is to establish the application process for converting a mortgage banker license to a mortgage broker license.

### **R20-4-1901 Exemption for an Institutional Investor**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-972(1).

#### **2. Objective**

The objective of the rule is to clarify criteria under which institutional investors are exempted from the commercial mortgage banker licensure requirements set forth in A.A.C. Title 20, Chapter 4, Article 19.

### **R20-4-1902 Exemption for an Entity Regulated by an Agency of this State, Other States, or by the United States**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-972(9).

#### **2. Objective**

The objective of the rule is to clarify the individuals exempted under A.R.S. § 6-972 and the Department's criteria for granting the exemption.

### **R20-4-1903 Equivalent and Related Experience**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-973.

#### **2. Objective**

The objective of the rule is to clarify the types and duration of experience allowed by statute to substitute for A.R.S. § 6-973(D)(1) requirement of three years' experience in the commercial mortgage business.

### **R20-4-1904 Restrictions on the Term of a Cash Alternative to a Surety Bond**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-975(F).

#### **2. Objective**

The objective of the rule is to specify the minimum term of a certificate of deposit or investment certificate placed with the Superintendent as an alternative to a surety bond.

### **R20-4-1905 Requirements for a Person Intended to Oversee a Branch Office**

#### **1. Authorization**

The authority for the rule derives from A.R.S. § 6-979(B).

**2. Objective**

The objective of the rule is to clarify the language of the statute requiring a licensee to designate a person to oversee the operations of each licensed branch office.

**14. Course of Action**

In the previous review of this rule, the Department indicated that it would amend this rule if advised from legal counsel. After further review of the rule, the Department has determined that the rule is clear and effective in its purpose.

**R20-4-1906 Notification of Change of Address**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-979(D).

**2. Objective**

The objective of the rule is to specify the form and timing of the notice required by statute.

**R20-4-1907 Recordkeeping Requirements**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-983(A).

**2. Objective**

The objective of the rule is to specify the records a licensee is required to have available, and conditions under which a licensee may use a computer system to maintain records.

**14. Course of Action**

In the previous review of this rule, the Department indicated that it would amend this rule if advised from legal counsel. After further review of the rule, the Department has determined that the rule is clear and effective in its purpose.

**R20-4-1908 Impound Accounts**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-983(D).

**2. Objective**

The objective of the rule is to specify that the limit on the amount of money retained by a commercial mortgage banker as a "cushion" against unanticipated payment from the impound account is regulated solely by the agreement of the parties.

**R20-4-1909 Authorization to Complete Blank Spaces**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-984(A).

**2. Objective**

The objective of the rule is to specify a legally sufficient form of notice that may be used to advise a borrower of its rights when asked to sign a lending document containing blank spaces.

#### **R20-4-1910 Delay or Cause Delay**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-984(E).

**2. Objective**

The objective of the rule is to clarify the scope of the statutory prohibition on delaying or causing delay in the closing of a loan.

#### **R20-4-1911 Acquisition of Additional Interest in Licensee by Majority Owner**

**1. Authorization**

The authority for the rule derives from A.R.S. § 6-978.

**2. Objective**

The objective of the rule is to clarify the requirement and timeframes within which a person that owns a majority of a mortgage banker's outstanding voting interests must report acquisitions of additional voting interest.

**Historical Note**

Appendix B repealed by final rulemaking at 6 A.A.R. 2471, effective June 8, 2000 (Supp. 00-2).

**ARTICLE 9. MORTGAGE BROKERS****R20-4-901. Reserved****Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-901 recodified from R4-4-901 (Supp. 95-1). Section repealed by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-902. Reserved****Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-902 recodified from R4-4-902 (Supp. 95-1). Section repealed by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-903. Exemption for an Entity Regulated by an Agency of this State, Other States, or by the United States**

- A.** The exemption under A.R.S. § 6-902 (A)(1) only applies to a person whose offers to make or negotiate a mortgage loan, as defined in A.R.S. § 6-901, and all mortgage loans made or negotiated by the person are regulated directly by an agency of this state, any other state, or the United States.
- B.** The required regulation of the transactions listed in subsection (A) includes:
1. Rules governing a claimant's accounting and recordkeeping practices;
  2. The authority to examine a claimant's books and records relating to its mortgage lending activities; and
  3. The ability to place a claimant in a receivership or conservatorship with regard to the claimant's mortgage lending activities.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-903 recodified from R4-4-903 (Supp. 95-1). Amended by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-904. Reserved****Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-904 recodified from R4-4-904 (Supp. 95-1). Section repealed by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-905. Repealed****Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-905 recodified from R4-4-905 (Supp. 95-1). Section repealed by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-906. Equivalent and Related Experience**

- A.** An applicant may satisfy the three years' experience requirement of A.R.S. § 6-903 by the types of lending-related experience listed in this subsection. The Department counts each month in the following types of work experience toward the three years required for a mortgage broker license, under A.R.S. § 6-903(B), or as a responsible individual, under A.R.S. § 6-903(E). The Department counts a fractional month of experience, at least 15 days long, as a full month.
1. Mortgage broker with an Arizona license, responsible individual, or branch manager for a licensee;

2. Mortgage banker with an Arizona license, responsible individual, or branch manager for a licensee;
3. Loan officer with responsibility primarily for loans secured by lien interests on real property;
4. Lender's branch manager with responsibility primarily for loans secured by lien interests on real property;
5. Mortgage broker with license from another state, or responsible individual for a mortgage broker licensed in another state;
6. Mortgage banker with license from another state, or responsible individual for a mortgage banker licensed in another state;
7. Attorney certified by any state as a real estate specialist.

- B.** An applicant with insufficient actual experience of the types listed in subsection (A) may satisfy the remainder of the three years' experience requirement of A.R.S. § 6-903 by the types of related experience listed in this subsection. The Department counts each month in the following types of work experience according to the ratio listed below, of actual experience to equivalent experience, credited towards qualifying for a license, under A.R.S. § 6-903(B), or as a responsible individual, under A.R.S. § 6-903(E). The Department counts a fractional month of experience, at least 15 days long, as a full month. An applicant receives credit in only one area listed and for not more than three years' actual experience. The remaining years of experience required to qualify for a license shall be obtained from types of work experiences listed in subsection (A).

1. Attorney without state bar certified real estate specialty...3:2
2. Paralegal with experience in real estate matters...3:2
3. Loan underwriter...3:2
4. Mortgage broker or mortgage banker from another state without license...3:2
5. Real estate broker with an Arizona license or license from a state with substantially equivalent licensing requirements...3:2
6. Escrow officer...3:2
7. Trust officer with a title company...3:2
8. Executive, supervisor, or policy maker involved in administering or operating a mortgage-related business...3:1.5
9. Title officer with a title company...3:1.5
10. Real estate broker, not qualified under subsection (B)(5)...3:1.5
11. Loan processor with responsibility primarily for loans secured by lien interests on real property...3:1.5
12. Lender's branch manager with responsibility primarily for loans not secured by lien interests on real property...3:1.5
13. Real property salesperson with an Arizona license or a license from a state with substantially equivalent licensing requirements...3:1
14. Loan officer, with responsibility primarily for loans not secured by lien interests on real property...3:1

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-906 recodified from R4-4-906 (Supp. 95-1). Amended by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-907. Course of Study**

- A. A course of study shall be satisfactorily completed if the applicant has:
1. Attended at least 24 hours of class, and
  2. Received a passing grade on the final exam.
- B. A course of study shall meet all the following requirements:
1. The following items shall be submitted by the school to the Superintendent on an annual basis:
    - a. Course materials;
    - b. Class content outlines on a session-by-session basis; and
    - c. Sample final exam.
  2. The following subjects shall be taught:
    - a. Mortgage, deed of trust, and security agreement law;
    - b. Negotiable instrument law;
    - c. Mortgage broker law;
    - d. Escrow agent law;
    - e. Recordkeeping requirements of R20-4-917;
    - f. Federal Housing Administration, Veterans Administration, Federal National Mortgage Association, Federal Home Loan Mortgage Corporation requirements;
    - g. Ethics;
    - h. Principal and agent law;
    - i. Arithmetical computations common to mortgage brokerage;
    - j. Real estate lending principles;
    - k. Real estate law;
    - l. Real Estate Settlement Procedures Act, 12 U.S.C. 2601 through 2617, and Consumer Credit Protection Act, 15 U.S.C. 1601 through 1666j; and
    - m. Securities law.
  3. A final exam shall be given that substantially tests the student's knowledge of the subjects described above.
- C. The Superintendent shall review the items submitted to the Department and determine within 60 days of submission whether the proposed course of study is satisfactory. The Superintendent may audit a course of study at any time. If the Superintendent finds that a course of study is unsatisfactory, or if the Superintendent has not received the course materials, course content outlines, and sample final exam within the prior 13 months, the Superintendent may withhold or suspend approval.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-907 recodified from R4-4-907 (Supp. 95-1).

**R20-4-908. Reserved****Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-908 recodified from R4-4-908 (Supp. 95-1). Section repealed by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-909. Reserved****Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-909 recodified from R4-4-909 (Supp. 95-1). Section repealed by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-910. Reserved****Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-910 recodified from R4-4-910 (Supp. 95-1). Section

repealed by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-911. Qualified Replacement Responsible Individual**

If a licensee chooses an individual to serve as a replacement responsible individual and that individual has not satisfactorily completed the course of study required by A.R.S. § 6-903(B)(2) or passed the mortgage broker examination required by A.R.S. § 6-903(B)(3), and is not given the opportunity to do so prior to the expiration of the 90-day time period provided in A.R.S. § 6-903(F), but otherwise meets the requirements of A.R.S. § 6-903(B), the individual shall be qualified as a replacement responsible individual until the next course of study has been held and, if the person successfully completes the course of study, until the mortgage broker examination next following the completion of the course of study has been held and the results of the examination are available. If the individual fails to satisfactorily complete the course of study or fails the mortgage broker examination, the licensee shall then have a new 90-day time period within which to place itself under the active management of a qualified responsible individual. Notwithstanding the foregoing, a licensee shall have no longer than 180 days within which to place the license under the active management of a qualified responsible individual unless the Superintendent grants additional time to the licensee for good cause shown.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-911 recodified from R4-4-911 (Supp. 95-1).

**R20-4-912. Restrictions on the Term of a Cash Alternative**

If an applicant or a licensee elects to place with the Superintendent a deposit in the form of a certificate of deposit or investment certificate, in addition to the requirements of A.R.S. § 6-903(J), the certificate of deposit or investment certificate shall not be renewable, nor expire, earlier than 12 months from the date of issuance.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-912 recodified from R4-4-912 (Supp. 95-1).

**R20-4-913. Reserved****Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-913 recodified from R4-4-913 (Supp. 95-1). Section repealed by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-914. Reserved****Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-914 recodified from R4-4-914 (Supp. 95-1). Section repealed by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-915. Requirements for a Person Intended to Oversee a Branch Office**

A person designated to oversee the operations of a branch office shall be knowledgeable about the branch activities of the licensee, shall supervise compliance by the branch with applicable law and rules, and shall have sufficient authority to ensure such compliance. One person may oversee more than one branch.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-915 recodified from R4-4-915 (Supp. 95-1).

**R20-4-916. Notification of Change of Address**

If the address of the principal place of business or of any branch office is changed, the licensee shall notify the Superintendent of the

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change within five business days after the occurrence of the change of location. Together with such notice, the licensee shall provide to the Department the license for the office changing addresses together with the fee required by A.R.S. § 6-126 for changing the address of an office. A copy of such license shall continue to be displayed at the place of business until a new license is issued.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-916 recodified from R4-4-916 (Supp. 95-1).

**R20-4-917. Recordkeeping Requirements**

**A.** The Superintendent shall approve a licensee's use of a computer or mechanical recordkeeping system if the licensee gives the Superintendent advanced written notice that it intends to do so. The Department shall not require a licensee to keep a written copy of the records if the licensee can generate all information required by this Section in a timely manner for examination or other purposes. A licensee may add, delete, modify, or customize an approved computer or mechanical recordkeeping system's hardware or software components. When requested, or in response to a written notice of an examination, a licensee shall report to the Superintendent any alteration in the approved system's fundamental character, medium, or function if the alteration changes:

1. Any approved computer or mechanical system back to a paper-based system;
2. An approved mechanical system to a computer system; or
3. An approved computer system to a mechanical system.

**B.** In addition to any statutory requirement regarding records, a record maintained by a mortgage broker shall include the following:

1. A list of all executed loan applications or executed fee agreements that includes the following information:
  - a. Applicant's name;
  - b. Application date;
  - c. Amount of initial loan request;
  - d. Final disposition date;
  - e. Disposition (funded, denied, etc.); and
  - f. Name of loan officer;
2. A record, such as a cash receipts journal, of all money received in connection with a mortgage loan including:
  - a. Payor's name;
  - b. Date received;
  - c. Amount; and
  - d. Receipt's purpose, including identification of a related loan, if any;
3. A sequential listing of checks written for each bank account relating to the mortgage broker business, such as a cash disbursement journal, including:
  - a. Payee's name;
  - b. Amount;
  - c. Date; and
  - d. Payment's purpose, including identification of a related loan, if any;
4. Bank account activity source documents for the mortgage broker business including receipted deposit tickets, numbered receipts for cash, bank account statements, paid checks, and bank advices.
5. A trust subsidiary ledger for each borrower that deposits trust funds showing:
  - a. Borrower's name or co-borrowers' names;
  - b. Loan number, if any;
  - c. Amount received;
  - d. Purpose for the amount received;
  - e. Date received;
  - f. Date deposited into trust account;

- g. Amount disbursed;
  - h. Date disbursed;
  - i. Disbursement's payee and purpose; and
  - j. Balance;
6. A file for each application for a mortgage loan containing:
    - a. The agreement with the customer concerning the broker's services, whether as a loan application, fee agreement, or both;
    - b. Document showing the application's final disposition, such as a settlement statement, or a denial or withdrawal letter;
    - c. Correspondence sent, received, or both by the licensee;
    - d. Contract, agreement, and escrow instructions to or with any depository;
    - e. Documents showing compliance with the Consumer Credit Protection Act's (15 U.S.C. §§ 1601 through 1666j) and the Real Estate Settlement Procedures Act's (12 U.S.C. §§ 2601 through 2617) disclosure requirements, to the extent applicable;
    - f. If the loan is funded by an investor that is not a financial institution, an enterprise, a licensed real estate broker or salesman, a profit sharing or pension trust or, an insurance company, the documents provided to the investor under A.R.S. § 6-907, a copy of the executed note and executed deed of trust or mortgage, and any assignment by the broker to the investor;
    - g. If the loan is closed in the mortgage broker's name, a copy of all closing documents including: closing instructions, any applicable rescission notice, HUD-1 settlement statement, final truth-in-lending disclosure, executed note, executed deed of trust or mortgage, and each assignment of beneficial interest by the licensee; and
    - h. Itemized list of all fees taken in advance including appraisal fee, credit report fee, and application fee;
  7. Samples of every piece of advertising relating to the mortgage broker's business in Arizona;
  8. Copies of governmental or regulatory compliance reviews;
  9. If the licensee is not a natural person, a file containing:
    - a. Organizational documents for the entity;
    - b. Minutes;
    - c. A record, such as a stock or ownership transfer ledger, showing ownership of all proportional equity interests in the licensee, ascertainable as of any given record date; and
    - d. Annual report, if required by law;
  10. If the licensee or anyone directly or indirectly owning more than 20% of the licensee has a felony conviction, a copy of the judgment or other record of conviction;
  11. If the licensee or anyone directly or indirectly owning more than 20% of the licensee has, in the previous seven years, been named a defendant in any civil suit, a copy of the complaint, any answer filed by the licensee, and any judgment, dismissal, or other final order disposing of the action; and
  12. If the Superintendent has granted approval to maintain records outside this state, the specific address where the records are kept, and a person's name to contact for them.
- C.** If 10 or fewer transactions have occurred during the prior calendar quarter, a licensee shall reconcile and update all records specified in subsection (B) at least once each calendar quarter. A licensee shall reconcile and update all records specified in subsection (B) monthly if more than 10 transactions occurred

during the prior calendar quarter. In addition to reconciling each trust bank account, a licensee shall verify each trust balance to each trust subsidiary ledger at each reconciliation.

- D.** A licensee shall retain the documents described in subsections (B)(1) and (B)(6) for the length of time provided in A.R.S. § 6-906. For the purposes of A.R.S. § 6-906, a mortgage loan's closing date, on a loan application that did not result in the making of a loan, is either:
1. The date a licensee receives a written cancellation notice from an applicant; or
  2. The date a licensee mails written notice to an applicant that the application has been denied, as required by federal law.
- E.** A licensee shall maintain all records described in this Section, and not included in subsection (D), for at least two years.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-917 recodified from R4-4-917 (Supp. 95-1). Amended by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-918. Repealed**

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-918 recodified from R4-4-918 (Supp. 95-1). Section repealed by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-919. Deposit of Monies Received by a Mortgage Broker**

All monies received by a mortgage broker which are required to be deposited into an escrow account with an escrow agent licensed pursuant to A.R.S. § 6-801 et seq. shall be so deposited by 5:00 p.m. on the next business day after receipt of the funds.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-919 recodified from R4-4-919 (Supp. 95-1).

**R20-4-920. Requirements for the Testing Committee**

- A.** No licensee shall submit more than five names as nominees to serve on the testing committee. The resumes of the nominees shall be included. The names and resumes shall be submitted to the Superintendent no later than August 1 of each even-numbered year. On or before September 30 of each even-numbered year, the Superintendent shall appoint four persons from the nominees submitted and one employee of the Department as members of the testing committee. A person may serve more than one two-year term. If the Superintendent does not find at least four persons from the list to be acceptable, the Superintendent shall solicit additional nominees from licensees.
- B.** In the event of a vacancy on the testing committee, the remaining members of the committee shall submit a list of nominees within 45 days of the vacancy to the Superintendent containing not less than two nominees for each vacancy. The Superintendent shall then appoint a nominee from the list to fill each vacancy for the remainder of the term. If the Superintendent does not find at least one person from the list to be acceptable to fill each vacancy, the remaining members of the committee shall, upon request, submit an additional list of nominees to the Superintendent.
- C.** The Superintendent may remove any member of the committee at any time without cause.
- D.** The committee shall review and revise questions on the test not less than once every two years. All questions used on the

test shall first be submitted to and approved by the Superintendent.

- E.** The committee shall inform the applicant of the applicant's score on the test in writing within 30 days of administration of the test.
- F.** The handbook for mortgage brokers shall be updated by the committee as necessary to reflect changes in the law.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-920 recodified from R4-4-920 (Supp. 95-1).

**R20-4-921. Authorizations to Complete Blank Spaces**

An authorization, under A.R.S. § 6-909, allowing a licensee or escrow agent to complete certain blank spaces in a document after it is signed by a party to the transaction shall:

1. Specifically identify the document and the blank spaces to be completed;
2. Be in writing, dated, and signed by the authorizing parties; and
3. Contain the following notice, conspicuously printed on its face: YOUR SIGNATURE BELOW AUTHORIZES YOUR MORTGAGE BROKER OR ESCROW AGENT TO FILL IN SPACES YOU LEFT BLANK IN SPECIFIED LOAN DOCUMENTS YOU ARE ABOUT TO SIGN OR MAY HAVE ALREADY SIGNED. UNDER STATE LAW YOU CAN GIVE THIS AUTHORITY, BUT YOU ARE NOT REQUIRED TO DO SO. YOU CAN REFUSE TO SIGN ANY DOCUMENTS UNTIL ALL BLANKS ARE COMPLETELY FILLED IN.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-921 recodified from R4-4-921 (Supp. 95-1). Amended by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-922. Determining Loan Amounts**

In determining the amount of a mortgage loan pursuant to A.R.S. § 6-909(D) or (G), only the principal amount of the loan shall be considered and not any points, interest, finance charges, insurance premiums of any kind, compensation paid to third parties or compensation retained by the mortgage broker or its agents.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-922 recodified from R4-4-922 (Supp. 95-1).

**R20-4-923. Delay or Cause Delay**

A mortgage broker shall not be deemed to have delayed or caused delay if such delay occurs due to events outside the control of the mortgage broker.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-923 recodified from R4-4-923 (Supp. 95-1).

**R20-4-924. Receipt and Disbursement of Monies**

A licensee is not receiving or disbursing monies in servicing or arranging a mortgage loan if the licensee, at the request of the lender or servicing agent, on an infrequent basis, assists in the collection or servicing of a mortgage loan by receiving from the borrower a check or draft payable to the lender or servicing agent and forwarding such instrument to the lender or servicing agent not later than 5:00 p.m. on the next business day after receipt by the licensee. For the purposes of this rule, an infrequent basis means, with regard to a particular loan, for not more than 25% of the regularly scheduled payments of the mortgage loan during any calendar year.

**Historical Note**

Adopted effective August 14, 1991 (Supp. 91-3). R20-4-924 recodified from R4-4-924 (Supp. 95-1).

**R20-4-925. Waiver of Examination and Course of Study**

The Superintendent's waiver of the examination and course of study requirement under A.R.S. § 6-903 extends to a person designated as a responsible individual by either an applicant or a licensee under A.R.S. § 6-903.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-926. Acquisition of Additional Interest in Licensee by Majority Owner**

A person that owns 51% or more of a licensee's outstanding voting equity interests, and that acquires the power to vote additional fractional equity interests, shall deliver written notice of the acquisition to the Superintendent. The person shall deliver the notice before completing the acquisition. Within 10 days after completing the acquisition, the person shall deliver documentation evidencing the acquisition to the Superintendent.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-927. Conversion to Commercial Mortgage Broker License**

- A. Under A.R.S. § 6-913, a mortgage broker licensee shall only be permitted to convert his or her license to a commercial mortgage broker license during the renewal period established by A.R.S. § 6-904.
- B. The licensee seeking conversion shall not be subject to the 12 continuing education units as prescribed by A.R.S. § 6-903(V).
- C. The licensee seeking conversion shall submit:
  1. The renewal fees required by A.R.S. § 6-126 for commercial mortgage brokers, and
  2. The information and documents required by A.R.S. § 6-903.

**Historical Note**

New Section adopted by final rulemaking at 18 A.A.R. 2622, effective December 2, 2012 (Supp. 12-4).

**R20-4-928. Certificate of Exemption Application and Renewal**

- A. Under A.R.S. § 6-912(C), upon application for a certificate of exemption, an applicant shall pay a nonrefundable fee of \$300.
- B. A person holding a certificate of exemption shall pay a renewal fee of \$150.00 on or before December 31 of each year. Certificates of exemption not renewed by December 31 are automatically suspended, and the certificate holder shall not act as a registered exempt person until the certificate is renewed or a new certificate is issued pursuant to A.R.S. § 6-912. While the certificate is suspended, the licensed loan originators sponsored by the registered exempt person may not transact business as a loan originator. A registered exempt person may renew an automatically suspended certificate by paying the renewal fee plus \$25.00 for each day after December 31 that a renewal fee is not received by the Superintendent and applying for renewal as prescribed by the Superintendent. A certificate of exemption that is not renewed by January 31 expires. A certificate of exemption shall not be granted to the holder of an expired certificate of exemption except as provided in A.R.S. § 6-912 for the issuance of an original certifi-

cate of exemption. Each licensed loan originator that is sponsored by a registered exempt person whose certificate has expired shall have his or her license placed on inactive status and shall not transact business in Arizona as a loan originator pursuant to A.R.S. § 6-991.02(M).

- C. In addition to the application fee, on issuance of the certificate of exemption, the Superintendent shall collect the first year's renewal fee prorated according to the number of quarters remaining until the date of the next annual renewal, as required by A.R.S. § 6-126(B).
- D. The following fees are payable to the Department:
  1. To change the name of the federally chartered savings bank on a certificate of exemption: \$250.00.
  2. To change the responsible individual for the exempt entity: \$250.00.
  3. To issue a duplicate or replace a lost certificate of exemption: \$100.00.
  4. To change the address of the federally chartered savings bank on a certificate of exemption: \$50.00.

**Historical Note**

New Section adopted by final rulemaking at 18 A.A.R. 2622, effective December 2, 2012 (Supp. 12-4).

**ARTICLE 10. SAFE DEPOSIT AND SAFEKEEPING CODE****R20-4-1001. Notice of Change of Location of Safe Deposit Repository**

- A. A corporation or association that moves a repository shall give written notice of the location change to the Superintendent and to its customers.
  1. A corporation or association shall provide notice of the location change to the Superintendent by mailing the notice required under this subsection by first class mail no less than 30 days before the scheduled moving date. The corporation or association shall include a copy of the notice to customers required under subsection (B).
  2. A corporation or association shall provide notice of the location change to its customers by:
    - a. Publishing notice of the change of location in:
      - i. An English language newspaper of general circulation in the county where the repository will be closed,
      - ii. In a weekly newspaper for two consecutive publications, or
      - iii. In a daily newspaper for three consecutive days; and
    - b. Publishing the notice no more than 90 days, and no less than 30 days, before the scheduled moving date.
- B. The corporation or association shall include all the following information in the notice:
  1. The date the corporation or association intends to move the repository,
  2. The earliest date a customer can remove contents and transact other business related to the move,
  3. The latest date a customer can remove contents and transact other business related to the move,
  4. The street address of the repository to be closed, and
  5. The street address of the new repository.

**Historical Note**

Former Rule 1. R20-4-1001 recodified from R4-4-1001 (Supp. 95-1). Amended by final rulemaking at 8 A.A.R. 5227, effective February 4, 2003 (Supp. 02-4). Preceding Historical Note entry corrected to read 2003 instead of 2002 (Supp. 03-1).

by final rulemaking at 11 A.A.R. 2031, effective July 2, 2005 (Supp. 05-2).

#### **R20-4-1703. Repealed**

##### **Historical Note**

Adopted effective October 1, 1986 (Supp. 86-5). R20-4-1703 recodified from R4-4-1703 (Supp. 95-1). Section repealed by final rulemaking at 11 A.A.R. 2031, effective July 2, 2005 (Supp. 05-2).

#### **R20-4-1704. Public Notice**

- A.** An applicant shall transmit to the Superintendent of Banks two copies of each notice and the publisher's affidavit of publication required by the Federal Reserve Board, Federal Home Loan Bank Board, the Federal Deposit Insurance Corporation, or other regulatory authority that has concurrent jurisdiction.
- B.** An applicant shall provide the Superintendent of Banks copies of any protests known to have been received by the Federal Reserve Board, Federal Home Loan Bank Board, the Federal Deposit Insurance Corporation, or other regulatory authority that has concurrent jurisdiction.

##### **Historical Note**

Adopted effective October 1, 1986 (Supp. 86-5). R20-4-1704 recodified from R4-4-1704 (Supp. 95-1). Amended by final rulemaking at 11 A.A.R. 2031, effective July 2, 2005 (Supp. 05-2).

#### **R20-4-1705. Repealed**

##### **Historical Note**

Adopted effective October 1, 1986 (Supp. 86-5). R20-4-1705 recodified from R4-4-1705 (Supp. 95-1). Section repealed by final rulemaking at 11 A.A.R. 2031, effective July 2, 2005 (Supp. 05-2).

#### **R20-4-1706. Repealed**

##### **Historical Note**

Adopted effective October 1, 1986 (Supp. 86-5). R20-4-1706 recodified from R4-4-1706 (Supp. 95-1). Section repealed by final rulemaking at 11 A.A.R. 2031, effective July 2, 2005 (Supp. 05-2).

### **ARTICLE 18. MORTGAGE BANKERS**

#### **R20-4-1801. Exemption for an Entity Regulated by an Agency of this State, Other States, or by the United States**

- A.** The exemption under A.R.S. § 6-942(A)(1) only applies to a person whose offers to make or negotiate a "mortgage banking loan" or a "mortgage loan," as those terms are defined in A.R.S. § 6-941, and all mortgage banking loans and mortgage loans made or negotiated by the person are regulated directly by an agency of this state, any other state, or the United States.
- B.** The required regulation of the transactions listed in subsection (A) includes:
1. Rules governing a claimant's accounting and recordkeeping practices;
  2. The authority to examine a claimant's books and records relating to its mortgage banking activities or mortgage lending activities, or both; and
  3. The ability to place a claimant in a receivership or conservatorship with regard to the claimant's mortgage banking activities, mortgage lending activities, or both.

##### **Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

#### **R20-4-1802. Equivalent and Related Experience**

- A.** An applicant may satisfy the three years' experience requirement of A.R.S. § 6-943 by the types of lending-related experience listed in this subsection. The Department counts each month in the following types of work experience toward the three years required either for a mortgage banker license, or as a responsible individual, both under A.R.S. § 6-943(C). The Department counts a fractional month of experience, at least 15 days long, as a full month.
1. Mortgage banker with an Arizona license, responsible individual, or branch manager for a licensee;
  2. Mortgage broker with an Arizona license, responsible individual, or branch manager for a licensee;
  3. Loan officer with responsibility primarily for loans secured by lien interests on real property;
  4. Lender's branch manager with responsibility primarily for loans secured by lien interests on real property;
  5. Mortgage banker with license from another state, or responsible individual for the mortgage banker;
  6. Mortgage broker with license from another state, or responsible individual for the mortgage broker;
  7. Attorney certified by any state as a real estate specialist.
- B.** An applicant with insufficient actual experience of the types listed in subsection (A) may satisfy the remainder of the three years' experience requirement of A.R.S. § 6-943 by the types of related experience listed in this subsection. The Department counts each month in the following types of work experience according to the ratio listed below, of actual experience to equivalent experience, credited toward qualifying for a license, or as a responsible individual, both under A.R.S. § 6-943(C). The Department counts a fractional month of experience, at least 15 days long, as a full month. An applicant receives credit in only one area listed and for not more than three years' actual experience. The remaining years of experience required to qualify for a license shall be obtained from types of work experiences listed in subsection (A).
1. Attorney without state bar certified real estate specialty...3:2
  2. Paralegal with experience in real estate matters...3:2
  3. Loan underwriter...3:2
  4. Mortgage banker or mortgage broker from another state without license...3:2
  5. Real estate broker with an Arizona license or license from a state with substantially equivalent licensing requirements...3:2
  6. Escrow officer...3:2
  7. Trust officer with a title company...3:2
  8. Executive, supervisor, or policy maker involved in administering or operating a mortgage-related business...3:1.5
  9. Title officer with a title company...3:1.5
  10. Real estate broker, not qualified under subsection (B)(5)...3:1.5
  11. Loan processor with responsibility primarily for loans secured by lien interests on real property...3:1.5
  12. Lender's branch manager with responsibility primarily for loans not secured by lien interests on real property...3:1.5
  13. Real property salesperson, with an Arizona license or a license from a state with substantially equivalent licensing requirements...3:1
  14. Loan officer, with responsibility primarily for loans not secured by lien interests on real property...3:1

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1803. Restrictions on the Term of a Cash Alternative to a Surety Bond**

A licensee or applicant shall not place a certificate of deposit or investment certificate as a cash alternative to a surety bond with the Superintendent that is renewable or expires earlier than 12 months from the date of issuance.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1804. Requirements for a Person Intended to Oversee a Branch Office**

A person designated to oversee the operations of a branch office shall be knowledgeable about the branch activities of the licensee, supervise compliance by the branch with applicable law and rules, and have sufficient authority to ensure such compliance. One person may oversee more than one branch.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1805. Notification of Change of Address**

If a licensee changes the licensee's principal place of business, or the location of a branch office, the licensee shall notify the Superintendent at least five business days before the address change. With the notice, a licensee shall provide the Superintendent with the license for the office changing its address and the fee required by A.R.S. § 6-126 for changing an office address. A copy of the license shall continue to be displayed at the place of business until a new license is issued.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2). Amended by final rulemaking at 8 A.A.R. 145, effective December 10, 2001 (Supp. 01-4).

**R20-4-1806. Recordkeeping Requirements**

- A.** The Superintendent shall approve a licensee's use of a computer or mechanical recordkeeping system if the licensee gives the Superintendent advanced written notice that it intends to do so. The Department shall not require a licensee to keep a written copy of the records if the licensee can generate all information required by this Section in a timely manner for examination or other purposes. A licensee may add, delete, modify, or customize an approved computer or mechanical recordkeeping system's hardware or software components. When requested, or in response to a written notice of an examination, a licensee shall report to the Superintendent any alteration in the approved system's fundamental character, medium, or function if the alteration changes:
1. Any approved computer or mechanical system back to a paper-based system; or
  2. An approved mechanical system to a computer system; or
  3. An approved computer system to a mechanical system.
- B.** In addition to any statutory requirement regarding records, a record maintained by a mortgage banker shall include the following:
1. A list of all executed loan applications or executed fee agreements that includes the following information:
    - a. Applicant's name;
    - b. Application date;
    - c. Amount of initial loan request;

- d. Final disposition date;
  - e. Disposition (funded, denied); and
  - f. Name of loan officer;
2. A record, such as a cash receipts journal, of all money received in connection with mortgage banking loans or mortgage loans including:
    - a. Payor's name;
    - b. Date received;
    - c. Amount; and
    - d. Receipt's purpose including identification of a related loan, if any;
  3. A sequential listing of checks written for each bank account relating to the mortgage banker business, such as a cash disbursement journal, including:
    - a. Payee's name;
    - b. Amount;
    - c. Date; and
    - d. Payment's purpose including identification of a related loan, if any;
  4. Bank account activity source documents for the mortgage banker business including receipted deposit tickets, numbered receipts for cash, bank account statements, paid checks, and bank advices;
  5. A trust subsidiary ledger for each borrower that deposits trust funds showing:
    - a. Borrower's name or co-borrowers' names;
    - b. Loan number, if any;
    - c. Amount received;
    - d. Purpose for the amount received;
    - e. Date received;
    - f. Date deposited into trust account;
    - g. Amount disbursed;
    - h. Date disbursed;
    - i. Disbursement's payee and purpose; and
    - j. Balance;
  6. A file for each application for a mortgage banking loan or a mortgage loan containing:
    - a. The agreement with the customer concerning the mortgage banker's services, whether as a loan application, fee agreement, or both;
    - b. Document showing the application's final disposition, such as a settlement statement, or a denial or withdrawal letter;
    - c. Correspondence sent, received, or both by the licensee;
    - d. Contract, agreement and escrow instructions to or with any depository;
    - e. Documents showing compliance with the Consumer Credit Protection Act's (15 U.S.C. §§ 1601 through 1666j) and the Real Estate Settlement Procedures Act's (12 U.S.C. §§ 2601 through 2617) disclosure requirements, to the extent applicable;
    - f. If the loan is closed in the licensee's name, and funded by a lender that is not an institutional investor as defined at A.R.S. § 6-943, a copy of the executed note, executed deed of trust or mortgage, and each assignment of beneficial interest by the licensee, if any. If any of the documents listed in this subsection have been recorded, the file shall also contain legible copies of the recorded documents, and;
    - g. Itemized list of all fees taken in advance including appraisal fee, credit report fee, and application fee;
  7. Samples of every piece of advertising relating to the mortgage banker's business in Arizona;

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8. Copies of governmental or regulatory compliance reviews;
  9. If the licensee is not a natural person, a file containing:
    - a. Organizational documents for the entity;
    - b. Minutes;
    - c. A record, such as a stock or ownership transfer ledger, showing ownership of all proportional equity interests in the licensee, ascertainable as of any given record date; and
    - d. Annual report, if required by law;
  10. If the licensee or anyone directly or indirectly owning more than 20% of the licensee has a felony conviction, a copy of the judgment or other record of conviction;
  11. If the licensee or anyone directly or indirectly owning more than 20% of the licensee has, in the previous seven years, been named a defendant in any civil suit, a copy of the complaint, any answer filed by the licensee, and any judgment, dismissal or other final order disposing of the action;
  12. If the Superintendent has granted approval to maintain records outside this state, the specific address where the records are kept, and a person's name to contact for them;
  13. If a licensee does business in other states, it must be able to separate Arizona loan information from information relating to other states to enable the Superintendent to conduct an examination.
  14. A licensee shall produce a trial balance of the general ledger monthly to evidence the mortgage banker's net worth.
- C.** If 10 or fewer transactions have occurred during the prior calendar quarter, a licensee shall reconcile and update all records specified in subsection (B) at least once each calendar quarter. A licensee shall reconcile and update all records specified in subsection (B) monthly if more than 10 transactions occurred during the prior calendar quarter. In addition to reconciling each trust bank account, a licensee shall verify each trust balance to each trust subsidiary ledger at each reconciliation.
- D.** A licensee shall retain the documents described in subsections (B)(1) and (6) for the length of time provided in A.R.S. § 6-946. For the purposes of A.R.S. § 6-946, the mortgage banking loan's closing date, on a loan application that did not result in the making of a loan, is either:
1. The date a licensee receives a written cancellation notice from an applicant; or
  2. The date a licensee mails written notice to an applicant that an application has been denied, as required by federal law.
- E.** A licensee shall maintain all other records described in this Section, and not included in subsection (D), for at least two years.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1807. Providing Copies of Records**

For each loan closed in an Arizona mortgage broker's name with a concurrent assignment of beneficial interest to a mortgage banker, the mortgage banker licensee shall provide to the mortgage broker in whose name the loan closed a copy of:

1. The closing instructions;
2. Any applicable rescission notice;
3. The HUD-1 settlement statement;
4. The final truth-in-lending disclosure;
5. The note;
6. The executed deed of trust or mortgage; and
7. Each assignment of beneficial interest by the mortgage banker licensee.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1808. Authorization to Complete Blank Spaces**

An authorization, under A.R.S. § 6-947, allowing a licensee or escrow agent to complete certain blank spaces in a document after it is signed by a party to the transaction shall:

1. Specifically identify the document and the blank spaces to be completed;
2. Be in writing, dated, and signed by the authorizing parties, and
3. Contain the following notice, conspicuously printed on its face: YOUR SIGNATURE BELOW AUTHORIZES YOUR MORTGAGE BANKER OR ESCROW AGENT TO FILL IN SPACES YOU LEFT BLANK IN SPECIFIED LOAN DOCUMENTS YOU ARE ABOUT TO SIGN OR MAY HAVE ALREADY SIGNED. UNDER STATE LAW YOU CAN GIVE THIS AUTHORITY, BUT YOU ARE NOT REQUIRED TO DO SO. YOU CAN REFUSE TO SIGN ANY DOCUMENTS UNTIL ALL BLANKS ARE COMPLETELY FILLED IN.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1809. Determining Loan Amounts**

The amount of a mortgage banking loan or a mortgage loan under A.R.S. § 6-947(E) or 6-947(K), is the principal amount of the loan and does not include any points, interest, finance charges, insurance premiums of any kind, compensation paid to third parties, or compensation retained by a mortgage banker or its agents.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1810. Delay or Cause Delay**

A mortgage banker does not delay or cause delay if the delay occurs due to events outside the control of the mortgage banker.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1811. Impound Account**

The total of all funds retained by a mortgage banker from all periodic payments made by a borrower to maintain a cushion, as defined in R20-4-102, shall not exceed 1/6th of the estimated total annual payments from the impound account.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1812. Acquisition of Additional Interest in Licensee by Majority Owner**

A person that owns 51% or more of a licensee's outstanding voting equity interests, and that acquires the power to vote additional fractional equity interests, shall deliver written notice of the acquisition to the Superintendent. The person shall deliver the notice before completing the acquisition. Within 10 days after completing the acquisition, the person shall deliver documentation evidencing the acquisition to the Superintendent.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1813. Conversion to Mortgage Broker License**

Under A.R.S. § 6-949 to apply for a conversion from a mortgage banker license to a mortgage broker license, the applicant shall submit during the renewal period all applicable renewal documents and renewal fees required by A.R.S. §§ 6-126 and 6-903 for mortgage brokers.

#### Historical Note

New Section adopted by final rulemaking at 18 A.A.R. 2622, effective December 2, 2012 (Supp. 12-4).

### ARTICLE 19. COMMERCIAL MORTGAGE BANKERS

#### R20-4-1901. Exemption for an Institutional Investor

- A. The exemption from the licensure requirement for an institutional investor, solely as that term is used in A.R.S. §§ 6-971, 6-972, and this Article, applies only if a person claiming the exemption meets all the following criteria:
1. The claimant originates or directly or indirectly makes, negotiates, or offers to make or negotiate commercial mortgage loans that are all exclusively funded by the claimant's own resources, as defined in A.R.S. § 6-971;
  2. The claimant does so in the regular course of business;
  3. The claimant makes only commercial mortgage loans, as defined in A.R.S. § 6-971;
  4. The claimant makes each loan on the security of commercial property, as defined in A.R.S. § 6-971; and
  5. The claimant makes only loans of more than \$250,000.
- B. If a claimant makes even one commercial mortgage loan that does not satisfy all the above criteria, any claim of exemption is invalid, and that person shall not engage in any lending activity before obtaining a license.

#### Historical Note

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

#### R20-4-1902. Exemption for an Entity Regulated by an Agency of this State, Other States, or by the United States

- A. The exemption under A.R.S. § 6-972(9) only applies to a person whose offers to make or negotiate a "commercial mortgage loan," as that term is defined in A.R.S. § 6-971, and all commercial mortgage loans made or negotiated by the person are regulated directly by an agency of this state, any other state, or the United States.
- B. The required regulation of the transactions listed in subsection (A) includes:
1. Rules governing a claimant's accounting and recordkeeping practices;
  2. The authority to examine a claimant's books and records relating to its commercial mortgage lending activities;
  3. The ability to place a claimant in a receivership or conservatorship with regard to the claimant's commercial mortgage lending activities.

#### Historical Note

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

#### R20-4-1903. Equivalent and Related Experience

- A. An applicant may satisfy the three years' experience requirement of A.R.S. § 6-973 by the types of lending-related experience listed in this subsection. The Department counts each month in the following types of work experience towards the three years required either for a commercial mortgage banker license, or as a responsible individual, both under A.R.S. § 6-973(D). The Department counts a fractional month of experience, at least 15 days long, as a full month.
1. Commercial mortgage banker with an Arizona license, or Responsible Individual or branch manager for a licensee;

2. Mortgage broker with Arizona license, or Responsible Individual or branch manager for a licensee;
  3. Mortgage banker with an Arizona license, or Responsible Individual or branch manager for a licensee;
  4. Loan officer, with responsibility primarily for loans secured by lien interests on commercial real property;
  5. Lender's branch manager, with responsibility primarily for loans secured by lien interests on commercial real property;
  6. Commercial mortgage banker with license from another state, or Responsible Individual for the commercial mortgage banker;
  7. Mortgage broker with license from another state, or Responsible Individual for the mortgage broker;
  8. Mortgage banker with license from another state, or responsible individual for the mortgage banker;
  9. Attorney certified by any state as a real estate specialist.
- B. The experience of an applicant with insufficient actual experience of the types listed in subsection (A) is reviewed and evaluated on a case by case basis.

#### Historical Note

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

#### R20-4-1904. Restrictions on the Term of a Cash Alternative to a Surety Bond

A licensee or applicant shall not place a certificate of deposit or investment certificate as a cash alternative to a surety bond with the Superintendent that is renewable or expires earlier than 12 months from the date of issuance.

#### Historical Note

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

#### R20-4-1905. Requirements for a Person Intended to Oversee a Branch Office

A Person designated to oversee the operations of a branch office shall be knowledgeable about the branch activities of the licensee, supervise compliance by the branch with applicable law and rules, and have sufficient authority to ensure such compliance. One Person may oversee more than one branch.

#### Historical Note

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

#### R20-4-1906. Notification of Change of Address

If a licensee changes the licensee's principal place of business, or the location of a branch office, the licensee shall notify the Superintendent within five business days after the address change. With the notice, a licensee shall provide the Superintendent with the license for the office changing its address and the fee required by A.R.S. § 6-126 for changing an office address. A copy of the license shall continue to be displayed at the place of business until a new license is issued.

#### Historical Note

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

#### R20-4-1907. Recordkeeping Requirements

- A. The Superintendent shall approve a licensee's use of a computer or mechanical recordkeeping system if the licensee gives the Superintendent advanced written notice that it intends to do so. The Department shall not require a licensee to keep a written copy of the records if the licensee can generate all information required by this Section in a timely manner for examination or other purposes. A licensee may add, delete,

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modify, or customize an approved computer or mechanical recordkeeping system's hardware or software components. When requested, or in response to a written notice of an examination, a licensee shall report to the Superintendent any material alteration in the approved system's fundamental character, medium, or function if the alteration changes:

1. Any approved computer or mechanical system back to a paper-based system; or
  2. An approved mechanical system to a computer system; or
  3. An approved computer system to a mechanical system.
- B.** In addition to any statutory requirement regarding records, a record maintained by a commercial mortgage banker shall include the following:
1. A list of all executed loan applications or executed fee agreements that includes the following information:
    - a. Applicant's name;
    - b. Application date;
    - c. Amount of initial loan request;
    - d. Final disposition date;
    - e. Disposition (funded, denied); and
    - f. Name of loan officer;
  2. A record, such as a cash receipts journal, of all money received in connection with commercial mortgage loans including:
    - a. Payor's name;
    - b. Date received;
    - c. Amount; and
    - d. Receipt's purpose including identification of a related loan, if any;
  3. A sequential listing of checks written for each bank account relating to the commercial mortgage banker business, such as a cash disbursement journal, including:
    - a. Payee's name;
    - b. Amount;
    - c. Date; and
    - d. Payment's purpose including identification of a related loan, if any;
  4. Bank account activity source documents for the commercial mortgage banker business including receipted deposit tickets, numbered receipts for cash, bank account statements, paid checks, and bank advices.
  5. A trust subsidiary ledger for each borrower that deposits trust funds showing:
    - a. Borrower's name or co-borrowers' names;
    - b. Loan number, if any;
    - c. Amount received;
    - d. Purpose for the amount received;
    - e. Date received;
    - f. Date deposited into trust account;
    - g. Amount disbursed;
    - h. Date disbursed;
    - i. Disbursement's payee and purpose, and
    - j. Balance.
  6. A file for each application for a commercial mortgage loan containing:
    - a. The agreement with the customer concerning the commercial mortgage banker's services, whether as a loan application, fee agreement, or both;
    - b. The documents showing the application's final disposition, such as a settlement statements, a denial or withdrawal letter, or internal memorandum;
    - c. Correspondence sent, received, or both by the licensee;
    - d. Contract, agreement, and escrow instructions to or with any depository;
    - e. If the loan is closed in the licensee's name, a copy of all closing documents including: closing instructions, copy of the executed note, executed deed of trust or mortgage, and each assignment of beneficial interest by the licensee, if any. If any of the documents listed in this subsection have been recorded, the file shall also contain legible copies of the recorded documents, and
    - f. Itemized list of all fees taken in advance including appraisal fee, credit report fee, and application fee.
  7. Samples of every piece of advertising relating to the commercial mortgage banker's business in Arizona;
  8. Copies of governmental or regulatory reviews;
  9. If the licensee is a not a natural person, a file containing:
    - a. Organizational documents for the entity;
    - b. Minutes;
    - c. A record, such as a stock or ownership transfer ledger, showing ownership of all proportional equity interests in the licensee, ascertainable as of any given record date; and
    - d. Annual report, if required by law;
  10. If the licensee or anyone directly or indirectly owning more than 20% of the licensee has a felony conviction, a copy of the judgment or other record of conviction.
  11. If the licensee or anyone directly or indirectly owning more than 20% of the licensee has, in the previous seven years, been named a defendant in any civil suit, a copy of the complaint, any answer filed by the licensee, and any judgment, dismissal or other final order disposing of the action.
  12. If the Superintendent has granted approval to maintain records outside this state, the specific address where the records are kept, and a person's name to contact for them.
  13. If a licensee does business in other states, it must be able to separate Arizona loan information from information relating to other states to enable the Superintendent to conduct an examination.
  14. A licensee shall produce a trial balance of the general ledger monthly to evidence the commercial mortgage banker's net worth.
- C.** If 10 or fewer transactions have occurred during the prior calendar quarter, a licensee shall reconcile and update all records specified in subsection (B) at least once each calendar quarter. A licensee shall reconcile and update all records specified in subsection (B) monthly if more than 10 transactions occurred during the prior calendar quarter. In addition to reconciling each trust bank account, a licensee shall verify each trust balance to each trust subsidiary ledger at each reconciliation.
- D.** A licensee shall retain the documents described in subsections (B)(1) and (6) for the length of time provided in A.R.S. § 6-983. For the purposes of A.R.S. § 6-983, the commercial mortgage loan's closing date, on a loan application that did not result in the making of a loan, is either:
1. The date a licensee receives a written cancellation notice from the applicant; or
  2. The date a licensee mails written notice to an applicant that an application has been denied; or
  3. The date of a licensee's internal memorandum closing a loan file.
- E.** A licensee shall maintain all other records described in this Section, and not included in subsection (D), for at least two years.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1908. Impound Accounts**

The total of all funds, if any, retained by the commercial mortgage banker from all periodic payments made by the borrower to maintain a Cushion, as defined in R20-4-102, is limited only by the written agreement of the parties, if at all.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1909. Authorization to Complete Blank Spaces**

An authorization, under A.R.S. § 6-984, allowing a licensee or escrow agent to complete certain blank spaces in a document after it is signed by a party to the transaction shall:

1. Specifically identify the document and the blank spaces to be completed;
2. Be in writing, dated, and signed by the authorizing party, and
3. Contain the following notice, conspicuously printed on its face: YOUR SIGNATURE BELOW AUTHORIZES YOUR COMMERCIAL MORTGAGE BANKER OR ESCROW AGENT TO FILL IN SPACES YOU LEFT BLANK IN SPECIFIED LOAN DOCUMENTS YOU ARE ABOUT TO SIGN OR MAY HAVE ALREADY SIGNED. UNDER STATE LAW YOU CAN GIVE THIS AUTHORITY, BUT YOU ARE NOT REQUIRED TO

DO SO. YOU CAN REFUSE TO SIGN ANY DOCUMENTS UNTIL ALL BLANKS ARE COMPLETELY FILLED IN.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1910. Delay or Cause Delay**

A commercial mortgage banker does not delay or cause delay if the delay occurs due to events outside the control of the commercial mortgage banker.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

**R20-4-1911. Acquisition of Additional Interest in Licensee by Majority Owner**

A person that owns 51% or more of a licensee's outstanding voting equity interests, and that acquires the power to vote additional fractional equity interests, shall deliver written notice of the acquisition to the Superintendent. The person shall deliver the notice before completing the acquisition. Within 10 days after completing the acquisition, the person shall deliver documentation evidencing the acquisition to the Superintendent.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R. 2094, effective June 10, 1999 (Supp. 99-2).

### 6-123. Superintendent; powers

In addition to the other powers, express or implied, the superintendent may:

1. Exercise all powers that are necessary for the administration and enforcement of the laws and rules relating to financial institutions and enterprises.
2. In accordance with title 41, chapter 6, adopt rules that are necessary or appropriate to administer, enforce and accomplish the purposes of this title and adopt rules and issue orders that limit transactions between financial institutions or enterprises and the directors, officers or employees of the financial institutions or enterprises.
3. Require appropriate records, documents, information and reports from any financial institution or enterprise.
4. Submit to the department of public safety, or the nationwide mortgage licensing system and registry established by the secure and fair enforcement for mortgage licensing act of 2008 (P.L. 110-289; 122 Stat. 2810; 12 United States Code sections 5101 through 5116) or its successor, the name and fingerprints of any applicant, licensee, active manager or responsible individual or the name and fingerprints of any organizer, director or officer of any corporate applicant or licensee for:
  - (a) A banking permit.
  - (b) Permission to organize a savings and loan association or credit union.
  - (c) Any license.
  - (d) Any certificate.
  - (e) Authority to engage in interstate banking and branching in this state.

The department of public safety shall report the criminal record, if any, of such applicant, licensee or organizer, director or officer of such corporate applicant or licensee within ninety days of receipt of the request of the superintendent.

5. Employ appraisers to appraise any property that is owned or held as security by any financial institution or enterprise. The reasonable expenses and compensation of such appraisers shall be paid by the financial institution or enterprise.
6. Hold membership in, pay dues to and attend the convention of the national and regional organizations of state officials occupying like offices or performing similar functions.
7. Cooperate with other regulatory agencies and professional associations to promote the efficient, safe and sound operation and regulation of interstate banking and branching activities, including the formulation of interstate examination policies and procedures and the drafting of model rules and agreements.
8. Participate in the nationwide mortgage licensing system and registry established by the secure and fair enforcement for mortgage licensing act of 2008 (P.L. 110-289; 122 Stat. 2810; 12 United States Code sections 5101 through 5116) or its successor. The superintendent may allow the system to collect licensing fees on behalf of the superintendent, to collect a processing fee for the services of the system directly from each applicant for a license or licensee and to process and maintain records on behalf of the superintendent, including information collected pursuant to this section and section 6-123.01. This paragraph does not affect the records disclosure requirements and limitations prescribed in section 6-129.01.

6-903. Licensing of mortgage brokers required; qualifications; application; bond; fees; renewal

A. A person shall not act as a mortgage broker if the person is not licensed under this article. A person who brokers only commercial mortgage loans shall obtain either a mortgage broker license or a commercial mortgage broker license. A person who brokers residential mortgage loans shall obtain a mortgage broker license.

B. The superintendent shall not grant a mortgage broker's license or a commercial mortgage broker's license to a person, other than a natural person, who is not registered to do business in this state on the date of granting the license.

C. An applicant for an original mortgage broker's license shall:

1. Have not less than three years' experience as a mortgage broker or loan originator or equivalent lending experience in a related business during the five years immediately preceding the time of application.
2. Have satisfactorily completed a course of study approved by the superintendent during the three years immediately preceding the time of application.
3. Have passed a mortgage broker's test, pursuant to section 6-908.

D. An applicant for an original commercial mortgage broker's license shall:

1. Have not less than three years' experience in the commercial mortgage broker business or equivalent lending experience in a related business during the five years immediately preceding the time of application.
2. Have made in the past or intend to make or negotiate or offer to make or negotiate commercial mortgage loans.
3. Provide the superintendent with the following:
  - (a) A balance sheet prepared within the immediately preceding six months and certified by the licensee. The superintendent may require a more recent balance sheet.
  - (b) If the applicant has begun operations, a statement of operations and retained earnings and a statement of changes in financial position.
  - (c) Notes to the financial statement if applicable.

E. Notwithstanding subsection D, paragraph 3 of this section, commercial mortgage broker licensees and commercial mortgage broker license applicants whose own resources are derived exclusively from correspondent contracts with institutional investors shall provide the superintendent with a current financial statement or that of its parent company prepared according to generally accepted accounting principles, including:

1. A balance sheet prepared within the immediately preceding six months and certified by the licensee. The superintendent may require a more recent balance sheet.
2. If the applicant has begun operations, a statement of operations and retained earnings and a statement of changes in financial position.
3. Notes to the financial statement if applicable.

F. A person shall make an application for a license or for a renewal of a license in writing on the forms, in the manner and accompanied by the information prescribed by the superintendent. The superintendent may require additional information on the experience, background, honesty, truthfulness, integrity and competency of the applicant and any responsible individual designated by the applicant. If the applicant is a person other than a

natural person, the superintendent may require information as to the honesty, truthfulness, integrity and competency of any officer, director, shareholder or other interested party of the association, corporation or group.

G. The nonrefundable application fee and annual renewal fee are as prescribed in section 6-126. The nonrefundable application fee shall accompany each application for an original license only. The superintendent shall deposit, pursuant to sections 35-146 and 35-147, the monies in the state general fund.

H. If a licensee is a person other than a natural person, the license issued to it entitles all officers, directors, members, partners, trustees and employees of the licensed corporation, partnership, association or trust to engage in the mortgage business if one officer, director, member, partner, employee or trustee of the person is designated in the license as the individual responsible for the person under this article. If a licensee is a natural person, the license entitles all employees of the licensee to engage in the mortgage business. If the natural person is not a resident of this state, an employee of the licensee shall be designated in the license as the individual responsible for the licensee under the provisions of this article. For the purposes of this subsection, an employee does not include an independent contractor. A responsible individual shall be a resident of this state, shall be in active management of the activities of the licensee governed by this article and shall meet the qualifications set forth in subsection C or D of this section for a licensee.

I. A licensee shall notify the superintendent that its responsible individual will cease to be in active management of the activities of the licensee within ten days of learning that fact. The licensee has ninety days after the notification is received by the superintendent within which to replace the responsible individual with a qualified replacement and to so notify the superintendent. If the license is not placed under active management of a qualified responsible individual and if notice is not given to the superintendent within the ninety day period, the license of the licensee expires.

J. Every person licensed as a mortgage broker or a commercial mortgage broker shall deposit with the superintendent, before doing business as a mortgage broker or a commercial mortgage broker, a bond executed by the licensee as principal and a surety company authorized to do business in this state as surety. The bond shall be conditioned on the faithful compliance of the licensee, including the licensee's directors, officers, members, partners, trustees and employees, with this article. The bond is payable to any person injured by the wrongful act, default, fraud or misrepresentation of the licensee or the licensee's employees and to this state for the benefit of the person injured. Only one bond is required for any person, firm, association or corporation irrespective of the number of officers, directors, members, partners or trustees who are employed by or are members of such firm, association or corporation. No suit may be commenced on the bond after the expiration of one year following the commission of the act on which the suit is based, except that claims for fraud or mistake are limited to the limitation period provided in section 12-543, paragraph 3. If an injured person commences an action for a judgment to collect from the bond, the injured person shall notify the superintendent of the action in writing at the time of the commencement of the action and shall provide copies of all documents relating to the action to the superintendent on request.

K. The bond required by this section shall be ten thousand dollars for licensees whose investors are limited solely to institutional investors, and fifteen thousand dollars for licensees whose investors include any noninstitutional investors.

L. For the purposes of subsection K of this section:

1. "Institutional investor" means a state or national bank, a state or federal savings and loan association, a state or federal savings bank, a state or federal credit union, a federal government agency or instrumentality, a quasi-federal government agency, a financial enterprise, a licensed real estate broker or salesman, a profit sharing or pension trust, or an insurance company.

2. "Investor" means any person who directly or indirectly provides to a mortgage broker funds that are, or are intended to be, used in the making of a loan, and any person who purchases a loan, or any interest therein, from

a mortgage broker or in a transaction that has been directly or indirectly arranged or negotiated by a mortgage broker.

M. Notwithstanding section 35-155, in lieu of the bond described in this section, an applicant for a license or a licensee may deposit with the superintendent a deposit in the form of cash or alternatives to cash in the same amount as the bond required under subsection J of this section. The superintendent may accept any of the following as an alternative to cash:

1. Certificates of deposits or investment certificates that are payable or assigned to the state treasurer, issued by banks or savings banks doing business in this state and fully insured by the federal deposit insurance corporation or any successor institution.
2. Certificates of deposit, investment certificates or share accounts that are payable or assigned to the state treasurer, issued by a savings and loan association doing business in this state and fully insured by the federal deposit insurance corporation or any successor institution.
3. Certificates of deposit, investment certificates or share accounts that are payable or assigned to the state treasurer, issued by a credit union doing business in this state and fully insured by the national credit union administration or any successor institution.

N. The superintendent shall deposit the cash or alternatives to cash received under this section with the state treasurer. The state treasurer shall hold the cash or alternatives to cash in the name of this state to guarantee the faithful performance of all legal obligations of the person required to post bond pursuant to this section. The person is entitled to receive any accrued interest earned from the alternatives to cash. The state treasurer may impose a fee to reimburse the state treasurer for administrative expenses. The fee shall not exceed ten dollars for each cash or alternatives to cash deposit and shall be paid by the applicant or licensee. The state treasurer may prescribe rules relating to the terms and conditions of each type of security provided by this section.

O. In addition to such other terms and conditions as the superintendent prescribes by rule or order, the principal amount of the deposit shall be released only on written authorization of the superintendent or on the order of a court of competent jurisdiction. The principal amount of the deposit shall not be released before the expiration of three years from the first to occur of any of the following:

1. The date of substitution of a bond for a cash alternative.
2. The surrender of the license.
3. The revocation of the license.
4. The expiration of the license.

P. A licensee or an employee of the licensee shall not advertise for or solicit mortgage business in any manner without using the name and license number as issued on the mortgage broker's principal place of business license, except that a licensee may employ or refer to the commonly used name and any trademarks or service marks of any affiliate. If a license is issued in the name of a natural person, nothing in the advertising or solicitation may imply the license is in the name of another person or entity. For the purposes of this subsection, "advertise" does not include business cards, radio and television advertising directed at national or regional markets and promotional items except if those items contain rates or terms on which a mortgage loan may be obtained.

Q. A licensee shall not employ any person unless the licensee:

1. Conducts a reasonable investigation of the background, honesty, truthfulness, integrity and competency of the employee before hiring.
2. Keeps a record of the investigation for not less than two years after termination.

R. A license is not transferable or assignable and control of a licensee may not be acquired through a stock purchase or other device without the prior written consent of the superintendent. Written consent shall not be given if the superintendent finds that any of the grounds for denial, revocation or suspension of a license as set forth in section 6-905 are applicable to the acquiring person. For the purposes of this subsection, "control" means the power to vote more than twenty per cent of outstanding voting shares of a licensed corporation, partnership, association or trust.

S. The licensee is liable for any damage caused by any of the licensee's employees while acting as an employee of the licensee.

T. A licensee shall comply with the requirements of section 6-114 relating to balloon payments.

U. The examination and course of study requirements of this section shall be waived by the superintendent for any person applying for a license who, within the six months immediately prior to the submission of the application, has been a licensee or a responsible person pursuant to this chapter.

V. If the applicant for renewal of a mortgage broker license is a natural person, the applicant shall have satisfactorily completed twelve continuing education units by a continuing education provider approved by the superintendent before submitting the renewal application. If the applicant is other than a natural person, the designated responsible individual shall have satisfactorily completed twelve continuing education units by a continuing education provider approved by the superintendent before submitting the renewal application. An applicant for renewal of a commercial mortgage broker license is not subject to the continuing education requirements prescribed by this article.

W. A licensee who employs a loan originator shall comply with section 6-991.03.

6-904. Issuance of license; renewal; inactive status; branch office license; application; fee

- A. The superintendent, on determining that the applicant is qualified and has paid the fees, shall issue a mortgage broker's license or a commercial mortgage broker's license to the applicant which is evidenced by a continuous certificate. The superintendent shall grant or deny a license within one hundred twenty days after receipt of the completed application and fees. An applicant who has been denied a license may not reapply for such a license before one year from the date of the previous application.
- B. For licenses approved on or before September 30, 2008, a licensee shall pay the renewal fee on or before September 30, 2008 and on or before December 31 for subsequent years beginning on or before December 31, 2009. Licenses not renewed by September 30, 2008 are suspended, and the licensee shall not act as a mortgage broker or a commercial mortgage broker until the license is renewed or a new license is issued pursuant to this article. A person may renew a suspended license by paying the renewal fee plus twenty-five dollars for each day after September 30, 2008 that a license renewal fee is not received by the superintendent and making application for renewal as prescribed by the superintendent. Licenses which are not renewed by October 31, 2008 expire. A license shall not be granted to the holder of an expired license except as provided in this article for the issuance of an original license.
- C. For licenses approved on or before September 30, 2008, a licensee may request inactive status on or before September 30, 2008 for the following license year, and the license shall be placed on inactive status after payment to the superintendent of the inactive status renewal fee prescribed in section 6-126, subsection C and the surrender of the license to the superintendent. During inactive status, an inactive licensee is not required to maintain a bond and shall not act as a mortgage broker or a commercial mortgage broker. A licensee may not be on inactive status for more than two consecutive years, nor for more than four years in any ten year period. The license is deemed expired on violation of any of the limitations of this subsection.
- D. For licenses approved after or renewed on September 30, 2008, a licensee shall pay the renewal fee on or before December 31, 2009 and on or before December 31 of each subsequent year. Licenses not renewed by December 31 are suspended, and the licensee shall not act as a mortgage broker or a commercial mortgage broker until the license is renewed or a new license is issued pursuant to this article. A person may renew a suspended license by paying the renewal fee plus twenty-five dollars for each day after December 31 that a license renewal fee is not received by the superintendent and applying for renewal as prescribed by the superintendent. A license that is not renewed by January 31 expires. A license shall not be granted to the holder of an expired license except as provided in this article for the issuance of an original license.
- E. For licenses approved after or renewed on September 30, 2008, beginning in 2009 and each subsequent year, a licensee may request inactive status for the following license year if the licensee makes the request on or before December 31. The license shall be placed on inactive status after the licensee pays to the superintendent the inactive status renewal fee prescribed in section 6-126, subsection C and surrenders the license to the superintendent. During inactive status, an inactive licensee is not required to maintain a bond and shall not act as a mortgage broker or a commercial mortgage broker. A licensee may not be on inactive status for more than two consecutive years or for more than four years in any ten year period. The license expires on violation of this subsection.
- F. An inactive licensee may return to active status notwithstanding the requirements of section 6-903, subsections C and D by making a written request to the superintendent for reactivation and paying the prorated portion of the annual assessment that would have been charged to the licensee. The licensee shall also provide the superintendent with proof that the licensee meets all of the other requirements for acting as a mortgage broker or a commercial mortgage broker, including required bond coverage or the deposit of a cash alternative.
- G. A licensee shall prominently display the mortgage broker license or commercial mortgage broker license in the office of the mortgage broker or commercial mortgage broker.

H. Every licensed mortgage broker and licensed commercial mortgage broker shall designate and maintain a principal place of business in this state for the transaction of business. The license shall specify the address of the licensee's principal place of business. If a licensee wishes to maintain one or more locations in addition to a principal place of business, the licensee shall first obtain a branch office license from the superintendent and designate a person for each branch office to oversee the operations of that office. The licensee shall submit a fee as set forth in section 6-126 for each branch office license. If the superintendent determines that the applicant is qualified, the superintendent shall issue a branch office license indicating the address of the branch office. The licensee shall conspicuously display the branch office license in the branch office. If the address of the principal place of business or of any branch office is changed, the licensee shall immediately notify the superintendent of the change and the superintendent shall endorse the change of address on the license for a fee as prescribed in section 6-126.

**6-906. Required accounting practices and records; escrow of monies; disclosure**

A. Every mortgage broker shall keep and maintain at all times correct and complete records as prescribed by the superintendent which will enable him to determine whether the licensee is conducting his business in accordance with this article. If the mortgage broker operates two or more licensed places of business in this state, after notifying the superintendent, he may maintain such records at his principal place of business in this state, except that a mortgage broker, with the approval of the superintendent, may maintain the records outside of this state. For records kept outside this state, a mortgage broker shall make the records available to the superintendent in this state not more than three business days after demand and provide for the acceptance of collect calls or provide a toll free telephone number to borrowers to obtain information from the records if the licensed place of business in this state cannot readily provide the information requested by the borrowers. Every mortgage broker shall maintain original documents or clearly legible copies of all mortgage loan transactions for not fewer than five years from the date of the mortgage loan closing.

B. Every mortgage broker shall observe generally accepted accounting principles and practices.

C. A mortgage broker shall immediately deposit all monies received by the mortgage broker in an escrow account with an escrow agent licensed pursuant to chapter 7 of this title. Withdrawals shall only be disbursed according to the terms of the escrow instructions. The escrow agent shall not be the mortgage broker. A mortgage broker, however, may accept an appraisal fee, which the mortgage broker shall only use to obtain an appraisal, a credit investigation fee and a fee in connection with an application for a mortgage loan. The mortgage broker shall not commingle the appraisal fee or credit investigation fee with other monies of the mortgage broker. A mortgage broker shall not accept any monies or documents in connection with an application for a mortgage loan in an amount of two hundred thousand dollars or less, except as provided in this section and pursuant to a written agreement. The parties shall sign the written agreement and the agreement shall contain terms pertaining to the disposition of the monies and documents, whether the loan is finally consummated or not, the term for which the agreement is to remain in force before return of the monies and documents for nonperformance can be required and an itemized list of all estimated costs to the borrower of obtaining the mortgage loan including all costs charged by third parties. The licensee shall preserve all agreements between the parties involved in the transaction and all contracts, agreements and escrow instructions to or with the depository. All documents provided by the borrower or at the expense of the borrower to the mortgage broker, including any appraisals, are the property of the borrower and shall, at the borrower's request, be returned to the borrower or transferred to any person designated by the borrower without further expense to the borrower if the loan is not consummated, provided that any such document is not prohibited by law from being transferred or returned.

D. Before a mortgage loan closing on residential real property designed principally for the occupancy of from one to four families, a licensee shall fully comply, to the extent applicable, with the real estate lending disclosure requirements of title I of the consumer credit protection act (15 United States Code sections 1601 through 1666j), the real estate settlement procedures act (12 United States Code sections 2601 through 2617) and the regulations promulgated under those acts.

6-908. Testing committee; testing of applicants; approval by superintendent; definition

A. The superintendent shall establish a testing committee to create, periodically update and establish standards for passing a test for mortgage brokers. The committee shall consist of five members appointed by the superintendent once every two years. Four of the members shall be licensees appointed from nominations submitted by licensees and one of the members shall be an employee of the department. Licensees who serve as members of the committee shall serve without expense to this state. The test is subject to the approval of the superintendent.

B. Each applicant for an original license, before issuance of the license, shall personally take and pass the written test given under the supervision of the department. The test must reasonably examine the applicant's knowledge of:

1. The obligations between principal and agent, the applicable canons of business ethics, the provisions of this article and the rules adopted under this article.
2. The arithmetical computations common to mortgage brokerage.
3. The principles of real estate lending.
4. The general purposes and legal effect of mortgages, deeds of trust and security agreements.

C. The department shall administer the test to applicants for licenses not less than once every six months. The department shall reasonably prescribe the time, place and conduct of testing and collect a fee for administration of the test to be assessed to all persons taking the test. The fee is fifty dollars per testing. An applicant may not take the test more than two times within a twelve month period.

D. All tests shall be given, conducted and graded in a fair and impartial manner and without unfair discrimination between individuals tested. The committee shall inform the applicant of the result of the test within thirty days.

E. For testing purposes the department shall prepare a handbook for mortgage brokers and distribute it to all applicants for a fee of not to exceed the actual cost of producing and distributing the handbook.

F. For the purposes of this section "applicant" means a person who has submitted a completed application in the form prescribed by law, accompanied by a letter of inquiry to a surety company authorized to do business in this state regarding the procurement of a bond pursuant to section 6-903, to be issued upon completion of all requirements for the granting of a license.

## 6-909. Prohibited acts

A. Except for employment verifications, verifications of mortgages and loans, and deposit or account verifications, a person, in connection with or incidental to the making of any mortgage loan, shall not induce, require or permit any document to be signed by a party to the transaction if such document contains any blank spaces to be filled in after it has been signed, except that the party may specifically authorize the licensee or the escrow agent handling the transaction, in writing, to complete certain blank spaces.

B. A person is not entitled to receive compensation in connection with arranging for or negotiating a mortgage loan if such person is not licensed pursuant to this article. A mortgage broker shall not pay compensation to, contract with or employ as an independent contractor a person who is acting as a mortgage broker or mortgage banker but who is not licensed under this chapter.

C. A person engaged in the mortgage business shall not knowingly advertise, display, distribute, broadcast or televise, or cause or permit to be advertised, displayed, distributed, broadcast or televised, in any manner whatever, any false, misleading or deceptive statement or representation with regard to the rates, terms or conditions for a mortgage loan. The charges or rates of charge, if stated, shall be set forth in such manner as to prevent misunderstanding by prospective borrowers.

D. A mortgage broker shall not request or require a person seeking a mortgage loan on real property designed principally for the occupancy of from one to four families in an amount of two hundred thousand dollars or less to enter into an agreement that prohibits the person from seeking the loan from another source.

E. A mortgage broker, except in good faith, shall not delay or cause delay in the closing of a loan that results in increased costs to a borrower.

F. A mortgage broker shall not record or cause to be recorded any document that would give rise to liability under section 33-420.

G. A mortgage broker shall not, for compensation, either directly or indirectly make or negotiate or offer to make or negotiate a loan that is either:

1. Less than five thousand dollars.
2. Not secured by a mortgage or deed of trust or other lien interest in real property.

H. A person who is employed by a licensee to act in the capacity of a mortgage broker shall not be concurrently employed by any other licensee to act as a mortgage broker, except with the prior written approval of all the concurrently employing licensees.

I. A mortgage broker shall not collect compensation for rendering services as a real estate broker or real estate salesman unless both of the following apply:

1. The mortgage broker is licensed pursuant to title 32, chapter 20.
2. The mortgage broker has disclosed to the person from whom the compensation is collected that the mortgage broker is receiving compensation both for mortgage broker services, if applicable, and for real estate broker or real estate salesman services.

J. A licensee shall not accept any assignment of the borrower's wages or salary in connection with activities governed by this article.

K. A mortgage broker shall not receive or disburse monies in servicing or arranging a mortgage loan except as provided in section 6-906, subsection C.

- L. A mortgage broker shall not make a false promise or misrepresentation or conceal an essential or material fact in the course of the mortgage broker business.
- M. A mortgage broker shall not fail to truthfully account for the monies belonging to a party to a mortgage loan transaction or fail to disburse monies in accordance with his agreements.
- N. A mortgage broker shall not engage in illegal or improper business practices.
- O. A mortgage broker shall not record a mortgage or deed of trust if monies are not available for the immediate disbursement to the mortgagor unless, before that recording, the mortgage broker informs the mortgagor in writing of a definite date by which payment shall be made and obtains the mortgagor's written permission for the delay.
- P. A mortgage broker shall not require a person seeking a loan secured by real property to obtain property insurance coverage in an amount that exceeds the replacement cost of the improvements as established by the property insurer.
- Q. A mortgage broker must reasonably supervise the activities of a loan originator who is licensed pursuant to article 4 of this chapter and who is employed by the mortgage broker.

### 6-912. Certificate of exemption

A. A person who is exempt from licensure pursuant to articles 1, 2 and 3 of this chapter as a federally chartered savings bank that is registered with the nationwide mortgage licensing system and registry may file a written application with the department for a certificate of exemption for the following purposes:

1. Registering with the department except that the registration shall not affect the exempt status of the applicant.
2. Sponsoring one or more mortgage loan originators.
3. Fulfilling any reporting requirements.
4. Reasonably supervising the activities of a mortgage loan originator who is licensed pursuant to article 4 of this chapter and who is employed by or under exclusive contract with the applicant.

B. A person shall make an application for a certificate of exemption or renewal of a certificate of exemption in writing on the forms, in the manner and accompanied by the information prescribed by the superintendent. The superintendent may require additional information on the experience, background, honesty, truthfulness, integrity and competency of the applicant and the responsible individual designated by the applicant.

C. The department may charge a fee for processing the original or renewal application for a certificate of exemption and for other costs incurred by the department.

D. An exempt person shall notify the superintendent that the person has designated a responsible individual to actively manage the activities of the mortgage loan originator licensees. The responsible individual may be located in this state or in the state where the primary business of the bank is conducted and shall have at least three years of experience in the business of making mortgage loans or equivalent experience in a related business. The responsible individual may supervise one or more licensed mortgage loan originators in this state.

E. Within ten days after learning that a responsible individual will cease managing the licensees' activities, an exempt person must notify the superintendent. Within ninety days after the notification is received by the superintendent, the exempt person must replace the responsible individual with a person who meets the qualifications prescribed by subsection D of this section and must notify the superintendent of the replacement. A certificate of exemption expires if either of the following occurs:

1. The exempt person is not placed under active management of a qualified responsible individual.
2. The exempt person does not provide notice of replacement of the responsible individual to the superintendent as prescribed by this section.

F. After reviewing the application for a certificate of exemption and after verifying the submitted information, the department shall issue the certificate of exemption.

G. An exempt person who sponsors a loan originator on an exclusive contract shall comply with section 6-991.03.

H. The superintendent may deny a certificate of exemption to a person or suspend or revoke a certificate of exemption if the superintendent finds that an applicant or certificate holder has done any of the following:

1. Shown that the applicant or certificate holder is not a person of honesty, truthfulness and good character.
2. Violated any applicable law, rule or order.
3. Refused or failed to furnish, within a reasonable time, any information or make any report that may be required by the superintendent.

4. Had a final judgment entered against the applicant or certificate holder in a civil action on grounds of fraud, deceit or misrepresentation and the conduct on which the judgment is based indicates that it would be contrary to the interest of the public to permit the applicant or certificate holder to manage a loan originator.
5. Had an order entered against the applicant or certificate holder involving fraud, deceit or misrepresentation by an administrative agency of this state, the federal government or any other state or territory of the United States and the facts relating to the order indicate that it would be contrary to the interest of the public to permit the applicant or certificate holder to manage a loan originator.
6. Made a material misstatement or suppressed or withheld information on the application for a certificate of exemption or any document required to be filed with the superintendent.

I. If a person to whom a certificate of exemption is issued or who has applied for a certificate of exemption under this article is indicted or informed against for forgery, embezzlement, obtaining money under false pretenses, extortion, criminal conspiracy to defraud or a like offense, and a certified copy of the indictment or information or other proper evidence of the indictment or information is filed with the superintendent, the superintendent may suspend the certificate of exemption issued to the exempt person or refuse to grant a certificate of exemption to an applicant pending trial on the indictment.

J. Every person licensed as an exempt person pursuant to this section shall deposit with the superintendent, before doing business as a registered exempt person, a bond executed by the registered exempt person as principal and a surety company authorized to do business in this state as surety. The bond shall be conditioned on the faithful compliance of the registered exempt person including the registered exempt persons, directors, officers, members, partners, trustees and employees, with this article. The bond is payable to any person injured by the wrongful act, default, fraud or misrepresentation of the registered exempt person, or the registered exempt person's employees and to this state for the benefit of the person injured. Only one bond is required for any person, firm, association or corporation irrespective of the number of officers, directors, members, partners or trustees who are employed by or are members of such firm, association or corporation. No suit may be commenced on the bond after the expiration of one year following the commission of the act on which the suit is based, except that claims for fraud or mistake are limited to the limitation provided in section 12-543, paragraph 3. If an injured person commences an action for a judgment to collect from the bond, the injured person shall notify the superintendent of the action in writing at the time of the commencement of the action and shall provide copies of all documents relating to the action to the superintendent on request. The bond required by this section shall be two hundred thousand dollars.

### 6-913. Conversion to commercial mortgage broker license

Notwithstanding section 6-903, a person who holds a mortgage broker license may convert it to a commercial mortgage broker license by applying in a manner prescribed by the superintendent by rule. The approval of the conversion is at the discretion of the superintendent.

## 6-942. Exemptions

A. This article does not apply to:

1. A person who does business under any other law of this state, or any other state while regulated by a state agency of such other state, or of the United States, relating to banks, savings banks, trust companies, savings and loan associations, profit sharing and pension trusts, credit unions, insurance companies or consumer lenders, or receiverships, including directly or indirectly making, negotiating or offering to make or negotiate a mortgage banking loan or a mortgage loan if the mortgage transactions are regulated by the other law or are under the jurisdiction of a court.

2. A person who makes a mortgage banking loan or a mortgage loan:

(a) With his own monies.

(b) For his own investment.

(c) Without intent to resell.

(d) And is not engaged in the business of making mortgage loans or mortgage banking loans.

3. A person who funds a mortgage loan or mortgage banking loan which has been originated and processed by a licensee, by a mortgage broker licensed in this state or by a person exempt under paragraph 1 of this subsection and who meets all of the following:

(a) Does not maintain a place of business in this state in connection with funding mortgage loans or mortgage banking loans.

(b) Does not directly or indirectly solicit borrowers in this state for the purpose of making mortgage loans.

(c) Does not participate in the negotiation of mortgage loans.

4. A person who, as seller of real property, receives one or more mortgages or deeds of trust as security for a purchase money obligation.

5. A person who is licensed to practice law in this state, but is not actively and principally engaged in the business of negotiating mortgage banking loans or mortgage loans, if this person renders services in the course of his practice as an attorney at law.

6. A person who receives a mortgage or deed of trust on real property as security for an obligation payable on an installment or deferred payment basis and arising out of materials furnished or services rendered in the improvement of that real property or any lien created without the consent of the owner of such real property.

7. A person who is licensed pursuant to article 1 or 3 of this chapter.

8. An agency of any state or of the United States.

9. A nonprofit federally tax exempt corporation certified by the United States small business administration and organized to promote economic development within this state whose primary activity consists of providing financing for business expansion.

10. An institutional investor as defined in section 6-971 unless the institutional investor makes either:

(a) A mortgage loan other than a commercial mortgage loan as defined in section 6-971.

(b) A mortgage banking loan other than a commercial mortgage loan as defined in section 6-971.

B. Subsidiaries and service corporations of institutions exempt under subsection A, paragraph 1 of this section shall not be exempt and shall be subject to the provisions of this article unless preempted by federal law.

C. For the purposes of:

1. Subsection A, paragraph 3 of this section, "originate" includes loans closed in a name other than that of the licensee, a mortgage broker licensed in this state or exempt person only if the person in whose name the loan is closed meets the other requirements of subsection A, paragraph 3 of this section.

2. Subsection A, paragraph 3, subdivision (c) of this section, negotiation of mortgage loans does not include setting the terms under which a person may buy a mortgage loan originated by a licensee or a person exempt under subsection A, paragraph 1 of this section.

6-943. Licensing of mortgage bankers required; qualifications; application; bond; fees; renewal

A. A person shall not act as a mortgage banker if he is not licensed under this article.

B. The superintendent shall not grant a mortgage banker's license to a person, other than a natural person, who is not registered to do business in this state on the date of application for a license. The superintendent shall not issue a mortgage banker's license or a renewal of a license to an applicant unless the applicant meets all of the requirements prescribed in subsection C of this section. The superintendent shall determine whether the applicant meets the requirements based on the application and evidence presented at a hearing, if any, or any other evidence that the superintendent may have regarding qualifications of the applicant.

C. In order to qualify for a mortgage banker license or a renewal of a license, an applicant shall:

1. Have not fewer than three years' experience in the business of making mortgage banking loans or equivalent lending experience in a related business. If the applicant is a person other than a natural person, the responsible individual shall meet this requirement.

2. Have engaged or intend to engage in the business of making mortgage loans or mortgage banking loans.

3. Either:

(a) Be authorized to do business with any of the following:

(i) The federal housing administration.

(ii) The United States department of veterans affairs.

(iii) The federal national mortgage association.

(iv) The federal home loan mortgage corporation.

(b) Notwithstanding paragraph 5 of this subsection, at all times have and maintain a net worth of not less than one hundred thousand dollars.

4. Provide the superintendent with a current audited financial statement or that of its parent company prepared by an independent certified public accountant in accordance with generally accepted accounting principles including:

(a) The certified public accountant's opinion as to the fairness of the presentation in conformity with generally accepted accounting principles.

(b) A balance sheet prepared within the previous six months and certified by the licensee. The superintendent may require a more recent balance sheet.

(c) A statement of operations and retained earnings and a statement of changes in financial position provided the applicant has commenced operations.

(d) Notes to the financial statement if applicable.

5. At all times have and maintain a net worth of not less than one hundred thousand dollars.

D. A person shall make an application for a license or for a renewal of a license in writing on the forms, in the manner and accompanied by the information prescribed by the superintendent including the requirements prescribed in subsection C of this section. The superintendent may require additional information on the experience, background, honesty, truthfulness, integrity and competency of the applicant and any responsible individual designated by the applicant. If the applicant is a person other than a natural person, the superintendent

may require information as to the honesty, truthfulness, integrity and competency of any officer, director, shareholder, member, partner, trustee, employee or other interested party of the association, corporation or group.

E. The nonrefundable application fee and annual renewal fee shall be as prescribed in section 6-126. The nonrefundable application fee shall accompany each application for an original license only.

F. If a licensee is a person other than a natural person, the license issued to it entitles all officers, directors, members, partners, trustees and employees of the licensed corporation, partnership, association or trust to engage in the mortgage banking business if one officer, director, member, partner, employee or trustee of the person is designated in the license as the individual responsible for the person under this article. If a licensee is a natural person, the license entitles all employees of the licensee to engage in the mortgage banking business. If the natural person is not a resident of this state, an employee of the licensee shall be designated in the license as the individual responsible for the licensee under this article. For the purposes of this article, an employee does not include an independent contractor. For the purposes of this article, a responsible individual shall be a resident of this state, shall be in active management of the activities of the licensee governed by this article and shall have not less than three years' experience in the business of making mortgage banking loans or equivalent experience in a related business.

G. A licensee shall notify the superintendent that its responsible individual will cease to be in active management of the licensee within ten days of learning that fact. Not more than ninety days after the superintendent receives the notice, the licensee shall place itself under the active management of a qualified responsible person and notify the superintendent. If the licensee is not placed under active management of a qualified responsible individual and if notice is not received by the superintendent within the ninety day period, the license of the licensee expires.

H. Every person licensed as a mortgage banker shall deposit with the superintendent, before doing business as a mortgage banker, a bond executed by the licensee as principal and a surety company authorized to do business in this state as surety. The bond shall be conditioned on the faithful compliance of the licensee, including his directors, officers, members, partners, trustees and employees, with this article. Only one bond is required for a person, firm, association or corporation irrespective of the number of officers, directors, members, partners or trustees who are employed by or are members of the firm, association or corporation. The bond is payable to any person injured by the wrongful act, default, fraud or misrepresentation of the licensee and to this state for the benefit of any injured person. The coverage shall be maintained in the minimum amount prescribed in this subsection, computed on a base consisting of the total assets of the licensee plus the unpaid balance of loans it has contracted to service for others as of the end of the licensee's fiscal year.

#### Base Minimum Bond

Not over \$1,000,000    \$25,000 for the first \$500,000 plus

\$5,000 for each \$100,000 or fraction

thereof over \$500,000

\$1,000,001 to \$10,000,000    \$50,000 plus \$5,000 for each \$1,800,000

or fraction thereof over \$1,000,000

\$10,000,001 to \$100,000,000    \$75,000 plus \$5,000 for each \$18,000,000

or fraction thereof over \$10,000,000

\$100,000,001 and over    \$100,000

No suit may be commenced on the bond after the expiration of one year following the commission of the act on which the suit is based, except that claims for fraud or mistake are limited to the limitation period provided in section 12-543, paragraph 3. If any injured person commences an action for a judgment to collect on the bond, the injured person shall notify the superintendent of the action in writing at the time of the commencement of the action and shall provide copies of all documents relating to the action to the superintendent on request.

I. Notwithstanding subsection H of this section, the bond required shall be twenty-five thousand dollars for licensees whose investors are limited solely to institutional investors.

J. For the purposes of subsection I of this section:

1. "Institutional investor" means a state or national bank, a state or federal savings and loan association, a state or federal savings bank, a state or federal credit union, a federal government agency or instrumentality, a quasi-federal government agency, a financial enterprise, a licensed real estate broker or salesman, a profit sharing or pension trust, or an insurance company.

2. "Investor" means any person who directly or indirectly provides to a mortgage banker funds that are, or are intended to be, used in the making of a loan, and any person who purchases a loan, or any interest therein, from a mortgage banker or in a transaction that has been directly or indirectly arranged or negotiated by a mortgage banker.

K. Notwithstanding section 35-155, in lieu of the bond described in this section, an applicant for a license or a licensee may deposit with the superintendent a deposit in the form of cash or alternatives to cash in the amount prescribed in subsection H or I of this section, as applicable. The superintendent may accept any of the following as an alternative to cash:

1. Certificates of deposit or investment certificates that are payable or assigned to the state treasurer, issued by banks or savings banks doing business in this state and fully insured by the federal deposit insurance corporation or any successor institution.

2. Certificates of deposit, investment certificates or share accounts that are payable or assigned to the state treasurer, issued by a savings and loan association doing business in this state and fully insured by the federal deposit insurance corporation or any successor institution.

3. Certificates of deposit, investment certificates or share accounts that are payable or assigned to the state treasurer, issued by a credit union doing business in this state and fully insured by the national credit union administration or any successor institution.

L. The superintendent shall deposit the cash or alternatives to cash received under this section with the state treasurer. The state treasurer shall hold the cash or alternatives to cash in the name of this state to guarantee the faithful performance of all legal obligations of the person required to post bond pursuant to this section. The person is entitled to receive any accrued interest earned from the alternatives to cash. The state treasurer may impose a fee to reimburse the state treasurer for administrative expenses. The fee shall not exceed ten dollars for each cash or alternatives to cash deposit and shall be paid by the applicant or licensee. The state treasurer may prescribe rules relating to the terms and conditions of each type of security provided by this section.

M. In addition to such other terms and conditions as the superintendent prescribes by rule or order, the principal amount of the deposit shall be released only on written authorization of the superintendent or on the order of a court of competent jurisdiction. The principal amount of the deposit shall not be released before the expiration of three years from the first to occur of any of the following:

1. The date of substitution of a bond for a cash alternative.
2. The surrender of the license.

3. The revocation of the license.

4. The expiration of the license.

N. A licensee or an employee of the licensee shall not advertise for or solicit mortgage banking business in any manner without using the name and license number as issued on the mortgage banker's principal place of business license, except that a licensee may also employ or refer to the commonly used name and any trademarks or service marks of any affiliate. If a license is issued in the name of a natural person, nothing in the advertising or solicitation may imply that the license is in the name of another person or entity. For the purposes of this subsection, advertise does not include business cards, radio and television advertising directed at national or regional markets and promotional items except if those items contain rates or terms on which a mortgage loan or mortgage banking loan may be obtained.

O. A licensee shall not employ any person unless the licensee:

1. Conducts a reasonable investigation of the background, honesty, truthfulness, integrity and competency of the employee before hiring.

2. Keeps a record of the investigation for not less than two years after termination.

P. The licensee is liable for any damage caused by any of his employees while engaged in the business of making mortgage loans or mortgage banking loans.

Q. A licensee shall comply with the requirements of section 6-114 relating to balloon payments.

R. Notwithstanding subsection C, paragraph 4 of this section, licensees and applicants whose own resources are derived exclusively from correspondent contracts between mortgage bankers and banks, savings banks, trust companies, savings and loan associations, credit unions, profit sharing or pension trusts, consumer lenders or insurance companies shall provide the superintendent with a current financial statement or that of its parent company prepared in accordance with generally accepted accounting principles including:

1. A balance sheet prepared within the previous six months and certified by the licensee. The superintendent may require a more recent balance sheet.

2. A statement of operations and retained earnings and a statement of changes in financial position provided the applicant has commenced operations.

3. Notes to the financial statement if applicable.

S. In addition to the grounds specified in section 6-945, subsection A, failure of a licensee to operate the business of making mortgage loans or mortgage banking loans for a continuous period of twelve months or more shall constitute grounds for revocation of such license. The superintendent, on good cause shown, may extend the time for operating such business for a single fixed period, which shall not exceed twelve months.

T. If the applicant for renewal of a mortgage banker license is a natural person, the applicant shall have satisfactorily completed twelve continuing education units by a continuing education provider approved by the superintendent before submitting the renewal application. If the applicant is other than a natural person, the designated responsible individual shall have satisfactorily completed twelve continuing education units by a continuing education provider approved by the superintendent before submitting the renewal application.

U. A licensee who employs a loan originator shall comply with section 6-991.03.

6-944. Issuance of license; renewal; branch office license; application; fee

A. If the superintendent determines that the applicant has met the requirements set forth in section 6-943, subsection C, is qualified and has paid the fees, the superintendent shall issue a mortgage banker's license to the applicant evidenced by a continuous certificate. The license is not transferable or assignable. An applicant who has been denied a license may not reapply for such a license before one year from the date of the previous application. A person may not acquire control of a licensee through a stock purchase or other device without the prior written consent of the superintendent. Written consent shall not be given if the superintendent finds that any of the grounds for denial, revocation or suspension of a license as set forth in section 6-945 are applicable to the acquiring person. For the purposes of this subsection, "control" means the power to vote more than twenty per cent of outstanding voting shares of a licensed corporation, partnership, association or trust.

B. For licenses approved on or before March 31, 2009, a licensee shall make an application and pay the renewal fee set forth in section 6-126 on or before March 31, 2009 but not sooner than February 1, 2009 and on or before December 31 for subsequent years beginning in 2009. Licenses not renewed by March 31, 2009 are suspended, and the licensee shall not act as a mortgage banker until the license is renewed or a new license is issued pursuant to this article. A person may renew a suspended license by paying the renewal fee plus twenty-five dollars for each day after March 31, 2009 that a license renewal fee is not received by the department and making application for renewal as prescribed by the superintendent. Licenses which are not renewed by April 30, 2009 expire. A license shall not be granted to the holder of an expired license except as provided in this article for the issuance of an original license.

C. For licenses approved after or renewed on March 31, 2009, a licensee shall pay the renewal fee on or before December 31, beginning in 2009. Licenses not renewed by December 31 are suspended, and the licensee shall not act as a mortgage banker until the license is renewed or a new license is issued pursuant to this article. A person may renew a suspended license by paying the renewal fee plus twenty-five dollars for each day after December 31 that a license renewal fee is not received by the superintendent and applying for renewal as prescribed by the superintendent. Licenses that are not renewed by January 31 expire. A license shall not be granted to the holder of an expired license except as provided in this article for the issuance of an original license.

D. A licensee shall prominently display the mortgage banker license in the office of the mortgage banker.

E. Every licensed mortgage banker shall designate and maintain a principal place of business in this state for the transaction of business. The license shall specify the address of the principal place of business. If a licensee wishes to maintain one or more locations in addition to a principal place of business, the licensee shall first obtain a branch office license from the superintendent and designate a person for each branch office to oversee the operations of that office. The licensee shall submit a fee as prescribed in section 6-126 for each branch office license. If the superintendent determines that the applicant is qualified, the superintendent shall issue a branch office license indicating the address of the branch office. The licensee shall conspicuously display the branch office license in the branch office. If the address of the principal place of business or of any branch office is changed, the licensee shall notify the superintendent before the change and the superintendent shall endorse the change of address on the license for a fee as prescribed in section 6-126.

6-946. Required accounting practices and records; refundable deposits; periodic impoundment payments; disclosure

A. Every mortgage banker shall keep and maintain at all times correct and complete records clearly reflecting the financial condition of the business as prescribed by the superintendent that will enable him to determine whether the licensee is conducting his business in accordance with this article. If the mortgage banker operates two or more licensed places of business in this state, after notifying the superintendent, he may maintain the records at his principal place of business in this state, except that a mortgage banker, with the approval of the superintendent, may maintain the records outside of this state. A mortgage banker shall, for records kept outside of this state, make the records available to the superintendent in this state not more than three business days after demand and provide for the acceptance of collect calls or provide a toll free telephone number to borrowers to obtain information from the records if the licensed places of business in this state cannot readily provide the information requested by the borrowers. Every mortgage banker shall maintain original documents, or clearly legible copies, of all mortgage banking loan transactions and mortgage loan transactions, unless the mortgage banking loan or mortgage loan is paid in full or the mortgage banking loan or mortgage loan and its servicing are sold, for not fewer than two years after the date of the mortgage banking loan closing or the date of the last disbursement of monies by the licensee, whichever occurs last. With the approval of the superintendent, a licensee that uses a computer or mechanical record keeping system is not required to keep a written copy of the records if the licensee is able to generate all information required by this section in a timely manner for examination or for other purposes.

B. Every mortgage banker shall observe generally accepted accounting principles and practices.

C. If a mortgage banker requires an advance or fee to be paid in connection with an application for a mortgage banking loan or mortgage loan, there shall be a written agreement. The parties shall sign the written agreement, and the agreement shall contain terms pertaining to the payment of the fee or disposition of the advance or fee, whether the loan is finally consummated or not, and the term for which the agreement is to remain in force before return of the advance or fee for nonperformance can be required. Advances or fees shall be immediately deposited in a trust account in a bank, savings bank or savings and loan association that is fully insured by the federal deposit insurance corporation or any successor agency and shall not be commingled with other monies. The trust account shall designate the licensee as trustee and shall provide for withdrawal of the monies without previous notice. Withdrawals shall only be disbursed according to the terms of the agreement. A licensee who receives advances or fees shall preserve and on request make available to the superintendent all deposits, withdrawal receipts and statements of account rendered by the bank or savings and loan association. The licensee shall further preserve all agreements between the parties involved in the transaction and all contracts, agreements and instructions to or with the depository and shall keep an accurate accounting of each separate bank account in which the trust funds have been deposited. If the loan is declined by or on behalf of the lender or cancelled by the applicant, all documents provided by or at the expense of the applicant, including any appraisal, are the property of the applicant. At the applicant's discretion, said documents shall be returned or transferred to any financial institution or enterprise so designated without additional consideration except for fees for which the applicant has previously contracted, provided that any such document is not prohibited by law from being transferred or returned.

D. If periodic payments are to be collected from the mortgagor to provide for payments by the mortgagee of taxes, assessments, insurance premiums, ground rents or other current charges against the real estate security, the estimated payment amount stated to the mortgagor by the mortgage banker shall be such that the total of these payments collected for each category during the tax or other period will approximate the actual tax or other payment when due. All such periodic payments of taxes, assessments, insurance premiums, ground rents and other current charges shall be accounted for annually to the borrower and, to the extent monies have been collected for payment, shall be paid promptly by the mortgage banker.

E. Before a mortgage banking loan closing on residential real property designed principally for the occupancy of from one to four families, a licensee shall fully comply, to the extent they apply, with the real estate lending disclosure requirements of title I of the consumer credit protection act (15 United States Code sections 1601

through 1666j), the real estate settlement procedures act (12 United States Code sections 2601 through 2617) and the regulations promulgated under those acts.

### 6-947. Prohibited acts

A. Except for employment verifications and deposit or account verifications, a person in connection with or incidental to the making of any mortgage banking loan or mortgage loan shall not induce, require or permit any document to be signed by a party to the transaction if the document contains any blank spaces to be filled in after it has been signed, except that the party may specifically authorize the licensee or the escrow agent handling the transaction, in writing, to complete blank spaces in certain documents.

B. A person is not entitled to receive compensation in connection with arranging for or negotiating a mortgage banking loan or mortgage loan if the person is not licensed pursuant to this article. A mortgage banker shall not pay compensation to, contract with or employ as an independent contractor a person who is acting as a mortgage broker or mortgage banker but who is not licensed under this chapter.

C. A mortgage banker may not commingle monies of borrowers or monies held for the benefit of borrowers with monies of the mortgage banker.

D. A person engaged in the mortgage banking business shall not knowingly advertise, display, distribute, broadcast or televise, or cause or permit to be advertised, displayed, distributed, broadcast or televised, in any manner whatever, any false, misleading or deceptive statement or representation with regard to the rates, terms or conditions for a mortgage banking loan or mortgage loan. The charges or rates of charge, if stated, shall be set forth in a clear and concise manner.

E. A mortgage banker shall not request or require a person seeking a mortgage banking loan or mortgage loan, on real property designed principally for the occupancy of from one to four families, in an amount of two hundred thousand dollars or less to enter into an agreement which prohibits the person from seeking the loan from another source.

F. A mortgage banker shall not, except in good faith, delay or cause delay in the closing of a loan that results in increased costs to a borrower.

G. A mortgage banker shall not record or cause to be recorded any document which would give rise to liability under section 33-420.

H. A person who is employed by a licensee to act in the capacity of a mortgage banker shall not be concurrently employed by any other licensee to act in the capacity of a mortgage banker, except with the prior written approval of all such concurrently employing licensees.

I. A mortgage banker shall not collect compensation for rendering services as a real estate broker or real estate salesman unless both of the following apply:

1. The mortgage banker is licensed pursuant to title 32, chapter 20.

2. The mortgage banker has disclosed to the person from whom the compensation is collected that the mortgage banker is receiving compensation both for mortgage banker services, if applicable, and for real estate broker or real estate salesman services.

J. A licensee shall not accept any assignment of the borrower's wages or salary in connection with activities governed by this article.

K. A mortgage banker shall not, for compensation, either directly or indirectly make or negotiate or offer to make or negotiate a loan of money in an amount of ten thousand dollars or less that is not secured by a mortgage or deed of trust or other lien interest in real property.

L. A mortgage banker shall not make a false promise or misrepresentation or conceal an essential or material fact in the course of the mortgage banker business.

M. A mortgage banker shall not fail to truthfully account for the monies belonging to a party to a mortgage loan or mortgage banking loan transaction or fail to disburse monies in accordance with his agreements.

N. A mortgage banker shall not record a mortgage or deed of trust if monies are not available for the immediate disbursement to the mortgagor unless, before that recording, the mortgage banker informs the mortgagor in writing of a definite date by which payment shall be made and obtains the mortgagor's written permission for the delay.

O. A mortgage banker shall not require a person seeking a loan secured by real property to obtain property insurance coverage in an amount that exceeds the replacement cost of the improvements as established by the property insurer.

P. A mortgage banker must reasonably supervise the activities of a loan originator who is licensed pursuant to article 4 of this chapter and who is employed by the mortgage banker.

### 6-949. Conversion to mortgage broker license

Notwithstanding any other law, a licensee who funds in the aggregate one hundred fifty or fewer loans in the immediately preceding calendar year may apply at the time of license renewal to the department for a conversion to a mortgage broker license issued pursuant to article 1 of this chapter. The conversion application shall be in a manner prescribed by the superintendent by rule. The approval of the conversion is at the discretion of the superintendent.

## 6-972. Exemptions

This article does not apply to:

1. Institutional investors.
2. A person who funds a commercial mortgage loan that was originated and processed by a licensee or by an institutional investor and who meets all of the following conditions:
  - (a) Does not maintain a place of business in this state in connection with funding commercial mortgage loans.
  - (b) Does not directly or indirectly solicit borrowers in this state for the purpose of making commercial mortgage loans.
  - (c) Does not participate in negotiating commercial mortgage loans. For purposes of this subdivision, "negotiating commercial mortgage loans" does not include setting the terms under which a person may buy or make a commercial mortgage loan originated by a licensee, a mortgage banker or a mortgage broker licensed pursuant to article 1 or 2 of this chapter, or an institutional investor.
3. A person who as a seller of commercial property receives one or more mortgages or deeds of trust as security for a purchase money obligation.
4. A person who is licensed to practice law in this state but is not actively and principally engaged in the business of negotiating commercial mortgage loans, if this person renders services in the course of his practice as an attorney at law.
5. A person who receives a mortgage or deed of trust on commercial property as security for an obligation payable on an installment or deferred payment basis and arising out of materials furnished or services rendered in improving that commercial property or any lien created without the consent of the owner of commercial property.
6. A person who is licensed pursuant to article 1 or 2 of this chapter.
7. An agency of any state or of the United States.
8. A nonprofit federally tax exempt corporation certified by the United States small business administration, organized to promote economic development in this state and whose primary activity consists of providing financing for business expansion.
9. A bank, savings bank, trust company, savings and loan association, profit sharing trust, pension trust, credit union, insurance company, consumer lender or receivership if it is regulated by this state, another state, the United States or a court with respect to its commercial mortgage business.

6-973. Licensing commercial mortgage bankers required; qualifications

- A. A person shall not act as a commercial mortgage banker without a license issued under this article.
- B. A person who engages in commercial mortgage banking need not be licensed under article 1 or 2 of this chapter or chapter 7 of this title if the person is licensed under this article.
- C. The superintendent shall not grant a commercial mortgage banker's license to a person, other than a natural person, who is not registered to do business in this state on the date the license is granted. The superintendent shall not issue to or renew a commercial mortgage banker's license of an applicant unless the applicant meets all of the requirements prescribed in subsection D of this section. The superintendent shall determine whether the applicant meets the requirements based on the application, and evidence presented at a hearing, if any, or any other evidence that the superintendent may have regarding the applicant's qualifications.
- D. In order to qualify for a commercial mortgage banker's license or a renewal of such a license an applicant shall:
1. Have at least three years' experience in the commercial mortgage business or equivalent experience in a related business. If the applicant is not a natural person, the responsible individual shall meet this requirement.
  2. Have made in the past or intend to make or negotiate or offer to make or negotiate commercial mortgage loans.
  3. Provide the superintendent with a current audited financial statement or that of its parent company prepared by an independent certified public accountant according to generally accepted accounting principles including:
    - (a) The certified public accountant's opinion as to the fairness of the presentation according to generally accepted accounting principles.
    - (b) A balance sheet prepared within the immediately preceding six months and certified by the licensee. The superintendent may require a more recent balance sheet.
    - (c) If the applicant has begun operations, a statement of operations and retained earnings and a statement of changes in financial position.
    - (d) Notes to the financial statement if applicable.
  4. Have and maintain at all times a net worth of at least one hundred thousand dollars.
- E. Notwithstanding subsection D, paragraph 3 of this section, licensees and applicants whose own resources are derived exclusively from correspondent contracts with institutional investors shall provide the superintendent with a current financial statement or that of its parent company prepared according to generally accepted accounting principles including:
1. A balance sheet prepared within the immediately preceding six months and certified by the licensee. The superintendent may require a more recent balance sheet.
  2. If the applicant has begun operations, a statement of operations and retained earnings and a statement of changes in financial position.
  3. Notes to the financial statement if applicable.

### 6-975. Bond or other security

A. Each licensed commercial mortgage banker shall deposit with the superintendent, before doing business as a commercial mortgage banker, a bond executed by the licensee as principal and a surety company authorized to do business in this state as surety. The bond shall be conditioned on the licensee's faithful compliance, including the directors, officers, members, partners, trustees and employees, with this article. Only one bond is required for any person, firm, association or corporation regardless of the number of officers, directors, members, partners or trustees who are employed by or are members of the firm, association or corporation.

B. The bond is payable to any person who is injured by the wrongful act, default, fraud or misrepresentation of the licensee or the licensee's employees and to this state for the benefit of the person injured. No suit may be commenced on the bond after the expiration of one year following the commission of the act on which the suit is based, except that claims for fraud or mistake are limited to the limitation period prescribed in section 12-543, paragraph 3. If an injured person commences an action for a judgment to collect on the bond, the injured person shall notify the superintendent of the action in writing when the action is commenced and shall provide copies of all documents relating to the action to the superintendent on request.

C. The bond required by this section is twenty-five thousand dollars for licensees whose investors are limited solely to institutional investors and one hundred thousand dollars for licensees whose investors include any other investors.

D. Notwithstanding section 35-155, in lieu of the bond described in this section, an applicant for a license or a licensee may deposit with the superintendent a deposit in the form of cash or alternatives to cash in the same amount as the bond required under subsection C of this section. The superintendent may accept any of the following as an alternative to cash:

1. Certificates of deposit, investment certificates or share accounts that are payable or assigned to the state treasurer, issued by banks, savings banks or savings and loan associations doing business in this state and fully insured by the federal deposit insurance corporation or any successor institution.
2. Certificates of deposit, investment certificates or share accounts that are payable or assigned to the state treasurer, issued by a credit union doing business in this state and fully insured by the national credit union administration or any successor institution.

E. The superintendent shall deposit the cash or alternatives to cash received under this section with the state treasurer. The state treasurer shall hold the cash or alternatives to cash in the name of this state to guarantee the faithful performance of all legal obligations of the person required to post bond pursuant to this section. The person is entitled to receive any accrued interest earned from the alternatives to cash. The state treasurer may impose a fee to reimburse the state treasurer for administrative expenses. The fee shall be paid by the applicant or licensee. The state treasurer may prescribe rules relating to the terms and conditions of each type of security provided by this section.

F. In addition to such other terms and conditions as the superintendent prescribes by rule or order, the principal amount of the deposit shall be released only on written authorization of the superintendent or on the order of a court of competent jurisdiction. The principal amount of the deposit shall not be released before the expiration of three years after the first to occur of any of the following:

1. The date of substitution of a bond for a cash alternative.
2. The surrender of the license.
3. The revocation of the license.
4. The expiration of the license.

**6-978. Consent of superintendent for transferring, assigning or acquiring control of licensee; definition**

A license is not transferable or assignable and control of a licensee may not be acquired through a stock purchase or any other device without the prior written consent of the superintendent. The superintendent shall not give written consent if he finds that any of the grounds for denial, revocation or suspension of a license as set forth in section 6-982 apply to the acquiring person. For the purpose of this section, "control" means the power to vote more than twenty per cent of the outstanding voting shares of a licensed corporation, partnership, association or trust.

**6-979. Principal place of business; branch office license; change of address**

- A. Each licensed commercial mortgage banker shall designate and maintain a principal place of business in this state to transact business. The license shall specify the address of his principal place of business.
- B. If a licensee wishes to maintain one or more locations in addition to a principal place of business, the licensee shall first obtain a branch office license from the superintendent and designate a person for each branch office to oversee the operations of that office.
- C. If the superintendent determines that the licensee is qualified, the superintendent shall issue a branch office license indicating the address of the branch office. The licensee shall conspicuously display the branch office license in the branch office.
- D. If the address of the principal place of business or of any branch office is changed, the licensee shall immediately notify the superintendent of the change and the superintendent shall endorse the change of address on the license.

**6-983. Required accounting practices and records; escrow of monies; disclosure**

A. A commercial mortgage banker shall keep and maintain at all times correct and complete records as prescribed by the superintendent that will enable the superintendent to determine whether the licensee is complying with this article. If the commercial mortgage banker operates two or more licensed places of business in this state, after notifying the superintendent, he may maintain such records at his principal place of business in this state, except that a commercial mortgage banker, with the approval of the superintendent, may maintain the records outside of this state. For records kept outside this state, a commercial mortgage banker shall make the records available to the superintendent in this state not more than three business days after demand and shall provide for the acceptance of collect calls or provide a toll free telephone number to borrowers to obtain information from the records if the licensed place of business in this state cannot readily provide the information requested by the borrowers. A commercial mortgage banker shall maintain original documents or clearly legible copies of all commercial mortgage loan transactions for at least two years from the date of the commercial mortgage loan closing.

B. A commercial mortgage banker shall observe generally accepted accounting principles and practices.

C. If a commercial mortgage banker requires an advance or fee to be paid in connection with an application for a commercial mortgage loan there shall be a written agreement. The parties shall sign the written agreement, and the agreement shall contain terms pertaining to the payment of the fee or disposition of the advance or fee, whether the loan is finally consummated or not, and a term for which the agreement is to remain in force before return of the advance or fee for nonperformance can be required. The licensee shall immediately deposit advances or fees in a trust account in a bank, savings bank or savings and loan association that is fully insured by the federal deposit insurance corporation or any successor agency, and the advances or fees shall not be commingled with other monies. The trust account shall designate the licensee as trustee and shall provide for withdrawing the monies without previous notice. Withdrawals shall only be disbursed according to the terms of the agreement. A licensee who receives advances or fees shall preserve and on request make available to the superintendent all deposits, withdrawal receipts and statements of account rendered by the bank, savings bank or savings and loan association. The licensee shall further preserve all agreements between the parties involved in the transaction and all contracts, agreements and instructions to or with the depository and shall keep an accurate accounting of each separate bank account in which the trust monies have been deposited. If the loan is declined by or on behalf of the lender or canceled by the applicant, all documents provided by or at the expense of the applicant, including any appraisal, are the property of the applicant. At the applicant's discretion, the documents shall be returned or transferred to any designated financial institution or enterprise without additional consideration except for fees for which the applicant has previously contracted, if the document is not prohibited by law from being transferred or returned.

D. If periodic payments are to be collected from the mortgagor to provide for payments by the mortgagee of taxes, assessments, insurance premiums, ground rents or other current charges against the real estate security, the estimated payment amount stated to the mortgagor by the commercial mortgage banker shall be such that the total of these payments collected for each category during the tax or other period will approximate the actual tax or other payment when due. The licensee shall annually account to the borrower for all such periodic payments of taxes, assessments, insurance premiums, ground rents and other current charges and, to the extent monies have been collected for payment, shall pay them promptly.

### 6-984. Prohibited acts

A. Except for employment verifications and deposit or account verifications, a person shall not induce, require or permit any document in connection with making a commercial mortgage loan to be signed by a party to the transaction if the document contains any blank spaces to be filled in after it has been signed unless the party has specifically authorized the licensee or the escrow agent in writing to complete those blank spaces.

B. A person is not entitled to receive compensation in connection with arranging for or negotiating a commercial mortgage loan if the person is not licensed pursuant to or is not exempt from this article, except that a commercial mortgage banker, mortgage banker or mortgage broker licensed pursuant to this article or article 1 or 2 of this chapter may compensate a person who is a resident of another state and who meets the licensing requirements, if any, of the other state in connection with arranging for or negotiating a commercial mortgage loan.

C. A commercial mortgage banker may not commingle monies of borrowers or monies held for the benefit of borrowers with monies of the commercial mortgage banker.

D. A person engaged in commercial mortgage banking shall not knowingly advertise, display, distribute, broadcast or televise, or cause or permit to be advertised, displayed, distributed, broadcast or televised, in any manner whatever, a false, misleading or deceptive statement or representation with regard to the rates, terms or conditions for a commercial mortgage loan. The charges or rates of charge, if stated, shall be set forth in a clear and concise manner.

E. A commercial mortgage banker shall not, except in good faith, delay or cause delay in the closing of a loan that results in increased costs to a borrower.

F. A commercial mortgage banker shall not record or cause to be recorded a document that would give rise to liability under section 33-420.

G. A person who is employed by a licensee to act in the capacity of a commercial mortgage banker shall not be concurrently employed by any other licensee to act in the capacity of a commercial mortgage banker, except with the prior written approval of all concurrently employing licensees.

H. A commercial mortgage banker shall not collect compensation for rendering services as a real estate broker or real estate salesperson unless both of the following apply:

1. The commercial mortgage banker is licensed pursuant to title 32, chapter 20.
2. The commercial mortgage banker has disclosed to the person from whom the compensation is collected that the commercial mortgage banker is receiving compensation both for commercial mortgage banking and for services as a real estate broker or salesperson.

I. A licensee shall not accept any assignment of the borrower's wages or salary in connection with activities governed by this article.

J. A commercial mortgage banker shall not make or negotiate or offer to make or negotiate, for compensation, either directly or indirectly, a loan of money that is not secured by a mortgage or deed of trust or any other lien interest in real property or if the real estate security is a one to four family residence.

K. A commercial mortgage banker shall not make a false promise or misrepresentation or conceal an essential or material fact in the course of the commercial mortgage banker business.

L. A commercial mortgage banker shall not fail to truthfully account for the monies belonging to a party to a commercial mortgage loan or commercial mortgage banking loan transaction or fail to disburse monies in accordance with the agreements.

M. A commercial mortgage banker shall not record a mortgage or deed of trust if monies are not available for the immediate disbursal to the mortgagor unless, before that recording, the commercial mortgage banker informs the mortgagor in writing of a definite date by which payment shall be made and obtains the mortgagor's written permission for the delay.

**ARIZONA DEPARTMENT OF HEALTH SERVICES (F19-0901)**

Title 9, Chapter 1, Article 1, Rules of Practice and Procedure; Article 2, Public Participation in Rulemaking; and Article 3, Disclosure of Medical Records, Payment Records, and Public Health Records



# GOVERNOR'S REGULATORY REVIEW COUNCIL

## ATTORNEY MEMORANDUM - FIVE-YEAR REVIEW REPORT

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**MEETING DATE:** September 4, 2019

**TO:** Members of the Governor's Regulatory Review Council (Council)

**FROM:** Council Staff

**DATE:** August 9, 2019

**SUBJECT: ARIZONA DEPARTMENT OF HEALTH SERVICES (F19-0901)**  
Title 9, Chapter 1, Article 1, Rules of Practice and Procedure; Article 2, Public Participation in Rulemaking; and Article 3, Disclosure of Medical Records, Payment Records, and Public Health Records

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This Five Year Review Report (5YRR) from the Arizona Department of Health Services relates to rules in Title 9, Health Services, Chapter 1. The rules cover the following:

- **Article 1** - Rules of Practice and Procedure
- **Article 2** - Public Participation in Rulemaking
- **Article 3** - Disclosure of Medical Records, Payment Records, and Public Health Record

In the previous 5YRR for these rules, the Department indicated it would not propose to amend the rules unless substantive issues arose. The Department indicates that there were no substantive issues, therefore a rulemaking was not submitted.

### **Proposed Action**

The Department indicates R9-1-101 (Definitions), R9-1-201 (Definitions), R9-1-203 (Petition for Department Rulemaking and Petition for Review of a Department Practice or Substantive Policy Statement), R9-1-301 (Definitions), and R9-1-303 (Public Health Records

Disclosure) are no longer consistent with other rules and statutes and therefore proposes to amend these rules.

The Department also indicates R9-1-202 (Rulemaking Record) needs to be amended to improve its clarity, conciseness, and understandability. The Department proposes to submit a Notice of Final Rulemaking to the Council by December 2020 that addresses the issues identified in this 5YRR.

**1. Has the agency analyzed whether the rules are authorized by statute?**

Yes, the Department cites to general and specific authority for these rules.

**2. Summary of the agency's economic impact comparison and identification of stakeholders:**

The Department submitted the economic, small business, and consumer impact statements (EISs) from 2002 and 2006. The Department indicates that the costs and benefits stated in those EISs are generally consistent with the actual costs and benefits of the rules. Stakeholders include the Department and members of the public seeking disclosure. This includes business entities and individuals.

**3. Has the agency analyzed the costs and benefits of the rulemaking and determined that the rules impose the least burden and costs to those who are regulated?**

The Department states that the rules impose the least burden upon stakeholders necessary to achieve the rule's objectives. However, some rules contain outdated language and statutory cross-references. The Department plans to submit a Notice of Final Expedited Rulemaking to the Council by December 2020 to address these issues.

**4. Has the agency received any written criticisms of the rules over the last five years?**

No, the Department indicates it did not receive any written criticisms of these rules.

**5. Has the agency analyzed the rules' clarity, conciseness, and understandability, consistency with other rules and statutes, and effectiveness?**

Yes. For the reasons specified in the report, the Department indicates that the following rules could be amended to improve their clarity, conciseness, and understandability:

- R9-1-101 (Definitions)
- R9-1-201 (Definitions)
- R9-1-202 (Rulemaking Record)
- R9-1-203 (Petition for Department Rulemaking and Petition for Review of a Department Practice or Substantive Policy Statement)
- R9-1-301 (Definitions)

- **R9-1-303** (Public Health Records Disclosure)

**6. Has the agency analyzed the current enforcement status of the rules?**

Yes, the Department indicates that the rules are enforced as written.

**7. Are the rules more stringent than corresponding federal law and, if so, is there statutory authority to exceed the requirements of federal law?**

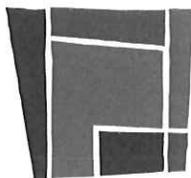
Not applicable. There is no corresponding federal law.

**8. For rules adopted after July 29, 2010, do the rules require a permit or license and, if so, does the agency comply with A.R.S. § 41-1037?**

Not applicable. The rules were adopted before July 29, 2010.

**9. Conclusion**

As mentioned above, the Department proposes to amend its rules to improve their clarity, conciseness, effectiveness and understandability by December 2020. Council staff recommends approval of this report.



# ARIZONA DEPARTMENT OF HEALTH SERVICES

POLICY & INTERGOVERNMENTAL AFFAIRS

June 24, 2019

**VIA EMAIL:** [grrc@azdoa.gov](mailto:grrc@azdoa.gov)

Connie Wilhelm, Vice-Chair

Governor's Regulatory Review Council

100 North 15th Avenue, Suite 305

Phoenix, Arizona 85007

RE: Department of Health Services, 9 A.A.C. 1, Articles 1-3, Five-Year-Review Report

Dear Ms. Wilhelm:

Please find enclosed the Five-Year-Review Report from the Arizona Department of Health Services (Department) for 9 A.A.C. 1, Articles 1-3, Administration, which is due on June 28, 2019.

The Department hereby certifies compliance with A.R.S. § 41-1091.

For questions about this report, please contact Brittany Green at 602-542-1574 or [brittany.green@azdhs.gov](mailto:brittany.green@azdhs.gov).

Sincerely,

A handwritten signature in black ink, appearing to be 'RL', written over a circular stamp or seal.

Robert Lane  
Director's Designee

RL:bg

Enclosures



ARIZONA DEPARTMENT  
OF HEALTH SERVICES

**ARIZONA DEPARTMENT OF HEALTH SERVICES  
FIVE-YEAR-REVIEW REPORT**

**TITLE 9. HEALTH SERVICES**

**CHAPTER 1. DEPARTMENT OF HEALTH SERVICES  
ADMINISTRATION**

**ARTICLE 1. RULES OF PRACTICE AND PROCEDURE**

**ARTICLE 2. PUBLIC PARTICIPATION IN RULEMAKING**

**ARTICLE 3. DISCLOSURE OF MEDICAL RECORDS, PAYMENT RECORDS, AND PUBLIC HEALTH RECORDS**

JUNE 2019

**1. Authorization of the rule by existing statutes**

General Statutory Authority: A.R.S. §§ 36-104(3), 36-136(A)(1), and 36-136(G).

<b>Rule</b>	<b>Specific Statutory Authority</b>
Article 1	A.R.S. §§ 41-1002(C), 41-1003, 41-1092.08, and 41-1092.09
Article 2	A.R.S. §§ 41-1029, and 41-1033
Article 3	A.R.S. §§ 36-104(9), 36-105, 36-107, 36-136(H)(11), and 36-351

**2. The objective of each rule:**

<b>Rule</b>	<b>Objective</b>
R9-1-101	The objective of this rule is to define terms and phrases used in the Chapter and Article, allowing for consistent interpretation.
R9-1-102	The objective of this rule is to provide a process for a party of an administrative decision to object to a recommended decision.
R9-1-103	The objective of this rule is to provide a process for a party to an administrative decision to express an objection to, or obtain a possible rehearing or review of, the administrative decision.
R9-1-201	The objective of this rule is to define terms and phrases used in the Article, allowing for consistent interpretation.
R9-1-202	The objective of this rule is to provide for a party to review a rulemaking record at the office of the Director between specific days and times.
R9-1-203	The objective of this rule is to establish requirements to petition the Department for a rulemaking or a review of a practice or substantive policy statement that allegedly constitutes a rule, and establishes requirements and a time-frame for the Department to respond.
R9-1-301	The objective of this rule is to define terms and phrases used in the Article, allowing for consistent interpretation.

R9-1-302	The objective of this rule is to establish requirements for when the Department may disclose information in medical records or payment records.
R9-1-303	The objective of this rule is to govern the Department's disclosure of public health records.

3. **Are the rules effective in achieving their objectives?** Yes  No

*If not, please identify the rule(s) that is not effective and provide an explanation for why the rule(s) is not effective.*

Rule	Explanation
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4. **Are the rules consistent with other rules and statutes?** Yes  No

*If not, please identify the rule(s) that is not consistent. Also, provide an explanation and identify the provisions that are not consistent with the rule.*

Rule	Explanation
R9-1-101, R9-1-201, R9-1-203, and R9-1-301	Within these Sections are definitions and references to A.R.S. Titles 12, 13, 14, 36, and 41 that have outdated subsection citation numbers.
R9-1-203	Subsection A of this rule explains that a person may petition the Department under A.R.S. § 41-1033 to request a review of a Department practice. In 2018, legislation was passed that provided an additional avenue for a person to petition the Governor's Regulatory Review Council to review an existing Department practice. The rules do not reflect this change.
R9-1-303	Subsection A of this rule adds exceptions for the Department's disclosure of public health records, but does not include an exception for medical marijuana records which are confidential under A.R.S. § 36-2810 and exempt from A.R.S. 39, Chapter 1, Article 2.

5. **Are the rules enforced as written?** Yes  No

*If not, please identify the rule(s) that is not enforced as written and provide an explanation of the issues with enforcement. In addition, include the agency's proposal for resolving the issue.*

Rule	Explanation
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6. **Are the rules clear, concise, and understandable?** Yes  No

*If not, please identify the rule(s) that is not clear, concise, or understandable and provide an explanation as to how the agency plans to amend the rule(s) to improve clarity, conciseness, and understandability.*

Rule	Explanation
R9-1-202	The rulemaking records are no longer being held in the Director's Office. They are now being held in the Office of Administrative Counsel and Rules.

7. **Has the agency received written criticisms of the rules within the last five years?** Yes \_\_\_ No √

*If yes, please fill out the table below:*

Commenter	Comment	Agency's Response
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8. **Economic, small business, and consumer impact comparison:**

The Department submitted economic, small business, and consumer impact statements (EISs) in 2002 and 2006 with rulemakings on this Chapter. The Department designates costs or benefits as minimal when less than \$1,000; moderate when between \$1,000 and \$10,000; substantial when greater than \$10,000; and significant when meaningful or important but not readily subject to quantification.

The 2002 EIS estimated the economic impact of Article 1 and R9-1-202. It forecasted that the Department would bear moderate costs for implementing the rules, and that the Department, entities regulated by any Department rules, and the public would experience a significant benefit from rules that have been updated to be consistent with other laws and to be clear, concise, and understandable. The Department expected no direct impact on public or private employment within the state and no additional costs to private persons or consumers who are directly affected by the rules. The Department determined that the rules were as minimally costly and intrusive as possible. The Department believes the costs and benefits identified in the EIS are generally consistent with the actual costs and benefits of the rules.

The 2006 EIS for Article 2 estimated the economic impact of R9-1-201 and R9-1-203 that deals with the public's participation in the Department's rulemaking process. It forecasted that the Department would bear moderate costs for implementing the rules, and that the Department, entities regulated by any Department rules, and the public could incur minimal costs under R9-1-203 and would experience a significant benefit from rules that were updated to be consistent with other laws, and to be clear, concise, and understandable. The Department expected no direct impact on public or private employment within the state and no additional costs to private persons or consumers who are directly affected by the rules. The Department receives, on average, less than one rulemaking petition of any kind per year and, if any petition is received, the submitting petitioner would incur minimal costs for preparing and submitting the petition. The Department believes the rules are as minimally costly and intrusive as possible, and that actual costs and benefits since 2006 have been as expected for R9-1-201 and R9-1-203.

The 2006 EIS for Article 3 estimated the economic impact of R9-1-301, R9-1-302, and R9-1-303. It identified stakeholders as the Department and members of the public seeking disclosure, including business entities and individuals. The 2006 EIS forecasted that the Department would incur substantial administrative and enforcement costs related to rules in the Article. It stated that business entities and individuals seeking records disclosure from the Department, if seeking disclosure for a commercial purpose, could incur significant costs; if seeking

disclosure for a purpose other than a commercial purpose, could incur minimal costs; and would benefit from rules that are easier to use, are consistent with state and federal statutes, and are clear, concise, and understandable.

The rules in Article 3 were expected to have no direct impact on political subdivisions or public or private employment. Total public record requests from the Department’s Office of Administrative Counsel and Rules (OACR) are as follows, reflecting the minimal or significant costs to parties seeking disclosure, as forecasted in the 2006 EIS:

Calendar Year	Total Public Record Requests	Total Charges	Average Charge
2015	514	\$12,416	\$24
2016	411	\$5,446	\$13
2017	373	\$8,006	\$21
2018	480	\$9,733	\$20

In the 2006 EIS, with regard to records disclosure, the Department’s costs were estimated to increase because of an anticipated increase in the number of public records requests and an increase in the number of personnel who may be involved with the handling of records. The Department was unable to specify each personnel member who might be involved in the handling of records requests or determine the amount of time personnel members would spend on that activity. The Department believes the costs and benefits identified in the EIS are generally consistent with the actual costs and benefits of the rules.

9. **Has the agency received any business competitiveness analyses of the rules?** Yes \_\_\_ No

10. **Has the agency completed the course of action indicated in the agency’s previous five-year-review report?**  
*Please state what the previous course of action was and if the agency did not complete the action, please explain why not.*

In the previous five-year-review report for 9 A.A.C. 1, Articles 1, 2, and 3, the Department proposed not to amend the rules until substantive issues arose. No substantive issues have arisen in the past five years, so no rulemaking was undertaken.

11. **A determination that the probable benefits of the rule outweigh within this state the probable costs of the rule, and the rule imposes the least burden and costs to regulated persons by the rule, including paperwork and other compliance costs, necessary to achieve the underlying regulatory objective:**

The rules impose the least burden upon stakeholders necessary to achieve the rule’s objectives. However, R9-1-101, R9-1-201, R9-1-202, R9-1-203, and R9-1-301 contain some outdated language and statutory cross-

references, and a burden may result from any time incurred by a stakeholder to find the correct statutory subsection referenced.

12. **Are the rules more stringent than corresponding federal laws?** Yes\_\_\_ No

*Please provide a citation for the federal law(s). And if the rule(s) is more stringent, is there statutory authority to exceed the requirements of federal law(s)?*

13. **For rules adopted after July 29, 2010 that require the issuance of a regulatory permit, license, or agency authorization, whether the rules are in compliance with the general permit requirements of A.R.S. § 41-1037 or explain why the agency believes an exception applies:**

The rules were adopted before July 29, 2010.

14. **Proposed course of action**

The Department plans to amend the rules to address all of the issues identified in this report. The Department plans to submit a Notice of Final Expedited Rulemaking to the Governor's Regulatory Review Council by December 2020.

## **APPENDIX A- Current Rules**

### **9 A.A.C. 1 Articles 1-3. Administration**

#### **ARTICLE 1. ADMINISTRATION**

##### **ARTICLE 1. RULES OF PRACTICE AND PROCEDURE**

###### **R9-1-101. Definitions**

**A.** In this Chapter, unless otherwise specified:

1. “Day” means a calendar day, and excludes the:
  - a. Day of the act or event from which a designated period of time begins to run; and
  - b. Last day of the period if a Saturday, Sunday, or official state holiday.
2. “Department” means the Arizona Department of Health Services.
3. “Director” means the Director of the Arizona Department of Health Services or an individual designated by the Director.
4. “Rule” has the same meaning as in A.R.S. § 41-1001(17).

**B.** In this Article, unless otherwise specified:

1. “Administrative law judge” has the same meaning as in A.R.S. § 41-1092.
2. “Appealable agency action” has the same meaning as in A.R.S. § 41-1092.
3. “Contested case” has the same meaning as in A.R.S. § 41-1001.
4. “Final administrative decision” has the same meaning as in A.R.S. § 41-1092.
5. “Party” has the same meaning as in A.R.S. § 41-1001.
6. “Recommended decision” means the written ruling made by an administrative law judge regarding a contested case or appealable agency action within 20 days after a hearing under A.R.S. § 41-1092.07

###### **R9-1-102. Objection to a Recommended Decision**

**A.** Upon receipt of a copy of a recommended decision for a contested case or an appealable agency action, the Director may mail a copy of the recommended decision to each party.

**B.** A party has ten days from the date the Director mails the recommended decision to submit a memorandum of objections that states each reason why the recommended decision is in error, with information supporting the reason.

**C.** The Director may consider the memorandum of objections in determining whether to accept, reject, or modify the recommended decision.

## **APPENDIX A- Current Rules**

### **9 A.A.C. 1 Articles 1-3. Administration**

#### **R9-1-103. Rehearing or Review of a Final Administrative Decision**

- A.** A party who is aggrieved by a final administrative decision may file with the Director, not later than 30 days after service of the final administrative decision, a written motion for rehearing or review of the decision specifying the grounds for rehearing or review.
- B.** A party filing a motion for rehearing or review under this Section may amend the motion at any time before it is ruled upon by the Director. Any other party may file a response to the motion for rehearing or review within 15 days after the date the motion is filed with the Director. The director may require that the parties file supplemental memoranda explaining the issues raised in the motion and may permit oral argument.
- C.** The Director may grant a rehearing or review of the final administrative decision for any of the following reasons materially affecting the requesting party's rights:
  - 1. Irregularity in the proceedings of the hearings or an abuse of discretion, that deprived the party of a fair hearing,
  - 2. Misconduct by the administrative law judge or the prevailing party,
  - 3. Accident or surprise that could not have been prevented by ordinary prudence,
  - 4. Newly discovered material evidence that could not with reasonable diligence have been discovered and produced at the original hearing,
  - 5. Excessive or insufficient penalties,
  - 6. Error in the admission or rejection of evidence or other errors of law occurring at the hearing, or
  - 7. That the decision is not supported by the evidence or is contrary to law.
- D.** The Director shall rule on the motion within 15 days after the response to the motion is filed. If no response to the motion is filed, the Director shall rule on the motion within five days after the expiration of the response period.
- E.** An order issued by the Director granting a rehearing or review shall specify the grounds for the rehearing or review.

### **ARTICLE 2. PUBLIC PARTICIPATION IN RULEMAKING**

#### **R9-1-201. Definitions**

In addition to the definitions in R9-1-101(A), the following definitions apply in this Article, unless otherwise specified:

- 1. "Amendment" means a change to a rule, including added or deleted text.
- 2. "Arizona Administrative Code" means the publication described in A.R.S. § 41-1012.
- 3. "Citation" means the number that identifies a rule.

## APPENDIX A- Current Rules

### 9 A.A.C. 1 Articles 1-3. Administration

4. "Person" means the same as in A.R.S. § 41-1001(13).
5. "Rulemaking" means the same as in A.A.C. R1-1-101.
6. "Rulemaking record" means a file maintained by the Department as specified in A.R.S. § 41-1029.
7. "Substantive policy statement means the same as in A.R.S. § 41-1001(20).
8. "Text" means a letter, number, symbol, table, or punctuation in a rule.

#### **R9-1-202. Rulemaking Record**

Except on a state holiday, an individual may review a rulemaking record at the Office of the Director, Monday through Friday, from 8:00 a.m. until 5:00 p.m.

#### **R9-1-203. Petition for Department Rulemaking and Petition for Review of a Department Practice or Substantive Policy Statement**

**A.** A petition to the Department for rulemaking under A.R.S. § 41-1033 shall include:

1. The name and address of the individual who submits the petition;
2. An identification of the rulemaking, including:
  - a. A statement of the rulemaking sought,
  - b. The Arizona Administrative Code citation of each existing rule included in the petition, and
  - c. A description of each new rule included in the petition;
3. The specific text of each new rule or amendment;
4. The reasons for requesting the rulemaking, supported by:
  - a. Statistical data;
  - b. If the statistical data refers to exhibits, the exhibits;
  - c. An identification of the persons who would be affected by the rulemaking and the type of effect; and
  - d. Other information supporting the rulemaking;
5. The signature of the individual who submits the petition;
6. The date the petition is signed; and
7. A copy of each existing rule included in the petition.

**B.** A petition to the Department under A.R.S. § 41-1033 for review of a Department practice or substantive policy statement that allegedly constitutes a rule shall include:

1. The name and address of the individual who submits the petition,
2. The reasons why the Department's practice or substantive policy statement allegedly constitutes a rule,

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3. The signature of the individual who submits the petition,
  4. The date the petition is signed, and
  5. A copy of the Department's substantive policy statement or a description of the Department's practice.
- C.** According to A.R.S. § 41-1033(A), the Department shall notify an individual who submits a subsection (A) or subsection (B) petition of the Department's decision in writing within 60 days after receipt of the petition.
- D.** If the Department denies a subsection (A) or subsection (B) petition, the individual who submitted the petition may proceed according to either A.R.S. § 41-1033(B) or A.R.S. § 41-1034 or according to both A.R.S. § 41-1033(B) and A.R.S. § 41-1034.

### **ARTICLE 3. DISCLOSURE OF MEDICAL RECORDS, PAYMENT RECORDS, AND PUBLIC HEALTH RECORDS**

#### **R9-1-301. Definitions**

In addition to the definitions in R9-1-101(A), the following definitions apply in this Article, unless otherwise specified:

1. "Behavioral health services" means the assessment, diagnosis, or treatment of an individual's mental, emotional, psychiatric, psychological, psychosocial, or substance abuse issues.
2. "Business day" means the same as in A.R.S. § 10-140.
3. "Commercial purpose" means the same as in A.R.S. § 39-121.03(D).
4. "Consent" means permission by an individual or by the individual's parent, legal guardian, or other health care decision maker to have medical services provided to the individual.
5. "Correctional facility" means the same as in A.R.S. § 13-2501(2).
6. "Court of competent jurisdiction" means a court with the authority to enter an order.
7. "De-identified" means a public health record from which the information listed in 45 CFR 164.514(b)(2)(i) for an individual and the individual's relatives, employers, or household members has been removed.
8. "Diagnosis" means an identification of a disease or an injury by an individual authorized by law to make the identification.
9. "Disclose" means to release, transfer, provide access to, or divulge information in any other manner.
10. "Disclosure" means the release, transfer, provision of access to, or divulging of information in any other manner by the person holding the information.

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11. "Disease" means a condition or disorder that causes the human body to deviate from its normal or healthy state.
12. "Documentation" means written supportive evidence.
13. "Emancipated minor" means an individual less than age 18 who:
  - a. Is determined to be independent of parents or legal guardians under A.R.S. Title 12, Chapter 15, Article 1, as added by Laws 2005, Chapter 137, § 3, effective August 12, 2005;
  - b. Meets the requirements for recognition as an emancipated minor in A.R.S. § 12-2455, as added by Laws 2005, Chapter 137, § 3, effective August 12, 2005;
  - c. Has the ability to make a contract under A.R.S. § 44-131 or to consent to medical services under A.R.S. § 44-132; or
  - d. Is married or is a U.S. armed forces enlisted member.
14. "Employee" means an individual who works for the Department for compensation.
15. "Enlisted member" means the same as in 32 U.S.C. 101(9).
16. "Epidemic" means a disease that affects a disproportionately large number of individuals in a population, community, or region at the same time.
17. "Estate" means the same as in A.R.S. § 14-1201(16).
18. "Financial institution" means a bank, a savings and loan association, a credit union, or a consumer lender.
19. "Halfway house" means a residential facility that temporarily provides shelter, food, and other services to an individual after the individual completes a confinement in a correctional facility or a stay in a health care institution.
20. "Health care decision maker" means the same as in A.R.S. § 12-2291(3).
21. "Health care institution" means the same as in A.R.S. § 36-401(23).
22. "Health care system" means the facilities, personnel, and financial resources in place in a state or other geographic area for delivering behavioral health services, medical services, nursing services, and health-related services to individuals in the state or other geographic area.
23. "Health oversight activity" means:
  - a. Supervision of the health care system,
  - b. Determining eligibility for health-related government benefit programs,
  - c. Determining compliance with health-related government regulatory programs, or
  - d. Determining compliance with civil rights laws for which health-related information is relevant.
24. "Health-related services" means the same as in A.R.S. § 36-401(24).

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25. "Homeless minor" means an individual described in A.R.S. § 44-132(C).
26. "Homeless shelter" means the same as in A.R.S. § 16-121(D).
27. "Human Subjects Review Board" means individuals designated by the Director to:
  - a. Review human subjects research that is conducted, funded, or sponsored by the Department for consistency with 45 CFR Part 46, Subpart A, dealing with the protection of the human subjects;
  - b. Review requests for Department information from external entities conducting or planning to conduct human subjects research; and
  - c. Establish guidelines for the submission and review of human subjects research.
28. "Incapacitated person" means the same as in A.R.S. § 14-5101(1).
29. "Incidence" means the rate of cases of a disease or an injury in a population, community, or region during a specified period.
30. "Individually identifiable health information" means the information described in 42 U.S.C. 1320d(6).
31. "Injury" means trauma or damage to a part of the human body.
32. "Jurat" means the same as in A.R.S. § 41-311(6).
33. "Legal guardian" means an individual:
  - a. Appointed by a court of competent jurisdiction under A.R.S. Title 8, Chapter 10, Article 5 or A.R.S. Title 14, Chapter 5;
  - b. Appointed by a court of competent jurisdiction under another state's laws for the protection of minors and incapacitated persons; or
  - c. Appointed for a minor or an incapacitated person in a probated will.
34. "Medical records" means the same as in A.R.S. § 12-2291(5).
35. "Medical services" means the same as in A.R.S. § 36-401(31).
36. "Minor" means the same as in A.R.S. § 36-798(5).
37. "Nursing services" means the same as in A.R.S. § 36-401(35).
38. "Outbreak" means an unexpected increase in the incidence of a disease as determined by the Department or a health agency defined in A.R.S. § 36-671(5).
39. "Parent" means a biological or adoptive mother or father of an individual.
40. "Patient" means an individual receiving behavioral health services, medical services, nursing services, or health-related services.
41. "Payment records" means the same as in A.R.S. § 12-2291(6).
42. "Person" means the same as in A.R.S. § 41-1001(13).

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43. "Personal representative" means the same as in A.R.S. § 14-1201(38).
44. "Probated will" means a will that has been proved as valid in a court of competent jurisdiction.
45. "Public health intervention" means responding to and containing:
  - a. Outbreaks or epidemics of disease, or
  - b. The incidence of injury.
46. "Public health investigation" means identifying and examining:
  - a. Outbreaks or epidemics of disease, or
  - b. The incidence of injury.
47. "Public health records" means information created, obtained, or maintained by the Department for:
  - a. Public health surveillance, public health investigation, or public health intervention;
  - b. A system of public health statistics;
  - c. A system of vital records; or
  - d. Health oversight activities.
48. "Public health surveillance" means monitoring the incidence and spread of a disease or an injury.
49. "Research" means the same as in 45 CFR 164.501.
50. "State" means the same as in A.R.S. § 36-841.
51. "Surviving spouse" means the individual:
  - a. To whom a deceased individual was married at the time of death, and
  - b. Who is currently alive.
52. "System of public health statistics" means the same as in A.R.S. § 36-301(31).
53. "System of vital records" means the same as in A.R.S. § 36-301(32).
54. "Third person" means a person other than:
  - a. The individual identified by medical records; or
  - b. The individual's parent, legal guardian, or other health care decision maker:
55. "Treatment" means a procedure or method to cure, improve, or palliate a disease or an injury.
56. "Valid authorization" means written permission to disclose individually identifiable health information that contains all the elements described in 45 CFR 164.508(c)(1).
57. "Veteran" means the same as in 38 U.S.C. 101(2).
58. "Vital record" means the same as in A.R.S. § 36-301(33).
59. "Volunteer" means an individual who works for the Department without compensation.
60. "Will" means the same as in A.R.S. § 14-1201(59).

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#### R9-1-302. Medical Records or Payment Records Disclosure

- A. Except as provided in subsection (B), an employee or volunteer shall not disclose to a third person medical records or payment records containing individually identifiable health information that the employee or volunteer obtained or accessed as a result of the employment or volunteering.
- B. Unless otherwise prohibited by law, an employee or volunteer may disclose to a third person medical records or payment records containing individually identifiable health information:
1. With the valid authorization of the individual identified by the information in the medical records or payment records, if the individual:
    - a. Is at least age 18 or an emancipated minor, and
    - b. Is not an incapacitated person;
  2. With the valid authorization of the parent, legal guardian, or other health care decision maker of the individual identified by the information in the medical records or payment records, if the individual is:
    - a. Less than age 18, other than an emancipated minor; or
    - b. An incapacitated person;
  3. With the valid authorization of the individual identified by the information in the medical records or payment records, regardless of age, if:
    - a. The information to be disclosed resulted from the consent given by the individual under A.R.S. § 44-132.01 or A.R.S. § 36-663; and
    - b. The individual is not an incapacitated person;
  4. With the valid authorization of the individual identified by information in the medical records or payment records if:
    - a. The information to be disclosed resulted from the individual's treatment under A.R.S. § 44-133.01;
    - b. The individual was at least age 12 at the time of the treatment under A.R.S. § 44-133.01 as established by documentation, such as a copy of the individual's:
      - i. Driver license issued by a state, or
      - ii. Birth certificate; and
    - c. The individual is not an incapacitated person;
  5. If the individual identified by the information in the medical records or payment records is deceased, upon the written request to the Department according to subsection (D) for disclosure of the deceased individual's medical records or payment records to:
    - a. The deceased individual's health care decision maker at the time of death;

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- b. The personal representative of the deceased individual's estate; or
  - c. If the deceased individual's estate has no personal representative, a person listed in A.R.S. §§ 12-2294(D)(1) through 12-2294(D)(6);
6. At the direction of the Human Subjects Review Board, if the medical records or payment records are sought for research and the disclosure meets the requirements of 45 CFR 164.512(i)(2); or
7. As required by an order issued by a court of competent jurisdiction.
- C. For purposes of subsection (B)(1), an individual less than age 18 who claims emancipated minor status shall submit to the Department a valid authorization signed by the individual less than age 18 and:
- 1. A copy of an order emancipating the individual issued by the Superior Court of Arizona;
  - 2. If the individual was an emancipated minor in a state other than Arizona:
    - a. Documentation establishing that the individual is at least age 16, such as a copy of the individual's:
      - i. Driver license issued by a state, or
      - ii. Birth certificate; and
    - b. Documentation of the individual's emancipation, such as a copy of:
      - i. An order emancipating the individual issued by a court of competent jurisdiction of a state other than Arizona,
      - ii. A real property purchase agreement signed by the individual as the buyer or the seller in a state other than Arizona,
      - iii. An order for the individual to pay child support issued by a court of competent jurisdiction of a state other than Arizona, or
      - iv. A financial institution loan agreement signed by the individual as the borrower in a state other than Arizona;
  - 3. A copy of the individual's marriage certificate issued by a state;
  - 4. If the individual is a homeless minor, documentation such as:
    - a. A statement on the letterhead of a homeless shelter or halfway house that:
      - i. Is dated within 10 days before the date the Department receives the document,
      - ii. States the homeless shelter or halfway house is the individual's primary residence,
      - iii. Is signed by an authorized signer for the homeless shelter or halfway house, and
      - iv. States the authorized signer's title or position at the homeless shelter or halfway house; or
    - b. A statement signed by the individual that:
      - i. The individual does not live with the individual's parents, and

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- ii. The individual lacks a fixed nighttime residence;
  - 5. If the individual is a U.S. armed forces enlisted member, a copy of the individual's U.S. armed forces:
    - a. Enlistment document, or
    - b. Identification card; or
  - 6. If the individual is a U.S. armed forces veteran, a copy of the individual's discharge certificate.
- D.** A request to the Department under subsection (B)(5) to disclose medical records or payment records shall include:
- 1. The name of the individual identified by the information in the medical records or payment records;
  - 2. A statement that the individual identified by the information in the medical records or payment records is deceased;
  - 3. The description and dates of the medical records or payment records requested;
  - 4. The name, address, and telephone number of the person requesting the medical records or payment records disclosure;
  - 5. Whether the person requesting the medical records or payment records disclosure:
    - a. Was the deceased individual's health care decision maker at the time of death,
    - b. Is the personal representative of the deceased individual's estate, or
    - c. Is a person listed in A.R.S. § 12-2294(D);
  - 6. The signature of the individual requesting the medical records or payment records disclosure;
  - 7. Documentation that the individual identified by the information in the medical records or payment records is deceased, such as a copy of:
    - a. The individual's death certificate,
    - b. A published obituary notice for the individual, or
    - c. Written notification of the individual's death; and
  - 8. Documentation establishing the relationship to the deceased individual indicated under subsection (D)(5), such as a copy of:
    - a. Appointment as the deceased individual's legal guardian by a court of competent jurisdiction,
    - b. Appointment as the personal representative of the deceased individual's estate by a court of competent jurisdiction,
    - c. The deceased individual's birth certificate naming the person requesting the medical records or payment records as a parent,

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- d. The birth certificate of the person requesting the medical records or payment records naming the deceased individual as a parent, or
- e. If the person requesting the medical records or payment records disclosure is the deceased individual's surviving spouse:
  - i. A copy of the person's marriage certificate naming the deceased individual as spouse, and
  - ii. The person's statement that the person and the deceased individual were not divorced or legally separated at the time of the deceased individual's death, or
  - iii. A copy of the deceased individual's probated will naming the person as the deceased individual's surviving spouse.
- E. The Department shall send a response to a request for medical records or payment records disclosure under subsection (B)(5) that meets the requirements of subsection (D):
  - 1. By regular mail,
  - 2. To the address provided under subsection (D)(4), and
  - 3. Within 30 days after the date the Department receives the request.

#### **R9-1-303. Public Health Records Disclosure**

- A. A.R.S. Title 39, Chapter 1, Article 2 governs the Department's disclosure of public health records, except for:
  - 1. Disclosure of public health records under A.R.S. §§ 36-104(9) and 36-105;
  - 2. Disclosure of vital records under A.R.S. §§ 36-324, 36-342, and 36-351; and
  - 3. At the direction of the Human Subjects Review Board, disclosure of public health records that are not de-identified when:
    - a. The public health records are sought for research, and
    - b. The disclosure meets the requirements of 45 CFR 164.512(i)(2).
- B. For disclosure of public health records under A.R.S. Title 39, Chapter 1, Article 2, an individual shall submit to the Department a public records request that contains:
  - 1. The request date;
  - 2. The requester's name, address, and telephone number;
  - 3. If applicable, the name, address, and telephone number of the requester's organization;
  - 4. A specific identification of the public health records to be disclosed, including the description and dates of the records;
  - 5. Whether the public health records identified in subsection (B)(4) will be used for commercial purposes;

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6. If the requester indicates under subsection (B)(5) that the public health records will be used for commercial purposes, an explanation of each commercial purpose;
  7. The requester's signature; and
  8. If the requester indicates under subsection (B)(5) that the public health records will be used for a commercial purpose:
    - a. A jurat completed by an Arizona notary; or
    - b. A notarization from another state indicating that the notary:
      - i. Verified the signer's identity,
      - ii. Observed the signing of the document, and
      - iii. Heard the signer swear or affirm the truthfulness of the document.
- C.** Within 15 business days after the Department receives a public records request that meets the requirements in subsection (B) or at a later time agreed upon by the Department and the individual requesting the records, the Department shall respond to the request by:
1. Sending by regular mail to the address provided in subsection (B)(2):
    - a. An acknowledgement that the Department received the public records request;
    - b. A list of categories of public health records that are not subject to disclosure; and
    - c. For the public health records requested that are subject to disclosure, a statement that the Department will notify the individual when disclosure will be provided; or
  2. Providing:
    - a. A list of categories of public health records that are not subject to disclosure; and
    - b. For the public health records requested that are subject to disclosure, disclosure of the records.
- D.** The Department shall ensure that public health records disclosed pursuant to a public records request are de-identified.
- E.** For copies of public health records disclosed pursuant to a public records request:
1. If the copies are for a commercial purpose, the Department shall charge:
    - a. The amount determined according to A.R.S. § 39-121.03, and
    - b. Based on the requester's explanation under subsection (B)(6);
  2. If the copies are not for a commercial purpose, the Department shall charge twenty-five cents per page; or
  3. If the copies are for a purpose stated in A.R.S. § 39-122(A), the Department shall not impose a charge.

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#### 36-104. Powers and duties

This section is not to be construed as a statement of the department's organization. This section is intended to be a statement of powers and duties in addition to the powers and duties granted by section 36-103. The director shall:

1. Administer the following services:

(a) Administrative services, which shall include at a minimum the functions of accounting, personnel, standards certification, electronic data processing, vital statistics and the development, operation and maintenance of buildings and grounds used by the department.

(b) Public health support services, which shall include at a minimum:

(i) Consumer health protection programs, consistent with paragraph 25 of this section, that include at least the functions of community water supplies, general sanitation, vector control and food and drugs.

(ii) Epidemiology and disease control programs that include at least the functions of chronic disease, accident and injury control, communicable diseases, tuberculosis, venereal disease and others.

(iii) Laboratory services programs.

(iv) Health education and training programs.

(v) Disposition of human bodies programs.

(c) Community health services, which shall include at a minimum:

(i) Medical services programs that include at least the functions of maternal and child health, preschool health screening, family planning, public health nursing, premature and newborn program, immunizations, nutrition, dental care prevention and migrant health.

(ii) Dependency health care services programs that include at least the functions of need determination, availability of health resources to medically dependent individuals, quality control, utilization control and industry monitoring.

(iii) Children with physical disabilities services programs.

(iv) Programs for the prevention and early detection of an intellectual disability.

(d) Program planning, which shall include at least the following:

(i) An organizational unit for comprehensive health planning programs.

(ii) Program coordination, evaluation and development.

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(iii) Need determination programs.

(iv) Health information programs.

2. Include and administer, within the office of the director, staff services, which shall include at a minimum budget preparation, public information, appeals, hearings, legislative and federal government liaison, grant development and management and departmental and interagency coordination.

3. Make rules for the organization and proper and efficient operation of the department.

4. Determine when a health care emergency or medical emergency situation exists or occurs within this state that cannot be satisfactorily controlled, corrected or treated by the health care delivery systems and facilities available. When such a situation is determined to exist, the director shall immediately report that situation to the legislature and the governor. The report shall include information on the scope of the emergency, recommendations for solution of the emergency and estimates of costs involved.

5. Provide a system of unified and coordinated health services and programs between this state and county governmental health units at all levels of government.

6. Formulate policies, plans and programs to effectuate the missions and purposes of the department.

7. Make contracts and incur obligations within the general scope of the department's activities and operations subject to the availability of monies.

8. Be designated as the single state agency for the purposes of administering and in furtherance of each federally supported state plan.

9. Provide information and advice on request by local, state and federal agencies and by private citizens, business enterprises and community organizations on matters within the scope of the department's duties subject to the departmental rules and regulations on the confidentiality of information.

10. Establish and maintain separate financial accounts as required by federal law or regulations.

11. Advise with and make recommendations to the governor and the legislature on all matters concerning the department's objectives.

12. Take appropriate steps to reduce or contain costs in the field of health services.

13. Encourage and assist in the adoption of practical methods of improving systems of comprehensive planning, of program planning, of priority setting and of allocating resources.

14. Encourage an effective use of available federal resources in this state.

15. Research, recommend, advise and assist in the establishment of community or area health facilities, both public and private, and encourage the integration of planning, services and programs for the development of the state's health delivery capability.

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16. Promote the effective use of health manpower and health facilities that provide health care for the citizens of this state.
17. Take appropriate steps to provide health care services to the medically dependent citizens of this state.
18. Certify training on the nature of sudden infant death syndrome, which shall include information on the investigation and handling of cases involving sudden and unexplained infant death for use by law enforcement officers as part of their basic training requirement.
19. Adopt protocols on the manner in which an autopsy shall be conducted under section 11-597, subsection D in cases of sudden and unexplained infant death.
20. Cooperate with the Arizona-Mexico commission in the governor's office and with researchers at universities in this state to collect data and conduct projects in the United States and Mexico on issues that are within the scope of the department's duties and that relate to quality of life, trade and economic development in this state in a manner that will help the Arizona-Mexico commission to assess and enhance the economic competitiveness of this state and of the Arizona-Mexico region.
21. Administer the federal family violence prevention and services act grants, and the department is designated as this state's recipient of federal family violence prevention and services act grants.
22. Accept and spend private grants of monies, gifts and devises for the purposes of methamphetamine education. The department shall disburse these monies to local prosecutorial or law enforcement agencies with existing programs, faith-based organizations and nonprofit entities that are qualified under section 501(c)(3) of the United States internal revenue code, including nonprofit entities providing services to women with a history of dual diagnosis disorders, and that provide educational programs on the repercussions of methamphetamine use. State general fund monies shall not be spent for the purposes of this paragraph. If the director does not receive sufficient monies from private sources to carry out the purposes of this paragraph, the director shall not provide the educational programs prescribed in this paragraph. Grant monies received pursuant to this paragraph are not lapsing and do not revert to the state general fund at the close of the fiscal year.
23. Identify successful methamphetamine prevention programs in other states that may be implemented in this state.
24. Pursuant to chapter 13, article 8 of this title, coordinate all public health and risk assessment issues associated with a chemical or other toxic fire event if a request for the event is received from the incident commander, the emergency response commission or the department of public safety and if funding is available. Coordination of public health issues shall include general environmental health consultation and risk assessment services consistent with chapter 13, article 8 of this title and, in consultation with the Arizona poison control system, informing the public as to potential public health risks from the environmental exposure. Pursuant to chapter 13, article 8 of this title, the department of health services shall also prepare a report, in consultation with appropriate state, federal and local governmental agencies, that evaluates the public health risks from the environmental exposure. The department of health services' report shall include any department of environmental quality report and map of smoke dispersion from the fire, the results of any environmental samples taken by the department of environmental quality and the toxicological implications and public health risks of the environmental exposure. The department of health services shall consult with the Arizona poison control system regarding toxicology issues and shall

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prepare and produce its report for the public as soon as practicable after the event. The department of health services shall not use any monies pursuant to section 49-282, subsection E to implement this paragraph.

25. Consult, cooperate, collaborate and, if necessary, enter into interagency agreements and memoranda of understanding with the Arizona department of agriculture concerning its administration, pursuant to title 3, chapter 3, article 4.1, of this state's authority under the United States food and drug administration produce safety rule (21 Code of Federal Regulations part 112) and any other federal produce safety regulation, order or guideline or other requirement adopted pursuant to the FDA food safety modernization act (P.L. 111-353; 21 United States Code sections 2201 through 2252).

26. Adopt rules pursuant to title 32, chapter 32, article 5 prescribing the designated database information to be collected by health profession regulatory boards for the health professionals workforce database.

#### 36-105. Information; state-federal cooperation

Subject to the laws and departmental rules and regulations on the confidentiality of information promulgated pursuant thereto, and upon request, the department shall furnish information to any agency of the United States which is charged with the administration of health services.

#### 36-107. Power to promulgate rules concerning confidential nature of records

The director shall promulgate such rules and regulations as are required by state law or federal law or regulation to protect confidential information. No names or other information of any applicant, claimant, recipient or employer shall be made available for any political, commercial or other unofficial purpose.

#### 36-136. Powers and duties of director; compensation of personnel; rules; definitions

A. The director shall:

1. Be the executive officer of the department of health services and the state registrar of vital statistics but shall not receive compensation for services as registrar.
2. Perform all duties necessary to carry out the functions and responsibilities of the department.
3. Prescribe the organization of the department. The director shall appoint or remove personnel as necessary for the efficient work of the department and shall prescribe the duties of all personnel. The director may abolish any office or position in the department that the director believes is unnecessary.
4. Administer and enforce the laws relating to health and sanitation and the rules of the department.
5. Provide for the examination of any premises if the director has reasonable cause to believe that on the premises there exists a violation of any health law or rule of this state.
6. Exercise general supervision over all matters relating to sanitation and health throughout this state. When in the opinion of the director it is necessary or advisable, a sanitary survey of the whole or of any part of this state shall be made. The director may enter, examine and survey any source and means of water supply, sewage disposal plant, sewerage system, prison, public or private place of detention,

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asylum, hospital, school, public building, private institution, factory, workshop, tenement, public washroom, public restroom, public toilet and toilet facility, public eating room and restaurant, dairy, milk plant or food manufacturing or processing plant, and any premises in which the director has reason to believe there exists a violation of any health law or rule of this state that the director has the duty to administer.

7. Prepare sanitary and public health rules.

8. Perform other duties prescribed by law.

B. If the director has reasonable cause to believe that there exists a violation of any health law or rule of this state, the director may inspect any person or property in transportation through this state, and any car, boat, train, trailer, airplane or other vehicle in which that person or property is transported, and may enforce detention or disinfection as reasonably necessary for the public health if there exists a violation of any health law or rule.

C. The director, after consultation with the department of administration, may take all necessary steps to enhance the highest and best use of the state hospital property, including contracting with third parties to provide services, entering into short-term lease agreements with third parties to occupy or renovate existing buildings and entering into long-term lease agreements to develop the land and buildings. The director shall deposit any monies collected from contracts and lease agreements entered into pursuant to this subsection in the Arizona state hospital charitable trust fund established by section 36-218. At least thirty days before issuing a request for proposals pursuant to this subsection, the department of health services shall hold a public hearing to receive community and provider input regarding the highest and best use of the state hospital property related to the request for proposals. The department shall report to the joint committee on capital review on the terms, conditions and purpose of any lease or sublease agreement entered into pursuant to this subsection relating to state hospital lands or buildings or the disposition of real property pursuant to this subsection, including state hospital lands or buildings, and the fiscal impact on the department and any revenues generated by the agreement. Any lease or sublease agreement entered into pursuant to this subsection relating to state hospital lands or buildings or the disposition of real property pursuant to this subsection, including state hospital lands or buildings, must be reviewed by the joint committee on capital review.

D. The director may deputize, in writing, any qualified officer or employee in the department to do or perform on the director's behalf any act the director is by law empowered to do or charged with the responsibility of doing.

E. The director may delegate to a local health department, county environmental department or public health services district any functions, powers or duties that the director believes can be competently, efficiently and properly performed by the local health department, county environmental department or public health services district if:

1. The director or superintendent of the local health agency, environmental agency or public health services district is willing to accept the delegation and agrees to perform or exercise the functions, powers and duties conferred in accordance with the standards of performance established by the director of the department of health services.

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2. Monies appropriated or otherwise made available to the department for distribution to or division among counties or public health services districts for local health work may be allocated or reallocated in a manner designed to ensure the accomplishment of recognized local public health activities and delegated functions, powers and duties in accordance with applicable standards of performance. Whenever in the director's opinion there is cause, the director may terminate all or a part of any delegation and may reallocate all or a part of any funds that may have been conditioned on the further performance of the functions, powers or duties conferred.

F. The compensation of all personnel shall be as determined pursuant to section 38-611.

G. The director may make and amend rules necessary for the proper administration and enforcement of the laws relating to the public health.

H. Notwithstanding subsection I, paragraph 1 of this section, the director may define and prescribe emergency measures for detecting, reporting, preventing and controlling communicable or infectious diseases or conditions if the director has reasonable cause to believe that a serious threat to public health and welfare exists. Emergency measures are effective for no longer than eighteen months.

I. The director, by rule, shall:

1. Define and prescribe reasonably necessary measures for detecting, reporting, preventing and controlling communicable and preventable diseases. The rules shall declare certain diseases reportable. The rules shall prescribe measures, including isolation or quarantine, that are reasonably required to prevent the occurrence of, or to seek early detection and alleviation of, disability, insofar as possible, from communicable or preventable diseases. The rules shall include reasonably necessary measures to control animal diseases transmittable to humans.

2. Define and prescribe reasonably necessary measures, in addition to those prescribed by law, regarding the preparation, embalming, cremation, interment, disinterment and transportation of dead human bodies and the conduct of funerals, relating to and restricted to communicable diseases and regarding the removal, transportation, cremation, interment or disinterment of any dead human body.

3. Define and prescribe reasonably necessary procedures that are not inconsistent with law in regard to the use and accessibility of vital records, delayed birth registration and the completion, change and amendment of vital records.

4. Except as relating to the beneficial use of wildlife meat by public institutions and charitable organizations pursuant to title 17, prescribe reasonably necessary measures to ensure that all food or drink, including meat and meat products and milk and milk products sold at the retail level, provided for human consumption is free from unwholesome, poisonous or other foreign substances and filth, insects or disease-causing organisms. The rules shall prescribe reasonably necessary measures governing the production, processing, labeling, storing, handling, serving and transportation of these products. The rules shall prescribe minimum standards for the sanitary facilities and conditions that shall be maintained in any warehouse, restaurant or other premises, except a meat packing plant, slaughterhouse, wholesale meat processing plant, dairy product manufacturing plant or trade product manufacturing plant. The rules shall prescribe minimum standards for any truck or other vehicle in which food or drink is produced, processed, stored, handled, served or transported. The rules shall provide for the inspection and licensing of premises and vehicles so used, and for abatement as public nuisances of any premises or vehicles that

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do not comply with the rules and minimum standards. The rules shall provide an exemption relating to food or drink that is:

- (a) Served at a noncommercial social event such as a potluck.
- (b) Prepared at a cooking school that is conducted in an owner-occupied home.
- (c) Not potentially hazardous and prepared in a kitchen of a private home for occasional sale or distribution for noncommercial purposes.
- (d) Prepared or served at an employee-conducted function that lasts less than four hours and is not regularly scheduled, such as an employee recognition, an employee fund-raising or an employee social event.
- (e) Offered at a child care facility and limited to commercially prepackaged food that is not potentially hazardous and whole fruits and vegetables that are washed and cut on-site for immediate consumption.
- (f) Offered at locations that sell only commercially prepackaged food or drink that is not potentially hazardous.
- (g) A cottage food product that is not potentially hazardous or a time or temperature control for safety food and that is prepared in a kitchen of a private home for commercial purposes, including fruit jams and jellies, dry mixes made with ingredients from approved sources, honey, dry pasta and roasted nuts. Cottage food products must be packaged at home with an attached label that clearly states the name and registration number of the food preparer, lists all the ingredients in the product and the product's production date and includes the following statement: "This product was produced in a home kitchen that may process common food allergens and is not subject to public health inspection." If the product was made in a facility for individuals with developmental disabilities, the label must also disclose that fact. The person preparing the food or supervising the food preparation must complete a food handler training course from an accredited program and maintain active certification. The food preparer must register with an online registry established by the department pursuant to paragraph 13 of this subsection. The food preparer must display the preparer's certificate of registration when operating as a temporary food establishment. For the purposes of this subdivision, "not potentially hazardous" means cottage food products that meet the requirements of the food code published by the United States food and drug administration, as modified and incorporated by reference by the department by rule.
- (h) A whole fruit or vegetable grown in a public school garden that is washed and cut on-site for immediate consumption.
- (i) Produce in a packing or holding facility that is subject to the United States food and drug administration produce safety rule (21 Code of Federal Regulations part 112) as administered by the Arizona department of agriculture pursuant to title 3, chapter 3, article 4.1. For the purposes of this subdivision, "holding", "packing" and "produce" have the same meanings prescribed in section 3-525.

5. Prescribe reasonably necessary measures to ensure that all meat and meat products for human consumption handled at the retail level are delivered in a manner and from sources approved by the Arizona department of agriculture and are free from unwholesome, poisonous or other foreign substances

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and filth, insects or disease-causing organisms. The rules shall prescribe standards for sanitary facilities to be used in identity, storage, handling and sale of all meat and meat products sold at the retail level.

6. Prescribe reasonably necessary measures regarding production, processing, labeling, handling, serving and transportation of bottled water to ensure that all bottled drinking water distributed for human consumption is free from unwholesome, poisonous, deleterious or other foreign substances and filth or disease-causing organisms. The rules shall prescribe minimum standards for the sanitary facilities and conditions that shall be maintained at any source of water, bottling plant and truck or vehicle in which bottled water is produced, processed, stored or transported and shall provide for inspection and certification of bottled drinking water sources, plants, processes and transportation and for abatement as a public nuisance of any water supply, label, premises, equipment, process or vehicle that does not comply with the minimum standards. The rules shall prescribe minimum standards for bacteriological, physical and chemical quality for bottled water and for the submission of samples at intervals prescribed in the standards.

7. Define and prescribe reasonably necessary measures governing ice production, handling, storing and distribution to ensure that all ice sold or distributed for human consumption or for the preservation or storage of food for human consumption is free from unwholesome, poisonous, deleterious or other foreign substances and filth or disease-causing organisms. The rules shall prescribe minimum standards for the sanitary facilities and conditions and the quality of ice that shall be maintained at any ice plant, storage and truck or vehicle in which ice is produced, stored, handled or transported and shall provide for inspection and licensing of the premises and vehicles, and for abatement as public nuisances of ice, premises, equipment, processes or vehicles that do not comply with the minimum standards.

8. Define and prescribe reasonably necessary measures concerning sewage and excreta disposal, garbage and trash collection, storage and disposal, and water supply for recreational and summer camps, campgrounds, motels, tourist courts, trailer coach parks and hotels. The rules shall prescribe minimum standards for preparation of food in community kitchens, adequacy of excreta disposal, garbage and trash collection, storage and disposal and water supply for recreational and summer camps, campgrounds, motels, tourist courts, trailer coach parks and hotels and shall provide for inspection of these premises and for abatement as public nuisances of any premises or facilities that do not comply with the rules. Primitive camp and picnic grounds offered by this state or a political subdivision of this state are exempt from rules adopted pursuant to this paragraph but are subject to approval by a county health department under sanitary regulations adopted pursuant to section 36-183.02. Rules adopted pursuant to this paragraph do not apply to two or fewer recreational vehicles as defined in section 33-2102 that are not park models or park trailers, that are parked on owner-occupied residential property for less than sixty days and for which no rent or other compensation is paid. For the purposes of this paragraph, "primitive camp and picnic grounds" means camp and picnic grounds that are remote in nature and without accessibility to public infrastructure such as water, electricity and sewer.

9. Define and prescribe reasonably necessary measures concerning the sewage and excreta disposal, garbage and trash collection, storage and disposal, water supply and food preparation of all public schools. The rules shall prescribe minimum standards for sanitary conditions that shall be maintained in any public school and shall provide for inspection of these premises and facilities and for abatement as public nuisances of any premises that do not comply with the minimum standards.

10. Prescribe reasonably necessary measures to prevent pollution of water used in public or semipublic swimming pools and bathing places and to prevent deleterious health conditions at these places. The rules shall prescribe minimum standards for sanitary conditions that shall be maintained at any public or

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semipublic swimming pool or bathing place and shall provide for inspection of these premises and for abatement as public nuisances of any premises and facilities that do not comply with the minimum standards. The rules shall be developed in cooperation with the director of the department of environmental quality and shall be consistent with the rules adopted by the director of the department of environmental quality pursuant to section 49-104, subsection B, paragraph 12.

11. Prescribe reasonably necessary measures to keep confidential information relating to diagnostic findings and treatment of patients, as well as information relating to contacts, suspects and associates of communicable disease patients. In no event shall confidential information be made available for political or commercial purposes.

12. Prescribe reasonably necessary measures regarding human immunodeficiency virus testing as a means to control the transmission of that virus, including the designation of anonymous test sites as dictated by current epidemiologic and scientific evidence.

13. Establish an online registry of food preparers that are authorized to prepare cottage food products for commercial purposes pursuant to paragraph 4 of this subsection. A registered food preparer shall renew the registration every three years and shall provide to the department updated registration information within thirty days after any change.

14. Prescribe an exclusion for fetal demise cases from the standardized survey known as "the hospital consumer assessment of healthcare providers and systems".

J. The rules adopted under the authority conferred by this section shall be observed throughout the state and shall be enforced by each local board of health or public health services district, but this section does not limit the right of any local board of health or county board of supervisors to adopt ordinances and rules as authorized by law within its jurisdiction, provided that the ordinances and rules do not conflict with state law and are equal to or more restrictive than the rules of the director.

K. The powers and duties prescribed by this section do not apply in instances in which regulatory powers and duties relating to public health are vested by the legislature in any other state board, commission, agency or instrumentality, except that with regard to the regulation of meat and meat products, the department of health services and the Arizona department of agriculture within the area delegated to each shall adopt rules that are not in conflict.

L. The director, in establishing fees authorized by this section, shall comply with title 41, chapter 6. The department shall not set a fee at more than the department's cost of providing the service for which the fee is charged. State agencies are exempt from all fees imposed pursuant to this section.

M. After consultation with the state superintendent of public instruction, the director shall prescribe the criteria the department shall use in deciding whether or not to notify a local school district that a pupil in the district has tested positive for the human immunodeficiency virus antibody. The director shall prescribe the procedure by which the department shall notify a school district if, pursuant to these criteria, the department determines that notification is warranted in a particular situation. This procedure shall include a requirement that before notification the department shall determine to its satisfaction that the district has an appropriate policy relating to nondiscrimination of the infected pupil and confidentiality of test results and that proper educational counseling has been or will be provided to staff and pupils.

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N. Until the department adopts exemptions by rule as required by subsection I, paragraph 4, subdivision (f) of this section, food and drink are exempt from the rules prescribed in subsection I of this section if offered at locations that sell only commercially prepackaged food or drink that is not potentially hazardous, without a limitation on its display area.

O. Until the department adopts exemptions by rule as required by subsection I, paragraph 4, subdivision (h) of this section, a whole fruit or vegetable grown in a public school garden that is washed and cut on-site for immediate consumption is exempt from the rules prescribed in subsection I of this section.

P. Until the department adopts an exclusion by rule as required by subsection I, paragraph 14 of this section, the standardized survey known as "the hospital consumer assessment of healthcare providers and systems" may not include patients who experience a fetal demise.

Q. For the purposes of this section:

1. "Cottage food product":

(a) Means a food that is not potentially hazardous or a time or temperature control for safety food as defined by the department in rule and that is prepared in a home kitchen by an individual who is registered with the department.

(b) Does not include foods that require refrigeration, perishable baked goods, salsas, sauces, fermented and pickled foods, meat, fish and shellfish products, beverages, acidified food products, nut butters or other reduced-oxygen packaged products.

2. "Fetal demise" means a fetal death that occurs or is confirmed in a licensed hospital. Fetal demise does not include an abortion as defined in section 36-2151.

#### 36-351. Duties of the director; Arizona state library, archives and public records

A. The director shall provide safe, secure and permanent preservation of vital records. The director shall comply with preservation requirements, including the resolution necessary for authentic reproduction, established by the Arizona state library, archives and public records pursuant to section 39-101.

B. The director shall submit to the Arizona state library, archives and public records for permanent preservation, a copy of a person's:

1. Registered birth certificate seventy-five years after the person's birth.
2. Registered death certificate fifty years after the person's death.

C. Pursuant to section 41-151.09, subsection D, the Arizona state library, archives and public records shall provide access to registered birth certificates and registered death certificates submitted pursuant to subsection B of this section.

D. Each calendar year, the director shall reproduce on permanent media established by the Arizona state library, archives and public records pursuant to section 39-101, vital records registered for the calendar year including an index. The director shall submit the vital records and index to the Arizona state library,

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archives and public records, which shall provide for the confidential safekeeping of the vital records and index.

E. The director of the Arizona state library, archives and public records is entitled to receive records, including sealed records, within one hundred and twenty days on receipt or creation by the department. These electronic records shall be used only for archival or preservation purposes and may not be released or copied for other purposes.

#### 41-1002. Applicability and relation to other law; preapplication authorization; definitions

A. This article and articles 2 through 5 of this chapter apply to all agencies and all proceedings not expressly exempted.

B. This chapter creates only procedural rights and imposes only procedural duties. They are in addition to those created and imposed by other statutes. To the extent that any other statute would diminish a right created or duty imposed by this chapter, the other statute is superseded by this chapter, unless the other statute expressly provides otherwise.

C. An agency may grant procedural rights to persons in addition to those conferred by this chapter so long as rights conferred on other persons by any provision of law are not substantially prejudiced.

D. Unless specifically authorized by statute, an agency shall avoid duplication of other laws that do not enhance regulatory clarity and shall avoid dual permitting to the extent practicable.

E. Unless specifically authorized by statute, an agency may not require preapplication authorization or require preapplication conferences as a requirement to filing an application that is otherwise allowed by statute. If preapplication procedures are required by statute, an agency shall consider the preapplication requirements or procedures as the beginning of the licensing time frame for the purposes of article 7.1 of this chapter. An agency may offer voluntary preapplication procedures without specific statutory authority if the agency communicates to an applicant that the preapplication procedures are not mandatory. If preapplication procedures are offered by an agency, the agency shall consider the costs and delays that may be imposed on an applicant and shall seek to minimize those impacts.

F. Unless authorized by federal or state law, an agency may not take any action that materially increases the regulatory burdens on a business unless there is a threat to the health, safety and welfare of the public that has not been addressed by legislation or industry regulation within the proposed regulated field.

G. Unless authorized by federal or state law, an agency may not apply a regulation to a qualified marketplace platform if the purpose of that regulation is to regulate a business that provides goods or services directly to the customer.

H. For the purposes of this section:

1. "Qualified marketplace contractor" means any person or organization, including an individual, corporation, limited liability company, partnership, sole proprietor or other entity, that enters into an agreement with a qualified marketplace platform to use the qualified marketplace platform's digital platform to provide goods or services to third-party individuals or entities seeking those services.

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2. "Qualified marketplace platform" means an organization, including a corporation, limited liability company, partnership, sole proprietor or any other entity, that operates a digital platform that facilitates the provision of goods or services by qualified marketplace contractors to third-party individuals or entities seeking those goods or services.

#### 41-1003. Required rule making

Each agency shall make rules of practice setting forth the nature and requirements of all formal procedures available to the public.

#### 41-1029. Agency rule making record

A. An agency shall maintain an official rule making record for each rule it proposes by publication in the register of a notice of proposed rule making and each final rule filed in the office of the secretary of state. The record and matter incorporated by reference must be available for public inspection.

B. The agency rule making record shall contain all of the following:

1. A copy of the notice initially filed in the office of the secretary of state.
2. Copies of all publications in the register with respect to the rule or the proceeding on which the rule is based.
3. Copies of any portions of the agency's rule making docket containing entries relating to the rule or the proceeding on which the rule is based.
4. All written petitions, requests, submissions and comments received by the agency and all other written materials considered or prepared by the agency in connection with the rule or the proceeding on which the rule is based.
5. Any official transcript of oral presentations made in the proceeding on which the rule is based, or if not transcribed, any tape recording or stenographic record of those presentations, and any memorandum prepared by a presiding official summarizing the contents of those presentations.
6. A copy of all materials submitted to the council, including the economic, small business and consumer impact statement and the minutes of the council meeting at which the rule was reviewed.
7. A copy of the final rule and preamble.
8. Information requested regarding the experience, technical competence, specialized knowledge and judgment of an agency if the agency relies on section 41-1024, subsection D in the making of a rule and a request is made.

C. On judicial review, the record required by this section constitutes the official agency rule making record with respect to a rule. Except as provided in section 41-1036 or otherwise required by a provision of law, the agency rule making record need not constitute the exclusive basis for agency action on that rule or for judicial review of that rule.

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#### 41-1033. Petition for a rule or review of an agency practice, substantive policy statement, final rule or unduly burdensome licensing requirement; notice

A. Any person may petition an agency to do either of the following:

1. Make, amend or repeal a final rule.
2. Review an existing agency practice or substantive policy statement that the petitioner alleges to constitute a rule.

B. An agency shall prescribe the form of the petition and the procedures for the petition's submission, consideration and disposition. The person shall state on the petition the rulemaking to review or the agency practice or substantive policy statement to consider making into a rule.

C. Not later than sixty days after submission of the petition, the agency shall either:

1. Reject the petition and state its reasons in writing for denial to the petitioner.
2. Initiate rulemaking proceedings in accordance with this chapter.
3. If otherwise lawful, make a rule.

D. The agency's response to the petition is open to public inspection.

E. If an agency rejects a petition pursuant to subsection C of this section, the petitioner has thirty days to appeal to the council to review whether the existing agency practice or substantive policy statement constitutes a rule. The council chairperson shall place this appeal on the agenda of the council's next meeting if at least three council members make such a request of the council chairperson within two weeks after the filing of the appeal.

F. A person may petition the council to request a review of a final rule based on the person's belief that the final rule does not meet the requirements prescribed in section 41-1030.

G. A person may petition the council to request a review of an existing agency practice, substantive policy statement, final rule or regulatory licensing requirement that is not specifically authorized by statute pursuant to title 32 based on the person's belief that the existing agency practice, substantive policy statement, final rule or regulatory licensing requirement is unduly burdensome or is not demonstrated to be necessary to specifically fulfill a public health, safety or welfare concern. If the council determines that the existing agency practice, substantive policy statement, final rule or regulatory licensing requirement applies to a profession for which the average wage in that profession in this state does not exceed two hundred percent of the federal poverty guidelines for a family of four, the council shall review the existing agency practice, substantive policy statement, final rule or regulatory licensing requirement as prescribed by this section. This subsection does not apply to an individual or institution that is subject to title 36, chapter 4, article 10 or chapter 20.

H. If the council receives information that indicates an existing agency practice or substantive policy statement may constitute a rule, that a final rule does not meet the requirements prescribed in section 41-1030 or that an existing agency practice, substantive policy statement, final rule or regulatory licensing

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requirement does not meet the guidelines prescribed in subsection G of this section and at least four council members request of the chairperson that the matter be heard in a public meeting:

1. Within ninety days after receipt of the fourth council member's request, the council shall determine whether the agency practice or substantive policy statement constitutes a rule, whether the final rule meets the requirements prescribed in section 41-1030 or whether an existing agency practice, substantive policy statement, final rule or regulatory licensing requirement meets the guidelines prescribed in subsection G of this section.

2. Within ten days after receipt of the fourth council member's request, the council shall notify the agency that the matter has been or will be placed on an agenda.

3. Not later than thirty days after receiving notice from the council, the agency shall submit a statement to the council that addresses whether the existing agency practice, substantive policy statement constitutes a rule or whether the final rule meets the requirements prescribed in section 41-1030 or whether an existing agency practice, substantive policy statement, final rule or regulatory licensing requirement meets the guidelines prescribed in subsection G of this section.

I. For the purposes of subsection H of this section, the council meeting shall not be scheduled until the expiration of the agency response period prescribed in subsection H, paragraph 3 of this section.

J. An agency practice, substantive policy statement, final rule or regulatory licensing requirement considered by the council pursuant to this section shall remain in effect while under consideration of the council. If the council ultimately decides the agency practice or substantive policy statement constitutes a rule or that the final rule does not meet the requirements prescribed in section 41-1030, the practice, policy statement or rule shall be considered void. If the council determines that the existing agency practice, substantive policy statement, final rule or regulatory licensing requirement is unduly burdensome or is not demonstrated to be necessary to specifically fulfill a public health, safety or welfare concern and meets the requirements of subsection G of this section, the council may modify, revise or declare void any such existing agency practice, substantive policy statement, final rule or regulatory licensing requirement.

K. A council decision pursuant to this section shall include findings of fact and conclusions of law, separately stated. Conclusions of law shall specifically address the agency's authority to act consistent with section 41-1030.

L. A decision by the agency pursuant to this section is not subject to judicial review, except that, in addition to the procedure prescribed in this section or in lieu of the procedure prescribed in this section, a person may seek declaratory relief pursuant to section 41-1034.

M. Each agency and the secretary of state shall post prominently on their websites notice of an individual's right to petition the council for review pursuant to this section.

#### 41-1092.08. Final administrative decisions; review; exception

A. The administrative law judge of the office shall issue a written decision within twenty days after the hearing is concluded. The written decision shall contain a concise explanation of the reasons supporting the decision, including the findings of fact and conclusions of law. The administrative law judge shall

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serve a copy of the decision on the agency. On request of the agency, the office shall also transmit to the agency the record of the hearing as described in section 12-904, except as provided in section 41-1092.01, subsection F.

B. Within thirty days after the date the office sends a copy of the administrative law judge's decision to the head of the agency, executive director, board or commission, the head of the agency, executive director, board or commission may review the decision and accept, reject or modify it. If the head of the agency, executive director, board or commission declines to review the administrative law judge's decision, the agency shall serve a copy of the decision on all parties. If the head of the agency, executive director, board or commission rejects or modifies the decision, the agency head, executive director, board or commission must file with the office, except as provided in section 41-1092.01, subsection F, and serve on all parties a copy of the administrative law judge's decision with the rejection or modification and a written justification setting forth the reasons for the rejection or modification of each finding of fact or conclusion of law. If there is a rejection or modification of a conclusion of law, the written justification shall be sent to the president of the senate and the speaker of the house of representatives.

C. A board or commission whose members are appointed by the governor may review the decision of the agency head, as provided by law, and make the final administrative decision.

D. Except as otherwise provided in this subsection, if the head of the agency, the executive director or a board or commission does not accept, reject or modify the administrative law judge's decision within thirty days after the date the office sends a copy of the administrative law judge's decision to the head of the agency, executive director, board or commission, as evidenced by receipt of such action by the office by the thirtieth day, the office shall certify the administrative law judge's decision as the final administrative decision. If the board or commission meets monthly or less frequently, if the office sends the administrative law judge's decision at least thirty days before the next meeting of the board or commission and if the board or commission does not accept, reject or modify the administrative law judge's decision at the next meeting of the board or commission, as evidenced by receipt of such action by the office within five days after the meeting, the office shall certify the administrative law judge's decision as the final administrative decision.

E. For the purposes of subsections B and D of this section, a copy of the administrative law judge's decision is sent on personal delivery of the decision or five days after the decision is mailed to the head of the agency, executive director, board or commission.

F. The decision of the agency head is the final administrative decision unless either:

1. The agency head, executive director, board or commission does not review the administrative law judge's decision pursuant to subsection B of this section or does not reject or modify the administrative law judge's decision as provided in subsection D of this section, in which case the administrative law judge's decision is the final administrative decision.

2. The decision of the agency head is subject to review pursuant to subsection C of this section.

G. If a board or commission whose members are appointed by the governor makes the final administrative decision as an administrative law judge or on review of the decision of the agency head, the decision is not subject to review by the head of the agency.

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H. A party may appeal a final administrative decision pursuant to title 12, chapter 7, article 6, except as provided in section 41-1092.09, subsection B and except that if a party has not requested a hearing on receipt of a notice of appealable agency action pursuant to section 41-1092.03, the appealable agency action is not subject to judicial review.

I. This section does not apply to the Arizona peace officer standards and training board established by section 41-1821.

#### 41-1092.09. Rehearing or review

A. Except as provided in subsection B of this section:

1. A party may file a motion for rehearing or review within thirty days after service of the final administrative decision.
2. The opposing party may file a response to the motion for rehearing within fifteen days after the date the motion for rehearing is filed.
3. After a hearing has been held and a final administrative decision has been entered pursuant to section 41-1092.08, a party is not required to file a motion for rehearing or review of the decision in order to exhaust the party's administrative remedies.

B. A party to an appealable agency action of or contested case with a self-supporting regulatory board shall exhaust the party's administrative remedies by filing a motion for rehearing or review within thirty days after the service of the administrative decision that is subject to rehearing or review in order to be eligible for judicial review pursuant to title 12, chapter 7, article 6. The board shall notify the parties in the administrative decision that is subject to rehearing or review that a failure to file a motion for rehearing or review within thirty days after service of the decision has the effect of prohibiting the parties from seeking judicial review of the board's decision.

C. Service is complete on personal service or five days after the date that the final administrative decision is mailed to the party's last known address.

D. Except as provided in this subsection, the agency head, executive director, board or commission shall rule on the motion within fifteen days after the response to the motion is filed or, if a response is not filed, within five days of the expiration of the response period. A self-supporting regulatory board shall rule on the motion within fifteen days after the response to the motion is filed or at the board's next meeting after the motion is received, whichever is later.

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**GAME AND FISH COMMISSION (R19-0901)**

Title 12, Chapter 4, Article 3, Taking and Handling of Wildlife



# GOVERNOR'S REGULATORY REVIEW COUNCIL

## ATTORNEY MEMORANDUM - REGULAR RULEMAKING

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**MEETING DATE:** September 4th, 2019

**TO:** Members of the Governor's Regulatory Review Council (Council)

**FROM:** Council Staff

**DATE:** July 31, 2019

**SUBJECT: GAME AND FISH COMMISSION (R19-0901)**  
Title 12, Chapter 4, Article 3, Taking and Handling of Wildlife

**Amend:** R12-4-303

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### **Summary:**

This regular rulemaking from the Game and Fish Commission (Commission) seeks to amend one rule in Title 12, Chapter 4, Article 3 relating to the taking and handling of wildlife. Specifically, the Commission seeks to add language to R12-4-303 to designate a predator/fur-bearing hunt contest, as it is defined in the proposed rule, an unlawful manner and method of take for predator/fur-bearing animals.

The Commission is conducting this rulemaking to "address social concerns associated with predator/fur-bearing contests, and to proscribe the manner and method of take for participants to a predators/fur-bearings contest." The Commission states that "public outrage with these events [predator/fur-bearing contests] has the potential to threaten hunting as a legitimate wildlife management function."

1. **Are the rules legal, consistent with legislative intent, and within the agency's statutory authority?**

Yes. The Commission cites to both general and specific authority for these rules.

2. **Do the rules establish a new fee or contain a fee increase?**

No. The rulemaking does not establish a new fee or contain a fee increase.

3. **Does the preamble disclose a reference to any study relevant to the rules that the agency reviewed and either did or did not rely upon?**

The Commission did not review or rely on any study in conducting this rulemaking.

4. **Summary of the agency's economic impact analysis:**

In this rulemaking, the Commission is adopting rules that will explicitly prohibit hunting contests for predatory animals and fur-bearing animals. The Commission notes that hunting contests can allow wildlife to go to waste or allow wildlife to be taken for economic gain. This is contrary to the Commission's principles to conserve wildlife for all Arizonans.

The Commission indicates that hunting contests are a small part of the entire hunting industry in Arizona and a miniscule part of the entire tourism industry in Arizona. Hunting contests represent a small portion of the economic impact created by hunting in Arizona (approximately 2.64%). Expanding the analysis to all tourism in Arizona, hunting contests represent approximately 0.00267% of the economic impact created by all tourism in Arizona. Hunting contests are a small percentage of hunting dollars and an insignificant percentage of tourism dollars spent in Arizona.

5. **Has the agency analyzed the costs and benefits of the rulemaking and determined that the rules impose the least burden and costs to those who are regulated?**

The Commission states that this rulemaking will impose minimal costs on a small percentage of hunters. This rulemaking will benefit the vast majority of hunters by aligning the practices of the Commission with their principles of wildlife management. The benefits outweigh the costs.

6. **What are the economic impacts on stakeholders?**

Key stakeholders are the Commission, the Department, hunting-related businesses, hunters, and the general public.

The Commission and the Department will bear the costs associated with creating and implementing the rules. The Commission and Department will benefit from rules that are more aligned with their principles for wildlife management.

Hunting-related businesses may see minimal decreases in economic activity due to some hunters choosing to forego hunting that is not part of an organized contest. The Commission indicates that the economic activity that organized hunting contests generate is minimal. Hunters choosing to participate in hunting outside of organized contests may mitigate these minimal costs even further.

Hunters will be prohibited from participating in organized hunting contests for predatory animals and fur-bearing animals. The Commission indicates that prohibiting these contests can strengthen public trust in the Commission's wildlife management techniques. Increased public trust could help protect hunting in Arizona.

The general public will benefit from this rulemaking because it helps to manage Arizona's wildlife for the use of all Arizonans.

7. **Are the final rules a substantial change, considered as a whole, from the proposed rules and any supplemental proposals?**

No. The final rules are not a substantial change from the proposed rules. The Commission added the term "sponsor" to the text of the proposed rule, which was not contained in the Notice of Proposed Rulemaking. The addition of this term does not alter the meaning or effect of the proposed rule and is thus not a substantive change under A.R.S. § 41-1025.

8. **Does the agency adequately address the comments on the proposed rules and any supplemental proposals?**

Yes. The Commission received approximately 4,810 comments regarding this rulemaking. The Commission has adequately addressed these comments and included a summary of the comments and its responses to those comments, organized by topic, in its Notice of Final Rulemaking. The Commission has also included a document titled "Comment Statistics and Information" that details the number of comments received.

GRRC staff also received a number of comments on this rulemaking.

9. **Do the rules require a permit or license and, if so, does the agency comply with A.R.S. § 41-1037?**

Not applicable. These rules do not require a permit.

**10. Are the rules more stringent than corresponding federal law and, if so, is there statutory authority to exceed the requirements of federal law?**

Not applicable. There is no corresponding federal law.

**11. Conclusion**

Council staff finds that the Commission has followed the applicable statutes and rules in conducting this rulemaking. The Commission received more than four thousand comments and adequately addressed those comments. Council staff takes no position on whether this rulemaking should be approved or returned. Council staff encourages the Council to discuss the relative merits of this rulemaking with the Commission at the Study Session and Council Meeting.

The Commission is requesting an effective date of January 1, 2020 to provide those planning and conducting events with a certain date after which such events will be prohibited. However, the Commission is conducting this rulemaking to prevent such events, which it finds are already contrary to the public interest. Under A.R.S. § 41-1032, “a rulemaking agency may specify an effective date more than sixty days after the filing of the rule in the office of the secretary of state if the agency determines that good cause exists for and the public interest will not be harmed by the later date.”

Therefore, Council staff encourages the Council to inquire of the Commission whether its stated reasons for a delayed effective date constitute “good cause” and that the delayed effective date would not harm the public interest.



**VIA EMAIL:** [grrc@azdoa.gov](mailto:grrc@azdoa.gov)

Nicole Sornsin, Chair  
Governor's Regulatory Review Council  
100 North 15th Avenue, Suite 305  
Phoenix, Arizona 85007

**RE:** Arizona Game and Fish Commission, 12 A.A.C. 4, Article 3, R12-4-303 Unlawful Devices, Methods, and Ammunition

Dear Ms Sornsin:

- |   |               |
|---|---------------|
| 1. The close of record date:  | June 21, 2019 |
| 2. Does the rulemaking activity relate to a Five Year Review Report:    | No            |
| a. If yes, the date the Council approved the Five Year Review Report:   | NA            |
| 3. Does the rule establish a new fee:                                   | No            |
| a. If yes, what statute authorizes the fee:                             | NA            |
| 4. Does the rule contain a fee increase:                                | No            |
| 5. Is an immediate effective date requested pursuant to A.R.S. 41-1032: | No            |

The Arizona Game and Fish Department (Department) certifies that the preamble discloses a reference to any study relevant to the rule that the agency reviewed. The Department certifies that the preamble states that it did not rely on it in the Department's evaluation of or justification for the rule.

The Department certifies that the preparer of the economic, small business, and consumer impact statement has notified the Joint Legislative Budget Committee of the number of new full-time employees necessary to implement and enforce the rule.

The following documents are enclosed:

1. Notice of Final Rulemaking, including the preamble, table of contents, and text of each rule;
2. An economic, small business, and consumer impact statement that contains the information required by A.R.S. 41-1055;
3. The written comments received by the agency concerning the proposed rule and a written record, transcript, or minutes of any testimony received if the agency maintains a written record, transcript or minutes;

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GOVERNOR: DOUGLAS A. DUCEY COMMISSIONERS: CHAIRMAN, JAMES S. ZIELER, ST. JOHNS | ERIC S. SPARKS, TUCSON | KURT R. DAVIS, PHOENIX  
LELAND S. "BILL" BRAKE, ELGIN | JAMES E. COUGHNOUR, PAYSON DIRECTOR: TY E. GRAY DEPUTY DIRECTOR: TOM P. FINLEY

4. General and specific statutes authorizing the rules, including relevant statutory definitions; and
5. If a term is defined in the rule by referring to another rule or a statute other than the general and specific statutes authorizing the rule, the statute or other rule referred to in the definition.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ty Gray', with a long, sweeping underline that extends to the right.

Ty Gray  
Director



Telephone: (623) 236-7390

E-mail: CCook@azgfd.gov

Please visit the AZGFD website to track the progress of this rule; view the regulatory agenda and all previous Five-year Review Reports; and learn about any other agency rulemaking matters at <https://www.azgfd.com/agency/rulemaking/>.

**6. An agency's justification and reason why the rule should be made, amended, repealed, or renumbered, to include an explanation about the rulemaking:**

The Arizona Game and Fish Commission proposes to adopt rules to regulate hunting activities consistent with the guiding principles governing the Commission's duty to preserve wildlife for the beneficial use of the public. The proposed rulemaking will designate a predator/fur-bearing hunt contest, as defined by the rule, an unlawful manner and method of take for predator/fur-bearing animals. A rule that provides clear instruction about the legal hunting of predator/fur-bearing species provides for the conservation, maintenance, and utilization of wildlife under the jurisdiction of the State for the benefit of all the citizens.

This proposed rulemaking contains rule language included in the Notice of Proposed Rulemaking, see 24 A.A.R. 529, March 16, 2018, which was approved by the Governor's Regulatory Review Council on February 5, 2019 and becomes effective on June 1, 2019.

An exemption from Executive Order 2019-01 was provided for this rulemaking by Hunter Moore, Natural Resource Policy Advisor, Governor's Office, in an email dated February 15, 2019.

**7. A reference to any study relevant to the rule that the agency reviewed and proposes to either rely on or not rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**

The agency did not rely on any study in its evaluation of or justification for the rule.

**8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:**

Not applicable

**9. A summary of the economic, small business, and consumer impact:**

The Commission's intent in adopting the rule is to address social concerns associated with predator/fur-bearing contests, and to proscribe the manner and method of take for participants to a predators/fur-bearings contest. Wildlife predator/fur-bearing hunting contest that link economic gain to the greatest number or variety of animals killed are contrary to the important principle that the take of wildlife should not be allowed to go to waste or taken for economic gain. The Commission believes the rulemaking will benefit the State and persons regulated by the rule by reducing regulatory uncertainty, and strengthening consistency with the principles that guide the Commission's public trust responsibility to conserve wildlife for the benefit of the citizens of Arizona. Extensive public controversy exists about predator/fur-bearing contests that award prizes to participants who kill the largest number or variety of predator/fur-bearing animals or the contest is based on the combined weight of animals a participant kills. To the extent these contests reflect on the overall hunting community, public outrage with these events has the potential to threaten hunting as a legitimate wildlife management function.

Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission in its duty to preserve wildlife for the beneficial use of present and future generations. The Commission anticipates the rulemaking will impose a burden on persons regulated by the rule by prohibiting wildlife predator/fur-bearing contests. The Commission anticipates the rulemaking will result in no impact to agencies or political subdivisions of this State, private and public employment in businesses, or State revenues. The Commission has determined the rulemaking will not require any new full-time employees. The Commission has determined that there are no less intrusive or costly alternative methods of achieving the purpose of the rulemaking. The Department will incur costs related to the cost of rulemaking and implementing the rule. The Commission has determined that the benefits of the rulemaking outweigh any costs.

**10. A description of any changes between the proposed rulemaking, to include supplemental notices, and the final rulemaking:**

Subsection R12-4-303(A)(4)(i) was revised to include the term "sponsor." The Department believes the term "promote" also addressed sponsorship activities, however, to the extent that the meaning of the terms "sponsor" and "promoter" differ, the Department proposes to include the term "sponsor." This is not viewed as a substantive change.

**11. An agency's summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments:**

The Notice of Rulemaking was published in the Arizona Administrative Register on April 12, 2019; the official public comment period began April 12 and ended on May 12, 2019. The Department also issued a number of press releases regarding the changes proposed in the Notice of Rulemaking and the Department's contact information for persons interested in submitting a comment. The Department received 41 comments prior to April 12; most of them voicing their support for the rulemaking. The Department received 4810 comments during the public comment period with a great majority of them being form letters generated by animal welfare organizations. Due to the volume of comments received, with much of it being redundant or similar and many simply voicing their support or opposition to the rulemaking or asking rhetorical questions, it is necessary to summarize the majority of comments rather than attempting to respond to each comment individually. It is important to note, the original comments were provided to the Commission and the Governor's Regulatory Review Council for consideration.

- 1. A number of comments are directed to who the Commission should or should not listen to in its decision-making. Some argue that the Commission should listen to only those who buy hunting and fishing licenses and who therefore support the Department financially. Some feel that the Commission is being non-supportive of hunters if it adopts a rule restricting or prohibiting hunting contests for predators and fur-bearing animals. There are also arguments that the Commission should not listen to animal welfare organizations or out-of-state individuals and organizations; they do not want "extremists and radicals" telling Arizonans how to vote on matters which apply to**

**Arizona wildlife and hunters.**

**Agency Response:** Arizona law does not limit who can submit comments for or against a proposed rule.

- 2. A number of comments state contests are ethically and ecologically indefensible; contests that link economic gain to the greatest number or variety of animals killed are barbaric, unethical, and trivialize the value of wildlife and that wildlife should not be treated on the same level as inanimate objects such as those used in other sports.**

**Agency Response:** This is an individual and personal ethical issue. However, to the extent these contests reflect on the overall hunting community, public outrage with events that award prizes to competitors that kill the largest number or variety of predator or fur-bearing animals has the potential to threaten hunting as a legitimate wildlife management function. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

- 3. A number of comments state contests occur on public lands, where wildlife should find sanctuary, not assaults; public lands are for outdoor activities that are compatible with the maintenance of a healthy environment; and contest attendees pose a threat to the safety of persons who are utilizing public lands to hike, bird watch, off-road, etc.**

**Agency Response:** Regulated hunting fundamentally supports wildlife conservation efforts in North America. Hunting is useful for the ecology, hunting guarantees that natural populations of game species are supportable from one decade to the next. Excise taxes paid by hunters on sporting equipment and related expenditures are distributed to the states for such purposes as improving natural life living space, overseeing and keeping up of parks and wildlife refuges, and directing reviews and research to decide the status of diversion as well as some non-game species. Along these lines, hunters contribute widely to the environment.

Hunting contest participants are neither more nor less dangerous to the safety of persons utilizing public lands compared to hunters who are not participating in contests. As the data suggests, hunting is a safe recreational activity for hunters and non-hunters alike. The Commission holds that hunting and fishing are outdoor activities that are compatible with a healthy environment.

There are a number of laws and rules in place that regulate hunting in the interest of public safety and the protection of non-target species. These laws and rules regulate the types of weapons that can be used, when

and how such weapons can be used, and what species are legal to hunt. Statewide compliance with existing game and fish laws is typically 96% or higher. A 2011 study from the National Sporting Goods Association found hunting with firearms to be one of the safest sports when compared to others (0.04% injuries per 100 participants), slightly higher than injuries associated with billiards/pool and slightly lower than bowling. Between the years of 1985 and 2013 hunting related accidents in Arizona averaged slightly above two incidents per year, with only one verified incident over the last two years.

The proposed rule is intended to address social outrage over these specific hunting contests. The proposed rule would be in place on all lands in the state of Arizona with the exception of tribal reservation lands, and is intended to address social outrage over these specific hunting contests; it is neither supported nor contradicted by science. Regulated hunting fundamentally supports wildlife conservation efforts in North America.

4. **A number of comments state the Wildlife Society (TWS) approved an issue statement calling out killing contests for "flawed use of science" and for "making a game of killing animals, thus demonstrating disrespect for and devaluing animals."**

**Agency Response:** While the TWS statement includes the text above, it is taken out of context. The original statement text is as follows: "Killing contests are viewed in widely different perspectives. Some people view them as making a game of killing animals, thus demonstrating disrespect for and devaluing animals; others view them as a potential management tool to be used to control predators and increase prey populations, or as entertainment without a perceived legitimate use of the harvested animals. In some cases, particularly for predators, justification for the killing contests is often based on flawed use of science. For example, coyote killing contests are often justified on the basis that coyotes kill deer or other game; however, that fails to recognize that predation is a proximal cause of mortality, but not necessarily the ultimate cause that limits a species' population. The policy of The Wildlife Society regarding wildlife killing contests: 1. Discourages contests that adversely affect the wildlife resource or the public appreciation of wildlife resources. 2. Supports that wildlife killed must be put to legitimate uses. 3. Opposes all contests that: a). intentionally wound animals in a manner that causes excess pain and suffering, b). kill parents resulting in orphaned, dependent young, c). or devalue wildlife by showing disrespectful photos of piles of dead animals. 4. Discourage contests that portray hunting in an unethical fashion. If a contest is held, all applicable permitting and hunting regulations must be followed during the contest by all parties involved. 5. Support public attitude surveys to determine societal values regarding killing contests and encourage agencies to consider these survey results when managing and regulating killing contests. 6. Recognize that there is little evidence to support the use of killing contests for controlling predator populations. 7. Recognize that while species killed in contests can be legally killed in most states, making a contest of it may undermine the public's view of ethical hunting.

5. **A number of comments state contests leave carcasses behind, allowing condors, bald eagles, Mexican gray wolves, and other wildlife to feed on the bodies and ingest lethal doses of lead.**

**Agency Response:** The Department has not documented or observed any lead poisoning issues specifically linked to predator and fur-bearing contests.

6. **A number of comments state that either 1) a rule prohibiting hunting contests for predators and fur-bearing animals should not be adopted because it is based on social influences rather than scientific or wildlife management needs and contests help regulate predator species and reduce fawn predation; or 2) that it should be adopted because of scientific biology or wildlife management needs; wild animals play an important ecological role in healthy ecosystems and increase biodiversity.**

**Agency Response:** The proposed rule is intended to address social outrage over these specific hunting contests, and is neither supported nor contradicted by science.

The Department recognizes that predators and their prey are integral parts of the same ecosystem and therefore, cannot be managed separately. However, the relationship between predator and prey is very complex. The Department must work toward balancing the needs of all species in Arizona, including predator species and their prey.

The management goal for prey species is to have healthy, sustainable populations able to withstand some predation. When predation limits the population growth of prey species or prey species populations are below management objectives, then area-specific predation management plans may be developed in accordance with the Predation Management Policy (A1.13).

In the past the Department has, at times, coordinated with hunt contest organizers to focus predator hunting in specific areas and at specific times in an effort to meet management goals. The proposed rule would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management, and the Department will continue to rely on hunters to help maintain the predator prey balance.

7. **A number of comments state Tucson, Dewey-Humboldt, Flagstaff, Coconino County, Pima County, and Yavapai County have already passed resolutions condemning wildlife killing contests and encourage the Commission to do the same.**

**Agency Response:** The proposed rule will make it unlawful to use any method of take to capture or kill

predator or fur-bearing animals during a hunting contest. The proposed rule would be in place on all lands in the state of Arizona with the exception of tribal reservation lands, and is intended to address social outrage over these specific hunting contests; it is neither supported nor contradicted by science. Within the state of Arizona, the authority to manage wildlife is vested in the Arizona Game and Fish Commission, city and county governments do not have the authority to regulate hunting.

- 8. A number of comments state contests put dogs that are out for a walk with their owners at risk, including deer and endangered Mexican gray wolves here in the Southwest; non-target species are killed or severely injured and off-spring are left to die.**

**Agency Response:** There are a number of laws and rules in place that regulate hunting in the interest of public safety and the protection of non-target species. These laws and rules regulate the types of weapons that can be used, when and how such weapons can be used, and what species are legal to hunt. All of these laws and rules apply to predator and fur-bearing contests, and the Department has not observed any significant compliance issues associated with these contests; statewide compliance with existing game and fish laws is typically 96% or higher.

The Department has not documented or observed any conflicts between predator and fur-bearer hunt contests and wolves. Additionally, the Department continues proactive outreach and education to all hunters who might hunt within the Mexican wolf range about the wolves presence, ways to identify wolves, and how to distinguish them from other wildlife species.

- 9. A number of comments state contests violate the public trust doctrine that wildlife belongs to all people and all future generations.**

**Agency Response:** The proposed rule will make it unlawful to use any method of take to capture or kill predator or fur-bearing animals during a hunting contest. The proposed rule would be in place on all lands in the state of Arizona with the exception of tribal reservation lands, and is intended to address social outrage over these specific hunting contests; it is neither supported nor contradicted by science.

To the extent these contests reflect on the overall hunting community, public outrage with these events that award prizes to competitors that kill the largest number or variety of predator or fur-bearing animals has the potential to threaten hunting as a legitimate wildlife management function. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

- 10. A number of comments state contests cast the sport of hunting in a bad light to non-hunters; they are not a legitimate form of hunting because the animals are left to waste.**

**Agency Response:** The proposed rule is intended to preserve hunting. To the extent these contests reflect on the overall hunting community, public outrage with these events that award prizes to competitors that kill the largest number or variety of predator or fur-bearing animals has the potential to threaten hunting as a legitimate wildlife management function. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

- 11. A number of comments state contests result in an increase in the number of rodents and snakes; predators are detrimental to song bird and sparrow populations; more predators help reduce the incidents of Lyme's disease.**

**Agency Response:** The Department has not documented or observed any evidence that predator and fur-bearing hunting contests correlate with increased populations of rodents and snakes, reduced populations of song birds and sparrows, or increased occurrences of Lyme's disease. The proposed rule would be in place on all lands in the state of Arizona with the exception of tribal reservation lands, and is intended to address social outrage over these specific hunting contests; it is neither supported nor contradicted by science.

- 12. A number of comments state the Commission is being pressured by anti-hunter/anti-gun groups to stop fellow hunters and outdoorsman from competing in a contest.**

**Agency Response:** The proposed rule is intended to preserve hunting. To the extent these contests reflect on the overall hunting community, public outrage with these events that award prizes to competitors that kill the largest number or variety of predator or fur-bearing animals has the potential to threaten hunting as a legitimate wildlife management function.

Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

- 13. A number of comments ask if this same logic apply to fishing contests.**

**Agency Response:** No. Unlike fishing events, predator and fur-bearing hunting contest threaten hunting as a legitimate wildlife management function. With a fishing event, there is a legal limit on the number of fish

caught, every effort is made to keep fish alive and returned to a lake in good health, and there is often a limit on the number of tournaments and tournament days. The public generally does not object to fishing events for these and other reasons.

**14. A number of comments state the impact of these contests are less than they appear to the outsider; they are not extinction hunts.**

**Agency Response:** The Department has no evidence or data to indicate these contests have a significant impact on predator or fur-bearing populations, but to the extent these contests reflect on the overall hunting community, public outrage with these events that award prizes to competitors that kill the largest number or variety of predator or fur-bearing animals has the potential to threaten hunting as a legitimate wildlife management function.

Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

**15. A number of comments state the rulemaking is just the first step in eliminating the sport of hunting, and possibly fishing.**

**Agency Response:** The proposed rule is intended to preserve hunting. The proposed rule will make it unlawful to use any method of take to capture or kill predator or fur-bearing animals during a hunting contest.

The proposed rule does not limit, restrict, or prohibit any hunting privileges. It is intended to address contests for predator and fur-bearing animals, only. Unlike fishing events, predator and fur-bearing contests threaten hunting as a legitimate wildlife management function.

Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

**16. A number of comments state the proposed rule would negatively impact cattle ranchers who already struggle with coyote depredation. When a competition is involved, more people participate and predator populations are better controlled. A 2015 USDA report dealing with nationwide cattle losses found that “coyotes accounted for the highest percentage of calf deaths in Arizona due to predators at 68.6%.**

**Agency Response:** The proposed rule would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management. In addition, A.R.S. § 17-239 and R12-4-113 provide relief from wildlife depredation and are unaffected by the rulemaking.

Under A.R.S. § 17-239 and R12-4-113, a no-fee small game depredation permit provides short-term relief until long-term, non-lethal measures can be implemented to eliminate or significantly reduce issues. The permits are issued to eliminate or reduce agricultural damage, private property damage, threats to human health and safety, and threats to recovery of protected wildlife. In addition, if harvest of animals is found to be necessary to relieve damage, the Commission may establish special seasons or special bag limits, and either set reduced fees or waive any or all license fees to crop that wildlife. If the Commission determines that this cropping by hunters is impractical, it may issue a special permit for taking that wildlife to the landowner, lessee, livestock operator, or municipality suffering damage.

- 17. A number of comments state the groups asking to eliminate these contests do not care about wildlife and the proper management of wildlife, rather their target is to eliminate all sport hunting using individual's emotions rather than scientific data.**

**Agency Response:** The proposed rule is intended to preserve hunting. The proposed rule does not limit, restrict, or prohibit any hunting privilege. It addresses hunting contests for predator and fur-bearing animals, only. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

The proposed rule will make it unlawful to use any method of take to capture or kill predator or fur-bearing animals during a hunting contest. The proposed rule would be in place on all lands in the state of Arizona with the exception of tribal reservation lands, and is addressing social outrage over these specific hunting contests. Unlike regulated hunting, predator and fur-bearing hunting contest threaten hunting as a legitimate wildlife management function.

- 18. A number of comments state the proposed rule violates the public trust doctrine of the North American Model by excluding contest hunters from hunting a renewable resource that should be held for all.**

**Agency Response:** Hunting is the foundation of the North American Model (NAM) of Wildlife Conservation, and neither the NAM nor the public trust doctrine protects predator and fur-bearing hunt

contests.

The proposed rule is intended to preserve hunting. It would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management. To the extent these contests reflect on the overall hunting community, public outrage with these events that award prizes to competitors that kill the largest number or variety of predator or fur-bearing animals has the potential to threaten hunting as a legitimate wildlife management function.

Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

**19. A number of comments state the Department will lose revenue due to contest participants not purchasing a hunting license and expending Department resources to enforce the proposed prohibition.**

**Agency Response:** The proposed rule is intended to preserve hunting. It will not apply to the lawful, regulated hunting of predatory and fur-bearing animals. The Department does not anticipate a significant decline in hunting license sales as a result.

The U.S. Fish and Wildlife Service's 2011 National Survey of Fishing, Hunting, and Wildlife-associated Recreation report indicates hunters spend approximately \$132 on hunting equipment and trip expenditures per day (user day). On an annual basis, it is estimated that there are 11 predator/fur-bearing hunting contests within Arizona resulting in approximately 4,600 user days equaling approximately \$607,200 of economic impact. According to Hunt Arizona 2014, on an annual basis general predator and fur-bearing hunters account for 175,237 user days in Arizona. The economic impact of general predator and fur-bearing hunting in Arizona is estimated to be over \$23,000,000. The Commission anticipates the rulemaking will protect these hunting opportunities.

The Department has not observed any significant compliance issues associated with these contests; statewide compliance with existing game and fish laws is typically 96% or higher. The Department does not see a need for special enforcement activities related to the proposed rule.

Part of the rulemaking process is to ensure the rule is enforceable. The officer in the field is responsible for conducting an investigation, collecting evidence, and, when determined valid, issuing a citation. Every time a citation is written by any officer, it is their interpretation of the law and the situation at hand that causes the issuance of the citation. The officer is part of the judicial process, but does not usurp the court's final

authority.

- 20. A number of comments state the rulemaking the proposed rule will inhibit or take away Americans freedom to hunt; predatory and fur-bearing animal contests are a traditional pastime and provide a great opportunity to introduce younger generations to hunting.**

**Agency Response:** The proposed rule is intended to preserve hunting. It would not prevent hunters from introducing youth to hunting because it would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management.

To the extent these contests reflect on the overall hunting community, public outrage with these events that award prizes to competitors that kill the largest number or variety of predator or fur-bearing animals has the potential to threaten hunting as a legitimate wildlife management function.

Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

- 21. A number of comments state contests result in important data being provided to Department biologists; prohibiting contests will remove a valuable tool from the Department's tool box that could be used to not only save the Department money, but would also help manage wildlife better.**

**Agency Response:** The proposed rule would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management. The Department will continue to communicate with predator and fur-bearing hunters to gather data when appropriate.

The Department has, at times, coordinated with hunt contest organizers to focus predator hunting in specific areas and at specific times in an effort to meet management goals. The proposed rule would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management, and the Department will continue to coordinate with hunters to help maintain the predator prey balance as part of an integrated wildlife management program.

- 22. A number of comments state the proposed rulemaking will result in an increase in wildlife diseases, such as mange, parvo, and rabies.**

**Agency Response:** The Department has not documented or observed any evidence of a relationship between hunting contests and wildlife diseases.

- 23. A number of comments state contests contribute to the State and local economies and towns like Seligman, and small businesses benefit economically from them because contestants purchase food, lodging, sporting goods, and out-of-state contestants purchase nonresident licenses.**

**Agency Response:** The proposed rule is intended to preserve hunting. It would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

The U.S. Fish and Wildlife Service's 2011 National Survey of Fishing, Hunting, and Wildlife-associated Recreation report indicates hunters spend approximately \$132 on hunting equipment and trip expenditures per day (user day). On an annual basis, it is estimated that there are 11 local wildlife predator/fur-bearing hunting contests resulting in approximately 4,600 user days equaling approximately \$607,200 of economic impact. Arizona's economy, both rural and urban, is greatly benefited by hunting of any kind. Predator and fur-bearing contests make up a very small percentage of that economic benefit. Predator hunting in general is a larger percentage. According to Hunt Arizona 2014, on an annual basis general predator and fur-bearing hunters account for 175,237 user days in Arizona. The economic impact of general predator and fur-bearing hunting in Arizona is estimated to be over \$23,000,000. The Commission anticipates the rulemaking will protect these hunting opportunities.

- 24. A number of comments ask why the Department isn't it concerned about the larger prizes and cash given out under other events involving other wildlife, such as fishing tournaments.**

**Agency Response:** Unlike fishing tournaments or other hunting events, predator and fur-bearing hunting contests threaten hunting as a legitimate wildlife management function. To the extent these contests reflect on the overall hunting community, public outrage with these events that award prizes to competitors that kill the largest number or variety of predator or fur-bearing animals has the potential to threaten hunting as a legitimate wildlife management function.

Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations. The proposed rule would not apply to the lawful, regulated hunting of predatory and fur-bearing animals which plays an important role in wildlife management.

- 25. A number of comments ask why the Department did not rely on scientific data or conduct an environmental impact study before proposing the rule.**

**Agency Response:** The proposed rule is intended to address social outrage over these specific hunting contests, and is neither supported nor contradicted by science. An environmental impact study is not required for this action.

The proposed rule would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management, and the Department does not anticipate a significant decline in the hunting of predators and fur-bearings, and does not anticipate any measurable environmental impact.

- 26. A number of comments ask what the estimated number of breeding pairs of coyotes in Arizona is.**

**Agency Response:** A population estimate, or estimate of breeding pairs, is difficult to determine given the wide distribution range of coyotes in Arizona. They inhabit every habitat type including urban areas and are opportunists and generalists when it comes to food sources allowing them to eat just about anything and thrive just about anywhere. Achieving a population estimate for coyotes would require an enormous undertaking in terms of time, funding, and manpower; and even then estimating the coyote population would be nearly impossible because of their wide distribution range.

- 27. A number of comments ask what the target number of removal of coyotes is.**

**Agency Response:** The Department does not set a target number during planned predation management efforts. The objective is to reduce coyote predation on specific prey species during the period when young are most vulnerable (birth through the first few months of life). These efforts are short-term and site specific. Research in Arizona and other Western states has shown that focused, intense coyote removal through aerial gunning can increase recruitment (Brown et al. 2011; Canon 1993; Menzel 1992; Smith et al. 1986; Wakeling et al. 2015, and Willis et al. 1994).

- 28. A number of comments ask how many coyotes does the Department remove from the wild and what costs are incurred on an annual basis.**

**Agency Response:** On an annual basis, and as part of site-specific predation management plans, about 200 to 250 coyotes are removed. The Department expends about \$30,000 annually on area-specific, targeted removal of coyotes. Such action targets a specific area during a short period of time and most often

effectively reduces coyote densities just prior to and during the birthing season, thereby reducing coyote predation on young.

**29. A number of comments ask what impact predators have on other wildlife populations.**

**Agency Response:** The Department recognizes that predators and their prey are integral parts of the same ecosystem and therefore, cannot be managed separately. The Department must work toward balancing the needs of all species in Arizona, including predator species and their prey species. The management goal for prey species is to have healthy, sustainable populations able to withstand some predation.

In some areas around the state, prey populations are below management objectives and predation has been identified as one factor in limiting population recovery. Predation management may be necessary to decrease predation in order to aid in the recovery, increase total numbers, and/or promote expansion of the prey species. Predation management is a valuable wildlife management tool that can affect populations of species that are preyed upon. When predation limits the population growth of prey species or prey species populations are below management objectives, then area-specific predation management plans may be developed in accordance with the Predation Management Policy (A1.13).

The Department has, at times, coordinated with contest organizers to focus predator hunting in specific areas, at specific times in an effort to meet established management goals. The Department will continue to coordinate with hunters to help maintain the predator prey balance as part of an integrated wildlife management program.

**30. A number of comments ask whether reducing the number of predators, specifically coyotes, is a game management objective of the Department.**

**Agency Response:** The Department recognizes that predators and their prey are integral parts of the same ecosystem and cannot be managed separately. However, the relationship between predator and prey is very complex. The Department must work toward balancing the needs of all species in Arizona, including predator and prey species. The management goal for prey species is to have healthy, sustainable populations that are able to withstand some predation. In some areas around the state, prey populations are below management objectives and predation has been identified as one factor in limiting population recovery. Predation management may be necessary to decrease predation in order to aid in the recovery, increase total numbers, and/or promote expansion of the prey species. Predation management is a valuable wildlife management tool that can affect populations of species that are preyed upon.

The proposed rule is intended to preserve hunting. It would not apply to lawful, regulated hunting of

predatory and fur-bearing animals, which plays an important role in wildlife management.

**31. A number of comments state the Department has directed some predator clubs to hold events in places in the North and West of Arizona to help reduce the coyote population.**

**Agency Response:** The Department has, at times, coordinated with hunt contest organizers to focus predator hunting in specific areas and at specific times in an effort to meet management goals. The proposed rule would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management, and the Department will continue to coordinate with hunters to help maintain the predator prey balance as part of an integrated wildlife management program.

**32. A number of comments state contests provide a small incentive for urban hunters to spend the time and money to prepare for the contest and to travel to the location of the event. For those willing to spend \$60 to \$100 in fuel to participate in a "contest," the chance of winning a small prize to help preserve an antelope herd is a small reward.**

**Agency Response:** The proposed rule is intended to preserve hunting. It would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

The U.S. Fish and Wildlife Service's 2011 National Survey of Fishing, Hunting, and Wildlife-associated Recreation report indicates hunters spend approximately \$132 on hunting equipment and trip expenditures per day (user day). On an annual basis, it is estimated that there are 11 local wildlife predator/fur-bearing hunting contests resulting in approximately 4,600 user days equaling approximately \$607,200 of economic impact. The economic impact of general predator and fur-bearing hunting in Arizona is estimated to be over \$23,000,000. According to Hunt Arizona 2014, on an annual basis general predator and fur-bearing hunters account for 175,237 user days in Arizona. The Commission anticipates the rulemaking will protect these hunting opportunities.

**33. A number of comments state hunting is a legitimate sport, is a necessary activity, and has positive social consequences even for those who oppose it.**

**Agency Response:** The Department agrees with this comment, and the proposed rule is intended to preserve hunting. It would not apply to lawful, regulated hunting of predatory and fur-bearing animals,

which plays an important role in wildlife management. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

**34. A number of comments state contests must comply with fair chase and adhere to game laws; contests do not cause hunters to hunt and harvest more predators.**

**Agency Response:** The proposed rule would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management. To the extent these contests reflect on the overall hunting community, public outrage with these events that award prizes to competitors that kill the largest number or variety of predator or fur-bearing animals has the potential to threaten hunting as a legitimate wildlife management function. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

**35. A number of comments state the Commission should change seasons, set bag limits, or use other means to reach the objective of the rule.**

**Agency Response:** The proposed rule is addressing social outrage over these specific hunting contests, and is neither supported nor contradicted by science. To the extent these contests reflect on the overall hunting community, public outrage with these events that award prizes to competitors that kill the largest number or variety of predator or fur-bearing animals has the potential to threaten hunting as a legitimate wildlife management function. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

The Commission could terminate this rule process and begin the process to change the Commission Orders to establish new seasons, bag, and possession limits for predators and fur-bearing animals. However, this alternative would directly affect general predator and fur-bearing hunting rather than only predator and fur-bearing contests. The current proposed, narrowly scoped, rule is far less burdensome than imposing new seasons, bag, and possession limits that would apply to all hunters.

**36. A number of comments state a fear that once anti hunters gain traction on this front they will not stop until all hunting and fishing activities are stopped.**

**Agency Response:** The Department does not believe that the rulemaking will lead to future impacts on hunting and fishing activities. General hunting, game bird field trials, fishing tournaments, etc. do not threaten hunting as a legitimate wildlife management function. The proposed rule is intended to preserve hunting.

The proposed rule would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management. To the extent these contests reflect on the overall hunting community, public outrage with these events that award prizes to competitors that kill the largest number or variety of predator or fur-bearing animals has the potential to threaten hunting as a legitimate wildlife management function. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

- 37. A number of comments state the rule should be revised to broaden the definition of "contest" as it is too vague (include contests that do not require a fee or registration, or award a prize); broaden the scope of species covered by the rule to include all terrestrial wildlife, not just predatory and fur-bearing wildlife as preemptive measure for prohibiting "creative" attempts to hold contests of other wildlife species; and include the term "sponsor" to ensure sponsorship is also a prohibited activity.**

**Agency Response:** The rulemaking process requires an agency to ensure rules are the least burdensome possible as necessary to address the agency's objective. The proposed rule would not apply to lawful, regulated hunting of predatory and fur-bearing animals, which plays an important role in wildlife management. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measurable loss in conservation efforts, and would represent a failure of the Commission to fulfill its duty to preserve wildlife for the beneficial use of present and future generations.

The definition of a "contest" is not vague but is purposely defined narrowly to ensure the proposed rule is as "least burdensome" as possible to address the Commission's objective to preserve hunting and will not have unintended consequences. In order to be a "contest" as defined by the proposed rule an event would have to satisfy all of the following elements: a competition among participants; participants register or record entry; participants pay a fee; and prizes or cash are awarded to winning or successful participants. Given the elements of the definition of a "contest" the Department does not believe the proposed rule would apply to the scenarios described by the comment. Broadening the definition of a "contest" would go beyond the Commission's objective to preserve hunting and potentially impact other hunting related social

activities beyond organized predator and fur-bearing contests.

The Department believes the act of a sponsor is addressed by the term "promote," however, to the extent that the meaning of the terms "sponsor" and "promoter" are substantially similar, the Department proposes to include the term "sponsor." This is not viewed as a substantive change.

**38. A number of comments state the rule could make violators out of two hunters who are making a friendly wager.**

**Agency Response:** A violation of the proposed rule is restricted by the definition of a “contest.” The term “contest” is purposely defined narrowly to ensure the proposed rule is as “least burdensome” as possible and does not have unintended consequences. In order to be a “contest” as defined by the proposed rule an event would have to satisfy all of the following elements: a competition among participants; participants register or record entry; participants pay a fee; and prizes or cash are awarded to winning or successful participants. Given the elements of the definition of contest, the rule would not apply to the scenario described above.

**39. A number of comments state the Department should regulate contests such as imposing bag limits, establishing a permitting process, requiring furs to be sold and the proceeds donated to a local charity, meat to be used, establishing check-in and check-out requirements; requiring the area Wildlife Manager to determine whether a contest may be held, requiring contests to be held during appropriate birthing times so it can benefit said species, etc.**

**Agency Response:** The Department does not believe the regulatory approach proposed by this comment alleviates the social concerns related to predator and fur-bearing hunting contests – a financial incentive to take as many animals as possible when no bag limits exist.

The rulemaking process requires an agency to ensure rules are the least burdensome possible as necessary to address the agency’s objective. The Department estimates around 4,600 hunter days expended during predator and fur-bearing hunting contests in Arizona each year that would be impacted by the proposed rule. If the Commission was to change seasons, set bag limits etc. they would be impacting an estimated 23,155 hunters and 175,237 hunter days (Hunt Arizona 2014). The definition of a “contest” was purposely defined narrowly to ensure the proposed rule is as “least burdensome” as possible to meet the Commission’s objective to preserve hunting and does not have unintended consequences.

The Department has not observed any significant compliance issues associated with these contests; statewide compliance with existing game and fish laws is typically 96% or higher.

**12. All agency's shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:**

**a. Whether the rule requires a permit, whether a general permit is used, and if not, the reason why a general permit is not used:**

The rule does not require a general permit.

**b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law, and if so, citation to the statutory authority to exceed the requirements of federal law:**

Federal law is not directly applicable to the subject of the rule. The rule is based on state law.

**c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:**

The agency has not received an analysis that compares the rule's impact of competitiveness of business in this state to the impact on business in other states.

**13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:**

Not applicable

**14. Whether the rule previously made, amended, or repealed as an emergency rule. If so, cite the notice published in the *Register* as specified in R1-4-409(A). Also, the agency shall state where the text was changed between the emergency and the final rulemaking packages:**

The rule was not previously made, amended, or repealed as an emergency rule.

**15. The full text of the rules follows:**

**TITLE 12. NATURAL RESOURCES**  
**CHAPTER 4. GAME AND FISH COMMISSION**  
**ARTICLE 3. TAKING AND HANDLING OF WILDLIFE**

Section

R12-4-303. Unlawful Devices, Methods, and Ammunition

### ARTICLE 3. TAKING AND HANDLING OF WILDLIFE

#### **R12-4-303. Unlawful Devices, Methods, and Ammunition**

- A.** In addition to the prohibitions prescribed under A.R.S. §§ 17-301 and 17-309, the following devices, methods, and ammunition are unlawful for taking wildlife in this state:
1. A person shall not use any of the following to take wildlife:
    - a. Fully automatic firearms, including firearms capable of selective automatic fire.
    - b. Tracer or armor-piercing ammunition designed for military use.
    - c. Any smart device as defined under R12-4-301.
    - d. Any self-guided projectiles.
  2. A person shall not take big game using full-jacketed or total-jacketed bullets that are not designed to expand upon impact,
  3. A person shall not use or possess any of the following while taking wildlife:
    - a. Poisoned projectiles or projectiles that contain explosives or a secondary propellant.
    - b. Pitfalls of greater than 5-gallon size, explosives, poisons, or stupefying substances, except as permitted under A.R.S. § 17-239 or as allowed by a scientific collecting permit issued under A.R.S. § 17-238.
    - c. Any lure, attractant, or cover scent containing any cervid urine.
    - d. Electronic night vision equipment, electronically enhanced light-gathering devices, thermal imaging devices or laser sights projecting a visible light; except for devices such as laser range finders projecting a non-visible light, scopes with self-illuminating reticles, and fiber optic sights with self-illuminating sights or pins that do not project a visible light onto an animal.
  4. A person shall not by any means:
    - a. Hold wildlife at bay other than during daylight hours, unless authorized by Commission Order.
    - b. Injure, confine, place, or use a tracking device in or on wildlife for the purpose of taking or aiding in the take of wildlife.
    - c. Place any substance, device, or object in, on, or by any water source to prevent wildlife from using that water source.
    - d. Place any substance in a manner intended to attract bears.
    - e. Use a manual or powered jacking or prying device to take reptiles or amphibians.
    - f. Use dogs to pursue, tree, corner or hold at bay any wildlife for a hunter, unless that hunter is present for the entire hunt.
    - g. Take migratory game birds, except Eurasian collared-doves:
      - i. Using a shotgun larger than 10 gauge, a shotgun of any description capable of holding more than three shells unless it is plugged with a one-piece filler that cannot be removed without disassembling the shotgun so that its total capacity does not exceed three shells.
      - ii. Using electronically amplified bird calls or baits.
      - iii. By means or aid of any motordriven land, water, or air conveyance, or any sailboat used for the

- purpose of or resulting in the concentrating, driving, rallying, or stirring up of any migratory bird.
- iv. Activities described under subsections (g)(i) through (g)(iii) are prohibited under 50 C.F.R. 20.21, revised October 1, 2015. The material incorporated by reference in this Section does not include any later amendments or editions. The incorporated material is available at any Department office, online from the Government Printing Office website [www.gpoaccess.gov](http://www.gpoaccess.gov), or may be ordered from the Superintendent of Documents, P.O. Box 979050, St. Louis, MO 63197-9000.
  - h. Discharge any of the following devices while taking wildlife within one-fourth mile (440 yards) of an occupied farmhouse or other residence, cabin, lodge or building without permission of the owner or resident:
    - i. Arrow or bolt,
    - ii. Hybrid device, or
    - iii. Pneumatic weapon .35 caliber or larger.
  - i. Participate in, organize, promote, sponsor, or solicit participation in a contest where a participant uses or intends to use any device or implement to capture or kill predatory animals or fur-bearing animals as defined under A.R.S. § 17-101. For the purposes of this subsection, "contest" means a competition among participants where participants must register or record entry and pay a fee and prizes or cash are awarded to winning or successful participants.
5. A person shall not use a live-action trail camera, or images from a live-action trail camera, for the purpose of:
    - a. Taking or aiding in the take of wildlife, or
    - b. Locating wildlife for the purpose of taking or aiding in the take of wildlife.
  6. A person shall not use images of wildlife produced or transmitted from a satellite or other device that orbits the earth for the purpose of:
    - a. Taking or aiding in the take of wildlife, or
    - b. Locating wildlife for the purpose of taking or aiding in the take of wildlife.
    - c. This subsection does not prohibit the use of mapping systems or programs.
  7. A person shall not use edible or ingestible substances to aid in taking big game. The use of edible or ingestible substances to aid in taking big game is unlawful when:
    - a. A person places edible or ingestible substances for the purpose of attracting or taking big game, or
    - b. A person knowingly takes big game with the aid of edible or ingestible substances placed for the purpose of attracting wildlife to a specific location.
  8. Subsection (A)(7) does not limit Department employees or Department agents in the performance of their official duties.
  9. For the purposes of subsection (A)(7), edible or ingestible substances do not include any of the following:
    - a. Water.
    - b. Salt.
    - c. Salt-based materials produced and manufactured for the livestock industry.

- d. Nutritional supplements produced and manufactured for the livestock industry and placed during the course of livestock or agricultural operations.
- B.** It is unlawful for a person who is a prohibited possessor to take wildlife with a deadly weapon or prohibited weapon.
- C.** Wildlife taken in violation of this Section is unlawfully taken.
- D.** This Section does not apply to any activity allowed under A.R.S. § 17-302, to a person acting within the scope of their official duties as an employee of the state or United States, or as authorized by the Department.

## COMMENT STATISTICS AND INFORMATION

<b>Comment Types</b>	<b>Resident</b>	<b>Nonresident</b>
Form Letters in Support of Rulemaking	3093	172
Individual in Support of Rulemaking	917	125
Individual in Opposition of Rulemaking	421	2
Refine Rule Language	22	
Suggest Regulating Contests	18	
Outside Scope of Rulemaking	34	
Questions About Rulemaking	6	
Totals = 4,810	4,511	299

For emailed comments: the date, time, and commenter's initials or abbreviations were used as the file name.

In the event the date, time, and initials were the same a space and a 1 was added to the file name.

For mailed comments: the date and commenter's initials were used as the file name.

The file named Postcard Form Letters includes all of the postcards received.

The numbers above are somewhat skewed as many commenters, both in support of and against the proposed rulemaking, submitted more than one comment - often resubmitting the exact same comment. Persons submitting multiple comments submitted anywhere from 2 to 10 comments each; with 3 being the most common multiplier.

I tried to find a way to determine when a person submits multiple comments, but found the only way to do that without buying special software is to search Google mail for each individual email address and create a spreadsheet. This process would be labor intensive and I do not believe the benefits would outweigh the costs.

**TITLE 12. NATURAL RESOURCES**  
**CHAPTER 4. GAME AND FISH COMMISSION**  
**ARTICLE 3. TAKING AND HANDLING OF WILDLIFE**  
**R12-4-303. UNLAWFUL DEVICES, METHODS, AND AMMUNITION**  
**Economic, Small Business and Consumer Impact Statement**

**A. Economic, small business and consumer impact summary:**

**1. Identification of the proposed rulemaking.**

The Arizona Game and Fish Commission proposes to adopt rules to regulate hunting activities consistent with the guiding principles governing the Commission's duty to preserve wildlife for the beneficial use of the public. The proposed rulemaking will designate a predator/fur-bearing hunt contest, as defined by the rule, an unlawful manner and method of take for predator/fur-bearing species. A rule that provides clear instruction about the legal hunting of predator/fur-bearing species provides for the conservation, maintenance, and utilization of wildlife under the jurisdiction of the State for the benefit of all the citizens.

**(a) The conduct and its frequency of occurrence that the rule is designed to change.**

Wildlife predator/fur-bearing hunting contest that link economic benefit to the greatest number or variety of animals killed are contrary to the important principle that the take of wildlife should not be for the purpose of a competition among participants and the awarding of prizes for winning participants. Because the species involved in these events have no bag limits and may be taken year-round, and the Department does not currently regulate wildlife predator/fur-bearing hunting contest, it is difficult to quantify the number of events that occur on a yearly basis. The Commission estimates that, on an annual basis, there are 11 local wildlife predator/fur-bearing hunting contests lasting two days with up to 100 participants in each contest, 4 multiple state contests lasting two days with up to 150 participants in each contest, and 2 State-wide contests lasting two days with up to 300 participants in each contest,

**(b) The harm resulting from the conduct the rule is designed to change and the likelihood it will continue to occur if the rule is not changed.**

Extensive public controversy exists about wildlife predator/fur-bearing hunting contest that award prizes to the participants who kill the largest number or variety of animals. Because these species have no bag limits and participants are generally required to comply with State laws and rules related to the take of wildlife, these contests are not unlawful. To the extent these contests reflect on the overall hunting community, public outrage with these events has the potential to threaten hunting as a legitimate wildlife management function. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measureable loss in conservation efforts, and would represent a failure of the Commission's duty to preserve wildlife for the beneficial use of present and future generations.

**(c) The estimated change in frequency of the targeted conduct expected from the rule change.**

The Commission believes that over time, through continued outreach, education, and enforcement of the rule changes identified under (A)(1), the frequency of wildlife predator/fur-bearing hunting contest will be significantly reduced.

**2. Brief summary of the information included in the economic, small business and consumer impact statement.**

The Commission's intent in adopting the rule is to address unethical concerns associated with predator/fur-bearing contests, and to proscribe the manner and method of take for participants to a predators/fur-bearings contest. Wildlife predator/fur-bearing hunting contest that link economic gain to the greatest number or variety of animals killed are contrary to the important principle that the take of wildlife should not be allowed to go to waste or taken for economic gain. The Commission believes the rulemaking will benefit the State and persons regulated by the rule by reducing regulatory uncertainty, and strengthening consistency with the principles that guide the Commission's public trust responsibility to conserve wildlife for the benefit of the citizens of Arizona. Extensive public controversy exists about predator/fur-bearing contests that award prizes to participants who kill the largest number or variety of predator/fur-bearing animals. To the extent these contests reflect on the overall hunting community, public outrage with these events has the potential to threaten hunting as a legitimate wildlife management function. Regulated hunting fundamentally supports wildlife conservation efforts in North America. The loss of hunting would equate to a measureable loss in conservation efforts, and would represent a failure of the Commission in its duty to preserve wildlife for the beneficial use of present and future generations. The Commission anticipates the rulemaking will impose a burden on persons regulated by the rule by prohibiting wildlife predator/fur-bearing contests. The Commission anticipates the rulemaking will result in no impact to agencies or political subdivisions of this State, private and public employment in businesses, or State revenues. The Commission has determined the rulemaking will not require any new full-time employees. The Commission has determined that there are no less intrusive or costly alternative methods of achieving the purpose of the rulemaking. The Department will incur costs related to the cost of rulemaking and implementing the rule. The Commission has determined that the benefits of the rulemaking outweigh any costs.

**3. The name and address of agency employees who may be contacted to submit or request additional data on the information included in the economic, small business and consumer impact statement.**

Name: Celeste Cook, Rules and Policy Manager

Address: Arizona Game and Fish Department

5000 W. Carefree Highway

Phoenix, AZ 85086

Telephone: (623) 236-7390

E-mail: CCook@azgfd.gov

**B. The economic, small business and consumer impact statement:**

**1. Identification of the proposed rulemaking.**

See paragraph (A)(1) above.

**2. Identification of the persons who will be directly affected by, bear the costs of or directly benefit from the proposed rulemaking.**

Persons who organize and participate in wildlife predator/fur-bearing contests (includes commercial businesses, livestock owners, and hunting clubs, associations, and organizations)

Businesses that provide products and services that directly generate sales as a result of purchases directly related to participation in wildlife predator/fur-bearing contests.

The Commission does not anticipate there will be a significant financial impact to individuals or businesses as a result of the proposed rulemaking and the Commission holds that the benefits of these amendments significantly outweigh any costs.

**3. Cost benefit analysis:**

**Cost-revenue scale. Annual costs or revenues are defined as follows:**

- (a) Probable costs and benefits to the implementing agency and other agencies directly affected by the implementation and enforcement of the proposed rulemaking. The probable costs to the implementing agency shall include the number of new full-time employees necessary to implement and enforce the proposed rule. The preparer of the Economic, Small Business, and Consumer Impact Statement shall notify the Joint Legislative Budget Committee of the number of new full-time employees necessary to implement and enforce the rule before the rule is approved by council.**

The Commission anticipates the proposed rulemaking will benefit the Department by reducing regulatory uncertainty, and strengthening consistency with the principles that guide the Commission's public trust responsibility to conserve wildlife for the benefit of the citizens of Arizona.

- (b) Probable costs and benefits to a political subdivision of this state directly affected by the implementation and enforcement of the proposed rulemaking.**

The Commission does not anticipate the proposed rulemaking will significantly affect political subdivisions of this State. A number of political subdivisions have already passed resolutions opposing these types of contests: Pima and Yavapai counties.

- (c) Probable costs and benefits to businesses directly affected by the proposed rulemaking, including any anticipated effect on the revenues or payroll expenditures of employers who are subject to the proposed rulemaking.**

Businesses that provide goods and services for the tourism industry, such as meals, lodgings, motor fuel, etc. will be affected by the proposed rulemaking. The U.S. Fish and Wildlife Service's 2011 National Survey of Fishing, Hunting, and Wildlife-associated Recreation report indicates hunters spend approximately \$132 on hunting equipment and trip expenditures per day (user day). On an annual basis, it is estimated that there are 11 predator/fur-bearing hunting contests within Arizona resulting in approximately 4,600 user days equaling approximately \$607,200 of economic impact. To put this figure into perspective, approximately 43.9 million tourists, both domestic and foreign, spent 22.7

billion dollars in Arizona in 2017 (Arizona Office of Tourism); therefore, the loss \$607,200 equates to an insignificant loss in contest-related revenue each year.

It is also important to note, the economic impact from predator hunting in general is larger. According to Hunt Arizona 2014, on an annual basis general predator and fur-bearing hunters account for 175,237 user days in Arizona. The economic impact of general predator and fur-bearing hunting in Arizona is estimated to be over \$23,000,000. This figure is provided to indicate the possible impact if broader restrictions were a result. The Commission anticipates the rulemaking will protect these hunting opportunities.

The Commission does not anticipate the proposed rulemaking will significantly affect businesses in this State. This is partly due to the lack of public support for wildlife predator/fur-bearing hunting contest. The number of wildlife predator/fur-bearing hunting contest have declined over the years; for example, from 2013 to 2017 the number of wildlife predator/fur-bearing hunting contest held by a nation-wide commercial entity have dwindled from 56 contests per year to only 11 contests per year.

It is important to recognize the proposed rulemaking would not prohibit a person who would have participated in a wildlife predator/fur-bearing hunting contest from hunting predators/fur-bearing animals during times when no contests are occurring. The national survey does not differentiate between money spent while hunting as a participant in a predator/fur-bearing hunting contest and money spent by hunters who are not participating in a contest a person hunting. The Commission does not anticipate the rulemaking will reduce the number of days a person chooses to hunt predators and fur-bearing animals, therefore it is believed the economic impact will be much lower than the estimate above suggests.

**4. General description of the probable impact on private and public employment in businesses, agencies and political subdivisions of this state directly affected by the proposed rulemaking.**

The Commission anticipates the proposed amendments will have no substantial impact on private and public employment in businesses, agencies, and political subdivisions of the State directly affected by the proposed rulemaking. The Commission anticipates persons directly affected by the rule will not incur any additional costs as a result of the rulemaking.

**5. Statement of the probable impact of the proposed rulemaking on small businesses:**

**(a) Identification of the small businesses subject to the proposed rulemaking.**

Businesses that provide lodging, fuel, meals, and miscellaneous sundries.

**(b) Administrative and other costs required for compliance with the proposed rulemaking.**

The Commission anticipates the proposed rulemaking will not create additional costs for compliance.

**(c) Description of the methods that the agency may use to reduce the impact on small businesses.**

The Commission believes establishing a less stringent approach is not possible to reduce the economic impact to small businesses.

**(d) Probable cost and benefit to private persons and consumers who are directly affected by the proposed rulemaking.**

The Commission anticipates the proposed rulemaking will benefit private persons and consumers by clarifying lawful manner and methods for take and, in doing so, ensuring the continued integrity of and compliance with its rules. The Commission anticipates the proposed rulemaking will have a probable cost to those private persons who receive economic gain from organizing and participating in wildlife predator/fur-bearing hunting contest.

**6. Statement of the probable effect on state revenues.**

The proposed rulemaking will not significantly impact State revenues.

**7. Description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed rulemaking including the monetizing of the costs and benefits for each option and providing rationale for not using the nonselected alternatives.**

The Commission has determined that there are no alternative methods of achieving the objectives of the proposed rulemaking. The Commission holds that the benefits of the proposed rulemaking outweigh any costs.

**8. Description of any data on which a rule is based with a detailed explanation of how the data was obtained and why the data is acceptable data. An agency advocating that any data is acceptable data has the burden of proving that the data is acceptable. For the purposes of this paragraph, "acceptable data" means empirical, replicable and testable data as evidenced in supporting documentation, statistics, reports, studies or research.**

For this rulemaking, the Commission relied on agency experience and observations, which included comments from the public and agency staff that administer and enforce the rules included in this rulemaking. This rulemaking includes rules that govern lawful manner and methods for the taking and handling of wildlife.

**C. If for any reason adequate data are not reasonably available to comply with the requirements of subsection B of this section, the agency shall explain the limitations of the data and the methods that were employed in the attempt to obtain the data and shall characterize the probable impacts in qualitative terms. The absence of adequate data, if explained in accordance with this subsection, shall not be grounds for a legal challenge to the sufficiency of the economic, small business and consumer impact statement.**

The Department tasked a team of subject matter experts to make recommendations for this proposed rule. In its review, the team considered all comments from the public and agency staff that administer and enforce Commission rules, available historical data, current processes and environment, and the Department's overall mission. The team considered each recommendation from a resource perspective and determined whether the recommendation would cause undue harm to the Department's goals and objectives. The team then determined whether the request was consistent with the Department's overall mission, if it was within the scope of the Commission's authority, and whether it was acceptable to the public. The Commission believes the process utilized in completing this economic, small business, and consumer statement is more than adequate.

## R12-4-303. UNLAWFUL DEVICES, METHODS, AND AMMUNITION

### DEFINITIONS

#### 17-101. Definitions

A. In this title, unless the context otherwise requires:

1. "Angling" means the taking of fish by one line and not to exceed two hooks, by one line and one artificial lure, which may have attached more than one hook, or by one line and not to exceed two artificial flies or lures.
2. "Bag limit" means the maximum limit, in number or amount, of wildlife that may lawfully be taken by any one person during a specified period of time.
3. "Closed season" means the time during which wildlife may not be lawfully taken.
4. "Commission" means the Arizona game and fish commission.
5. "Department" means the Arizona game and fish department.
6. "Device" means any net, trap, snare, salt lick, scaffold, deadfall, pit, explosive, poison or stupefying substance, crossbow, firearm, bow and arrow, or other implement used for taking wildlife. Device does not include a raptor or any equipment used in the sport of falconry.
7. "Domicile" means a person's true, fixed and permanent home and principal residence. Proof of domicile in this state may be shown as prescribed by rule by the commission.
8. "Falconry" means the sport of hunting or taking quarry with a trained raptor.
9. "Fishing" means to lure, attract or pursue aquatic wildlife in such a manner that the wildlife may be captured or killed.
10. "Fur dealer" means any person engaged in the business of buying for resale the raw pelts or furs of wild mammals.
11. "Guide" means a person who does any of the following:
  - (a) Advertises for guiding services.
  - (b) Holds himself out to the public for hire as a guide.
  - (c) Is employed by a commercial enterprise as a guide.
  - (d) Accepts compensation in any form commensurate with the market value in this state for guiding services in exchange for aiding, assisting, directing, leading or instructing a person in the field to locate and take wildlife.
  - (e) Is not a landowner or lessee who, without full fair market compensation, allows access to the landowner's or lessee's property and directs and advises a person in taking wildlife.
12. "License classification" means a type of license, permit, tag or stamp authorized under this title and prescribed by the commission by rule to take, handle or possess wildlife.
13. "License year" means the twelve-month period between January 1 and December 31, inclusive, or a different twelve-month period as prescribed by the commission by rule.
14. "Nonresident", for the purposes of applying for a license, permit, tag or stamp, means a citizen of the United States or an alien who is not a resident.
15. "Open season" means the time during which wildlife may be lawfully taken.

## R12-4-303. UNLAWFUL DEVICES, METHODS, AND AMMUNITION

### DEFINITIONS

16. "Possession limit" means the maximum limit, in number or amount of wildlife, that may be possessed at one time by any one person.
  17. "Resident", for the purposes of applying for a license, permit, tag or stamp, means a person who is:
    - (a) A member of the armed forces of the United States on active duty and who is stationed in:
      - (i) This state for a period of thirty days immediately preceding the date of applying for a license, permit, tag or stamp.
      - (ii) Another state or country but who lists this state as the person's home of record at the time of applying for a license, permit, tag or stamp.
    - (b) Domiciled in this state for six months immediately preceding the date of applying for a license, permit, tag or stamp and who does not claim residency privileges for any purpose in any other state or jurisdiction.
  18. "Road" means any maintained right-of-way for public conveyance.
  19. "Statewide" means all lands except those areas lying within the boundaries of state and federal refuges, parks and monuments, unless specifically provided differently by commission order.
  20. "Take" means pursuing, shooting, hunting, fishing, trapping, killing, capturing, snaring or netting wildlife or the placing or using of any net or other device or trap in a manner that may result in the capturing or killing of wildlife.
  21. "Taxidermist" means any person who engages for hire in the mounting, refurbishing, maintaining, restoring or preserving of any display specimen.
  22. "Traps" or "trapping" means taking wildlife in any manner except with a gun or other implement in hand.
  23. "Wild" means, in reference to mammals and birds, those species that are normally found in a state of nature.
  24. "Wildlife" means all wild mammals, wild birds and the nests or eggs thereof, reptiles, amphibians, mollusks, crustaceans and fish, including their eggs or spawn.
  25. "Youth" means a person who is under eighteen years of age.
  26. "Zoo" means a commercial facility open to the public where the principal business is holding wildlife in captivity for exhibition purposes.
- B.** The following definitions of wildlife shall apply:
1. Aquatic wildlife are all fish, amphibians, mollusks, crustaceans and soft-shelled turtles.
  2. Game mammals are deer, elk, bear, pronghorn (antelope), bighorn sheep, bison (buffalo), peccary (javelina), mountain lion, tree squirrel and cottontail rabbit.
  3. Big game are wild turkey, deer, elk, pronghorn (antelope), bighorn sheep, bison (buffalo), peccary (javelina), bear and mountain lion.
  4. "Trophy" means:
    - (a) A mule deer buck with at least four points on one antler, not including the eye-guard point.
    - (b) A whitetail deer buck with at least three points on one antler, not including the eye-guard point.

## **R12-4-303. UNLAWFUL DEVICES, METHODS, AND AMMUNITION**

### **DEFINITIONS**

- (c) A bull elk with at least six points on one antler, including the eye-guard point and the brow tine point.
  - (d) A pronghorn (antelope) buck with at least one horn exceeding or equal to fourteen inches in total length.
  - (e) Any bighorn sheep.
  - (f) Any bison (buffalo).
5. Small game are cottontail rabbits, tree squirrels, upland game birds and migratory game birds.
  6. Fur-bearing animals are muskrats, raccoons, otters, weasels, bobcats, beavers, badgers and ringtail cats.
  7. Predatory animals are foxes, skunks, coyotes and bobcats.
  8. Nongame animals are all wildlife except game mammals, game birds, fur-bearing animals, predatory animals and aquatic wildlife.
  9. Upland game birds are quail, partridge, grouse and pheasants.
  10. Migratory game birds are wild waterfowl, including ducks, geese and swans; sandhill cranes; all coots, all gallinules, common snipe, wild doves and bandtail pigeons.
  11. Nongame birds are all birds except upland game birds and migratory game birds.
  12. Raptors are birds that are members of the order of falconiformes or strigiformes and include falcons, hawks, owls, eagles and other birds that the commission may classify as raptors.
  13. Game fish are trout of all species, bass of all species, catfish of all species, sunfish of all species, northern pike, walleye and yellow perch.
  14. Nongame fish are all the species of fish except game fish.
  15. Trout means all species of the family salmonidae, including grayling.

### **R12-4-101. Definitions**

- A.** In addition to the definitions provided under A.R.S. § 17-101, R12-4-301, R12-4-401, and R12-4-501, the following definitions apply to this Chapter, unless otherwise specified:

“Bobcat seal” means the tag a person is required to attach to the raw pelt or unskinned carcass of any bobcat taken by trapping in Arizona or exported out of Arizona regardless of the method of take.

“Bonus point” means a credit that authorizes the Department to issue an applicant an additional computer-generated random number.

“Certificate of insurance” means an official document issued by the sponsor's and sponsor's vendors or subcontractors insurance carrier providing insurance against claims for injury to persons or damage to property which may arise from or in connection with the solicitation or event as determined by the Department.

“Commission Order” means a document adopted by the Commission that does one or more of the following:

- Open, close, or alter seasons,
- Open areas for taking wildlife,
- Set bag or possession limits for wildlife,
- Set the number of permits available for limited hunts, or

## **R12-4-303. UNLAWFUL DEVICES, METHODS, AND AMMUNITION**

### **DEFINITIONS**

Specify wildlife that may or may not be taken.

“Day-long” means the 24-hour period from one midnight to the following midnight.

“Department property” means those buildings or real property and wildlife areas under the jurisdiction of the Arizona Game and Fish Commission.

“Firearm” means any loaded or unloaded handgun, pistol, revolver, rifle, shotgun, or other weapon that will discharge, is designed to discharge, or may readily be converted to discharge a projectile by the action of an explosion caused by the burning of smokeless powder, black powder, or black powder substitute.

“Hunt area” means a management unit, portion of a management unit, or group of management units, or any portion of Arizona described in a Commission Order and not included in a management unit, opened to hunting.

“Hunt number” means the number assigned by Commission Order to any hunt area where a limited number of hunt permits are available.

“Hunt permits” means the number of hunt permit-tags made available to the public as a result of a Commission Order.

“Hunt permit-tag” means a tag for a hunt for which a Commission Order has assigned a hunt number.

“Identification number” means the number assigned to each applicant or license holder by the Department, as established under R12-4-111.

“License dealer” means a business authorized to sell hunting, fishing, and other licenses as established under ~~to~~ R12-4-105.

“Live baitfish” means any species of live freshwater fish designated by Commission Order as lawful for use in taking aquatic wildlife under R12-4-317.

“Management unit” means an area established by the Commission for management purposes.

“Nonpermit-tag” means a tag for a hunt for which a Commission Order does not assign a hunt number and the number of tags is not limited.

“Person” has the meaning as provided under A.R.S. § 1-215.

“Proof of purchase,” for the purposes of A.R.S. § 17-331, means an original, or any authentic and verifiable form of the original, of any Department-issued license, permit, or stamp that establishes proof of actual purchase.

“Restricted nonpermit-tag” means a tag issued for a supplemental hunt as established under R12-4-115.

“Solicitation” means any activity that may be considered or interpreted as promoting, selling, or transferring products, services, memberships, or causes, or participation in an event or activity of any kind, including organizational, educational, public affairs, or protest activities, including the distribution or posting of advertising, handbills, leaflets, circulars, posters, or other printed materials for these purposes.

“Solicitation material” means advertising, circulars, flyers, handbills, leaflets, posters, or other printed information.

“Sponsor” means the person or persons conducting a solicitation or event.

## **R12-4-303. UNLAWFUL DEVICES, METHODS, AND AMMUNITION**

### **DEFINITIONS**

“Stamp” means a form of authorization in addition to a license that authorizes the license holder to take wildlife specified by the stamp.

“Tag” means the Department authorization a person is required to obtain before taking certain wildlife as established under A.R.S. Title 17 and 12 A.A.C. 4.

“Waterdog” means the larval or metamorphosing stage of a salamander.

“Wildlife area” means an area established under 12 A.A.C. 4, Article 8.

**B.** If the following terms are used in a Commission Order, the following definitions apply:

“Antlered” means having an antler fully erupted through the skin and capable of being shed.

“Antlerless” means not having an antler, antlers, or any part of an antler erupted through the skin.

“Bearded turkey” means a turkey with a beard that extends beyond the contour feathers of the breast.

“Buck antelope” means a male pronghorn antelope.

“Adult bull buffalo” means a male buffalo any age or any buffalo designated by a Department employee during an adult bull buffalo hunt.

“Adult cow buffalo” means a female buffalo any age or any buffalo designated by a Department employee during an adult cow buffalo hunt.

“Bull elk” means an antlered elk.

“Designated” means the gender, age, or species of an animal or the specifically identified animal the Department authorizes to be taken and possessed with a valid tag.

“Ram” means any male bighorn sheep.

“Rooster” means a male pheasant.

“Yearling buffalo” means any buffalo less than three years of age or any buffalo designated by a Department employee during a yearling buffalo hunt.

### **R12-4-301. Definitions**

In addition to the definitions provided under A.R.S. § 17-101 and R12-4-101, the following definitions apply to this Article unless otherwise specified:

"Administer" means to apply a drug directly to wildlife by injection, inhalation, ingestion, or any other means.

"Aircraft" means any contrivance used for flight in the air or any lighter-than-air contrivance, including unmanned aircraft systems also known as drones.

"Artificial flies and lures" means man-made devices intended as visual attractants to catch fish. Artificial flies and lures does not include living or dead organisms or edible parts of those organisms, natural or prepared food stuffs, chemicals or organic materials intended to create a scent, flavor, or chemical stimulant to the device regardless of whether it is added or applied during or after the manufacturing process.

"Barbless hook" means any fish hook manufactured without barbs or on which the barbs have been completely closed or removed.

"Body-gripping trap" means a device designed to capture an animal by gripping the animal's body.

## **R12-4-303. UNLAWFUL DEVICES, METHODS, AND AMMUNITION**

### **DEFINITIONS**

"Confinement trap" means a device designed to capture wildlife alive and hold it without harm.

"Crayfish net" means a net that does not exceed 36 inches on a side or in diameter and is retrieved by means of a hand-held line.

"Deadly weapon" has the same meaning as provided under A.R.S. § 13-3101.

"Device" has the same meaning as provided under A.R.S. § 17-101.

"Dip net" means any net, excluding the handle, that is no greater than three feet in the greatest dimension, that is hand-held, non-motorized, and the motion of the net is caused by the physical effort of the person.

"Drug" means any chemical substance, other than food or mineral supplements, that affects the structure or biological function of wildlife.

"Edible portions of game meat" means, for:

Upland game birds, migratory game birds and wild turkey: breast.

Bear, bighorn sheep, bison, deer, elk, javelina, mountain lion, and pronghorn antelope: front quarters, hind quarters, loins (backstraps), neck meat, and tenderloins.

Game fish: fillets of the fish.

"Evidence of legality" means the wildlife is accompanied by the applicable license, tag, stamp, or permit required by law and is identifiable as the "legal wildlife" prescribed by Commission Order, which may include evidence of species, gender, antler or horn growth, maturity, and size.

"Foothold trap" means a device designed to capture an animal by the leg or foot.

"Hybrid device" means a device with a combination of components from two or more lawful devices and is used for the take of wildlife, such as but not limited to a firearm, pneumatic weapon, or slingshot that shoots arrows or bolts.

"Instant kill trap" means a device designed to render an animal unconscious and insensitive to pain quickly with inevitable subsidence into death without recovery of consciousness.

"Land set" means any trap used on land rather than in water.

"Live-action trail camera" means an unmanned device capable of transmitting images, still photographs, video, or satellite imagery, wirelessly to a remote device such as but not limited to a computer, smart phone, or tablet. This does not include a trail camera that only records photographic or video data and stores the data for later use, provided the device is not capable of transmitting data wirelessly.

"Minnow trap" means a trap with dimensions that do not exceed 12 inches in depth, 12 inches in width, and 24 inches in length.

"Muzzleloading handgun" means a firearm intended to be fired from the hand, incapable of firing fixed ammunition, and loaded with black powder or synthetic black powder and a single projectile.

"Muzzleloading rifle" means a firearm intended to be fired from the shoulder, incapable of firing fixed ammunition, having a single barrel, and loaded through the muzzle with black powder or synthetic black powder and a single projectile.

"Muzzleloading shotgun" means a firearm intended to be fired from the shoulder, incapable of firing fixed

## **R12-4-303. UNLAWFUL DEVICES, METHODS, AND AMMUNITION**

### **DEFINITIONS**

ammunition, having a single or double smooth barrel and loaded through the muzzle with black powder or synthetic black powder and using ball shot as a projectile.

"Paste-type bait" means a partially liquefied substance used as a lure for animals.

"Pneumatic weapon" means a device that fires a projectile by means of air pressure or compressed gas. This does not include tools that are common in the construction and art trade such as, but not limited to, nail and rivet guns.

"Pre-charged pneumatic weapon" means an air gun or pneumatic weapon that is charged from a high compression source such as an air compressor, air tank, or internal or external hand pump.

"Prohibited possessor" has the same meaning as provided under A.R.S. § 13-3101.

"Prohibited weapon" has the same meaning as provided under A.R.S. § 13-3101.

"Rifle" means a firearm intended to be fired from the shoulder that uses the energy from an explosive in a fixed cartridge to fire a single projectile through a rifled bore for each single pull of the trigger. This does not include a pre-charged pneumatic weapon.

"Shotgun" means a firearm intended to be fired from the shoulder and that uses the energy from an explosive in a fixed shotgun shell to fire either ball shot or a single projectile through a smooth bore or rifled barrel for each pull of the trigger.

"Sight-exposed bait" means a carcass, or parts of a carcass, lying openly on the ground or suspended in a manner so that it can be seen from above by a bird. This does not include a trap flag, dried or bleached bone with no attached tissue, or less than two ounces of paste-type bait.

"Simultaneous fishing" means taking fish by using only two lines at one time and not more than two hooks or two artificial flies or lures per line.

"Single-point barbless hook" means a fishhook with a single point, manufactured without barbs, or on which the barbs have been completely closed or removed. This does not include a treble fishhook.

"Sinkbox" means a low-floating device with a depression that affords a hunter a means of concealment beneath the surface of the water.

"Smart device" means any device equipped with a target-tracking system or an electronically-controlled, electronically-assisted, or computer-linked trigger or release. This includes but is not limited to smart rifles.

"Trap flag" means an attractant made from materials other than animal parts that is suspended at least three feet above the ground.

"Water set" means any trap used and anchored in water rather than on land.

**ARTICLE 3. TAKING AND HANDLING OF WILDLIFE  
R12-4-312 STATUTORY AUTHORITY**

**17-102. Wildlife as state property; exceptions**

Wildlife, both resident and migratory, native or introduced, found in this state, except fish and bullfrogs impounded in private ponds or tanks or wildlife and birds reared or held in captivity under permit or license from the commission, are property of the state and may be taken at such times, in such places, in such manner and with such devices as provided by law or rule of the commission.

**17-231. General powers and duties of the commission**

**A.** The commission shall:

1. Adopt rules and establish services it deems necessary to carry out the provisions and purposes of this title.
2. Establish broad policies and long-range programs for the management, preservation and harvest of wildlife.
3. Establish hunting, trapping and fishing rules and prescribe the manner and methods that may be used in taking wildlife, but the commission shall not limit or restrict the magazine capacity of any authorized firearm.
4. Be responsible for the enforcement of laws for the protection of wildlife.
5. Provide for the assembling and distribution of information to the public relating to wildlife and activities of the department.
6. Prescribe rules for the expenditure, by or under the control of the director, of all funds arising from appropriation, licenses, gifts or other sources.
7. Exercise such powers and duties necessary to carry out fully the provisions of this title and in general exercise powers and duties that relate to adopting and carrying out policies of the department and control of its financial affairs.
8. Prescribe procedures for use of department personnel, facilities, equipment, supplies and other resources in assisting search or rescue operations on request of the director of the division of emergency management.
9. Cooperate with the Arizona-Mexico commission in the governor's office and with researchers at universities in this state to collect data and conduct projects in the United States and Mexico on issues that are within the scope of the department's duties and that relate to quality of life, trade and economic development in this state in a manner that will help the Arizona-Mexico commission to assess and enhance the economic competitiveness of this state and of the Arizona-Mexico region.

**B.** The commission may:

1. Conduct investigations, inquiries or hearings in the performance of its powers and duties.

2. Establish game management units or refuges for the preservation and management of wildlife.
3. Construct and operate game farms, fish hatcheries, fishing lakes or other facilities for or relating to the preservation or propagation of wildlife.
4. Expend funds to provide training in the safe handling and use of firearms and safe hunting practices.
5. Remove or permit to be removed from public or private waters fish which hinder or prevent propagation of game or food fish and dispose of such fish in such manner as it may designate.
6. Purchase, sell or barter wildlife for the purpose of stocking public or private lands and waters and take at any time in any manner wildlife for research, propagation and restocking purposes or for use at a game farm or fish hatchery and declare wildlife salable when in the public interest or the interest of conservation.
7. Enter into agreements with the federal government, with other states or political subdivisions of the state and with private organizations for the construction and operation of facilities and for management studies, measures or procedures for or relating to the preservation and propagation of wildlife and expend funds for carrying out such agreements.
8. Prescribe rules for the sale, trade, importation, exportation or possession of wildlife.
9. Expend monies for the purpose of producing publications relating to wildlife and activities of the department for sale to the public and establish the price to be paid for annual subscriptions and single copies of such publications. All monies received from the sale of such publications shall be deposited in the game and fish publications revolving fund.
10. Contract with any person or entity to design and produce artwork on terms that, in the commission's judgment, will produce an original and valuable work of art relating to wildlife or wildlife habitat.
11. Sell or distribute the artwork authorized under paragraph 10 of this subsection on such terms and for such price as it deems acceptable.
12. Consider the adverse and beneficial short-term and long-term economic impacts on resource dependent communities, small businesses and the state of Arizona, of policies and programs for the management, preservation and harvest of wildlife by holding a public hearing to receive and consider written comments and public testimony from interested persons.
13. Adopt rules relating to range operations at public shooting ranges operated by and under the jurisdiction of the commission, including the hours of operation, the fees for the use of the range, the regulation of groups and events, the operation of related range facilities, the type of firearms and ammunition that may be used at the range, the safe handling of firearms at the range, the required safety equipment for a person using the range, the sale of firearms, ammunition and

shooting supplies at the range, and the authority of range officers to enforce these rules, to remove violators from the premises and to refuse entry for repeat violations.

14. Solicit and accept grants, gifts or donations of money or other property from any source, which may be used for any purpose consistent with this title.

- C. The commission shall confer and coordinate with the director of water resources with respect to the commission's activities, plans and negotiations relating to water development and use, restoration projects under the restoration acts pursuant to chapter 4, article 1 of this title, where water development and use are involved, the abatement of pollution injurious to wildlife and in the formulation of fish and wildlife aspects of the director of water resources' plans to develop and utilize water resources of the state and shall have jurisdiction over fish and wildlife resources and fish and wildlife activities of projects constructed for the state under or pursuant to the jurisdiction of the director of water resources.
- D. The commission may enter into one or more agreements with a multi-county water conservation district and other parties for participation in the lower Colorado river multispecies conservation program under section 48-3713.03, including the collection and payment of any monies authorized by law for the purposes of the lower Colorado river multispecies conservation program.

**17-234. Open or closed seasons; bag limits; possession limits**

The commission shall by order open, close or alter seasons and establish bag and possession limits for wildlife, but a commission order to open a season shall be issued not less than ten days prior to such opening date. The order may apply statewide or to any portion of the state. Closed season shall be in effect unless opened by commission order.

**17-301. Times when wildlife may be taken; exceptions; methods of taking**

- A. A person may take wildlife, except aquatic wildlife, only during daylight hours unless otherwise prescribed by the commission. A person shall not take any species of wildlife by the aid or with the use of a jacklight, other artificial light, or illegal device, except as provided by the commission.
- B. A person shall not take wildlife, except aquatic wildlife, or discharge a firearm or shoot any other device from a motor vehicle, including an automobile, aircraft, train or powerboat, or from a sailboat, boat under sail, or a floating object towed by powerboat or sailboat except as expressly permitted by the commission. No person may knowingly discharge any firearm or shoot any other device upon, from, across or into a road or railway.
- C. Fish may be taken only by angling unless otherwise provided by the commission. The line shall be constantly attended. In every case the hook, fly or lure shall be used in such manner that the fish

voluntarily take or attempt to take it in their mouths.

- D. It shall be unlawful to take wildlife with any leghold trap, any instant kill body gripping design trap, or by a poison or a snare on any public land, including state owned or state leased land, lands administered by the United States forest service, the federal bureau of land management, the national park service, the United States department of defense, the state parks board and any county or municipality. This subsection shall not prohibit:
1. The use of the devices prescribed in this subsection by federal, state, county, city, or other local departments of health which have jurisdiction in the geographic area of such use, for the purpose of protection from or surveillance for threats to human health or safety.
  2. The taking of wildlife with firearms, with fishing equipment, with archery equipment, or other implements in hand as may be defined or regulated by the Arizona game and fish commission, including but not limited to the taking of wildlife pursuant to a hunting or fishing license issued by the Arizona game and fish department.
  3. The use of snares, traps not designed to kill, or nets to take wildlife for scientific research projects, sport falconry, or for relocation of the wildlife as may be defined or regulated by the Arizona game and fish commission or the government of the United States or both.
  4. The use of poisons or nets by the Arizona game and fish department to take or manage aquatic wildlife as determined and regulated by the Arizona game and fish commission.
  5. The use of traps for rodent control or poisons for rodent control for the purpose of controlling wild and domestic rodents as otherwise allowed by the laws of the state of Arizona, excluding any fur-bearing animals as defined in section 17-101.

**G.** CONSIDERATION AND DISCUSSION OF 2020 GOVERNOR'S REGULATORY REVIEW  
COUNCIL CALENDAR

**GOVERNOR'S REGULATORY REVIEW COUNCIL DEADLINES FOR 2020 (MEETING DATES ARE SUBJECT TO CHANGE)**

<b>DEADLINE FOR PLACEMENT ON AGENDA *</b>	<b>FINAL MATERIALS SUBMITTED TO COUNCIL</b>	<b>DATE OF COUNCIL STUDY SESSION</b>	<b>DATE OF COUNCIL MEETING</b>
<i>Tuesday</i> November 19, 2019	<i>Tuesday</i> December 24, 2019	<i>Tuesday</i> January 7, 2020	<i>Tuesday</i> January 14, 2020
<i>Tuesday</i> December 24, 2019	<i>Tuesday</i> January 21, 2020	<i>Tuesday</i> January 28, 2020	<i>Tuesday</i> February 4, 2020
<i>Tuesday</i> January 21, 2020	<i>Tuesday</i> February 18, 2020	<i>Tuesday</i> February 25, 2020	<i>Tuesday</i> March 3, 2020
<i>Tuesday</i> February 18, 2020	<i>Tuesday</i> March 24, 2020	<i>Tuesday</i> March 31, 2020	<i>Tuesday</i> April 7, 2020
<i>Tuesday</i> March 24, 2020	<i>Tuesday</i> April 21, 2020	<i>Tuesday</i> April 28, 2020	<i>Tuesday</i> May 5, 2020
<i>Tuesday</i> April 21, 2020	<i>Tuesday</i> May 19, 2020	<b><i>Wednesday</i></b> May 27, 2020	<i>Tuesday</i> June 2, 2020
<i>Tuesday</i> May 19, 2020	<i>Tuesday</i> June 23, 2020	<i>Tuesday</i> June 30, 2020	<i>Tuesday</i> July 7, 2020
<i>Tuesday</i> June 23, 2020	<i>Tuesday</i> July 21, 2020	<i>Tuesday</i> July 28, 2020	<i>Tuesday</i> August 4, 2020
<i>Tuesday</i> July 21, 2020	<i>Tuesday</i> August 18, 2020	<i>Tuesday</i> August 25, 2020	<i>Tuesday</i> September 1, 2020
<i>Tuesday</i> August 18, 2020	<i>Tuesday</i> September 22, 2020	<i>Tuesday</i> September 29, 2020	<i>Tuesday</i> October 6, 2020
<i>Tuesday</i> September 22, 2020	<i>Tuesday</i> October 20, 2020	<i>Tuesday</i> October 27, 2020	<i>Tuesday</i> November 3, 2020
<i>Tuesday</i> October 20, 2020	<i>Tuesday</i> November 17, 2020	<i>Tuesday</i> November 24, 2020	<i>Tuesday</i> December 1, 2020
<i>Tuesday</i> November 17, 2020	<i>Tuesday</i> December 22, 2020	<i>Tuesday</i> December 29, 2020	<i>Tuesday</i> January 5, 2021
<i>Tuesday</i> December 29, 2020	<i>Tuesday</i> January 19, 2021	<i>Tuesday</i> January 26, 2021	<i>Tuesday</i> February 2, 2021

\* Materials must be submitted by **5 PM** on dates listed as a deadline for placement on a particular agenda. Placement on a particular agenda is not guaranteed.

**GOVERNOR'S REGULATORY REVIEW COUNCIL DEADLINES FOR 2020 (MEETING DATES ARE SUBJECT TO CHANGE)**

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<i>Tuesday</i> December 24, 2019	<i>Tuesday</i> January 21, 2020	<i>Tuesday</i> January 28, 2020	<i>Tuesday</i> February 4, 2020
<i>Tuesday</i> January 21, 2020	<i>Tuesday</i> February 18, 2020	<i>Tuesday</i> February 25, 2020	<i>Tuesday</i> March 10, 2020
<i>Tuesday</i> February 18, 2020	<i>Tuesday</i> March 24, 2020	<i>Tuesday</i> March 31, 2020	<i>Tuesday</i> April 14, 2020
<i>Tuesday</i> March 24, 2020	<i>Tuesday</i> April 21, 2020	<i>Tuesday</i> April 28, 2020	<i>Tuesday</i> May 12, 2020
<i>Tuesday</i> April 21, 2020	<i>Tuesday</i> May 19, 2020	<b><i>Wednesday</i></b> May 27, 2020	<i>Tuesday</i> June 9, 2020
<i>Tuesday</i> May 19, 2020	<i>Tuesday</i> June 23, 2020	<i>Tuesday</i> June 30, 2020	<i>Tuesday</i> July 14, 2020
<i>Tuesday</i> June 23, 2020	<i>Tuesday</i> July 21, 2020	<i>Tuesday</i> July 28, 2020	<i>Tuesday</i> August 11, 2020
<i>Tuesday</i> July 21, 2020	<i>Tuesday</i> August 18, 2020	<i>Tuesday</i> August 25, 2020	<i>Tuesday</i> September 8, 2020
<i>Tuesday</i> August 18, 2020	<i>Tuesday</i> September 22, 2020	<i>Tuesday</i> September 29, 2020	<i>Tuesday</i> October 13, 2020
<i>Tuesday</i> September 22, 2020	<i>Tuesday</i> October 20, 2020	<i>Tuesday</i> October 27, 2020	<i>Tuesday</i> November 10, 2020
<i>Tuesday</i> October 20, 2020	<i>Tuesday</i> November 17, 2020	<i>Tuesday</i> November 24, 2020	<i>Tuesday</i> December 8, 2020
<i>Tuesday</i> November 17, 2020	<i>Tuesday</i> December 22, 2020	<i>Tuesday</i> December 29, 2020	<i>Tuesday</i> January 12, 2021
<i>Tuesday</i> December 29, 2020	<i>Tuesday</i> January 19, 2021	<i>Tuesday</i> January 26, 2021	<i>Tuesday</i> February 9, 2021

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