

FIVE-YEAR REVIEW REPORT
TITLE 12. NATURAL RESOURCES
CHAPTER 7. OIL AND GAS CONSERVATION COMMISSION
ARTICLE 1. OIL, GAS, HELIUM, AND GEOTHERMAL RESOURCES

I. Information That is Identical for All Rules in A.A.C. Title 12, Chapter 7, Article 1 (unless stated otherwise in the Section by Section Analysis)

1. Authorization of rules by existing statutes:

The Arizona Oil and Gas Conservation Commission (AOGCC) is granted authority to prevent the waste of oil and gas and non-hydrocarbon gases in Arizona Revised Statutes (A.R.S.) § 27-503. The Commission is granted authority under A.R.S. §§ 27-516(A) and 27-656(A) to adopt the rules in 12 Arizona Administrative Code (A.A.C.) 7, Article 1.

2. Objective of the rules:

The overall objective of the AOGCC is specified in A.R.S. § 27-514 *et seq.*, which is to conserve and prevent the waste of oil and gas and non-hydrocarbon gases and regulate oil and gas wells. The responsibility extends to regulating drilling for and production of oil, gas, and non-hydrocarbon substances, such as helium, carbon dioxide, and geothermal resources.

3. Effectiveness of the rule in achieving the objectives:

RESERVED for Part II – Section by Section Analysis of Rules

4. Consistency of the rules with state and federal statutes and rules:

The AOGCC judges the consistency of its rules in connection with its statutory declaration of policy (A.R.S. § 27-502), obligation to prevent physical waste (A.R.S. § 27-503), authorizing statutes (A.R.S. §§ 27-515, 27-516, and 27-656), and the Arizona Administrative Procedures Act (A.R.S. §§ 41-1001 *et seq.*). A.A.C. Title 12, Chapter 7 is consistent with all applicable state and federal statutes and rules applicable to oil, gas, helium, and geothermal resources, with one possible exception. That exception is the Interim Final Rule promulgated by the Pipeline Hazardous Materials and Safety Administration (PHMSA) on December 19, 2016 at 81 FR 91860, discussed below in item #12.

5. Status of Agency enforcement policy regarding the rules:

The Arizona Administrative Code sets forth rule requirements to drill and produce oil, gas and geothermal resources in a manner that conserves these resources. The AOGCC enforces the rules by conducting inspections, reviewing numerous submitted forms and reports, and when necessary, referring enforcement actions to the Arizona Attorney General’s Office.¹

The existing rule, R12-7-103, only requires a \$10,000 performance bond for any well drilled to 10,000 feet and \$20,000 for wells drilled deeper than 10,000 feet. For multiple wells, an operator must provide a blanket performance bond to cover all wells: \$25,000 (10 or fewer wells); \$50,000 (more than 10, but fewer than 50 wells); or \$250,000 (50 or more wells). The last revision to these performance bond amounts was made in 1994 or earlier.

Ensuring that operators properly close (“plug and abandon”) geothermal wells has been difficult for

¹ Effective August 6, 2016, SB-1530, 52nd Legislature, Second Session, amended A.R.S. § 27-515(A) and assigned the Arizona Department of Environmental Quality to provide staff support to the AOGCC to administer the oil and gas program.

the AOGCC because the mandatory performance bond amounts are very inadequate to cover plugging and abandonment. Geothermal wells typically reach depths of 10,000 feet or more. Plugging costs increase as the wells are drilled deeper; geothermal wells are amongst the deepest wells drilled in the state. A \$20,000 performance bond covers only a fraction of the cost to properly plug and abandon a geothermal well. The state is forced to take action to plug and abandon any well when the operator fails to abandon a well in compliance with R12-7-127. The AOGCC must vote on the performance bond forfeiture and then use the funds to properly abandon the well.

The AOGCC spent up to ten years, between 2000 and 2010, pushing individual geothermal well owners to properly plug and abandon their wells. The wells were in areas undergoing residential development in Chandler. Mandatory and timely operator compliance with the rule reduces the significant threat to public health and safety consistent with Executive Order (EO) 2017-02.

The AOGCC and the state face high costs of plugging and abandonment in excess of the performance bond. In the past, the AOGCC has voted to forfeit the performance bonds of operators who failed to properly plug and abandon shallower oil and gas wells, which were sufficient to cover the Commission's costs at one time. Today, rising costs of drilling, plugging and abandoning make such action inadequate to protect the State of Arizona financially from the full liability exposure.

6. Analysis of clarity, conciseness, and understandability:

Generally, the rules are clear, concise, and understandable and are consistent with the applicable statutes and rules, unless stated otherwise in the Section by Section Analysis.

For consistency and to add clarity, one common recommendation throughout this report is to, "Add clarifying language, 'on a form approved by the Commission'". Over time, the AOGCC has created about twenty forms for operators to use; however their use is inconsistent and the oil and gas program's reporting requirements could be met more timely and efficiently, if use of these forms were required in the rule. Only two places in the current rule refer to a form by a proper name: R12-7-125(B) ("Sundry Notice") and R12-7-129(B) ("notarized water-well responsibility form"). This revision would reduce the regulatory burden while achieving the same regulatory objective, consistent with EO2017-02.

Several AOGCC actions to permit or otherwise authorize an operator action require the Commissioners to vote on approval at a public hearing. The rules could be improved by clearly stating in each instance the time frame for a public notice before the hearing. For example: R12-7-176(A)(B), 15 days is specified for a hearing for an injection well permit; R12-7-107(E)(4) provides 10 days for change of a well classification; elsewhere, the time frame is unspecified. Currently, if the time frames are unspecified, the AOGCC infers it to be 15 calendar days. The rules could be improved by a consistent time frame of 15 calendar days to give the public adequate notice and allow time for preparation. Rule language should be added where noted in the Section by Section Analysis.

The AOGCC recommends amendments to R12-7-107(E), 107(F), 107(G), 116, 137, 139 and 152(B) to clearly designate that 15 calendar days' notice is required before any public hearing.

7. Written criticisms of the rules received within the last five years:

For this Five Year Rule Review Report, on December 16, 2016, the AOGCC invited written comments from industry stakeholders on the effectiveness of its rules in achieving the objectives and an analysis of clarity, conciseness, and understandability of the rules. The AOGCC received one response from Kinder-Morgan CO₂ Company, LP pertaining to the effectiveness of R12-7-103 (Bonds). That comment is discussed in the Section by Section Analysis in Section 103.

The AOGCC received one written criticism on the rules within the past five years in regards to confidentiality of proprietary data submitted with a drilling application. This report will address the details in Section 121, item #7.

8. Comparison of economic, small business, and consumer impact with economic impact statement:

At least seven companies (two publicly-owned businesses, two publicly-owned small businesses, and three privately-owned small businesses) are engaged in oil and gas exploration or development activity in Arizona; two operate 14 liquefied petroleum gas (LPG) storage wells, four operate 41 producing oil and gas wells, and one or more are currently drilling wells.

These rules directly impact the companies engaged in oil, gas, or geothermal exploration or development activities. In the opinion of the AOGCC, the rules are mostly procedural in nature and do not significantly impact the economy, small businesses or consumers. The AOGCC has not identified any information that would alter the economic, small business, and consumer impact statements that were submitted with the rulemakings in 2007, 2005, 2002, 2000, 1998, 1997, 1993, and 1992. These economic, small business and consumer impact statements concluded that the rules would not significantly impact the economy or have a significant impact upon small businesses or consumers.

9. Any analysis submitted to AOGCC by another person that compares the rules' impact on Arizona's business competitiveness to the impact on businesses in other states:

The AOGCC has received no such written analysis for any rule in this Article.

10. Completion of previous proposed courses of action:

In its March 22, 2012 report to the Governor's Regulatory Review Council, the AOGCC stated its intent to amend R12-7-107(E) to clarify that the Commission may grant exceptions to regular locations for horizontally drilled wells after notice and hearing. The report stated the intent to complete the rulemaking by December 2013 if the Governor's rulemaking moratorium ended as scheduled in June 2012. The moratorium has been extended and criteria for exception have changed. Although the AOGCC did not seek an exception to the rulemaking moratorium during this reporting period, the Commission will evaluate the current criteria and pursue an exception. The regulated community regularly applies for, and the Commission grants, exceptions to well spacing. The AOGCC will determine the priority of this rule making exception request based on its overall workload, which is explained in the section by section analysis.

11. A determination that the probable benefits of the rule outweigh within this state the probable costs of the rule, the rule imposes the least burden and costs to persons regulated by the rule, including paperwork and other compliance costs, necessary to achieve the underlying regulatory objective.

The rules are procedural in nature and the AOGCC believes that these rules impose the least burden and costs to regulated persons, including paperwork and other compliance costs, which are necessary to achieve the underlying regulatory and statutory objectives. The AOGCC encourages exploration and development of oil and gas resources consistent with industry standards and requirements in surrounding states. In the long experience of the Commission, the issues that arise are of a technical nature, rather than legal, and do not lend themselves to retaining legal counsel.

12. Stringency Compared to Corresponding Federal Law:

The oil and gas rules are consistent with and not more stringent than the federal regulations applicable to oil and gas conservation. The Pipeline Hazardous Materials and Safety Administration (PHMSA), however, promulgated a new Interim Final Rule on December 19, 2016 at 81 FR 91860. A failure at Well SS25 at the Aliso Canyon facility in California in 2015 generated the new rule making at the US Department of Transportation. The well is part of an intrastate regulated facility located in Southern California, which suffered a wellhead failure and a resultant uncontrolled release of methane into the environment. In the aftermath of the emergency, PHMSA promulgated minimum federal standards for the wells and downhole facilities located at both intrastate and interstate underground storage facilities. These standards are more stringent than AOGCC's rules, which do not address safety at

underground natural gas storage facilities in the state.

The new Interim Final Rule provides for new regulations of both wellhead and pipeline operation. In Arizona, the Arizona Corporation Commission (ACC) has jurisdiction over the pipeline safety and the AOGCC has jurisdiction over the wellheads. The new Interim Final Rule may require amendments to R12-7-175 through R12-7-182 to ensure they are as stringent as the new Interim Final Rule. The AOGCC has opened a dialog with the Attorney General's Office and the Pipeline Safety Division of the ACC to determine if there are overlapping responsibilities.

Arizona has two intrastate underground storage facilities; however neither is connected to a natural gas transportation pipeline. According to the ACC's Pipeline Safety Division, the Interim Final Rule applies to natural gas and not to liquefied petroleum gas, or LPG (*e.g.*, propane) and does not apply in Arizona because Arizona's two existing facilities do not store natural gas, only LPG. The Pipeline Safety Division opined that the interim rule will only apply in Arizona if any new underground natural gas storage facilities are permitted in the future.

The AOGCC'S preliminary interpretation of the PHMSA Interim Final Rule is that it will not affect the state's rules regulating the two existing underground storage facilities.

13. Compliance with A.R.S. § 41-1037 (General permits; issuance of traditional permit):

The rules were originally adopted and any amendments were promulgated prior to July 29, 2010.

14. Proposed course of action:

If the AOGCC determines the new Interim Final Rule affects any of the wells within its jurisdiction or is required in anticipation of new wells, it will pursue an exception to any applicable Governor's rulemaking moratorium to adopt safety rules as stringent as the PHMSA Interim Final Rule for the two underground natural gas facilities potentially subject to it within the state and to new wells.

In addition, to better protect public health and safety from wells that have not been timely plugged and abandoned, the AOGCC plans to pursue an exception to amend R12-7-103. To reduce the regulatory burden, but achieve the same objective, the AOGCC could also pursue an exception to complete the rulemaking contemplated in the last Five Year Rule Review Report to amend R12-7-107(E) to clarify that the Commission may grant exceptions to regular locations for horizontally drilled wells after notice and hearing; improve identification and utility of AOGCC's forms; make improvements for clarity, conciseness and understandability discussed in the Section by Section Analysis below; and revise every rule requiring a public hearing by the Commission to require "at least 15 days' notice" for consistency. The AOGCC will determine the priority of these rulemaking exception requests based on its overall workload after a decision is made on the Interim Final Rule jurisdiction. The Interim Final Rule would be the AOGCC's first priority due to safety concerns.

II. Section by Section Analysis of Rules

Sections 101 to 107 -- Procedures to obtain a permit to drill oil, gas, helium, or geothermal wells in Arizona.

R12-7-101. Definitions

2. Objective of the rules:

The definition section defines unique terms and acronyms, words with uncommon meanings and technical terms used in the oil and gas industry as used in 12 A.A.C., Chapter 7, Article 1.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

R12-7-153 expands the scope of this rule to include non-hydrocarbon gases (helium, carbon dioxide, etc.). This was an amendment to the rule, effective February 23, 1993, but no other changes were made to harmonize other rules, such as the definition of “gas well,” with this amendment. Also, to improve clarity of what constitutes a completed well, a definition for “completion operations” is needed in this section.

14. Proposed course of action:

The AOGCC plans to revise the definition for “gas” to harmonize with R12-7-153. Many definitions are already covered in A.R.S. § 27-501, such as “completed well,” “drilling unit,” “drainage unit,” “pool,” and “well” apply everywhere. The Commission will consider adding other terms not defined in the current rule, such as “formation,” “reservoir,” and “source of supply” (or replacing these terms with one term) and moving other definitions within individual rules to this section.

To reduce confusion and enhance clarity of what constitutes a well completion, the AOGCC will develop a definition of “completion operations” into R12-7-101 that is consistent with A.R.S. § 27-551(2). For purposes of consistency and where applicable, definitions in A.R.S. § 27-551 will be incorporated into this rule where they are applicable on non-state land.

R12-7-103. Bond

2. Objective of the rules:

This section specifies the mandatory financial assurance to be posted by operators, prescribing performance bond amounts and terms for the purpose of the proper plugging and abandonment of the well. In addition, the performance bond shall cover well site reclamation (including ARS § 27-516.18) and removal of equipment and debris and backfilling of all mud pits. The AOGCC requires operators to fill out one of two notarized forms (cash or performance bond), which are available online for recording performance bond deposits with the state.

3. Effectiveness of the rule in achieving the objectives:

The AOGCC has a history of difficulties with operators who fail to comply with the plug and abandonment rules in R12-7-125 through 127. When compared to neighboring states (Colorado, New Mexico, Utah and Nevada), performance bond price amounts are too low and out of date. The current performance bond amounts required in this rule are very inadequate to cover state’s costs to plug a well properly, should an operator choose to forsake its financial responsibility. There is risk of serious financial loss to the State, if an operator defaults on its legal responsibilities to plug and abandon any well it drills. A failure to properly plug and abandon may lead to a violation of A.R.S. § 27-516(A)(1)

and forfeiture of the undervalued performance bond. Under the current rules, the AOGCC does not have the authority to require operators to pay the difference between the bond amount and the actual plugging costs, if the state assumes control of the well. However, Arizona taxpayers must cover the additional cost of proper plugging and abandonment of the well. Also, the Commission has no authority in its current rule to increase performance bond amounts held by individual operators whose activities the AOGCC deems to be high risk. Oil and gas commissions in other states have greater flexibility to increase a performance bond amount in relation to the State's risk in issuing a permit. Oil and gas commissions in other states have greater flexibility to increase a performance bond amount in relation to the State's risk in issuing a permit.

Kinder-Morgan CO₂ Company, LP provided the AOGCC with cost estimates for nine recently plugged wells, which ranged from \$69,700, with a total depth of 2035 ft. to \$187,250 with a total depth of 1885 ft. The average plugging cost was estimated to be \$75,000 per well, but this estimate is highly dependent on the actual wellbore conditions encountered, such as the depth, number of completion zones and casing integrity. The AOGCC will review appropriate performance bond amounts for emergency relief wells and ensure sufficiency and consistency for bonding of all wells between (A)(1) and (A)(2) in R12-7-103.

6. Analysis of clarity, conciseness, and understandability:

The rule is clear, concise, and understandable.

7. Written criticisms of the rules received within the last five years:

The AOGCC received the following comment from Kinder-Morgan CO₂ Company, LP, regarding the performance bonding requirements in neighboring states as compared to Arizona:

“In response to your inquiry regarding performance bonds (R12-7-102)[sic] [repealed, renumbered as R12-7-103] and Kinder Morgan's experience operating in neighboring states, the financial assurance requirements vary somewhat from the AOGCC rules. The dollar amounts of the performance bonds for single-well plugging and abandonment vary from state to state but usually include a base amount related to the depth of the well and may also include a surcharge per foot of depth. In all cases the regulatory body reserves the authority to increase financial assurance requirements based on complex geologic, environmental, or operational circumstances that might otherwise burden that body with undue cost should the operator fail to fulfill its statutory obligations.”

The AOGCC views this comment as additional support for its proposed course of action.

14. Proposed course of action:

The AOGCC will revise Arizona's performance bond amounts and determine what appropriate increases will meet current financial assurance needs. The Commission intends to conduct a survey to determine the range of actual costs to plug and abandon a well in compliance with regulatory requirements as the basis for rule revisions. The Commission will revise the rule to allow adjustment of individual performance bonds, consider a base amount and a surcharge per foot of depth, and update performance bond amounts to reduce financial risk to the state for taking over improperly abandoned wells.

The AOGCC will also consider requiring a financial assurance demonstration by all operators to establish their financial capability of conducting oil and gas business in Arizona. A statutory change would be necessary to authorize the AOGCC to make financial capability determinations.

The AOGCC plans to use the term “performance bond” consistently throughout the rules. Also, the Commission plans to add clarifying language, “on a form approved by the Commission” to direct operators to use clearly identified forms that must accompany a performance bond deposit, either as

cash or as a surety.

R12-7-104. Application for Permit to Drill

2. Objective of the rules:

This section specifies procedures, requirements and timeframes for permitting all wells under jurisdiction of the AOGCC, including oil, gas, injection (R12-7-175 through 182) and geothermal wells. The AOGCC must issue a permit before any such well can be drilled in the state. A fee of \$25 per well is required.

3. Effectiveness of the rule in achieving the objectives:

The rule is generally effective in establishing who is required to obtain a permit to drill under the oil and gas program. An emergency relief well must also meet the requirements or rules 108 through 118, whether it is eventually used for production or not. If the operator needs additional time for the filing requirements, he may ask for it and the Commission has authority to grant it.

6. Analysis of clarity, conciseness, and understandability:

The rule is clear, concise, and understandable. The rule provides overall requirements for a complete application. "The Commission may authorize" means the AOGCC will issue either a written confirmation electronically or by US Mail.

14. Proposed course of action:

The AOGCC plans to add clarifying language, "on a form approved by the Commission".

The \$25 permit fee, established both in statute and rule, has never been reviewed since its inception and is now too low to support the costs of administering the program. The Commission will review other states' oil and gas fee programs and propose adopting a higher rate that can cover at least some of the expenses of administering Arizona's program.

The Commission will consider adding a definition of "commence."

R12-7-105 Change of Location

2. Objective of the rules:

This section specifies the procedures an operator must follow if there is a change in the approved location before drilling. The emergency relief well situation overrides the normal routine of permitting simply because it is an emergency. The rule allows the Administrator and the Commission discretion to address the emergency first, then require a post-drilling permit and post a performance bond, if necessary.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

R12-7-106 Identification of Wells, Producing Leases, Tanks, Refineries, Buildings, and Facilities

2. Objective of the rules:

This section specifies the minimum requirements for identification that must be present in the field when drilling and signage that must identify wells, producing leases, tanks, refineries, buildings, and oil and gas related facilities.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

R12-7-107 Spacing of Wells

2. Objective of the rules:

This section specifies well spacing and acreage dedication requirements, which then become dedicated drilling units. If an operator wants to deviate from the standard requirement, the AOGCC must grant a formal exception in a public hearing. The rule's intent is to protect adjoining landowners and other oil and gas interests, who may be damaged by drilling too close to their holdings. An operator must justify his request for a deviation from spacing and acreage requirements based on geological, geophysical, or other subsurface information. Such deviation may be allowed if the information defines a known geologic structure that makes the unconventional well location necessary. Commission approval requires a public hearing to openly discuss the merits and allow the adjoining interests to be informed and voice their concerns.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below. The purpose of a public hearing is to allow the public to be informed and allow all affected parties to bring forth their concerns for well spacing exceptions. The point of 107(F) is to show that the Commission has authority to modify the requested well spacing.

6. Analysis of clarity, conciseness, and understandability:

Two issues in this section are vague and could benefit from more precise rule language. R12-7-107(B) and (E) require the operator to provide the Commission extra supporting information, such as subsurface geologic and seismic data, to be submitted with any drilling application (R12-7-104) when the applicant seeks a well spacing exception. The rule could be improved by clearly stating the extra requirements, in accordance with similar specifics that are found in R12-7-176(B) for injection wells.

The second issue is that the rule is silent on the duration of the public notice period for a well *spacing exception*, although 107(E)(4) requires 10 days' notice for a hearing to change a well's *classification*. The AOGCC has always required 15 days' notice for hearings on well spacing exceptions. R12-7-107 should be clarified and public notice requirements made consistent throughout the entire rule.

As the rule is now written, all operators must appear before the Commission in a public hearing to justify why they want an exception for their proposed well to the spacing required by subsections A, B or C. This applies even to operators who control all adjoining leases to the proposed site. The rule's intent is to protect adjoining leaseholders and landowners from possible drainage of their interest in the oil or gas field, but when an operator controls all contiguous acreage in an oil or gas field, this requirement becomes burdensome causing needless delays to the operator who has to justify why he is drilling near one of his own wells.

14. Proposed course of action:

The AOGCC plans to clarify the language that requires supplemental information to be submitted with all well spacing exceptions. Also, new language in R12-7-107(E), 107(F) and 107(G) must clearly specify that a 15 calendar day public notice period is required before holding a public hearing on well spacing exceptions or well re-classifications.

The AOGCC will add language that includes horizontal drilling in the category requiring public notice and hearing (R12-7-107(E)) and clarifying hearing requirements in 107(F). This request was first made in the previous five year report.

The AOGCC plans to revise the language that requires all operators to appear in a public hearing so that operators who control all contiguous acreage will no longer be bound by this requirement. The

Commission would still require that operator to comply with all other application requirements in R12-7-104.

Sections 108 to 118 -- Requirements for drilling, casing, and testing of wells.

R12-7-108 Pit for Drilling Mud and Drill Cuttings

2. Objective of the rules:
Specifies requirements for drilling mud and construction of reserve pits during drilling activity.
3. Effectiveness of the rule in achieving the objectives:
The rule is effective in achieving the objectives.
6. Analysis of clarity, conciseness, and understandability:
The language of the regulation is clear to the regulated community.

R12-7-110 Surface Casing Requirements

2. Objective of the rules:
Specifies depth, size, cementing, and integrity requirements
3. Effectiveness of the rule in achieving the objectives:
Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.
6. Analysis of clarity, conciseness, and understandability:
The rule could be improved by replacing "witness" with "inspect" to improve the public's understanding of the rule's intent and replacing "corrective measures" and "remedial action" with "corrective actions" to improve clarity and conciseness. Cement requires a minimum of 12 hours curing time, which is the industry standard. No Commission authority is required for additional curing time for the cement.
14. Proposed course of action:
The AOGCC will replace "witness" with "inspect" or "observe." The AOGCC will also replace "corrective measures" and "remedial action" with "corrective actions." The Commission will review the sufficiency of the 1 hour minimum requirement in 110(C).

R12-7-111 Intermediate and Production Casing and Tubing Requirements

2. Objective of the rules:
Specifies size, depth, cementing, and integrity requirements of casing and tubing installed in a well.
3. Effectiveness of the rule in achieving the objectives:
Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.
6. Analysis of clarity, conciseness, and understandability:
Replacing "corrective measures" and "remedial action" with "corrective actions" could improve clarity and conciseness.

Replacing "witness" with "inspect" could improve understandability.

14. Proposed course of action:

The AOGCC will consider replacing "witness" with "inspect" or "observe."

R12-7-112 Defective Casing or Cementing

2. Objective of the rules:

Defines defective casing or cementing and standards for remediation.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

Wording about reporting to the Commission is awkward.

Replacing "corrective measures" and "remedial action" with "corrective actions" in R12-7-112(B) could improve clarity and conciseness.

14. Proposed course of action:

The AOGCC plans to rephrase existing rule language with either, "The operator shall report to the Commission in writing the corrective actions taken"; or, "The operator shall report in writing to the Commission the corrective actions taken" to improve consistency with similar language elsewhere in the rules.

R12-7-113 Blowout Prevention and Related Well-control Equipment

2. Objective of the rules:

Specifies blowout control equipment installation and testing requirements.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

The language in R12-7-113(A), "high pressures do or are likely to exist" is vague and subjective.

14. Proposed course of action:

The AOGCC will change the language in R12-7-113(A) to, "high pressures may be encountered that would result in safety or environmental hazards."

R12-7-114 Recovery of Casing

2. Objective of the rules:

Specifies requirements for recovery of casing.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

R12-7-115 Deviation of Hole and Directional Drilling

2. Objective of the rules:

Specifies requirements for directional drilling and deviation surveys. The AOGCC will consider language that exempts emergency wells from any public noticing and hearing requirements and enforcement during the emergency.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives. The current members of the Commission accept that operators knowingly deviate, provided that it is within the rule requirements. The AOGCC has broad discretionary authority to enforce non-compliance with any rule, including shutting down a drilling operation, pursuant to A.R.S. § 27-503(7). A.R.S. §§ 27-524(A) and 525 authorize the Commission to bring an action in Superior Court to enforce and obtain injunctive relief. Testing is conducted consistent with current technology.

6. Analysis of clarity, conciseness, and understandability:

There is no need to clarify “short distance” because every situation is unique. The Commission and the operator need discretion to determine what is adequate for a “short distance.”

R12-7-116 Multiple Zone Completions

2. Objective of the rules:

Specifies requirements for well completions with more than one production zone in a well.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

The time frame for a hearing is not specified and should be consistent throughout the article.

A new definition that differentiates “multiple zone completions” from “commingling production” could improve understandability. Alternatively, clarification language could be placed in section 116 and section 137 to differentiate the context of the two terms and improve conciseness. Replacing “witness” with “inspect” or “observe” could also improve understandability.

14. Proposed course of action:

The AOGCC will include language in this section that clearly specifies a 15 calendar day public notice period is required before a public hearing on multiple zone completions.

The AOGCC will work with the Interstate Oil and Gas Compact Commission (IOGCC) and other states’ oil and gas commissions to determine the need for clarifying language for “multiple zone completions” and “commingling production” and revise this rule. In addition, the Commission will consider revising the rule to use one term uniformly throughout the rule.

The AOGCC will revise “witness” with “inspect” or “observe.”

R12-7-117 Artificial Stimulation of Oil and Gas Wells

2. Objective of the rules:

Specifies requirements for artificial stimulation and chemical treatment of wells.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

The rule could benefit by coordinating key requirements from the ADEQ aquifer protection program. While advance notice is not required under AOGCC rules, an aquifer protection permit is required before drilling begins.

14. Proposed course of action:

The AOGCC will work with ADEQ to develop minimum requirements in the oil and gas rule that would meet the requirements of an aquifer protection permit to eliminate a duplicate permit burden, when the operator is performing artificial stimulation of a well under the oil and gas rules. The rules were consistent with industry standards at the time of adoption. If the governor extends the option to the AOGCC to redraft the rules, the Commission will update the rules to current industry standards.

R12-7-118 Operations in Hydrogen Sulfide Environments

2. Objective of the rules:

Specifies requirements to follow when drilling in hydrogen sulfide environments in order to protect human health.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives. A.A.C R12-7-118 is cross-referenced in R12-7-104(A)(2) as the construction plan must meet the requirements of subsection 118. The Commission relies on the industry expertise of the operator to determine the risk associated with encountering hydrogen sulfide environments while drilling. Requiring the presence of a safety company to be present at every site would impose an undue regulatory burden.

Sections 119 to 129 -- Requirements for completion, recompletion, plugging, and abandonment of wells.

R12-7-119 Wellhead and Lease Equipment

2. Objective of the rules:

Specifies requirements for wellheads and other lease equipment to prevent waste, protect the environment and ensure safety at the well site.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives. The rules were consistent with industry standards at the time of adoption. If the governor extends the option to the AOGCC to redraft the rules, the Commission will update the rules to current industry standards.

R12-7-120 Notification of Fires, Leaks, Spills, and Blowouts

2. Objective of the rules:

Specifies requirements operators must follow for preventing and reporting fires, spills, and blowouts at any drilling, producing, injection, disposal, transportation or storage facility.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives. The AOGCC has broad discretionary authority to enforce non-compliance with any rule, including root cause analysis, pursuant to A.R.S. § 27-503(7). A.R.S. §§ 27-524(A) and 525 authorize the Commission to bring an action in Superior Court to enforce and obtain injunctive relief. If an operator requires more than 15 days to conduct an internal investigation, the Commission has discretion to extend the deadline.

R12-7-121 Well Completion and Filing Requirements

2. Objective of the rules:

Specifies completion and filing requirements for drilled wells and their compliance time frames for submittal to the AOGCC. The rule grants confidentiality to certain types of wells.

3. Effectiveness of the rule in achieving the objectives:

The rule requires operators to submit completion reports with certain specified information to the AOGCC in a timely manner. The Commission protects the confidentiality of the data in completion reports, such as well logs and reports, for one year, if the well was drilled in an area outside of an established producing unit or field. The rule refers to this area as “unproven territory.” The rule does not protect an operator’s competitive advantage, which may include proprietary seismic data or geologic information. Operators must submit a confidentiality request before submitting any documentation to the AOGCC, pursuant to A.R.S. § 44-1374.

The AOGCC reviewed well records and discovered that there has been long-term confusion regarding the definition of a “completed well” and “the date the work is done” that has interfered with timely compliance for submitting completion data. The AOGCC developed a specific form for compiling completion data, but the rule does not require operators to use it.

6. Analysis of clarity, conciseness, and understandability:

Operators are confused by the language of R12-7-121(A). Some operators are submitting the required data a year or more after the well has been completed and in some cases after the well has begun producing, which is not the AOGCC’s intent. Without a new definition in rule, an expansion of the applicability to the definition of "completion operations" in A.R.S. § 27-551(2), or a newly established written policy, the existing language in subsection 121(A), “submit other well data to the Commission within 30 days of the date the work is done” the requirements will remain ineffective.

SB 1530 transferred administrative responsibilities to the Arizona Department of Environmental Quality, effective August 6, 2016 and the mailing address must be updated in R12-7-121(B)(3).

7. Written criticisms of the rules received within the last five years:

Ranger Development, L.L.C. sent the AOGCC an email on 12/31/2016 complaining about the lack of protection of proprietary data for geologic and seismic interpretation that they developed in early 2016. It recommended that the Commission develop procedures to safeguard presentation of confidential data made in support of oil and gas drilling applications. The AOGCC believes that protection under A.R.S. § 44-1374 will satisfy the needs of operators who must include trade secret material with permit applications. The AOGCC will add a reminder to its Permit or Permit Application Instructions about the need for the applicant to demonstrate at the time of submittal of the application confidentiality pursuant to this statute.

A.A.C. R12-7-121(C)(1) grants an automatic one-year of confidential record status that applies only to well completion data, provided that the operator submits the data to the AOGCC within 30 days of

completion of the well. An operator may be granted an extension of confidentiality for up to two years, if requested, and the operator can demonstrate that there is “credible evidence that disclosure of the information is likely to cause harm to the operator’s competitive position with respect to unleased land in the vicinity of the well.” The confidential status only applies to wells drilled outside of established producing fields or units. Confidentiality under this subsection does not extend to proprietary data that may be submitted with a drilling application before drilling begins, unless specifically requested by the operator.

The AOGCC has broad discretionary authority to enforce non-compliance with any rule, including shutting down a drilling operation, pursuant to A.R.S. § 27-503(7). A.R.S. §§ 27-524(A) and 525 authorize the Commission to bring an action in Superior Court to enforce and obtain injunctive relief.

14. Proposed course of action:

At a minimum, the AOGCC plans to update the mailing address of the Oil and Gas Program Administrator to 1110 W. Washington St., Phoenix, Arizona 85007. Mail is no longer delivered to 416 W. Congress St., Tucson.

The AOGCC has created a new form for confidentiality demonstrations in conformance with A.R.S. § 44-1374, which allows operators to claim geologic and seismic data, submitted as part of a drilling application, as a trade secret and therefore be protected from public disclosure. The AOGCC informs oil and gas operators that submit drill permit applications to the Commission to use the new form, requesting confidentiality. There is no need to create a new rule or statute to address this situation.

To reduce confusion and enhance clarity of what constitutes a well completion, the AOGCC will incorporate the definition in A.R.S. § 27-551(2) of “completion operations” into R12-7-101.

To reduce confusion, enhance clarity and expedite reporting of well completion data, the AOGCC will add clarifying language, “on a form approved by the Commission” and enforce the use of Form #4 by operators.

R12-7-122 Recompletion and Routine Maintenance Operations

2. Objective of the rules:

Specifies requirements on workovers, recompletions, or stimulation of wells.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

An operator who wants to reenter an existing well shall file with the Commission an application for permit to drill or reenter an existing well (Form #3) and pay the applicable fee. The rule language could be clarified by cross-referencing it with R12-7-104(A). “Zone” is an industry term with a common definition.

14. Proposed course of action:

The AOGCC will consider adding language, “on a form approved by the Commission”. The AOGCC may need to work with the IOGCC on the intent of this rule in order to determine what form best serves this purpose.

R12-7-125 Temporarily Abandoned and Shut-In Wells

2. Objective of the rules:
Specifies requirements for operations that are suspended for 60 days or more
3. Effectiveness of the rule in achieving the objectives:
The rule is effective in achieving the objectives.

R12-7-126 Application to Plug and Abandon

2. Objective of the rules:
Requires operators to submit plugging plans to the AOGCC for review and approval.
3. Effectiveness of the rule in achieving the objectives:
Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.
6. Analysis of clarity, conciseness, and understandability:
The rule could be improved by adding language that the Sundry Notice is used for this purpose
14. Proposed course of action:
The AOGCC plans to add clarifying language, “on a form approved by the Commission.” The AOGCC will consider more specific situations for the use of a Sundry Notice throughout the article.

R12-7-127 Plugging Methods and Procedures

2. Objective of the rules:
Specifies plugging methods, procedures, and reporting requirements to prevent subsurface contamination by oil, gas, and geothermal drilling and production activities.
3. Effectiveness of the rule in achieving the objectives:
Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.
6. Analysis of clarity, conciseness, and understandability:
The rule could be improved by replacing "witness" with "inspect" to improve understandability.
14. Proposed course of action:
The AOGCC will make the following revisions: change the wording from “witness” to “inspect” where applicable; change “bore hole” to “borehole;” add requirements for a wellbore schematic diagram in the application; and require a photograph of the marker in place and its GPS coordinates with the plugging record.

R12-7-128 Stratigraphic, Core, and Seismic Holes

2. Objective of the rules:
Specifies requirements for holes drilled to obtain stratigraphic or seismic info
3. Effectiveness of the rule in achieving the objectives:
The rule is effective in achieving the objectives.

R12-7-129 Wells to be Used as Water Wells

2. Objective of the rules:

Specifies requirements for converting any well or exploratory hole to a water well for use by persons who need a potable water source.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

Sections 135 to 161 -- Requirements for testing and production of wells.

R12-7-135 Gas-oil Ratio and Potential Tests

2. Objective of the rules:

Requires operators to conduct specific tests for the purpose of measuring oil / gas ratios in producing oil fields. This prevents waste and protects adjoining leaseholders' shared interests in the oil and gas produced.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives. "Pool" is a common industry term and is defined in A.R.S. § 27-501(16).

R12-7-136 Subsurface Pressure Tests and Reservoir Surveys

2. Objective of the rules:

Specifies initial and periodic testing requirements for oil and gas wells to ensure prevention of waste of oil and gas resources.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

R12-7-137 Commingling of Production from Pools

2. Objective of the rules:

Specifies requirements for accounting of production from separate pools to prevent waste and protect adjoining interests from being illegally drained. Protects all producers in a unitized pool by requiring a public hearing and AOGCC approval.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

The time frame for a hearing is not specified.

"Pool" is defined in A.R.S. § 27-501(16). The rule could be improved by adding a new definition, to differentiate "multiple zone completions" from "commingling production." Alternatively, clarifying

language could be added to R12-7-116 and 137 to differentiate the context of the two terms to improve conciseness. Replacing "witness" with "inspect" or "observe" would also improve understandability.

14. Proposed course of action:

The AOGCC plans to include language in this section that clearly specifies a 15 calendar day public notice period is required before a public hearing on commingling production from pools.

The AOGCC plans to work with the Interstate Oil and Gas Compact Commission (IOGCC) and other states' oil and gas commissions to determine the need for clarifying language for "commingling production." The AOGCC may consider replacing "witness" with "inspect" or "observe" where appropriate.

R12-7-138 Casinghead Gas

2. Objective of the rules:

Regulates the production, sale and transport and venting of all casinghead gas in order to prevent waste. Specifies measurement and reporting requirements to the AOGCC for gas produced from oil wells.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

R12-7-139 Use of Vacuum Pumps

2. Objective of the rules:

Prohibits the use of vacuum pumps unless authorized by the AOGCC in order to prevent waste and protect adjoining leaseholders from improper drainage of their interests. The Commission has statutory authority over all wells in A.R.S. § 27-516. Furthermore, the AOGCC has broad discretionary authority to promulgate rules that address the overall production rate and the method of production, pursuant to A.R.S. § 27-515, A.R.S. §§ 27-524(A) and 525.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below. The Commission has not received a request for the use of vacuum pumps in the recent history of the AOGCC.

6. Analysis of clarity, conciseness, and understandability:

The rule is silent on the duration of the public notice period for an AOGCC hearing on the use of vacuum pump in a well.

14. Proposed course of action:

The AOGCC plans to include language in this section that clearly specifies a 15 calendar day public notice period is required before a public hearing on the use of a vacuum pump in a well. The AOGCC plans to consult with the IOGCC as to applicability of this rule in Arizona and revise the applicability language, if appropriate.

R12-7-140 Pollution, Surface Damage, and Noise Abatement

2. Objective of the rules:

Requires operators to prevent surface/ subsurface pollution, surface damage, and minimize noise

caused by drilling activity.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives. The AOGCC has broad discretionary authority to enforce non-compliance with any rule, including shutting down a drilling operation, pursuant to A.R.S. § 27-503(7). A.R.S. §§ 27-524(A) and 525 authorize the Commission to bring an action in Superior Court to enforce and obtain injunctive relief.

R12-7-142 Measurement of Oil

2. Objective of the rules:

Requires precise measurement of oil produced, purchased or transported in order to minimize and/or prevent waste. Requires oil to be measured before transporting from a lease.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

6. Analysis of Clarity, conciseness, and understandability:

The term “measure” requires clarification.

14. Proposed course of action:

If the governor extends the option to the AOGCC to redraft the rules, the Commission will update the rules to current industry standards.

R12-7-143 Oil Tanks, Fire Walls, and Fire Hazards

2. Objective of the rules:

Specifies safety requirements for oil tanks, fire walls, and preventing fire hazards pursuant to the Declaration of Policy in A.R.S. 502(A)(6) “Safeguard the health, property and public welfare of citizens of the state and other interested persons.”

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

R12-7-150 Capacity Tests of Gas Wells and Geothermal Wells

2. Objective of the rules:

Requires capacity tests for wells in a certain time frame

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

R12-7-151 Measurement of Gas from Gas Wells and Geothermal Resources

2. Objective of the rules:

Requires precise measurement by metering of gas produced, purchased or transported in order to minimize and/or prevent waste. Requires accurate measurement of geothermal resources produced.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

14. Proposed course of action:

The rules were consistent with industry standards at the time of adoption. If the governor extends the option to the AOGCC to redraft the rules, the Commission will update the rules to current industry standards.

R12-7-152 Utilization of Gas

2. Objective of the rules:

Restricts and prohibits the use of gas from wells by well owners and operators to specific uses in order to prevent waste.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

The time frame for a hearing is not specified.

14. Proposed course of action:

The AOGCC plans to add language in section 152(B) that clearly specifies that a 15 calendar day public notice period is required before a public hearing on whether to approve the utilization of gas in the manufacture of carbon black.

R12-7-153 Non-hydrocarbon Gas

2. Objective of the rules:

R12-7-153 Non-hydrocarbon Gas Expands scope of Title 12, Chapter 7 to include non-hydrocarbon gases (“helium, carbon dioxide, and any other non-hydrocarbon gas.”)

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives, although the rule could be improved by adding geothermal wells to the list (even though it’s in the title of Article 1).

14. Proposed course of action:

The AOGCC will consider adding geothermal wells to the list, especially in the case of steam generation as a gas is produced in this process.

R12-7-160 Regulation of Production

2. Objective of the rules:

Gives the AOGCC authority to limit, allocate or apportion oil, gas or geothermal production under specific conditions where waste is, or may be caused. The Commission’s purpose is to promote the production of oil and gas in the state of Arizona, as stated in A.R.S. § 27-502.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

R12-7-161 Producer's Monthly Report

2. Objective of the rules:

Operators are required to report all oil, water, and gas produced from all wells regulated by the AOGCC in the state. This rule specifies what operators must report to the AOGCC on production from each producing lease and the timeframe for submittal.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

14. Proposed course of action:

The AOGCC plans to add clarifying language, “on a form approved by the Commission.”

Sections 175 to 182 -- Requirements for injection, re-injection, enhanced recovery, disposal, and storage wells.

R12-7-175 Injection Wells including Enhanced Recovery, Disposal, and Storage Wells

2. Objective of the rules:

Identifies the types of injection wells that require a permit from the AOGCC, pursuant to R12-7-104, and further specifies which types of wells are covered under specific sections of the rule.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the immediate objectives of the AOGCC, but there remains the potential overlap with competing rules adopted by USEPA and ADEQ, which also require permits for the same thing.

6. Analysis of clarity, conciseness, and understandability:

This rule is not clear on a few key issues, all of which are related to the Underground Injection Control (UIC) program administered by the US Environmental Protection Agency (USEPA) and the Arizona Department of Environmental Quality’s (ADEQ) Aquifer Protection Program. The rule references “Class II” and “Class V” wells, which is assumed to be the UIC program, but these terms are not defined in R12-7-101. Furthermore, the rule may have overlapping authorities with the Aquifer Protection Program and UIC with respect to regulatory oversight and financial assurance requirements.

14. Proposed course of action:

The AOGCC shall work with USEPA and ADEQ to understand which permitting requirements are redundant and overlapping with the other programs. The end result should be to remove the conflicts and inconsistencies, streamline the permitting process and amend the oil and gas rules accordingly to reduce the regulatory burden while still achieving the same objectives, consistent with EO2017-02.

R12-7-176 Permits for Injection Wells

2. Objective of the rules:

Specifies special requirements for permitting injection wells before the AOGCC will allow any substance to be injected into any geologic stratum.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

The requirement in section 176(A)(B) for a 15 day notice before a public hearing conflicts with the requirement in section 107(E)(4), change of well classification, which is ten days. A single time frame of 15 calendar days is recommended for consistency and to give the public adequate notice.

14. Proposed course of action:

The AOGCC plans to amend the rule to designate that a 15 calendar day notice is required before a public hearing on permitting new injection wells and to change section 176(A) to, "... is prohibited unless ~~1st~~ first authorized by ..."

R12-7-178 Notice of Commencement, Discontinuance, and Transfer of Injection Operations Testing and Monitoring of Injection Wells

2. Objective of the rules:

Requires operators to keep the AOGCC informed of the operational status of all regulated injection wells in the state, including start-up, cessation, temporary abandonment, plugging and abandonment or transfer of injection wells.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

The rule could be improved by changing "1" to "one" in R12-7-178(3).

14. Proposed course of action:

The AOGCC plans to change R12-7-178(3)(c) to, "The Commission shall return ~~1~~ one copy of the request for transfer to the operator and ~~1~~ one to the proposed new operator ..." and to change 178(3)(c)(ii) to, "the Commission shall return ~~1~~ one copy of the request to the operator and ~~1~~ one copy to the proposed operator ..."

R12-7-179 Testing and Monitoring of Injection Wells

2. Objective of the rules:

Specifies testing, monitoring, and reporting requirements for operators of injection wells. The testing, monitoring and recordkeeping requirements are to ensure operators are in compliance with the AOGCC rules on injection wells.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

R12-7-180 Supplementary Requirements for Storage Wells

2. Objective of the rules:

Specifies additional requirements an operator must include in any application for drilling storage (injection) wells to store liquid or gaseous hydrocarbons, or any other substances under the jurisdiction of the Commission.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

R12-7-181 Design and Construction of Storage Wells and Cavities

2. Objective of the rules:

The rule specifies minimum design, construction and maintenance requirements for underground storage of liquid or gaseous hydrocarbons, or any other substances under the jurisdiction of the Commission. This includes the storage wells that service these cavities to prevent waste, leakage or loss of product and/ or exposure of hazardous gases to people, pursuant to the Declaration of Policy in A.R.S. 502(A)(6) “Safeguard the health, property and public welfare of citizens of the state and other interested persons.”

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

Section 181(A) provides: “... applicant shall demonstrate to the Commission that ..., etc.” implies that the Commission must approve the applicant’s demonstration that the proposed design will preserve the structural integrity of the host rock. However, the rule is not clear whether a public hearing is required or that approval can be administratively granted. In the past the AOGCC has required this demonstration as part of the drilling application (R12-7-104). The rule is silent on any time frame the Commission must comply with, in accordance with R12-7-104(C). R12-7-181(D) preserves Arizona’s two underground storage facilities, however, if it is determined that the AOGCC has jurisdiction over the PHMSA Interim Rule in the state, these design and construction requirements may change.

14. Proposed course of action:

This section may need revision to comply with the new PHMSA Interim Final Rule on underground natural gas storage. Regardless of that outcome, this section should be amended to refer to the application requirements in R12-7-104.

R12-7-182 Operation, Inspection, and Closure of Storage-well Systems

2. Objective of the rules:

Specifies operation, inspection, reporting and abandonment requirements for underground storage wells for natural gas to prevent waste, leakage or loss of product and/ or exposure of hazardous gases to people. The information from required reports assists the AOGCC in monitoring the operator’s compliance with the oil and gas rules and the amount of product produced. The Commission is authorized to adopt this rule, pursuant to the Declaration of Policy in A.R.S. 502(A)(6) “Safeguard the health, property and public welfare of citizens of the state and other interested persons.”

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

6. Analysis of clarity, conciseness, and understandability:

“Witness”, “observe”, “inspect” are used interchangeably in regards to AOGCC activity at the site. For consistency, the AOGCC may consider replacing “witness” and “observe” throughout the rules with “may inspect”, or “shall inspect,” where appropriate.

14. Proposed course of action:

“Storage well” should not be hyphenated in the rule’s title. The AOGCC will change “Storage-well” to “Storage Well,” as in R12-7-181 and will consider replacing “witness” and “observe” with “may inspect”, or “shall inspect,” where appropriate.

Sections 183 to 194 -- Reporting requirements.

R12-7-183 Certificate of Compliance and Authorization to Transport

2. Objective of the rules:

Specifies requirements to transport oil and gas from a lease. The AOGCC issues a certificate, which authorizes an operator or producer to transport oil, gas, or geothermal resources from a lease for each well.

3. Effectiveness of the rule in achieving the objectives:

The rule’s effectiveness is unknown and untested in achieving the objectives, because no new transporters have applied for a certificate to transport in recent history of the AOGCC.

R12-7-184 Recovered Load Oil

2. Objective of the rules:

Load oil is oil pumped into a wellbore in preparation for, or as part of, a treatment of the well. The rule specifies requirements for transport of load oil that is recovered from the well after treatment. “Using load oil, often produced and processed from adjacent wells in the field, reduces the cost of fluids and can enhance the cleanup process when the treatment is complete” (according to The Schlumberger Oilfield Glossary). The AOGCC approves this activity by issuing a certificate of load oil credit and permit to transport.

3. Effectiveness of the rule in achieving the objectives:

In the last decade, the AOGCC has not been asked to issue a certificate of load oil credit and permit to transport. The rule appears to be effective and should not be repealed.

R12-7-185 Transporter's and Storer's Monthly Report

2. Objective of the rules:

The rule is designed to track an oil transporter’s stocks of oil and condensate on hand and all movements within the state of oil and condensate by pipeline, trucks, or other conveyances except railroads. This is done through a system of monthly reports submitted to the AOGCC. The information assists the AOGCC in monitoring the operator’s compliance with the rules and the amount of product produced.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

14. Proposed course of action:

The AOGCC plans to add clarifying language, “on a form approved by the Commission.”

R12-7-186 Gas or Geothermal Purchaser's Monthly Report

2. Objective of the rules:

Requires purchasers of gas and geothermal products to report monthly on the acquisition and disposition of gas or geothermal resources produced from a well. The information assists the AOGCC

in monitoring the operator's compliance with the rules and the amount of product produced.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is believed to be effective in achieving the objectives, but is unknown/ untested, because there is no active geothermal production and the AOGCC is not receiving geothermal production reports.

6. Analysis of clarity, conciseness, and understandability:

The rule needs more specificity on content for a typical geothermal report.

14. Proposed course of action:

The AOGCC plans to add clarifying language, "on a form approved by the Commission."

R12-7-187 Injection Project Report

2. Objective of the rules:

Requires injection well operators to submit monthly reports including locational data, operational parameters and production data. The information assists the AOGCC in monitoring the operator's compliance with the rules and the amount of product produced.

3. Effectiveness of the rule in achieving the objectives:

The rule is working as intended. Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

14. Proposed course of action:

The AOGCC plans to add clarifying language, "on a form approved by the Commission."

R12-7-188 Refinery Reports

2. Objective of the rules:

Requires refinery operators to report monthly on oil, condensate and other hydrocarbon products and by-products produced at such a facility. The information assists the AOGCC in monitoring the operator's compliance with the rules and the amount of product produced.

3. Effectiveness of the rule in achieving the objectives:

This rule has not been utilized in Arizona, because the state has no oil refineries.

6. Analysis of clarity, conciseness, and understandability:

Should an oil refinery ever be constructed in Arizona, this rule would satisfy the basic requirements of reporting typical data from such a facility that would be of interest to the state. At some future date if a refinery is operating, the rule may have to be amended to accommodate special factors or circumstances applicable to that refinery. The rule should not be repealed.

14. Proposed course of action:

The AOGCC plans to add clarifying language, "on a form approved by the Commission."

R12-7-190 Gasoline Plant Reports

2. Objective of the rules:

Specifies reporting requirements of all operators of plants that extract any hydrocarbon liquids (*e.g.*, gasoline, kerosene, condensate, oil, etc.) from gas. The information assists the AOGCC in monitoring the operator's compliance with the rules and the amount of product produced.

3. Effectiveness of the rule in achieving the objectives:

This rule has not been utilized in Arizona, because the state has no oil refineries and therefore, no gasoline plants.

6. Analysis of clarity, conciseness, and understandability:

Should a gasoline plant be constructed in Arizona, this rule would satisfy the basic requirements of reporting typical data from such a facility that would be of interest to the state. The rule may have to be amended in the future to accommodate factors applicable to a gasoline plant in this state. The rule should not be repealed.

14. Proposed course of action:

The AOGCC plans to add clarifying language, "on a form approved by the Commission."

R12-7-192 Books and Records to Substantiate Reports

2. Objective of the rules:

Specifies requirements for books and records to verify data reported to the AOGCC on prescribed forms. The rule gives the AOGCC legal access to inspect/ audit production data for up to six years after a well is completed.

3. Effectiveness of the rule in achieving the objectives:

The rule is effective in achieving the objectives.

R12-7-194 Organization Reports

2. Objective of the rules:

Specifies information required in a legal document (organization report) that must be submitted with an application to drill or with a Sundry Notice when the operator name changes. It is a statement made under oath of who the operator/ applicant is and that the operator is a legitimate business/ person doing business in the state of Arizona.

3. Effectiveness of the rule in achieving the objectives:

Generally, the rule is effective in achieving the objectives. To improve clarity, the proposed course of action is discussed below.

14. Proposed course of action:

The AOGCC plans to add clarifying language, "on a form approved by the Commission."