

NOTICE OF PROPOSED EXPEDITED RULEMAKING

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY – AIR POLLUTION CONTROL

PREAMBLE

- 1. Article, Part, or Section Affected (as applicable)**

	<u>Rulemaking Action</u>
R18-2-101	Amend
R18-2-326	Amend
R18-2-601	Amend
R18-2-602	Amend
R18-2-704	Amend
R18-2-801	Amend
R18-2-802	Amend
R18-2-804	Amend
R18-2-1509	Amend

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

Authorizing statutes: A.R.S. §§ 49-104(A)(10); 49-104(B)(4); 49-425(A)
Implementing statutes: A.R.S. §§ 49-426; 49-447; 49-458.01; 49-501

- 3. 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: 29 A.A.R. 1478 (June 30, 2023)

- 4. The agency’s contact person who can answer questions about the rulemaking:**

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- 5. An agency’s justification and reason why a rule should be made, amended, repealed or renumbered**

under A.R.S. § 41-1027(A), to include an explanation about the rulemaking:

ADEQ proposes replacing all instances of the term "air curtain destructor" or "air-curtain destructor" in Chapter 2 with "air curtain incinerator" to be consistent with applicable federal regulations, namely: 40 CFR §§ 60.2970 through 60.2974 (Air Curtain Incinerators That Burn Only Wood Waste, Clean Lumber, and Yard Waste). Specifically, this will require amending the following rules: A.A.C. R18-2-101(9); R18-2-326(C)(1); R18-2-601, R18-2-602(A)(12) and (D)(1)(h), R18-2-704(B)(2) and (C); and R18-2-1509(B)(10). These amendments will not change the substantive requirements of the rules, but will improve rule clarity, thereby facilitating the regulated community's understanding of the rules and, in turn, ADEQ's ability to protect air quality.

Additionally, ADEQ proposes eliminating requirements in Article 8 no longer necessary for the operation of state government due to preemption of ADEQ's statutory authority to regulate air emissions from certain mobile sources. In 1990, Congress expanded the scope of the Clean Air Act, thereby strengthening the federal government's role in controlling air pollution and, in turn, curtailing state authority. Among other things, Congress expressly prohibited states from adopting or attempting to enforce any standard relating to the control of emissions from new nonroad engines and vehicles. 42 U.S.C. § 7543(e)(1). Subsequent case law determined federal preemption of state law also applied to used nonroad engines. 42 U.S.C. § 7543(e)(2); *see, e.g., Engine Mfrs. Ass'n v. U.S. E.P.A.*, 88 F.3d 1075, 1087-88 (D.C. Cir. 1996) ("states must be preempted from adopting any regulation for which California could receive authorization."); *Pac. Merch. Shipping Ass'n v. Goldstene*, 517 F.3d 1108, 1113 (9th Cir. 2008) ("we join the D.C. Circuit and hold that the implied preemption of [42 U.S.C. § 7543(e)(2)] applies to 'any nonroad vehicles or engines,' including new and non-new sources."). Consequently, the smoke opacity standards contained in A.A.C. R18-2-801, R18-2-802, and R18-2-804 are now preempted under federal law to the extent they apply to nonroad engines or vehicles as defined in 42 U.S.C. § 7550(10) and (11). ADEQ may not apply emissions or opacity standards to nonroad engines or vehicles, although in-use limits such as fuel requirements, operating requirements, and limits on hours of operation may be permitted. As soon as ADEQ became aware of this, ADEQ stopped enforcing nonroad engine or vehicle standards to the extent they were preempted. These rules must be amended to align with Arizona's limited scope of authority to set emission standards for nonroad engines.

An expedited rulemaking is appropriate pursuant to A.R.S. § 41-1027(A)(1), (3), and (6) because this rulemaking will only clarify language and eliminate requirements no longer necessary for the operation of state government due to preemption of an agency's statutory authority. This rulemaking will not increase the cost of regulatory compliance, increase a fee, or reduce procedural rights of those regulated.

- 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

8. The preliminary summary of the economic, small business, and consumer impact:

Not applicable. The agency is exempt from the requirements to prepare and file an economic, small business, and consumer impact statement under A.R.S. § 41-1055(D)(2).

9. The agency's contact person who can answer questions about the economic, small business and consumer impact statement:

Not applicable.

10. The time, place, and nature of the proceedings to make, amend, repeal, or renumber the rule:

Close of record: TO BE ADDED AFTER INTERNAL APPROVAL OF NPERM

Written comments may be sent to the individual listed in Item 4 by the close of record.

No oral proceeding is scheduled at this time. An oral proceeding may be requested pursuant A.R.S. § 41-1027(C) by submitting a written request to the Individual listed in Item 4 by the close of record.

11. 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 statutes applicable specifically to ADEQ or this specific rulemaking.

a. Whether the rule requires a permit, license, or agency authorization under A.R.S. § 41-1037(A), and whether a general permit is used and if not, the reasons why a general permit is not used:

R18-2-602 requires a general permit. The proposed amendments do not change the permitting requirements of this rule.

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:

42 U.S.C. § 7550(10) and (11) and 40 CFR §§ 60.2970 through 60.2974 are applicable to the subjects of these rules. These rules are not more stringent than is required by 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.

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

Not applicable

13. The full text of the rules follows:

TITLE 18. ENVIRONMENTAL QUALITY

**CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY - AIR POLLUTION
CONTROL**

ARTICLE 1. GENERAL

Section

R18-2-101. Definitions

ARTICLE 3. PERMITS AND PERMIT REVISIONS

Section

R18-2-326. Fees Related to Individual Permits

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

Section

R18-2-601. General

R18-2-602. Unlawful Open Burning

ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS

Section

R18-2-704. Standards of Performance for Incinerators

ARTICLE 8. EMISSIONS FROM MOBILE SOURCES (NEW AND EXISTING)

Section

R18-2-801. Classification of Mobile Sources

R18-2-802. Off-road Machinery

R18-2-804. Roadway and Site Cleaning Machinery

ARTICLE 15. FOREST AND RANGE MANAGEMENT BURNS

Section

R18-2-1509. Emission Reduction Techniques

ARTICLE 1. GENERAL

R18-2-101. Definitions

The following definitions apply to this Chapter. Where the same term is defined in this Section and in the definitions Section for an Article of this Chapter, the Article-specific definition shall apply.

1. “Act” means the Clean Air Act of 1963 (P.L. 88-206; 42 U.S.C. 7401 through 7671q) as amended through December 31, 2011 (and no future editions).
2. “Actual emissions” means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in subsections (2)(a) through (e), except that this definition shall not apply for calculating whether a significant emissions increase as defined in R18-2-401 has occurred, or for establishing a plantwide applicability limitation as defined in R18-2-401. Instead, the definitions of projected actual emissions and baseline actual emissions in R18-2-401 shall apply for those purposes.
 - a. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period that precedes the particular date and that is representative of normal source operation. The Director may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit’s actual operating hours, production rates, and types of materials processed, stored or combusted during the selected time period.
 - b. The Director may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
 - c. For any emissions unit that is or will be located at a source with a Class I permit and has not begun normal operations on the particular date, actual emissions shall equal the unit’s potential to emit on that date.
 - d. For any emissions unit that is or will be located at a source with a Class II permit and has not begun normal operations on the particular date, actual emissions shall be based on applicable control equipment requirements and projected conditions of operation.
 - e. This definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL. Instead, the definitions of projected actual emissions and baseline actual emissions in R18-2-401 shall apply for those purposes.
3. “Administrator” means the Administrator of the United States Environmental Protection Agency.
4. “Affected facility” means, with reference to a stationary source, any apparatus to which a standard is applicable.
5. “Affected source” means a source that includes one or more units which are subject to emission reduction requirements or limitations under Title IV of the Act.

6. “Affected state” means any state whose air quality may be affected by a source applying for a permit, permit revision, or permit renewal and that is contiguous to Arizona or that is within 50 miles of the permitted source.
7. “Afterburner” means an incinerator installed in the secondary combustion chamber or stack for the purpose of incinerating smoke, fumes, gases, unburned carbon, and other combustible material not consumed during primary combustion.
8. “Air contaminants” means smoke, vapors, charred paper, dust, soot, grime, carbon, fumes, gases, sulfuric acid mist aerosols, aerosol droplets, odors, particulate matter, wind-borne matter, radioactive materials, or noxious chemicals, or any other material in the outdoor atmosphere.
9. “Air curtain ~~destructor~~incinerator” means an incineration device designed and used to secure, by means of a fan-generated air curtain, controlled combustion of only wood waste and slash materials in an earthen trench or refractory-lined pit or bin.
10. “Air pollution” means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in sufficient quantities, which either alone or in connection with other substances by reason of their concentration and duration are or tend to be injurious to human, plant or animal life, or cause damage to property, or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the director. A.R.S. § 49-421(2).
11. “Air pollution control equipment” means equipment used to eliminate, reduce or control the emission of air pollutants into the ambient air.
12. “Air quality control region” (AQCR) means an area so designated by the Administrator pursuant to Section 107 of the Act and includes the following regions in Arizona:
 - a. Maricopa Intrastate Air Quality Control Region which is comprised of the County of Maricopa.
 - b. Pima Intrastate Air Quality Control Region which is comprised of the County of Pima.
 - c. Northern Arizona Intrastate Air Quality Control Region which encompasses the counties of Apache, Coconino, Navajo, and Yavapai.
 - d. Mohave-Yuma Intrastate Air Quality Control Region which encompasses the counties of La Paz, Mohave, and Yuma.
 - e. Central Arizona Intrastate Air Quality Control Region which encompasses the counties of Gila and Pinal.
 - f. Southeast Arizona Intrastate Air Quality Control Region which encompasses the counties of Cochise, Graham, Greenlee, and Santa Cruz.
13. “Allowable emissions” means the emission rate of a stationary source calculated using both the maximum rated capacity of the source, unless the source is subject to federally enforceable limits which restrict the operating rate or hours of operation, and the most stringent of the following:
 - a. The applicable standards as set forth in 40 CFR 60, 61 and 63;

- b. The applicable emissions limitations approved into the state implementation plan, including those with a future compliance date; or,
 - c. The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.
14. “Ambient air” means that portion of the atmosphere, external to buildings, to which the general public has access.
15. “Applicable implementation plan” means those provisions of the state implementation plan approved by the Administrator or a federal implementation plan promulgated for Arizona or any portion of Arizona in accordance with Title I of the Act.
16. “Applicable requirement” means any of the following:
- a. Any federal applicable requirement.
 - b. Any other requirement established pursuant to this Chapter or A.R.S. Title 49, Chapter 3.
17. “Arizona Testing Manual” means sections 1 and 7 of the Arizona Testing Manual for Air Pollutant Emissions amended as of March 1992 (and no future editions).
18. “ASTM” means the American Society for Testing and Materials.
19. “Attainment area” means any area that has been identified in regulations promulgated by the Administrator as being in compliance with national ambient air quality standards.
20. *“Begin actual construction” means, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. With respect to a change in method of operation this term refers to those onsite activities, other than preparatory activities, which mark the initiation of the change.*
- a. For purposes of title I, parts C and D and section 112 of the clean air act, and for purposes of applicants that require permits containing limits designed to avoid the application of title I, parts C and D and section 112 of the clean air act, these activities include installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures but do not include any of the following, subject to subsection (20)(c):
 - i. Clearing and grading, including demolition and removal of existing structures and equipment, stripping and stockpiling of topsoil.
 - ii. Installation of access roads, driveways and parking lots.
 - iii. Installation of ancillary structures, including fences, office buildings and temporary storage structures, that are not a necessary component of an emissions unit or associated air pollution control equipment for which the permit is required.
 - iv. Ordering and onsite storage of materials and equipment.
 - b. For purposes other than those identified in subsection (20)(a), these activities do not include any of the following, subject to subsection (20)(c):
 - i. Clearing and grading, including demolition and removal of existing structures and equipment, stripping and stockpiling of topsoil and earthwork cut and fill for foundations.

- ii. Installation of access roads, parking lots, driveways and storage areas.
 - iii. Installation of ancillary structures, including fences, warehouses, storerooms and office buildings, provided none of these structures impacts the design of any emissions unit or associated air pollution control equipment.
 - iv. Ordering and onsite storage of materials and equipment.
 - v. Installation of underground pipework, including water, sewer, electric and telecommunications utilities.
 - vi. Installation of building and equipment supports, including concrete forms, footers, pilings, foundations, pads and platforms, provided none of these supports impacts the design of any emissions unit or associated air pollution control equipment.
- c. An applicant's performance of any activities that are excluded from the definition of "begin actual construction" under subsection (20)(a) or (b) shall be at the applicant's risk and shall not reduce the applicant's obligations under this Chapter. The director shall evaluate an application for a permit or permit revision and make a decision on the same basis as if the activities allowed under subsection (20)(a) or (b) had not occurred. A.R.S. § 49-401.01(7).
21. "Best available control technology" (BACT) means an emission limitation, including a visible emissions standard, based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major source or major modification, taking into account energy, environmental, and economic impact and other costs, determined by the Director in accordance with R18-2-406(A)(4) to be achievable for such source or modification.
22. "Btu" means British thermal unit, which is the quantity of heat required to raise the temperature of one pound of water 1°F.
23. "Categorical sources" means the following classes of sources:
- a. Coal cleaning plants with thermal dryers;
 - b. Kraft pulp mills;
 - c. Portland cement plants;
 - d. Primary zinc smelters;
 - e. Iron and steel mills;
 - f. Primary aluminum ore reduction plants;
 - g. Primary copper smelters;
 - h. Municipal incinerators capable of charging more than 50 tons of refuse per day;
 - i. Hydrofluoric, sulfuric, or nitric acid plants;
 - j. Petroleum refineries;
 - k. Lime plants;
 - l. Phosphate rock processing plants;
 - m. Coke oven batteries;

- n. Sulfur recovery plants;
 - o. Carbon black plants using the furnace process;
 - p. Primary lead smelters;
 - q. Fuel conversion plants;
 - r. Sintering plants;
 - s. Secondary metal production plants;
 - t. Chemical process plants, which shall not include ethanol production facilities that produce ethanol by natural fermentation included in North American Industry Classification System codes 325193 or 312140;
 - u. Fossil-fuel boilers, combinations thereof, totaling more than 250 million Btus per hour heat input;
 - v. Petroleum storage and transfer units with a total storage capacity more than 300,000 barrels;
 - w. Taconite ore processing plants;
 - x. Glass fiber processing plants;
 - y. Charcoal production plants;
 - z. Fossil-fuel-fired steam electric plants and combined cycle gas turbines of more than 250 million Btus per hour heat input.
24. "Categorically exempt activities" means any of the following:
- a. Any combination of diesel-, natural gas- or gasoline-fired engines with cumulative power equal to or less than 145 horsepower.
 - b. Natural gas-fired engines with cumulative power equal to or less than 155 horsepower.
 - c. Gasoline-fired engines with cumulative power equal to or less than 200 horsepower.
 - d. Any of the following emergency or stand-by engines used for less than 500 hours in each calendar year, provided the permittee keeps records documenting the hours of operation of the engines:
 - i. Any combination of diesel-, natural gas- or gasoline-fired emergency engines with cumulative power equal to or less than 2,500 horsepower.
 - ii. Natural gas-fired emergency engines with cumulative power equal to or less than 2,700 horsepower.
 - iii. Gasoline-fired emergency engines with cumulative power equal to or less than 3,700 horsepower.
 - e. Any combination of boilers with a cumulative maximum design heat input capacity of less than 10 million Btu/hr.
25. "CFR" means the Code of Federal Regulations, amended as of July 1, 2011, (and no future editions), with standard references in this Chapter by Title and Part, so that "40 CFR 51" means Title 40 of the Code of Federal Regulations, Part 51.
26. "Charge" means the addition of metal bearing materials, scrap, or fluxes to a furnace, converter or refining vessel.

27. "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post-combustion stage, at a new or existing facility that will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam, that was not in widespread use as of November 15, 1990.
28. "Clean coal technology demonstration project" means a project using funds appropriated under the heading "Department of Energy - Clean Coal Technology," up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology or similar projects funded through appropriations for the Environmental Protection Agency. The federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.
29. "Coal" means all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D-388-91, (Classification of Coals by Rank).
30. "Combustion" means the burning of matter.
31. "Commence" means, as applied to construction of a source, or a major modification as defined in Article 4 of this Chapter, that the owner or operator has all necessary preconstruction approvals or permits and either has:
 - a. Begun, or caused to begin, a continuous program of actual onsite construction of the source, to be completed within a reasonable time; or
 - b. Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
32. "Construction" means any physical change or change in the method of operation, including fabrication, erection, installation, demolition, or modification of an emissions unit, which would result in a change in emissions.
33. "Continuous monitoring system" means a CEMS, CERMS, or CPMS.
34. "Continuous emissions monitoring system" or "CEMS" means the total equipment, required under the emission monitoring provisions in this Chapter, used to sample, condition (if applicable), analyze, and provide, on a continuous basis, a permanent record of emissions.
35. "Continuous emissions rate monitoring system" or "CERMS" means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).
36. "Continuous parameter monitoring system" or "CPMS" means the total equipment, required under the emission monitoring provisions in this Chapter, to monitor process or control device operational parameters (for example, control device secondary voltages and electric currents) or other information (for example, gas flow rate, O₂ or CO₂ concentrations) and to provide, on a continuous basis, a permanent record of monitored values.
37. "Controlled atmosphere incinerator" means one or more refractory-lined chambers in which complete combustion is promoted by recirculation of gases by mechanical means.

38. “Conventional air pollutant” means any pollutant for which the Administrator has promulgated a primary or secondary national ambient air quality standard. A.R.S. § 49-401.01(12).
39. “Department” means the Department of Environmental Quality. A.R.S. § 49-101(2)
40. “Director” means the director of environmental quality who is also the director of the department. A.R.S. § 49-101(3)
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41. “Discharge” means the release or escape of an effluent from a source into the atmosphere.
42. “Dust” means finely divided solid particulate matter occurring naturally or created by mechanical processing, handling or storage of materials in the solid state.
43. “Dust suppressant” means a chemical compound or mixture of chemical compounds added with or without water to a dust source for purposes of preventing air entrainment.
44. “Effluent” means any air contaminant which is emitted and subsequently escapes into the atmosphere.
45. “Electric utility steam generating unit” means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
46. “Emission” means an air contaminant or gas stream, or the act of discharging an air contaminant or a gas stream, visible or invisible.
47. “Emission standard” or “emission limitation” means a requirement established by the state, a local government, or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.
48. “Emissions unit” means any part of a stationary source which emits or would have the potential to emit any regulated air pollutant and includes an electric steam generating unit.
49. “Equivalent method” means any method of sampling and analyzing for an air pollutant which has been demonstrated under R18-2-311(D) to have a consistent and quantitatively known relationship to the reference method, under specified conditions.
50. “Excess emissions” means emissions of an air pollutant in excess of an emission standard as measured by the compliance test method applicable to such emission standard.
51. “Federal applicable requirement” means any of the following (including requirements that have been promulgated or approved by EPA through rulemaking at the time of issuance but have future effective compliance dates):

- a. Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under Title I of the Act that implements the relevant requirements of the Act, including any revisions to that plan promulgated in 40 CFR 52.
 - b. Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under Title I, including parts C or D, of the Act.
 - c. Any standard or other requirement under section 111 of the Act, including 111(d).
 - d. Any standard or other requirement under section 112 of the Act, including any requirement concerning accident prevention under section 112(r)(7) of the Act.
 - e. Any standard or other requirement of the acid rain program under Title IV of the Act or the regulations promulgated thereunder and incorporated pursuant to R18-2-333.
 - f. Any requirements established pursuant to section 504(b) or section 114(a)(3) of the Act.
 - g. Any standard or other requirement governing solid waste incineration, under section 129 of the Act.
 - h. Any standard or other requirement for consumer and commercial products, under section 183(e) of the Act.
 - i. Any standard or other requirement for tank vessels under section 183(f) of the Act.
 - j. Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under section 328 of the Act.
 - k. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, unless the Administrator has determined that such requirements need not be contained in a Title V permit.
 - l. Any national ambient air quality standard or maximum increase allowed under R18-2-218 or visibility requirement under Part C of Title I of the Act, but only as it would apply to temporary sources permitted pursuant to section 504(e) of the Act.
52. “Federal Land Manager” means, with respect to any lands in the United States, the secretary of the department with authority over such lands.
53. “Federally enforceable” means all limitations and conditions which are enforceable by the Administrator under the Act, including all of the following:
- a. The requirements of the new source performance standards and national emission standards for hazardous air pollutants.
 - b. The requirements of such other state or county rules or regulations approved by the Administrator, including the requirements of state and county operating and new source review permit and registration programs that have been approved by the Administrator. Notwithstanding this subsection, the condition of any permit or registration designated as being enforceable only by the state is not federally enforceable.
 - c. The requirements of any applicable implementation plan.

- d. Emissions limitations, controls, and other requirements, and any associated monitoring, recordkeeping, and reporting requirements that are included in a permit pursuant to R18-2-306.01 or R18-2-306.02.
54. “Federally listed hazardous air pollutant” means a pollutant listed pursuant to R18-2-1701(9).
55. “Final permit” means the version of a permit issued by the Department after completion of all review required by this Chapter.
56. “Fixed capital cost” means the capital needed to provide all the depreciable components.
57. “Fuel” means any material which is burned for the purpose of producing energy.
58. “Fuel burning equipment” means any machine, equipment, incinerator, device or other Article, except stationary rotating machinery, in which combustion takes place.
59. “Fugitive emissions” means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
60. “Fume” means solid particulate matter resulting from the condensation and subsequent solidification of vapors of melted solid materials.
61. “Fume incinerator” means a device similar to an afterburner installed for the purpose of incinerating fumes, gases and other finely divided combustible particulate matter not previously burned.
62. “Good engineering practice (GEP) stack height” means a stack height meeting the requirements described in R18-2-332.
63. “Hazardous air pollutant” means any federally listed hazardous air pollutant.
64. “Heat input” means the quantity of heat in terms of Btus generated by fuels fed into the fuel burning equipment under conditions of complete combustion.
65. “Incinerator” means any equipment, machine, device, contrivance or other Article, and all appurtenances thereof, used for the combustion of refuse, salvage materials or any other combustible material except fossil fuels, for the purpose of reducing the volume of material.
66. “Indian governing body” means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.
67. “Indian reservation” means any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.
68. “Insignificant activity” means any of the following activities:
- a. Liquid Storage and Piping
 - i. Petroleum product storage tanks containing the following substances, provided the applicant lists and identifies the contents of each tank with a volume of 350 gallons or more and provides threshold values for throughput or capacity or both for each such tank: diesel fuels and fuel oil in storage tanks with capacity of 40,000 gallons or less, lubricating oil, transformer oil, and used oil.
 - ii. Gasoline storage tanks with capacity of 10,000 gallons or less.

- iii. Storage and piping of natural gas, butane, propane, or liquified petroleum gas, provided the applicant lists and identifies the contents of each stationary storage vessel with a volume of 350 gallons or more and provides threshold values for throughput or capacity or both for each such vessel.
- iv. Piping of fuel oils, used oil and transformer oil, provided the applicant includes a system description.
- v. Storage and handling of drums or other transportable containers where the containers are sealed during storage, and covered during loading and unloading, including containers of waste and used oil regulated under the federal Resource Conservation and Recovery Act, 42 U.S.C. 6901-6992(k). Permit applicants must provide a description of material in the containers and the approximate amount stored.
- vi. Storage tanks of any size containing exclusively soaps, detergents, waxes, greases, aqueous salt solutions, aqueous solutions of acids that are not regulated air pollutants, or aqueous caustic solutions, provided the permit applicant specifies the contents of each storage tank with a volume of 350 gallons or more.
- vii. Electrical transformer oil pumping, cleaning, filtering, drying and the re-installation of oil back into transformers.
- b. Internal combustion engine-driven compressors, internal combustion engine-driven electrical generator sets, and internal combustion engine-driven water pumps used for less than 500 hours per calendar year for emergency replacement or standby service, provided the permittee keeps records documenting the hours of operation of this equipment.
- c. Low Emitting Processes
 - i. Batch mixers with rated capacity of 5 cubic feet or less.
 - ii. Wet sand and gravel production facilities that obtain material from subterranean and subaqueous beds, whose production rate is 200 tons/hour or less, and whose permanent in-plant roads are paved and cleaned to control dust. This does not include activities in emissions units which are used to crush or grind any non-metallic minerals.
 - iii. Powder coating operations.
 - iv. Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing.
 - v. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system or collector serving them exclusively.
 - vi. Plastic pipe welding.
- d. Site Maintenance

- i. Housekeeping activities and associated products used for cleaning purposes, including collecting spilled and accumulated materials at the source, including operation of fixed vacuum cleaning systems specifically for such purposes.
 - ii. Sanding of streets and roads to abate traffic hazards caused by ice and snow.
 - iii. Street and parking lot striping.
 - iv. Architectural painting and associated surface preparation for maintenance purposes at industrial or commercial facilities.
- e. Sampling and Testing
- i. Noncommercial (in-house) experimental, analytical laboratory equipment which is bench scale in nature, including quality control/quality assurance laboratories supporting a stationary source and research and development laboratories.
 - ii. Individual sampling points, analyzers, and process instrumentation, whose operation may result in emissions but that are not regulated as emission units.
- f. Ancillary Non-Industrial Activities
- i. General office activities, such as paper shredding, copying, photographic activities, and blueprinting, but not to include incineration.
 - ii. Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) where the product is used at a source in the same manner as normal consumer use.
 - iii. Activities directly used in the diagnosis and treatment of disease, injury or other medical condition.
- g. Miscellaneous Activities
- i. Installation and operation of potable, process and waste water observation wells, including drilling, pumping, filtering apparatus.
 - ii. Transformer vents.
69. "Kraft pulp mill" means any stationary source which produces pulp from wood by cooking or digesting wood chips in a water solution of sodium hydroxide and sodium sulfide at high temperature and pressure. Regeneration of the cooking chemicals through a recovery process is also considered part of the kraft pulp mill.
70. "Lead" means elemental lead or alloys in which the predominant component is lead.
71. "Lime hydrator" means a unit used to produce hydrated lime product.
72. "Lime plant" includes any plant which produces a lime product from limestone by calcination. Hydration of the lime product is also considered to be part of the source.
73. "Lime product" means any product produced by the calcination of limestone.
74. "Major modification" is defined as follows:

- a. A major modification is any physical change in or change in the method of operation of a major source that would result in both a significant emissions increase of any regulated NSR pollutant and a significant net emissions increase of that pollutant from the stationary source.
- b. Any emissions increase or net emissions increase that is significant for nitrogen oxides or volatile organic compounds is significant for ozone.
- c. For the purposes of this definition, none of the following is a physical change or change in the method of operation:
 - i. Routine maintenance, repair, and replacement;
 - ii. Use of an alternative fuel or raw material by reason of an order under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. 792, or by reason of a natural gas curtailment plan under the Federal Power Act, 16 U.S.C. 792 - 825r;
 - iii. Use of an alternative fuel by reason of an order or rule under section 125 of the Act;
 - iv. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
 - v. For purposes of determining the applicability of R18-2-403 through R18-2-405 or R18-2-411, any of the following:
 - (1) Use of an alternative fuel or raw material by a stationary source that the source was capable of accommodating before December 21, 1976, unless the change would be prohibited under any federally enforceable permit condition established after December 12, 1976 under 40 CFR 52.21 or under Articles 3 or 4 of this Chapter; or
 - (2) Use of an alternative fuel or raw material by a stationary source that the source is approved to use under any permit issued under R18-2-403;
 - (3) An increase in the hours of operation or in the production rate, unless the change would be prohibited under any federally enforceable permit condition established after December 21, 1976, under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.
 - vi. For purposes of determining the applicability of R18-2-406 through R18-2-408 or R18-2-410, any of the following:
 - (1) Use of an alternative fuel or raw material by a stationary source that the source was capable of accommodating before January 6, 1975, unless the change would be prohibited under any federally enforceable permit condition established after January 6, 1975 under 40 CFR 52.21 or under Articles 3 or 4 of this Chapter;
 - (2) Use of an alternative fuel or raw material by a stationary source that the source is approved to use under any permit issued under 40 CFR 52.21, or under R18-2-406; or
 - (3) An increase in the hours of operation or in the production rate, unless the change would be prohibited under any federally enforceable permit condition established after January 6, 1975, under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.

- vii. Any change in ownership at a stationary source;
 - viii.[Reserved.]
 - ix. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, if the project complies with:
 - (1) The SIP, and
 - (2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated;
 - x. For electric utility steam generating units located in attainment and unclassifiable areas only, the installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, if the project does not result in an increase in the potential to emit any regulated pollutant emitted by the unit. This exemption applies on a pollutant-by-pollutant basis; and
 - xi. For electric utility steam generating units located in attainment and unclassifiable areas only, the reactivation of a very clean coal-fired electric utility steam generating unit.
 - d. This definition shall not apply with respect to a particular regulated NSR pollutant when the major source is complying with the requirements of R18-2-412 for a PAL for that regulated NSR pollutant. Instead, the definition of PAL major modification in R18-2-401(20) shall apply.
75. “Major source” means:
- a. A major source as defined in R18-2-401.
 - b. A major source under section 112 of the Act:
 - i. For pollutants other than radionuclides, any stationary source that emits or has the potential to emit, in the aggregate, including fugitive emission 10 tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to section 112(b) of the Act, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as described in Article 11 of this Chapter. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or
 - ii. For radionuclides, “major source” shall have the meaning specified by the Administrator by rule.
 - c. A major stationary source, as defined in section 302 of the Act, that directly emits or has the potential to emit, 100 tpy or more of any air pollutant including any major source of fugitive emissions of any such pollutant. The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of section 302(j) of the Act, unless the source belongs to a section 302(j) category.

76. “Malfunction” means any sudden and unavoidable failure of air pollution control equipment, process equipment or a process to operate in a normal and usual manner, but does not include failures that are caused by poor maintenance, careless operation or any other upset condition or equipment breakdown which could have been prevented by the exercise of reasonable care.
77. “Minor source” means a source of air pollution which is not a major source for the purposes of Article 4 of this Chapter and over which the Director, acting pursuant to A.R.S. § 49-402(B), has asserted jurisdiction.
78. “Minor source baseline area” means the air quality control region in which the source is located.
79. “*Mobile source*” means any combustion engine, device, machine or equipment that operates during transport and that emits or generates air contaminants whether in motion or at rest. A.R.S. § 49-401.01(23).
80. “*Modification*” or “*modify*” means a physical change in or change in the method of operation of a source that increases the emissions of any regulated air pollutant emitted by such source by more than any relevant *de minimis* amount or that results in the emission of any regulated air pollutant not previously emitted by more than such *de minimis* amount. An increase in emissions at a minor source shall be determined by comparing the source’s potential to emit before and after the modification. The following exemptions apply:
- a. A physical or operational change does not include routine maintenance, repair or replacement.
 - b. An increase in the hours of operation or if the production rate is not considered an operational change unless such increase is prohibited under any permit condition that is legally and practically enforceable by the department.
 - c. *A change in ownership at a source is not considered a modification.* A.R.S. § 49-401.01(24).
81. “Monitoring device” means the total equipment, required under the applicable provisions of this Chapter, used to measure and record, if applicable, process parameters.
82. “Motor vehicle” means any self-propelled vehicle designed for transporting persons or property on public highways.
83. “Multiple chamber incinerator” means three or more refractory-lined combustion chambers in series, physically separated by refractory walls and interconnected by gas passage ports or ducts.
84. “Natural conditions” includes naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.
85. “*National ambient air quality standard*” means the ambient air pollutant concentration limits established by the Administrator pursuant to section 109 of the Act. A.R.S. § 49-401.01(25).
86. “National emission standards for hazardous air pollutants” or “NESHAP” means standards adopted by the Administrator under section 112 of the Act.
87. “Necessary preconstruction approvals or permits” means those permits or approvals required under the Act and those air quality control laws and rules which are part of the SIP.

88. “Net emissions increase” means:

- a. The amount by which the sum of subsections (88)(a)(i) and (ii) exceeds zero:
 - i. The increase in emissions of a regulated NSR pollutant from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to R18-2-402(D); and
 - ii. Any other increases and decreases in actual emissions of the regulated NSR pollutant at the source that are contemporaneous with the particular change and are otherwise creditable.
 - iii. For purposes of calculating increases and decreases in actual emissions under subsection (88)(a)(ii), baseline actual emissions shall be determined as provided in the definition of baseline actual emissions in R18-2-401(2), except that R18-2-401(2)(a)(iii) and (b)(iv) shall not apply.
- b. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
 - i. The date five years before a complete application for a permit or permit revision authorizing the particular change is submitted or actual construction of the particular change begins, whichever occurs earlier, and
 - ii. The date that the increase from the particular change occurs.
- c. For purposes of determining the applicability of R18-2-403 through R18-2-405 or R18-2-411, an increase or decrease in actual emissions is creditable only if the Director has not relied on it in issuing a permit or permit revision under R18-2-403, which permit is in effect when the increase in actual emissions from the particular change occurs. For purposes of determining the applicability of R18-2-406 through R18-2-408 or R18-2-410, an increase or decrease in actual emissions is creditable only if the Director has not relied on it in issuing a permit under R18-2-406, which permit is in effect when the increase in actual emissions from the particular change occurs.
- d. An increase or decrease in actual emissions of sulfur dioxide, nitrogen oxides, PM₁₀, or PM_{2.5} which occurs before the applicable minor source baseline date, as defined in R18-2-218, is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
- e. An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- f. A decrease in actual emissions is creditable only to the extent that it satisfies all of the following conditions:
 - i. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions.
 - ii. It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.

- iii. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
 - iv. The emissions unit was actually operated and emitted the specific pollutant.
 - v. For purposes of determining the applicability of R18-2-403 through R18-2-405 or R18-2-411, the Director has not relied on it in issuing any permit, permit revision, or registration under Article 4, R18-2-302.01, (or) R18-2-334, and the state has not relied on it in demonstrating attainment or reasonable further progress.
 - g. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit, as defined in R18-2-401(24), that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
 - h. Subsection (2)(a) shall not apply for determining creditable increases and decreases.
89. "New source" means any stationary source of air pollution which is subject to a new source performance standard.
90. "New source performance standards" or "NSPS" means standards adopted by the Administrator under section 111(b) of the Act.
91. "Nitric acid plant" means any facility producing nitric acid 30% to 70% in strength by either the pressure or atmospheric pressure process.
92. "Nitrogen oxides" means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in the Appendices to 40 CFR 60.
93. "Nonattainment area" means an area so designated by the Administrator acting pursuant to section 107 of the Act as exceeding national primary or secondary ambient air standards for a particular pollutant or pollutants.
94. "Nonpoint source" means a source of air contaminants which lacks an identifiable plume or emission point.
95. "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.
96. "Operation" means any physical or chemical action resulting in the change in location, form, physical properties, or chemical character of a material.
97. "Owner or operator" means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source.
98. "Particulate matter" means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.
99. "Particulate matter emissions" means all finely divided solid or liquid materials other than uncombined water, emitted to the ambient air as measured by applicable test methods and procedures described in R18-2-311.

100. “Permitting authority” means the department or a county department, agency or air pollution control district that is charged with enforcing a permit program adopted pursuant to A.R.S. § 49-480(A). A.R.S. § 49-401.01(28).

101. “Permitting exemption thresholds” for a regulated minor NSR pollutant means the following:

Regulated Air Pollutant	Emission Rate in tons per year (TPY)
PM _{2.5} (primary emissions only; levels for precursors are set below)	5
PM ₁₀	7.5
SO ₂	20
NO _x	20
VOC	20
CO	50
Pb	0.3

102. “Person” means any public or private corporation, company, partnership, firm, association or society of persons, the federal government and any of its departments or agencies, the state and any of its agencies, departments or political subdivisions, as well as a natural person.

103. “Planning agency” means an organization designated by the governor pursuant to 42 U.S.C. 7504. A.R.S. § 49-401.01(29).

104. “PM_{2.5}” means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 CFR 50 Appendix L, or by an equivalent method designated according to 40 CFR 53.

105. “PM₁₀” means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method contained within 40 CFR 50 Appendix J or by an equivalent method designated in accordance with 40 CFR 53.

106. “PM₁₀ emissions” means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by applicable test methods and procedures described in R18-2-311.

107. “Plume” means visible effluent.

108. "Pollutant" means an air contaminant the emission or ambient concentration of which is regulated pursuant to this Chapter.
109. "Portable source" means any stationary source that is capable of being operated at more than one location.
110. "Potential to emit" or "potential emission rate" means the maximum capacity of a stationary source to emit a pollutant, excluding secondary emissions, under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is legally and practically enforceable by the Department or a county under A.R.S. Title 49, Chapter 3; any rule, ordinance, order or permit adopted or issued under A.R.S. Title 49, Chapter 3 or the state implementation plan.
111. "Predictive Emissions Monitoring System" or "PEMS" means the total equipment, required under the emission monitoring provisions in this Chapter, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.
112. "Primary ambient air quality standards" means the ambient air quality standards which define levels of air quality necessary, with an adequate margin of safety, to protect the public health, as specified in Article 2 of this Chapter.
113. "Process" means one or more operations, including equipment and technology, used in the production of goods or services or the control of by-products or waste.
114. "Project" means a physical change in, or change in the method of operation of, an existing major source.
115. "Proposed final permit" means the version of a Class I permit or Class I permit revision that the Department proposes to issue and forwards to the Administrator for review in compliance with R18-2-307(A). A proposed final permit constitutes a final and enforceable authorization to begin actual construction of, but not to operate, a new Class I source or a modification to a Class I source.
116. "Proposed permit" means the version of a permit for which the Director offers public participation under R18-2-330 or affected state review under R18-2-307(D).
117. "Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with commencing commercial operations by a coal-fired utility unit after a period of discontinued operation if the unit:
- a. Has not been in operation for the two-year period before enactment of the Clean Air Act Amendments of 1990, and the emissions from the unit continue to be carried in the Director's emissions inventory at the time of enactment;

- b. Was equipped before shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85% and a removal efficiency for particulates of no less than 98%;
 - c. Is equipped with low-NO_x burners before commencement of operations following reactivation; and
 - d. Is otherwise in compliance with the Act.
118. “Reasonable further progress” means the schedule of emission reductions defined within a nonattainment area plan as being necessary to come into compliance with a national ambient air quality standard by the primary standard attainment date.
119. “Reasonably available control technology” (RACT) means devices, systems, process modifications, work practices or other apparatus or techniques that are determined by the Director to be reasonably available taking into account:
- a. The necessity of imposing the controls in order to attain and maintain a national ambient air quality standard;
 - b. The social, environmental, energy and economic impact of the controls;
 - c. Control technology in use by similar sources; and
 - d. The capital and operating costs and technical feasibility of the controls.
120. “Reclaiming machinery” means any machine, equipment device or other Article used for picking up stored granular material and either depositing this material on a conveyor or reintroducing this material into the process.
121. “Reference method” means the methods of sampling and analyzing for an air pollutant as described in the Arizona Testing Manual; 40 CFR 50, Appendices A through K; 40 CFR 51, Appendix M; 40 CFR 52, Appendices D and E; 40 CFR 60, Appendices A through F; and 40 CFR 61, Appendices B and C, as incorporated by reference in 18 A.A.C. 2, Appendix 2.
122. “Regulated air pollutant” means any of the following:
- a. Any conventional air pollutant.
 - b. Nitrogen oxides and volatile organic compounds.
 - c. Any pollutant that is subject to a new source performance standard.
 - d. Any pollutant that is subject to a national emission standard for hazardous air pollutants or other requirements established under section 112 of the Act, including sections 112(g), (j), and (r), including the following:
 - i. Any pollutant subject to requirements under section 112(j) of the act. If the administrator fails to promulgate a standard by the date established pursuant to section 112(e) of the act, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to section 112(e) of the Act; and
 - ii. Any pollutant for which the requirements of section 112(g)(2) of the Act have been met, but only with respect to the individual source subject to the section 112(g)(2) requirement.

e. Any Class I or II substance subject to a standard promulgated under title VI of the Act.

123. "Regulated minor NSR pollutant" means any pollutant for which a national ambient air quality standard has been promulgated and the following precursors for such pollutants:

- a. VOC and nitrogen oxides as precursors to ozone.
- b. Nitrogen oxides and sulfur dioxide as precursors to PM_{2.5}.

124. "Regulated NSR pollutant" is defined as follows:

- a. For purposes of determining the applicability of R18-2-403 through R18-2-405 and R18-2-411, regulated NSR pollutant means any pollutant for which a national ambient air quality standard has been promulgated and any pollutant identified under this subsection as a constituent of or precursor to such pollutant, provided that such constituent or precursor pollutant may only be regulated under NSR as part of the regulation of the general pollutant. Precursors for purposes of NSR are the following:
 - i. Volatile organic compounds and nitrogen oxides are precursors to ozone in all areas.
 - ii. Sulfur dioxide is a precursor to PM_{2.5} in all areas.
 - iii. Nitrogen oxides are precursors to PM_{2.5} in all areas.
 - iv. VOC and ammonia are precursors to PM_{2.5} in PM_{2.5} nonattainment areas.
- b. For all other purposes, regulated NSR pollutant means the pollutants identified in subsection (a) and the following:
 - i. Any pollutant that is subject to any new source performance standard except greenhouse gases as defined in 40 CFR 86.1818-12(a).
 - ii. Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act as of July 1, 2011.
 - iii. Any pollutant that is otherwise subject to regulation under the Act, except greenhouse gases as defined in 40 CFR 86.1818-12(a).
- c. Notwithstanding subsections (124)(a) and (b), the term regulated NSR pollutant shall not include any or all hazardous air pollutants either listed in section 112 of the Act, or added to the list pursuant to section 112(b)(2) of the Act, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act.
- d. PM_{2.5} emissions and PM₁₀ emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On and after January 1, 2011, condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{2.5} and PM₁₀ in permits issued under Article 4.

125. "Repowering" means:

- a. Replacing an existing coal-fired boiler with one of the following clean coal technologies:
 - i. Atmospheric or pressurized fluidized bed combustion;
 - ii. Integrated gasification combined cycle;

- iii. Magnetohydrodynamics;
 - iv. Direct and indirect coal-fired turbines;
 - v. Integrated gasification fuel cells; or
 - vi. As determined by the Administrator, in consultation with the United States Secretary of Energy, a derivative of one or more of the above technologies; and
 - vii. Any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.
- b. Repowering also includes any oil, gas, or oil and gas-fired unit that has been awarded clean coal technology demonstration funding as of January 1, 1991, by the United States Department of Energy.
 - c. The Director shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection (and) is granted an extension under section 409 of the Act.
126. "Run" means the net period of time during which an emission sample is collected, which may be, unless otherwise specified, either intermittent or continuous within the limits of good engineering practice.
127. "Secondary ambient air quality standards" means the ambient air quality standards which define levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant, as specified in Article 2 of this Chapter.
128. "Secondary emissions" means emissions which are specific, well defined, quantifiable, occur as a result of the construction or operation of a major source or major modification, but do not come from the major source or major modification itself, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not otherwise be constructed or increase its emissions except as a result of the construction or operation of the major source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.
129. "Section 302(j) category" means:
- a. Any of the classes of sources listed in the definition of categorical source in subsection (23); or
 - b. Any category of affected facility which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.
130. "Shutdown" means the cessation of operation of any air pollution control equipment or process equipment for any purpose, except routine phasing out of process equipment.
131. "Significant" means, in reference to a significant emissions increase, a net emissions increase, a stationary source's potential to emit or a stationary source's maximum capacity to emit with any elective limits as defined in R18-2-301(13):
- a. A rate of emissions of conventional pollutants that would equal or exceed any of the following:

Pollutant	Emissions Rate
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
PM ₁₀	15 tpy
PM _{2.5}	10 tpy of direct PM _{2.5} emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions.
Ozone	40 tpy of VOC or nitrogen oxides
Lead	0.6 tpy

- b. For purposes of determining the applicability of R18-2-302(B)(2) or R18-2-406, in addition to the rates specified in subsection (131)(a), a rate of emissions of non-conventional pollutants that would equal or exceed any of the following:

Pollutant	Emissions Rate
Particulate matter	25 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H ₂ S)	10 tpy
Total reduced sulfur (including H ₂ S)	10 tpy
Reduced sulfur compounds (including H ₂ S)	10 tpy
Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-	3.5 x 10 ⁻⁶ tpy

dioxins and dibenzofurans)

Municipal waste combustor
metals (measured as
particulate matter) 15 tpy

Municipal waste combustor
acid gases (measured as
sulfur dioxide and
hydrogen chloride) 40 tpy

Municipal solid waste
landfill emissions
(measured as nonmethane
organic compounds) 50 tpy

Any regulated NSR
pollutant not specifically
listed in this subsection (or
subsection (131)(a), except Any
for ammonia. emission rate

- c. In ozone nonattainment areas classified as serious or severe, the emission rate for nitrogen oxides or VOC determined under R18-2-405.
- d. In a carbon monoxide nonattainment area classified as serious, a rate of emissions that would equal or exceed 50 tons per year, if the Administrator has determined that stationary sources contribute significantly to carbon monoxide levels in that area.
- e. In PM_{2.5} nonattainment areas, an emission rate that would equal or exceed 40 tons per year of VOC as a precursor of PM_{2.5}.
- f. In PM_{2.5} nonattainment areas, for purposes of determining the applicability of R18-2-403 or R18-2-404, an emission rate that would equal or exceed 40 tons per year of ammonia, as a precursor to PM_{2.5}. This subsection shall take effect on the effective date of the Administrator's action approving it as part of the state implementation plan.
- g. Notwithstanding the emission rates listed in subsection (131)(a) or (b), for purposes of determining the applicability of R18-2-406, any emissions rate or any net emissions increase associated with a major source or major modification, which would be constructed within 10 kilometers of a Class I

area and have an impact on the ambient air quality of such area equal to or greater than 1 $\mu\text{g}/\text{m}^3$ (24-hour average).

132. “Significant emissions increase” means, for a regulated NSR pollutant, an increase in emissions that is significant as defined in this Section for that pollutant.
133. “Smoke” means particulate matter resulting from incomplete combustion.
134. “Source” means any building, structure, facility or installation that may cause or contribute to air pollution or the use of which may eliminate, reduce or control the emission of air pollution. A.R.S. § 49-401.01(23).
135. “Stack” means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.
136. “Stack in existence” means that the owner or operator had either:
- a. Begun, or caused to begin, a continuous program of physical onsite construction of the stack;
 - b. Entered into binding agreements or contractual obligations, which could not be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed in a reasonable time.
137. “Start-up” means the setting into operation of any air pollution control equipment or process equipment for any purpose except routine phasing in of process equipment.
138. “State implementation plan” or “SIP” means the accumulated record of enforceable air pollution control measures, programs and plans adopted by the Director and submitted to and approved by the Administrator pursuant to 42 U.S.C. 7410.
139. “Stationary rotating machinery” means any gas engine, diesel engine, gas turbine, or oil fired turbine operated from a stationary mounting and used for the production of electric power or for the direct drive of other equipment.
140. “Stationary source” means any building, structure, facility or installation which emits or may emit any regulated NSR pollutant, any regulated air pollutant or any pollutant listed under section 112(b) of the act. “Building,” “structure,” “facility,” or “installation” means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same “Major Group” as described in the “Standard Industrial Classification Manual, 1987.”
141. “Subject to regulation” means, for any air pollutant, that the pollutant is subject to either a provision in the Act, or a nationally-applicable regulation codified by the administrator in 40 CFR chapter I, subchapter C, that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity.

142. “Sulfuric acid plant” means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge, but does not include facilities where conversion to sulfuric acid is utilized as a means of preventing emissions of sulfur dioxide or other sulfur compounds to the atmosphere.
143. “Temporary clean coal technology demonstration project” means a clean coal technology demonstration project operated for five years or less, and that complies with the applicable implementation plan and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after the project is terminated.
144. “Temporary source” means a source which is portable, as defined in A.R.S. § 49-401.01(23) and which is not an affected source.
145. “Total reduced sulfur” (TRS) means the sum of the sulfur compounds, primarily hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide, that are released during kraft pulping and other operations and measured by Method 16 in 40 CFR 60, Appendix A.
146. “Trivial activities” means activities and emissions units, such as the following, that may be omitted from a permit or registration application. Certain of the following listed activities include qualifying statements intended to exclude similar activities:
- a. Low-Emitting Combustion
 - i. Combustion emissions from propulsion of mobile sources;
 - ii. Emergency or backup electrical generators at residential locations;
 - iii. Portable electrical generators that can be moved by hand from one location to another. “Moved by hand” means capable of being moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device;
 - b. Low- Or Non-Emitting Industrial Activities
 - i. Blacksmith forges;
 - ii. Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, sawing, grinding, turning, routing or machining of ceramic art work, precision parts, leather, metals, plastics, fiberboard, masonry, carbon, glass, or wood;
 - iii. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAP metals. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are insignificant activities based on size or production level thresholds. Brazing, soldering, and welding equipment, and cutting torches directly related to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately in this definition;
 - iv. Drop hammers or hydraulic presses for forging or metalworking;
 - v. Air compressors and pneumatically operated equipment, including hand tools;

- vi. Batteries and battery charging stations, except at battery manufacturing plants;
 - vii. Drop hammers or hydraulic presses for forging or metalworking;
 - viii. Equipment used exclusively to slaughter animals, not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment;
 - ix. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation;
 - x. Equipment used for surface coating, painting, dipping, or spraying operations, except those that will emit VOC or HAP;
 - xi. CO2 lasers used only on metals and other materials that do not emit HAP in the process;
 - xii. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam;
 - xiii. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants;
 - xiv. Laser trimmers using dust collection to prevent fugitive emissions;
 - xv. Process water filtration systems and demineralizers;
 - xvi. Demineralized water tanks and demineralizer vents;
 - xvii. Oxygen scavenging or de-aeration of water;
 - xviii. Ozone generators;
 - xix. Steam vents and safety relief valves;
 - xx. Steam leaks; and
 - xxi. Steam cleaning operations and steam sterilizers;
 - xxii. Use of vacuum trucks and high pressure washer/cleaning equipment within the stationary source boundaries for cleanup and in-source transfer of liquids and slurried solids to waste water treatment units or conveyances;
 - xxiii. Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing.
 - xxiv. Electric motors.
- c. Building and Site Maintenance Activities
- i. Plant and building maintenance and upkeep activities, including grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots, if these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and do not otherwise trigger a permit revision. Cleaning and painting activities qualify as trivial activities if they are not subject to VOC or hazardous air pollutant control requirements;
 - ii. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating, de-greasing, or solvent metal cleaning activities, and not otherwise triggering a permit revision;

- iii. Janitorial services and consumer use of janitorial products;
 - iv. Landscaping activities;
 - v. Routine calibration and maintenance of laboratory equipment or other analytical instruments;
 - vi. Sanding of streets and roads to abate traffic hazards caused by ice and snow;
 - vii. Street and parking lot striping;
 - viii. Caulking operations which are not part of a production process.
- d. Incidental, Non-Industrial Activities
- i. Air-conditioning units used for human comfort that do not have applicable requirements under Title VI of the Act;
 - ii. Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing, industrial or commercial process;
 - iii. Tobacco smoking rooms and areas;
 - iv. Non-commercial food preparation;
 - v. General office activities, such as paper shredding, copying, photographic activities, pencil sharpening and blueprinting, but not including incineration;
 - vi. Laundry activities, except for dry-cleaning and steam boilers;
 - vii. Bathroom and toilet vent emissions;
 - viii. Fugitive emissions related to movement of passenger vehicles, if the emissions are not counted for applicability purposes under subsection (146)(c) of the definition of major source in this Section and any required fugitive dust control plan or its equivalent is submitted with the application;
 - ix. Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) where the product is used at a source in the same manner as normal consumer use;
 - x. Activities directly used in the diagnosis and treatment of disease, injury or other medical condition;
 - xi. Circuit breakers;
 - xii. Adhesive use which is not related to production.
- e. Storage, Piping and Packaging
- i. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP;
 - ii. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
 - iii. Chemical storage associated with water and wastewater treatment where the water is treated for consumption and/or use within the permitted facility;

- iv. Chemical storage associated with water and wastewater treatment where the water is treated for consumption and/or use within the permitted facility;
 - v. Storage cabinets for flammable products;
 - vi. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities;
 - vii. Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
- f. Sampling and Testing
- i. Vents from continuous emissions monitors and other analyzers;
 - ii. Bench-scale laboratory equipment used for physical or chemical analysis, but not laboratory fume hoods or vents;
 - iii. Equipment used for quality control, quality assurance, or inspection purposes, including sampling equipment used to withdraw materials for analysis;
 - iv. Hydraulic and hydrostatic testing equipment;
 - v. Environmental chambers not using HAP gases;
 - vi. Soil gas sampling;
 - vii. Individual sampling points, analyzers, and process instrumentation, whose operation may result in emissions but that are not regulated as emission units;
- g. Safety Activities
- i. Fire suppression systems;
 - ii. Emergency road flares;
- h. Miscellaneous Activities
- i. Shock chambers;
 - ii. Humidity chambers;
 - iii. Solar simulators;
 - iv. Cathodic protection systems;
 - v. High voltage induced corona; and
 - vi. Filter draining.

147. "Unclassified area" means an area which the Administrator, because of a lack of adequate data, is unable to classify as an attainment or nonattainment area for a specific pollutant, and which, for purposes of this Chapter, is treated as an attainment area.

148. "Uncombined water" means condensed water containing analytical trace amounts of other chemical elements or compounds.

149. "Urban or suburban open area" means an unsubdivided tract of land surrounding a substantial urban development of a residential, industrial, or commercial nature and which, though near or within the limits of a city or town, may be uncultivated, used for agriculture, or lie fallow.

150. "Vacant lot" means a subdivided residential or commercial lot which contains no buildings or structures of a temporary or permanent nature.
151. "Vapor" means the gaseous form of a substance normally occurring in a liquid or solid state.
152. "Visibility impairment" means any humanly perceptible change in visibility (light extinction, visual range, contrast, coloration) from that which would have existed under natural conditions.
153. "Visible emissions" means any emissions which are visually detectable without the aid of instruments and which contain particulate matter.
154. "Volatile organic compounds" or "VOC" means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions. This includes any such organic compound other than the following:
- a. Methane;
 - b. Ethane;
 - c. Methylene chloride (dichloromethane);
 - d. 1,1,1-trichloroethane (methyl chloroform);
 - e. 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
 - f. Trichlorofluoromethane (CFC-11);
 - g. Dichlorodifluoromethane (CFC-12);
 - h. Chlorodifluoromethane (HCFC-22);
 - i. Trifluoromethane (HFC-23);
 - j. 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114);
 - k. Chloropentafluoroethane (CFC-115);
 - l. 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123);
 - m. 1,1,1,2-tetrafluoroethane (HFC-134(a));
 - n. 1,1-dichloro 1-fluoroethane (HCFC-141(b));
 - o. 1-chloro 1,1-difluoroethane (HCFC-142(b));
 - p. 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
 - q. Pentafluoroethane (HFC-125);
 - r. 1,1,2,2-tetrafluoroethane (HFC-134);
 - s. 1,1,1-trifluoroethane (HFC-143(a));
 - t. 1,1-difluoroethane (HFC-152(a));
 - u. Parachlorobenzotrifluoride (PCBTF);
 - v. Cyclic, branched, or linear completely methylated siloxanes;
 - w. Acetone;
 - x. Perchloroethylene (tetrachloroethylene);
 - y. 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225(ca));

- z. 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225(cb));
- aa. 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee);
- bb. Difluoromethane (HFC-32);
- cc. Ethylfluoride (HFC-161);
- dd. 1,1,1,3,3,3-hexafluoropropane (HFC-236(fa));
- ee. 1,1,2,2,3-pentafluoropropane (HFC-245(ca));
- ff. 1,1,2,3,3-pentafluoropropane (HFC-245(ea));
- gg. 1,1,1,2,3-pentafluoropropane (HFC-245(eb));
- hh. 1,1,1,3,3-pentafluoropropane (HFC-245(fa));
- ii. 1,1,1,2,3,3-hexafluoropropane (HFC-236(ea));
- jj. 1,1,1,3,3-pentafluorobutane (HFC-365(mfc));
- kk. Chlorofluoromethane (HCFC-31);
- ll. 1 chloro-1-fluoroethane (HCFC-151(a));
- mm. 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123(a));
- nn. 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C₄F₉OCH₃);
- oo. 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OCH₃);
- pp. 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C₄F₉OC₂H₅);
- qq. 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CF₂OC₂H₅);
- rr. Methyl acetate; and
- ss. 1,1,1,2,2,3,3-heptafluoro-3-methoxypropane (n-C₃F₇OCH₃, HFE—7000);
- tt. 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE – 7500);
- uu. 1,1,1,2,3,3,3-hentafluoropropane (HFC 227ea);
- vv. Methyl formate (HCOOCH₃); and
- ww.(1) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE—7300);
- xx. Propylene carbonate;
- yy. Dimethyl carbonate; and
- zz. Trans -1,3,3,3-tetrafluoropropene;
- aaa.HCF₂OCF₂H (HFE-134);
- bbb.HCF₂OCF₂OCF₂H (HFE-236(cal2));
- ccc.HCF₂OCF₂CF₂OCF₂H (HFE-338(pcc13));
- ddd.HCF₂OCF₂OCF₂CF₂OCF₂H (H-Galden 1040x or H-Galden ZT 130 (or 150 or 180));
- eee. Trans 1-chloro-3,3,3- trifluoroprop-1-ene;
- fff. 2,3,3,3-tetrafluoropropene;
- ggg.2-amino-2-methyl-1-propanol; and
- hhh.Perfluorocarbon compounds that fall into these classes:
 - i. Cyclic, branched, or linear, completely fluorinated alkanes.

- ii. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations.
- iii. Cycle, branched, or linear, completely fluorinated tertiary amines with no unsaturations; or
- iv. Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
- v. The following compound is VOC for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to VOC and shall be uniquely identified in emission reports, but is not VOC for purposes of VOC emissions limitations or VOC content requirements: t-butyl acetate.

155. “Wood waste burner” means an incinerator designed and used exclusively for the burning of wood wastes consisting of wood slabs, scraps, shavings, barks, sawdust or other wood material, including those that generate steam as a by-product.

ARTICLE 3. PERMITS AND PERMIT REVISIONS

R18-2-326. Fees Related to Individual Permits

- A. No change
 - 1. No change
 - 2. No change
 - 3. No change
- B. No change
 - 1. No change
 - a. No change
 - b. No change
 - 2. No change
 - 3. No change
- C. Class I Title V Fees. The owner or operator of a Class I Title V source that has undergone initial startup by January 1 shall annually pay to the Director an administrative fee plus an emissions-based fee as follows:
 - 1. The applicable administrative fee from the table below, as adjusted annually under subsection (H). The fee is due by February 1 or 60 days after the Director mails the invoice under subsection (F), whichever is later.

Class I Title V Source Category	Administrative Fee
Aerospace	\$20,800
Air Curtain Destructor <u>Incinerator</u>	\$750
Cement Plants	\$63,690
Combustion/Boilers	\$15,480

Compressor Stations	\$12,730
Electronics	\$20,490
Expandable Foam	\$14,680
Foundries	\$19,520
Landfills	\$15,960
Lime Plants	\$60,160
Copper & Nickel Mines	\$15,000
Gold Mines	\$15,000
Mobile Home Manufacturing	\$14,830
Paper Mills	\$20,480
Paper Coaters	\$15,480
Petroleum Products Terminal Facilities	\$22,730
Polymeric Fabric Coaters	\$20,480
Reinforced Plastics	\$15,480
Semiconductor Fabrication	\$26,930
Copper Smelters	\$63,690
Utilities - Fossil Fuel Fired Except Coal	\$16,440
Utilities - Coal Fired	\$32,570
Vitamin/Pharmaceutical Manufacturing	\$15,800
Wood Furniture	\$15,480
Others	\$20,490
Others with Continuous Emissions Monitoring	\$20,490

2. An emissions-based fee of \$38.25 per ton of actual emissions of all regulated pollutants emitted during the previous calendar year ending 12 months earlier. The fee is adjusted annually under subsection

(C)(2)(d) and due by February 1 or 60 days after the Director mails the invoice under subsection (F), whichever is later.

- a. For purposes of this Section, “actual emissions” means the quantity of all regulated pollutants emitted during the calendar year, as determined by the annual emissions inventory under R18-2-327.
- b. For purposes of this Section, regulated pollutants consist of the following:
 - i. Nitrogen oxides and any volatile organic compounds;
 - ii. Conventional air pollutants, except carbon monoxide and ozone;
 - iii. Any pollutant that is subject to any standard promulgated under Section 111 of the Act, including fluorides, sulfuric acid mist, hydrogen sulfide, total reduced sulfur, and reduced sulfur compounds; and
 - iv. Any federally listed hazardous air pollutant.
- c. For purposes of this Section, the following emissions of regulated pollutants are excluded from a source’s actual emissions:
 - i. Emissions of any regulated pollutant from the source in excess of 4,000 tons per year;
 - ii. Emissions of any regulated pollutant already included in the actual emissions for the source, such as a federally listed hazardous air pollutant that is already accounted for as a VOC or as PM₁₀;
 - iii. Emissions from insignificant activities listed in the permit application for the source under R18-2-304(F)(8);
 - iv. Fugitive emissions of PM₁₀ from activities other than crushing, belt transfers, screening, or stacking; and
 - v. Fugitive emissions of VOC from solution-extraction units.
- d. The Director shall adjust the rate for emission-based fees every November 1, after December 4, 2007, by multiplying \$38.25 by the Consumer Price Index (CPI) for the most recent year, and then dividing by the CPI for the year 2007. The Consumer Price Index for any year is the average of the Consumer Price Index for all-urban consumers published by the United States Department of Labor, as of the close of the 12-month period ending on August 31 of that year.

D. No change

E. No change

F. No change

G. No change

1. No change

2. No change

3. No change

H. No change

I. No change

1. No change

- a. No change
- b. No change
- 2. No change
- 3. No change
- J.** No change
- K.** No change
- L.** No change
 - 1. No change
 - 2. No change
 - a. No change
 - b. No change
 - c. No change

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

R18-2-601. General

For purposes of this Article, any source of air contaminants which due to lack of an identifiable emission point or plume cannot be considered a point source, shall be classified as a nonpoint source. In applying this criteria, such items as ~~air curtain destructors~~ air curtain incinerators, heater-planners, and conveyor transfer points shall be considered to have identifiable plumes. Any affected facility subject to regulation under Article 7 of this Chapter or Title 18, Chapter 2, Article 9, shall not be subject to regulation under this Article.

R18-2-602. Unlawful Open Burning

A. In addition to the definitions contained in A.R.S. § 49-501, in this Section:

- 1. “Agricultural burning” means burning vegetative materials related to producing and harvesting crops and raising animals for the purpose of marketing for profit, or providing a livelihood, but does not include burning of household waste or prohibited materials. A person may conduct agricultural burns in fields, piles, ditch banks, fence rows, or canal laterals for purposes such as weed control, waste disposal, disease and pest prevention, or site preparation.
- 2. “Approved waste burner” means an incinerator constructed of fire resistant material with a cover or screen that is closed when in use, and has openings in the sides or top no greater than 1 inch in diameter.
- 3. “Class I Area” means any one of the Arizona mandatory federal Class I areas defined in A.R.S. § 49-401.01.
- 4. “Construction burning” means burning wood or vegetative material from land clearing, site preparation, or fabrication, erection, installation, demolition, or modification of any buildings or other land improvements, but does not include burning household waste or prohibited material.

5. “Dangerous material” means any substance or combination of substances that is capable of causing bodily harm or property loss unless neutralized, consumed, or otherwise disposed of in a controlled and safe manner.
6. “Delegated authority” means any of the following:
 - a. A county, city, town, air pollution control district, or fire district that has been delegated authority to issue open burning permits by the Director under A.R.S. § 49-501(E); or
 - b. A private fire protection service provider that has been assigned authority to issue open burning permits by one of the authorities in subsection (A)(6)(a).
7. “Director” means the Director of the Department of Environmental Quality, or designee.
8. “Emission reduction techniques” means methods for controlling emissions from open outdoor fires to minimize the amount of emissions output per unit of area burned.
9. “Flue,” as used in this Section, means any duct or passage for air or combustion gases, such as a stack or chimney.
10. “Household waste” means any solid waste including garbage, rubbish, and sanitary waste from a septic tank that is generated from households including single and multiple family residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas, but does not include construction debris, landscaping rubble, or demolition debris.
11. “Independent authority to permit fires” means the authority of a county to permit fires by a rule adopted under Arizona Revised Statutes, Title 49, Chapter 3, Article 3, and includes only Maricopa, Pima, and Pinal counties.
12. “Open outdoor fire or open burning” means the combustion of material of any type, outdoors and in the open, where the products of combustion are not directed through a flue. Open outdoor fires include agricultural, residential, prescribed, and construction burning, and fires using air curtain ~~destructors~~incinerators.
13. “Prohibited materials” means nonpaper garbage from the processing, storage, service, or consumption of food; chemically treated wood; lead-painted wood; linoleum flooring, and composite counter-tops; tires; explosives or ammunition; oleanders; asphalt shingles; tar paper; plastic and rubber products, including bottles for household chemicals; plastic grocery and retail bags; waste petroleum products, such as waste crankcase oil, transmission oil, and oil filters; transformer oils; asbestos; batteries; anti-freeze; aerosol spray cans; electrical wire insulation; thermal insulation; polyester products; hazardous waste products such as paints, pesticides, cleaners and solvents, stains and varnishes, and other flammable liquids; plastic pesticide bags and containers; and hazardous material containers including those that contained lead, cadmium, mercury, or arsenic compounds.
14. “Residential burning” means open burning of vegetative materials conducted by or for the occupants of residential dwellings, but does not include burning household waste or prohibited material.
15. “Prescribed burning” has the same meaning as in R18-2-1501.

- B.** Unlawful open burning. Notwithstanding any other rule in this Chapter, a person shall not ignite, cause to be ignited, permit to be ignited, allow, or maintain any open outdoor fire in a county without independent authority to permit fires except as provided in A.R.S. § 49-501 and this Section.
- C.** Open outdoor fires exempt from a permit. The following fires do not require an open burning permit from the Director or a delegated authority:
1. Fires used only for:
 - a. Cooking of food,
 - b. Providing warmth for human beings,
 - c. Recreational purposes,
 - d. Branding of animals,
 - e. Orchard heaters for the purpose of frost protection in farming or nursery operations, and
 - f. The proper disposal of flags under 4 U.S.C. 1, § 8.
 2. Any fire set or permitted by any public officer in the performance of official duty, if the fire is set or permission given for the following purpose:
 - a. Control of an active wildfire; or
 - b. Instruction in the method of fighting fires, except that the person setting these fires must comply with the reporting requirements of subsection (D)(3)(f).
 3. Fire set by or permitted by the Director of Department of Agriculture for the purpose of disease and pest prevention in an organized, area-wide control of an epidemic or infestation affecting livestock or crops.
 4. Prescribed burns set by or assisted by the federal government or any of its departments, agencies, or agents, or the state or any of its agencies, departments, or political subdivisions, regulated under Article 15 of this Chapter.
- D.** Open outdoor fires requiring a permit.
1. The following open outdoor fires are allowed with an open burning permit from the Director or a delegated authority:
 - a. Construction burning;
 - b. Agricultural burning;
 - c. Residential burning;
 - d. Prescribed burns conducted on private lands without the assistance of a federal or state land manager as defined under R18-2-1501;
 - e. Any fire set or permitted by a public officer in the performance of official duty, if the fire is set or permission given for the purpose of weed abatement, or the prevention of a fire hazard, unless the fire is exempt from the permit requirement under subsection (C)(3);
 - f. Open outdoor fires of dangerous material under subsection (E);
 - g. Open outdoor fires of household waste under subsection (F); and
 - h. Open outdoor fires that use an air curtain ~~destructor~~ incinerator, as defined in R18-2-101.

2. A person conducting an open outdoor fire in a county without independent authority to permit fires shall obtain a permit from the Director or a delegated authority unless exempted under subsection (C). Permits may be issued for a period not to exceed one year. A person shall obtain a permit by completing an ADEQ-approved application form.
3. Open outdoor fire permits issued under this Section shall include:
 - a. A list of the materials that the permittee may burn under the permit;
 - b. A means of contacting the permittee authorized by the permit to set an open fire in the event that an order to extinguish the open outdoor fire is issued by the Director or the delegated authority;
 - c. A requirement that burns be conducted during the following periods, unless otherwise waived or directed by the Director on a specific day basis:
 - i. Year-round: ignite fire no earlier than one hour after sunrise; and
 - ii. Year-round: extinguish fire no later than two hours before sunset;
 - d. A requirement that the permittee conduct all open burning only during atmospheric conditions that:
 - i. Prevent dispersion of smoke into populated areas;
 - ii. Prevent visibility impairment on traveled roads or at airports that result in a safety hazard;
 - iii. Do not create a public nuisance or adversely affect public safety;
 - iv. Do not cause an adverse impact to visibility in a Class I area; and
 - v. Do not cause uncontrollable spreading of the fire;
 - e. A list of the types of emission reduction techniques that the permittee shall use to minimize fire emissions.;
 - f. A reporting requirement that the permittee shall meet by providing the following information in a format provided by the Director for each date open burning occurred, on either a daily basis on the day of the fire, or an annual basis in a report to the Director or delegated authority due on March 31 for the previous calendar year:
 - i. The date of each burn;
 - ii. The type and quantity of fuel burned for each date open burning occurred;
 - iii. The fire type, such as pile or pit, for each date open burning occurred; and
 - iv. For each date open burning occurred, the legal location, to the nearest section, or latitude and longitude, to the nearest degree minute, or street address for residential burns;
 - g. A requirement that the person conducting the open burn notify the local fire-fighting agency or private fire protection service provider, if the service provider is a delegated authority, before burning. If neither is in existence, the person conducting the burn shall notify the state forester.;
 - h. A requirement that the permittee start each open outdoor fire using items that do not cause the production of black smoke;
 - i. A requirement that the permittee attend the fire at all times until it is completely extinguished;

- j. A requirement that the permittee provide fire extinguishing equipment on-site for the duration of the burn;
 - k. A requirement that the permittee ensure that a burning pit, burning pile, or approved waste burner be at least 50 feet from any structure;
 - l. A requirement that the permittee have a copy of the burn permit on-site during open burning;
 - m. A requirement that the permittee not conduct open burning when an air stagnation advisory, as issued by the National Weather Service, is in effect in the area of the burn or during periods when smoke can be expected to accumulate to the extent that it will significantly impair visibility in Class I areas;
 - n. A requirement that the permittee not conduct open burning when any stage air pollution episode is declared under R18-2-220;
 - o. A statement that the Director, or any other public officer, may order that the burn be extinguished or prohibit burning during periods of inadequate smoke dispersion, excessive visibility impairment, or extreme fire danger; and
 - p. A list of the activities prohibited and the criminal penalties provided under A.R.S. § 13-1706.
4. The Director or a delegated authority shall not issue an open burning permit under this Section:
- a. That would allow burning prohibited materials other than under a permit for the burning of dangerous materials;
 - b. If the applicant has applied for a permit under this Section to burn a dangerous material which is also hazardous waste under 40 CFR 261, but does not have a permit to burn hazardous waste under 40 CFR 264, or is not an interim status facility allowed to burn hazardous waste under 40 CFR 265; or
 - c. If the burning would occur at a solid waste facility in violation of 40 CFR 258.24 and the Director has not issued a variance under A.R.S. § 49-763.01.
- E.** Open outdoor fires of dangerous material. A fire set for the disposal of a dangerous material is allowed by the provisions of this Section, when the material is too dangerous to store and transport, and the Director has issued a permit for the fire. A permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and (D)(3)(f). The Director shall permit fires for the disposal of dangerous materials only when no safe alternative method of disposal exists, and burning the materials does not result in the emission of hazardous or toxic substances either directly or as a product of combustion in amounts that will endanger health or safety.
- F.** Open outdoor fires of household waste. An open outdoor fire for the disposal of household waste is allowed by provisions of this Section when permitted in writing by the Director or a delegated authority. A permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and (D)(3)(f). The permittee shall conduct open outdoor fires of household waste in an approved waste burner and shall either:
- 1. Burn household waste generated on-site on farms or ranches of 40 acres or more where no household waste collection or disposal service is available; or

2. Burn household waste generated on-site where no household waste collection and disposal service is available and where the nearest other dwelling unit is at least 500 feet away.
- G.** Permits issued by a delegated authority. The Director may delegate authority for the issuance of open burning permits to a county, city, town, air pollution control district, or fire district. A delegated authority may not issue a permit for its own open burning activity. The Director shall not delegate authority to issue permits to burn dangerous material under subsection (E). A county, city, town, air pollution control district, or fire district with delegated authority from the Director may assign that authority to one or more private fire protection service providers that perform fire protection services within the county, city, town, air pollution control district, or fire district. A private fire protection provider shall not directly or indirectly condition the issuance of open burning permits on the applicant being a customer. Permits issued under this subsection shall comply with the requirements in subsection (D)(3) and be in a format prescribed by the Director. Each delegated authority shall:
1. Maintain a copy of each permit issued for the previous five years available for inspection by the Director;
 2. For each permit currently issued, have a means of contacting the person authorized by the permit to set an open fire if an order to extinguish open burning is issued; and
 3. Annually submit to the Director by May 15 a record of daily burn activity, excluding household waste burn permits, on a form provided by the Director for the previous calendar year containing the information required in subsections (D)(3)(e) and (D)(3)(f).
- H.** The Director shall hold an annual public meeting for interested parties to review operations of the open outdoor fire program and discuss emission reduction techniques.
- I.** Nothing in this Section is intended to permit any practice that is a violation of any statute, ordinance, rule, or regulation.

ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS

R18-2-704. Standards of Performance for Incinerators

- A.** No person shall cause, allow or permit to be emitted into the atmosphere, from any type of incinerator, smoke, fumes, gases, particulate matter or other gas-borne material which exceeds 20% opacity except during the times specified in subsection (D).
- B.** No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any incinerator, in excess of the following limits:
 1. For multiple chamber incinerators, controlled atmosphere incinerators, fume incinerators, afterburners or other unspecified types of incinerators, emissions shall not exceed 0.1 grain per cubic foot, based on dry flue gas at standard conditions, corrected to 12% carbon dioxide.
 2. For wood waste burners other than air curtain ~~destructors~~incinerators, emissions discharged from the stack or burner top opening shall not exceed 0.2 grain per cubic foot, based on dry flue gas at standard conditions, corrected to 12% carbon dioxide.

- C. Air curtain ~~destructors~~incinerators shall not be used within 500 feet of the nearest dwelling.
- D. Incinerators shall be exempt from the opacity and emission requirements described in subsections (A) and (B) as follows:
 - 1. For multiple chamber incinerators, controlled atmosphere incinerators, fume incinerators, afterburners or other unspecified types of incinerators, such exemption shall be for not more than 30 seconds in any 60-minute period.
 - 2. Wood waste burners shall be exempt both:
 - a. For a period once each day for the purpose of building a new fire but not to exceed 60 minutes, and
 - b. For an upset of operations not to exceed three minutes in any 60-minute period.
- E. The owner or operator of any incinerator subject to the provisions of this Section shall record the daily charging rates and hours of operation.
- F. The test methods and procedures required by this Section are as follows:
 - 1. The reference methods in 40 CFR 60, Appendix A, shall be used to determine compliance with the standards prescribed in subsection (B) as follows:
 - a. Method 5 for the concentration of particulate matter and the associated moisture content;
 - b. Method 1 for sample and velocity traverses;
 - c. Method 2 for velocity and volumetric flow rate;
 - d. Method 3 for gas analysis and calculation of excess air, using the integrated sampling technique.
 - 2. For Method 5, the sampling time for each run shall be at least 60 minutes and the minimum sample volume shall be 0.85 dscm (30.0 dscf) except that smaller sampling times or sample volumes, when necessitated by process variables or other factors, may be approved by the Director.

ARTICLE 8. EMISSIONS FROM MOBILE SOURCES (NEW AND EXISTING)

R18-2-801. Classification of Mobile Sources

- A. This Article is applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations. This subsection shall not apply to non-road engines or vehicles, as defined by 42 U.S.C. § 7550(10) and (11).
- B. Unless otherwise specified, no mobile source shall emit smoke or dust the opacity of which exceeds 40%.

R18-2-802. Off-road Machinery

- A. No person shall cause, allow or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than 10 consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

- B.** Off-road machinery shall include trucks, graders, scrapers, rollers, locomotives and other construction and mining machinery not normally driven on a completed public roadway. This subsection shall not apply to non-road engines or vehicles, as defined by 42 U.S.C. § 7550(10) and (11).

R18-2-804. Roadway and Site Cleaning Machinery

- A.** No person shall cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than 10 consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes. This subsection shall not apply to non-road engines or vehicles, as defined by 42 U.S.C. § 7550(10) and (11).
- B.** In addition to complying with subsection (A), no person shall cause, allow or permit the cleaning of any site, roadway, or alley without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions may include applying dust suppressants. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means.

ARTICLE 15. FOREST AND RANGE MANAGEMENT BURNS

R18-2-1509. Emission Reduction Techniques

- A.** Each F/SLM conducting a prescribed burn shall implement as many Emission Reduction Techniques as are feasible subject to economic, technical, and safety feasibility criteria, and land management objectives.
- B.** Emission Reduction Techniques include:
1. Reducing biomass to be burned by use of techniques such as yarding or consolidation of unmerchandisable material, multi-product timber sales, or public firewood access, when economically feasible;
 2. Reducing biomass to be burned by fuel exclusion practices such as preventing the fire from consuming dead snags or dead and downed woody material through lining, application of fire-retardant foam, or water;
 3. Using mass ignition techniques such as aerial ignition by helicopter to produce high intensity fires of high fuel density areas such as logging slash decks;
 4. Burning only fuels essential to meet resource management objectives;
 5. Minimizing consumption and smoldering by burning under conditions of high fuel moisture of duff and litter;
 6. Minimizing fuel consumption and smoldering by burning under conditions of high fuel moisture of large woody fuels;
 7. Minimizing soil content when slash piles are constructed by using brush blades on material-moving equipment and by constructing piles under dry soil conditions or by using hand piling methods;
 8. Burning fuels in piles;

9. Using a backing fire in grass fuels;
10. Burning fuels with an air curtain ~~destructor~~incinerator, as defined in R18-2-101, operated according to manufacturer specifications and meeting applicable state or local opacity requirements;
11. Extinguishing or mopping-up of smoldering fuels;
12. Chunking of piles and other consolidations of burning material to enhance flaming and fuel consumption, and to minimize smoke production;
13. Burning before litter fall;
14. Burning before green-up of fuels;
15. Burning before recently cut large fuels cure in areas with activity; and
16. Burning just before precipitation to reduce fuel smoldering and consumption.