

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

## 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" 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.

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- 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.
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 250 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.



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- 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, O<sub>2</sub> or CO<sub>2</sub> 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)
  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 demon-

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- strated 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.

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- 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.

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- dination 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.

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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 physical or operational change does not include routine maintenance, repair or replacement.
  - 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.
  - 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:
- The amount by which the sum of subsections (88)(a)(i) and (ii) exceeds zero:
    - 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
    - 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.
    - 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.
  - An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
    - 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
    - The date that the increase from the particular change occurs.
  - 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.
  - An increase or decrease in actual emissions of sulfur dioxide, nitrogen oxides, PM<sub>10</sub>, or PM<sub>2.5</sub> 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.
  - An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
  - A decrease in actual emissions is creditable only to the extent that it satisfies all of the following conditions:
    - The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions.
    - It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.
    - It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
    - The emissions unit was actually operated and emitted the specific pollutant.
    - 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.
  - 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.
  - Subsection (2)(a) shall not apply for determining creditable increases and decreases.



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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 <sub>2.5</sub> (primary emissions only; levels for precursors are set below) | 5                                    |
| PM <sub>10</sub>  | 7.5                                  |
| SO <sub>2</sub>   | 20                                   |
| NO <sub>x</sub>   | 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<sub>2.5</sub>" 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. "PM<sub>10</sub>" 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. "PM<sub>10</sub> 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, O<sub>2</sub> or CO<sub>2</sub> 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:
- 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



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- 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<sub>x</sub> 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<sub>2.5</sub>.
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<sub>2.5</sub> in all areas.
    - iii. Nitrogen oxides are precursors to PM<sub>2.5</sub> in all areas.
    - iv. VOC and ammonia are precursors to PM<sub>2.5</sub> in PM<sub>2.5</sub> 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<sub>2.5</sub> emissions and PM<sub>10</sub> 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<sub>2.5</sub> and PM<sub>10</sub> 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

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- 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:
- Any of the classes of sources listed in the definition of categorical source in subsection (23); or
  - 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 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 <sub>10</sub>  | 15 tpy  |
| PM <sub>2.5</sub> | 10 tpy of direct PM <sub>2.5</sub> 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 <sub>2</sub> S)   | 10 tpy                     |
| Total reduced sulfur (including H <sub>2</sub> S)   | 10 tpy                     |
| Reduced sulfur compounds (including H <sub>2</sub> S)   | 10 tpy                     |
| Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans) | 3.5 x 10 <sup>-6</sup> tpy |
| 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 for ammonia.      | Any emission rate          |
- In ozone nonattainment areas classified as serious or severe, the emission rate for nitrogen oxides or VOC determined under R18-2-405.
  - 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.
  - In PM<sub>2.5</sub> nonattainment areas, an emission rate that would equal or exceed 40 tons per year of VOC as a precursor of PM<sub>2.5</sub>.
  - In PM<sub>2.5</sub> 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<sub>2.5</sub>. This subsection shall take effect on the effective date of the Administrator's action approving it as part of the state implementation plan.
  - 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 µg/m<sup>3</sup> (24-hour average).

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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:
- Begun, or caused to begin, a continuous program of physical onsite construction of the stack;
  - 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:
- Low-Emitting Combustion
    - Combustion emissions from propulsion of mobile sources;
    - Emergency or backup electrical generators at residential locations;
    - 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;
  - Low- Or Non-Emitting Industrial Activities
    - Blacksmith forges;
    - 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;
    - 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;
    - Drop hammers or hydraulic presses for forging or metalworking;
    - Air compressors and pneumatically operated equipment, including hand tools;
    - Batteries and battery charging stations, except at battery manufacturing plants;
    - Drop hammers or hydraulic presses for forging or metalworking;
    - 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;
    - Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation;

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- x. Equipment used for surface coating, painting, dipping, or spraying operations, except those that will emit VOC or HAP;
- xi. CO<sub>2</sub> 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;



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- 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 (C<sub>4</sub>F<sub>9</sub>OCH<sub>3</sub>);
  - oo. 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OCH<sub>3</sub>);
  - pp. 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C<sub>4</sub>F<sub>9</sub>OC<sub>2</sub>H<sub>5</sub>);
  - qq. 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF<sub>3</sub>)<sub>2</sub>CFCF<sub>2</sub>OC<sub>2</sub>H<sub>5</sub>);
  - rr. Methyl acetate; and
  - ss. 1,1,1,2,2,3,3-heptafluoro-3-methoxypropane (n-C<sub>3</sub>F<sub>7</sub>OCH<sub>3</sub>, 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 (HCOOCH<sub>3</sub>); 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. HCF<sub>2</sub>OCF<sub>2</sub>H (HFE-134);
  - bbb. HCF<sub>2</sub>OCF<sub>2</sub>OCF<sub>2</sub>H (HFE-236(cal2));
  - ccc. HCF<sub>2</sub>OCF<sub>2</sub>CF<sub>2</sub>OCF<sub>2</sub>H (HFE-338(pcc13));
  - ddd. HCF<sub>2</sub>OCF<sub>2</sub>OCF<sub>2</sub>CF<sub>2</sub>OCF<sub>2</sub>H (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

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- 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.

**Historical Note**

Former Section R9-3-101 repealed, new Section R9-3-101 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Editorial correction, paragraph (133) (Supp. 80-1). Editorial correction, paragraph (58) (Supp. 80-2). Amended effective July 9, 1980. Amended by adding new paragraphs (24), (55), (102), and (115) and renumbering accordingly, effective August 29, 1980 (Supp. 80-4). Amended effective May 28, 1982 (Supp. 82-3). Amended effective September 22, 1983 (Supp. 83-5). Amended paragraph (133), added paragraph (156) and renumbered accordingly effective September 28, 1984 (Supp. 84-5). Amended paragraph (29) by deleting (aa) and (bb) effective August 9, 1985 (Supp. 85-4). Former Section R9-3-101 renumbered without change as R18-2-101 (Supp. 87-3). Amended paragraph (98) effective December 1, 1988 (Supp. 88-4). Amended effective September 26, 1990 (Supp. 90-3). Amended effective November 15, 1993 (Supp. 93-4). Amended effective June 10, 1994 (Supp. 94-2). Amended effective October 7, 1994 (Supp. 94-4). Amended effective February 28, 1995 (Supp. 95-1). Amended effective August 1, 1995 (Supp. 95-3). Amended effective January 31, 1997; filed with the Office of Secretary of State January 10, 1997 (Supp. 97-1). Amended effective June 4, 1998 (Supp. 98-2). Amended by final rulemaking at 5 A.A.R. 4074, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 8 A.A.R. 2543, effective May 24, 2002 (Supp. 02-2). Amended by final rulemaking at 9 A.A.R. 4541, effective December 2, 2003 (Supp. 03-4). Amended by final rulemaking at 11 A.A.R. 3305, effective October 3, 2005 (Supp. 05-3). Amended by final rulemaking at 11 A.A.R. 5504, effective February 4, 2006 (Supp. 05-4). Amended by final rulemaking at 12 A.A.R. 1953, effective January 1, 2007 (Supp. 06-2). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2). Amended by final rulemaking at 23 A.A.R. 333, effective March 21, 2017 (Supp. 17-1). Amended by final rulemaking at 25 A.A.R. 3630, effective February 1, 2020 (Supp. 19-4).



**R18-2-102. Incorporated Materials**

The following documents are incorporated by reference and are on file with the Office of the Secretary of State (1700 W. Washington St., Suite 103, Phoenix, AZ 85007) and the Department (1110 W. Washington St., Phoenix, AZ 85007):

1. Sections 1 and 7 of the Department's "Arizona Testing Manual for Air Pollutant Emissions," amended as of March 1992 (and no future editions).
2. All ASTM test methods referenced in this Chapter as of the year specified in the reference (and no future amendments). They are available from the American Society for Testing and Materials, 1916 Race St., Philadelphia, PA 19103-1187.
3. The U.S. Government Printing Office's "Standard Industrial Classification Manual, 1987" (and no future editions).

**Historical Note**

Adopted effective September 26, 1990 (Supp. 90-3).  
Amended effective February 3, 1993 (Supp. 93-1).  
Amended effective November 15, 1993 (Supp. 93-4).  
Amended effective June 10, 1994 (Supp. 94-2). Amended effective December 7, 1995 (Supp. 95-4). Amended by final rulemaking at 5 A.A.R. 3221, effective August 12, 1999 (Supp. 99-3). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

**ARTICLE 2. AMBIENT AIR QUALITY STANDARDS; AREA DESIGNATIONS; CLASSIFICATIONS****R18-2-201. Particulate Matter: PM<sub>10</sub> and PM<sub>2.5</sub>****A. PM<sub>10</sub> Standards**

1. The level of the primary and secondary ambient air quality standards for PM<sub>10</sub> is 150 micrograms per cubic meter of PM<sub>10</sub> – 24-hour average concentration.
2. To determine attainment of the primary and secondary standards, a person shall measure PM<sub>10</sub> in the ambient air by:
  - a. A reference method based on 40 CFR 50, Appendix J, and designated according to 40 CFR 53; or
  - b. An equivalent method designated according to 40 CFR 53.
3. The primary and secondary 24-hour ambient air quality standards for PM<sub>10</sub> are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter, determined according to 40 CFR 50, Appendix K, is less than or equal to one.

**B. PM<sub>2.5</sub> Standards**

1. The primary ambient air quality standards for PM<sub>2.5</sub> are:
  - a. ~~45~~ 12 micrograms per cubic meter of PM<sub>2.5</sub> – annual arithmetic mean concentration.
  - b. 35 micrograms per cubic meter of PM<sub>2.5</sub> – 24-hour average concentration.
2. The secondary ambient air quality standards for PM<sub>2.5</sub> are:
  - a. 15 micrograms per cubic meter of PM<sub>2.5</sub> – annual arithmetic mean concentration.
  - b. 35 micrograms per cubic meter of PM<sub>2.5</sub> – 24-hour average concentration.
3. To determine attainment of the primary and secondary standards, a person shall measure PM<sub>2.5</sub> in the ambient air by:
  - a. A reference method based on 40 CFR 50, Appendix L, and designated according to 40 CFR 53; or
  - b. An equivalent method designated according to 40 CFR 53.
4. The primary ~~and secondary~~ annual ambient air quality ~~standards~~ standard for PM<sub>2.5</sub> ~~are~~ is met when the annual arithmetic mean concentration, determined according to 40 CFR 50, Appendix N, is less than or equal to ~~45~~ 12 micrograms per cubic meter.
5. The secondary annual ambient air quality standard for PM<sub>2.5</sub> is met when the annual arithmetic mean concentration, determined according to 40 CFR 50, Appendix N, is less than or equal to 15 micrograms per cubic meter.
56. The primary and secondary 24-hour ambient air quality standards for PM<sub>2.5</sub> are met when the 98th percentile 24-hour concentration, determined according to 40 CFR 50, Appendix N, is less than or equal to 35 micrograms per cubic meter.

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to section 191 of the Act, and the Administrator approves, a state implementation plan providing for attainment the standard in subsection (A)(3) in that area.

2. In areas other than those identified in subsection (D)(1), until the effective date of the designation of that area, pursuant to section 107 of the act, for the standard in subsection (A)(3).

**Historical Note**

Amended effective December 22, 1976 (Supp. 76-5).

Former Section R9-3-202 repealed, new Section R9-3-

202 adopted effective May 14, 1979 (Supp. 79-1).

Amended effective October 2, 1979 (Supp. 79-5).

Amended effective August 29, 1980 (Supp. 80-4).

Amended subsection (B) effective May 28, 1982 (Supp. 82-3). Amended by deleting subsections (C) through (E) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-202 renumbered without change as Section R18-2-202 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Amended by final rulemaking at 11 A.A.R. 3305, effective October 3, 2005 (Supp. 05-3). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

~~Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).~~

**R18-2-202. Sulfur Oxides (Sulfur Dioxide)**

- A. The primary ambient air quality standards for sulfur oxides, measured as sulfur dioxide, are:
  1. 0.03 parts per million (ppm) ( $80 \mu\text{g}/\text{m}^3$ ) -- annual arithmetic mean.
  2. 0.14 parts per million (ppm) ( $365 \mu\text{g}/\text{m}^3$ ) -- maximum 24-hour concentration not to be exceeded more than once per calendar year.
  3. 75 parts per billion (ppb) -- maximum one-hour concentration. The one-hour primary standard is met at an ambient air quality monitoring site when the three-year average of the annual 99th percentile of the daily maximum one-hour average concentrations is less than or equal to 75 parts per billion, as determined according to 40 CFR 50, Appendix T.
- B. The secondary ambient air quality standard for sulfur oxides, measured as sulfur dioxide, is 0.5 parts per million (ppm) ( $1300 \mu\text{g}/\text{m}^3$ ) -- maximum three-hour concentration not to be exceeded more than once per year.
- C. The level of the standards shall be measured by a reference method based on 40 CFR 50, Appendix A or A-1, or by a Federal Equivalent Method designated according to 40 CFR 53.
- D. The standards in subsections (A)(1) and (2) shall apply:
  1. In an area designated nonattainment for a standard in subsection (A)(1) or (2) as of August 23, 2011, and areas not meeting a state implementation plan call for a standard in subsection (A)(1) or (2), until the state submits pursuant

**ARTICLE 2. AMBIENT AIR QUALITY STANDARDS; AREA DESIGNATIONS; CLASSIFICATIONS****R18-2-203. Ozone: ~~One-hour Standard and Eight-hour Average Standard~~****~~A. One-hour standard. Until June 15, 2005:-~~**

- ~~1. The one-hour ambient air quality standard for ozone is 0.12 ppm (235 micrograms per cubic meter)-~~
- ~~2. The one-hour secondary ambient air quality standard for ozone is 0.12 ppm (235 micrograms per cubic meter)-~~
- ~~3. The one-hour standards are attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm (235 micrograms per cubic meter) is less than or equal to 1, determined by 40 CFR 50, Appendix H.~~

**~~B. Eight-hour averaged standard.~~**

- ~~1A.~~ The eight-hour average primary ambient air quality standard for ozone is ~~0.075~~ 0.070 ppm.
- ~~2B.~~ The eight-hour average secondary ambient air quality standard for ozone is ~~0.075~~ 0.070 ppm.
- ~~3C.~~ To determine attainment of the primary and secondary standards, a person shall measure ozone in the ambient air by:
  - ~~a1.~~ A reference method based on 40 CFR 50, Appendix D, and designated according to 40 CFR 53; or
  - ~~b2.~~ An equivalent method designated according to 40 CFR 53.



- 4D. ~~Eight-hour~~ The eight-hour average primary ~~and secondary~~ ambient air quality ~~standards~~ standard for ozone ~~are~~ is met at an ambient air quality monitoring site when the three-year average of the annual fourth highest daily maximum eight-hour average ozone concentration is less than or equal to ~~0.075~~ 0.070 ppm, determined according to 40 CFR 50, Appendix ~~P~~ U.

~~by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).~~

**R18-2-204. Carbon monoxide**

- A. The primary ambient air quality standards for carbon monoxide are:
1. 9 parts per million (10 milligrams per cubic meter) -- maximum eight-hour concentration not to be exceeded more than once per year.
  2. 35 parts per million (40 milligrams per cubic meter) -- maximum one-hour concentration not to be exceeded more than once per year.
- B. An eight-hour average shall be considered valid if at least 75% of the hourly averages for the eight-hour period are available. In the event that only six or seven hourly averages are available, the eight-hour average shall be computed on the basis of the hours available using 6 or 7 as the divisor.
- C. When summarizing data for comparison with the standards, averages shall be stated to one decimal place. Comparison of the data with the levels of the standards in parts per million shall be made in terms of integers with fractional parts of 0.5 or greater rounding up.

**Historical Note**

Amended effective December 22, 1976 (Supp. 76-5).  
Former Section R9-3-205 repealed, new Section R9-3-205 adopted effective May 14, 1979 (Supp. 79-1).  
Amended effective October 2, 1979 (Supp. 79-5).  
Amended effective August 29, 1980 (Supp. 80-4).  
Amended by deleting subsections (B) through (D) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-205 renumbered without change as Section R18-2-205 (Supp. 87-3). Former Section R18-2-204 renumbered to R18-2-203, new Section R18-2-204 renumbered from R18-2-205 and amended effective September 26, 1990 (Supp. 90-3).

**~~R18-2-205. Nitrogen Oxides (Nitrogen Dioxide)~~**

- A. The primary ambient air quality standards for oxides of nitrogen, measured in the ambient air as nitrogen dioxide, are:
1. 53 parts per billion -- annual average concentration.
  2. 100 parts per billion -- one-hour average concentration.
- B. The secondary ambient air quality standard for nitrogen dioxide is 0.053 (parts per million (100 micrograms per cubic meter) -- annual arithmetic mean.
- C. The levels of the standards shall be measured by a reference method based on 40 CFR 50, Appendix F or a federal equivalent method designated in accordance with 40 CFR 53.
- D. The annual primary standard is met when the annual average concentration in a calendar year is less than or equal to 53 ppb, as determined in accordance with 40 CFR, Appendix S for the annual standard.
- E. The one-hour primary standard is met when the three-year average of the annual 98th percentile of the daily maximum one-hour average concentration is less than or equal to 100 parts per billion, as determined in accordance with 40 CFR 50, Appendix S.
- F. The secondary standard is attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 ppm, rounded to three decimal places, with fractional parts equal to or greater than 0.0005 ppm rounded up. To demonstrate attainment, an annual mean shall be based upon hourly data that is at least 75% complete or upon data derived from the manual methods, that is at least 75% complete for the scheduled sampling days in each calendar quarter.

**Historical Note**

Amended effective December 22, 1976 (Supp. 76-5).

~~Former Section R9-3-206 repealed, new Section R9-3-206 adopted effective May 14, 1979 (Supp. 79-1).  
Amended effective October 2, 1979 (Supp. 79-5).  
Amended effective August 29, 1980 (Supp. 80-4).  
Amended by deleting subsections (B) through (D) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-206 renumbered without change as Section R18-2-206 (Supp. 87-3). Former Section R18-2-205 renumbered to R18-2-204, new Section R18-2-205 renumbered from R18-2-206 and amended effective September 26, 1990 (Supp. 90-3). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).~~

**R18-2-206. Lead**

- A. The primary ambient air quality standard for lead and its compounds, measured as elemental lead, is 0.15 micrograms per cubic meter -- maximum arithmetic mean averaged over a three-month period.
- B. The secondary ambient air quality standard for lead and its compounds, measured as elemental lead, is 0.15 micrograms per cubic meter -- maximum arithmetic mean averaged over a three-month period.
- C. The level of the standards shall be measured by a reference method based on 40 CFR 50, Appendix G and designated in accordance with 40 CFR 53, or by an equivalent designated in accordance with part 53 of this chapter.
- D. The national primary and secondary ambient air quality standards for lead are met when the maximum arithmetic three-month mean concentration for a three-year period, as determined in accordance with 40 CFR 50, Appendix R, is less than or equal to 0.15 micrograms per cubic meter.
- E. The former primary and secondary ambient air quality standards for lead of 1.5 micrograms per cubic meter averaged over a calendar quarter shall apply to an area until one year after the effective date of the designation of that area, pursuant to section 107 of the Act, for the standards in subsections (A) and (B).

**Historical Note**

Former Section R9-3-207 repealed effective May 14, 1979 (Supp. 79-1). New Section R9-3-207 adopted effective October 2, 1979 (Supp. 79-5). Amended effective August 29, 1980 (Supp. 80-4). Amended by deleting subsections (B) through (D) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-207 renumbered without change as Section R18-2-207 (Supp. 87-3). Former Section R18-2-206 renumbered to R18-2-205, new Section R18-2-206 renumbered from R18-2-207 and amended effective September 26, 1990 (Supp. 90-3). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

**R18-2-207. Renumbered****Historical Note**

Former Section R9-3-207 renumbered to R18-2-206 effective September 26, 1990 (Supp. 90-3).

**R18-2-208. Reserved****R18-2-209. Reserved****R18-2-210. Attainment, Nonattainment, and Unclassifiable Area Designations**

40 CFR 81.303 as amended as of July 1, 2011 (and no future amendments or editions) is incorporated by reference as an applicable requirement and on file with the Department of Environmental Quality. 40 CFR 81.303 is available from the U.S. Government Printing Office, Superintendent of Documents, Mail Stop SSOP, Washington, D.C. 20402-9328.



Former Section R9-3-206 repealed, new Section R9-3-206 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Amended effective August 29, 1980 (Supp. 80-4). Amended by deleting subsections (B) through (D) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-206 renumbered without change as Section R18-2-206 (Supp. 87-3). Former Section R18-2-205 renumbered to R18-2-204, new Section R18-2-205 renumbered from R18-2-206 and amended effective September 26, 1990 (Supp. 90-3). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

**R18-2-206. Lead**

- A. The primary ambient air quality standard for lead and its compounds, measured as elemental lead, is 0.15 micrograms per cubic meter – maximum arithmetic mean averaged over a three-month period.
- B. The secondary ambient air quality standard for lead and its compounds, measured as elemental lead, is 0.15 micrograms per cubic meter – maximum arithmetic mean averaged over a three-month period.
- C. The level of the standards shall be measured by a reference method based on 40 CFR 50, Appendix G and designated in accordance with 40 CFR 53, or by an equivalent designated in accordance with part 53 of this chapter.
- D. The national primary and secondary ambient air quality standards for lead are met when the maximum arithmetic three-month mean concentration for a three-year period, as determined in accordance with 40 CFR 50, Appendix R, is less than or equal to 0.15 micrograms per cubic meter.
- E. The former primary and secondary ambient air quality standards for lead of 1.5 micrograms per cubic meter averaged over a calendar quarter shall apply to an area until one year after the effective date of the designation of that area, pursuant to section 107 of the Act, for the standards in subsections (A) and (B).

**Historical Note**

Former Section R9-3-207 repealed effective May 14, 1979 (Supp. 79-1). New Section R9-3-207 adopted effective October 2, 1979 (Supp. 79-5). Amended effective August 29, 1980 (Supp. 80-4). Amended by deleting subsections (B) through (D) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-207 renumbered without change as Section R18-2-207 (Supp. 87-3). Former Section R18-2-206 renumbered to R18-2-205, new Section R18-2-206 renumbered from R18-2-207 and amended effective September 26, 1990 (Supp. 90-3). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

**R18-2-205. Nitrogen Oxides (Nitrogen Dioxide)**

- A. The primary ambient air quality standards for oxides of nitrogen, measured in the ambient air as nitrogen dioxide, are:
  - 1. 53 parts per billion – annual average concentration.
  - 2. 100 parts per billion – one-hour average concentration.
- B. The secondary ambient air quality standard for nitrogen dioxide is 0.053 (parts per million (100 micrograms per cubic meter) -- annual arithmetic mean.
- C. The levels of the standards shall be measured by a reference method based on 40 CFR 50, Appendix F or a federal equivalent method designated in accordance with 40 CFR 53.
- D. The annual primary standard is met when the annual average concentration in a calendar year is less than or equal to 53 ppb, as determined in accordance with 40 CFR, Appendix S for the annual standard.
- E. The one-hour primary standard is met when the three-year average of the annual 98th percentile of the daily maximum one-hour average concentration is less than or equal to 100 parts per billion, as determined in accordance with 40 CFR 50, Appendix S.
- F. The secondary standard is attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 ppm, rounded to three decimal places, with fractional parts equal to or greater than 0.0005 ppm rounded up. To demonstrate attainment, an annual mean shall be based upon hourly data that is at least 75% complete or upon data derived from the manual methods, that is at least 75% complete for the scheduled sampling days in each calendar quarter.

**Historical Note**

Amended effective December 22, 1976 (Supp. 76-5).

(Supp. 90-3). Amended by final rulemaking at 11 A.A.R. 3305, effective October 3, 2005 (Supp. 05-3). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

#### **R18-2-204. Carbon monoxide**

- A. The primary ambient air quality standards for carbon monoxide are:
1. 9 parts per million (10 milligrams per cubic meter) -- maximum eight-hour concentration not to be exceeded more than once per year.
  2. 35 parts per million (40 milligrams per cubic meter) -- maximum one-hour concentration not to be exceeded more than once per year.
- B. An eight-hour average shall be considered valid if at least 75% of the hourly averages for the eight-hour period are available. In the event that only six or seven hourly averages are available, the eight-hour average shall be computed on the basis of the hours available using 6 or 7 as the divisor.
- C. When summarizing data for comparison with the standards, averages shall be stated to one decimal place. Comparison of the data with the levels of the standards in parts per million shall be made in terms of integers with fractional parts of 0.5 or greater rounding up.

#### **Historical Note**

Amended effective December 22, 1976 (Supp. 76-5). Former Section R9-3-205 repealed, new Section R9-3-205 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Amended effective August 29, 1980 (Supp. 80-4). Amended by deleting subsections (B) through (D) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-205 renumbered without change as Section R18-2-205 (Supp. 87-3). Former Section R18-2-204 renumbered to R18-2-203, new Section R18-2-204 renumbered from R18-2-205 and amended effective September 26, 1990 (Supp. 90-3).

#### **R18-2-205. Nitrogen Oxides (Nitrogen Dioxide)**

- A. The primary ambient air quality standards for oxides of nitrogen, measured in the ambient air as nitrogen dioxide, are:
1. 53 parts per billion -- annual average concentration.
  2. 100 parts per billion -- one-hour average concentration.
- B. The secondary ambient air quality standard for nitrogen dioxide is 0.053 (parts per million (100 micrograms per cubic meter) -- annual arithmetic mean.
- C. The levels of the standards shall be measured by a reference method based on 40 CFR 50, Appendix F or a federal equivalent method designated in accordance with 40 CFR 53.
- D. The annual primary standard is met when the annual average concentration in a calendar year is less than or equal to 53 ppb, as determined in accordance with 40 CFR, Appendix S for the annual standard.
- E. The one-hour primary standard is met when the three-year average of the annual 98th percentile of the daily maximum one-hour average concentration is less than or equal to 100 parts per billion, as determined in accordance with 40 CFR 50, Appendix S.
- F. The secondary standard is attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 ppm, rounded to three decimal places, with fractional parts equal to or greater than 0.0005 ppm rounded up. To demonstrate attainment, an annual mean shall be based upon hourly data that is at least 75% complete or upon data derived from the manual methods, that is at least 75% complete for the scheduled sampling days in each calendar quarter.

#### **Historical Note**

Amended effective December 22, 1976 (Supp. 76-5). Former Section R9-3-206 repealed, new Section R9-3-206 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Amended effective August 29, 1980 (Supp. 80-4). Amended by deleting subsections (B) through (D) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-206 renumbered without change as Section R18-2-206 (Supp. 87-3). Former Section R18-2-205 renumbered to R18-2-204, new Section R18-2-205 renumbered from R18-2-206 and amended effective September 26, 1990 (Supp. 90-3). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

#### **R18-2-206. Lead**

- A. The primary ambient air quality standard for lead and its compounds, measured as elemental lead, is 0.15 micrograms per cubic meter -- maximum arithmetic mean averaged over a three-month period.
- B. The secondary ambient air quality standard for lead and its compounds, measured as elemental lead, is 0.15 micrograms per cubic meter -- maximum arithmetic mean averaged over a three-month period.
- C. The level of the standards shall be measured by a reference method based on 40 CFR 50, Appendix G and designated in accordance with 40 CFR 53, or by an equivalent designated in accordance with part 53 of this chapter.
- D. The national primary and secondary ambient air quality standards for lead are met when the maximum arithmetic three-month mean concentration for a three-year period, as determined in accordance with 40 CFR 50, Appendix R, is less than or equal to 0.15 micrograms per cubic meter.
- E. The former primary and secondary ambient air quality standards for lead of 1.5 micrograms per cubic meter averaged over a calendar quarter shall apply to an area until one year after the effective date of the designation of that area, pursuant to section 107 of the Act, for the standards in subsections (A) and (B).

#### **Historical Note**

Former Section R9-3-207 repealed effective May 14, 1979 (Supp. 79-1). New Section R9-3-207 adopted effective October 2, 1979 (Supp. 79-5). Amended effective August 29, 1980 (Supp. 80-4). Amended by deleting subsections (B) through (D) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-207 renumbered without change as Section R18-2-207 (Supp. 87-3). Former Section R18-2-206 renumbered to R18-2-205, new Section R18-2-206 renumbered from R18-2-207 and amended effective September 26, 1990 (Supp. 90-3). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

#### **R18-2-207. Renumbered**

#### **Historical Note**

Former Section R9-3-207 renumbered to R18-2-206 effective September 26, 1990 (Supp. 90-3).

#### **R18-2-208. Reserved**

#### **R18-2-209. Reserved**

#### **R18-2-210. Attainment, Nonattainment, and Unclassifiable Area Designations**

40 CFR 81.303 as amended as of July 1, 2014 (and no future amendments or editions) is incorporated by reference as an applicable requirement and on file with the Department of Environmental



Quality. 40 CFR 81.303 is available from the U.S. Government Printing Office, Superintendent of Documents, bookstore.gpo.gov, Mail Stop: SSOP IDCC-SSOM, Washington, D.C. 20402-9328.

#### Historical Note

Adopted effective November 15, 1993 (Supp. 93-4).  
Amended effective December 7, 1995 (Supp. 95-4).  
Amended by final rulemaking at 5 A.A.R. 3221, effective August 12, 1999 (Supp. 99-3). Amended by final rulemaking at 8 A.A.R. 2543, effective May 24, 2002 (Supp. 02-2). Amended by final rulemaking at 10 A.A.R. 3281, effective September 27, 2004 (Supp. 04-3).  
Amended by final rulemaking at 11 A.A.R. 3305, effective October 3, 2005 (Supp. 05-3). Amended by final rulemaking at 13 A.A.R. 4199, effective January 5, 2008 (Supp. 07-4). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2). Amended by exempt rulemaking pursuant to Laws 2011, Ch. 214, § 4, at 21 A.A.R. 1156, effective July 2, 2015 (Supp. 15-3).

#### ~~R18-2-211. Reserved~~

#### ~~R18-2-212. Reserved~~

#### ~~R18-2-213. Reserved~~

#### ~~R18-2-214. Reserved~~

#### ~~R18-2-215. Ambient air quality monitoring methods and procedures~~

- ~~A. Only those methods which have been either designated by the Administrator as reference or equivalent methods or approved by the Director shall be used to monitor ambient air.~~
- ~~B. Quality assurance, monitor siting, and sample probe installation procedures shall be in accordance with procedures described in the Appendices to 40 CFR 58.~~
- ~~C. The Director may approve other procedures upon a finding that the proposed procedures are substantially equivalent or superior to procedures in the Appendices to 40 CFR 58.~~

#### ~~Historical Note~~

~~Adopted effective September 22, 1983 (Supp. 83-5). Former Section R9-3-215 renumbered without change as Section R18-2-215 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3).~~

#### ~~R18-2-216. Interpretation of Ambient Air Quality Standards and Evaluation of Air Quality Data~~

~~Unless otherwise specified, interpretation of all ambient air quality standards contained in this Article shall be in accordance with 40 CFR 50, incorporated by reference in Appendix 2 of this Chapter.~~

#### ~~Historical Note~~

~~Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-216 repealed, new Section R9-3-216 adopted effective August 29, 1980 (Supp. 80-4). Former Section R9-3-216 renumbered without change as Section R18-2-216 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Amended by final rulemaking at 15 A.A.R. 281, effective March 7, 2009 (Supp. 09-1).~~

#### ~~R18-2-217. Designation and Classification of Attainment Areas~~

- ~~A. All attainment and unclassified areas or parts thereof shall be classified as either Class I, Class II or Class III.~~
- ~~B. All of the following areas which were in existence on August 7, 1977, including any boundary changes to those areas which occurred subsequent to the date of enactment of the Clean Air Act Amendments of 1977 and before March 12, 1993, shall be Class I areas irrespective of attainment status and shall not be redesignated:~~

- ~~1. International parks;~~
- ~~2. National wilderness areas which exceed 5,000 acres in size;~~
- ~~3. National memorial parks which exceed 5,000 acres in size; and~~
- ~~4. National parks which exceed 6,000 acres in size.~~
- ~~C. The following areas shall be designated only as Class I or II:~~
  - ~~1. An area which as of August 7, 1977, exceeds 10,000 acres in size and is one of the following:~~
    - ~~a. A national monument,~~
    - ~~b. A national primitive area,~~
    - ~~c. A national preserve,~~
    - ~~d. A national recreational area,~~
    - ~~e. A national wild and scenic river,~~
    - ~~f. A national wildlife refuge,~~
    - ~~g. A national lakeshore or seashore.~~
  - ~~2. A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.~~
- ~~D. All other areas shall be Class II areas unless redesignated under subsections (E) or (F).~~
- ~~E. The Governor or the Governor's designee may redesignate areas of the state as Class I or Class II, provided that the following requirements are fulfilled:~~
  - ~~1. At least one public hearing is held in or near the area affected;~~
  - ~~2. Other states, Indian governing bodies and Federal Land Managers, whose land may be affected by the proposed redesignation are notified at least 30 days prior to the public hearing.~~
  - ~~3. A discussion document of the reasons for the proposed redesignation including a description and analysis of health, environmental, economic, social and energy effects of the proposed redesignation is prepared by the Governor or the Governor's designee. The discussion document shall be made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing shall contain appropriate notification of the availability of such discussion document.~~
  - ~~4. Prior to the issuance of notice respecting the redesignation of an area which includes any federal lands, the Governor or the Governor's designee has provided written notice to the appropriate Federal Land Manager and afforded the Federal Land Manager adequate opportunity, not in excess of 60 days, to confer with the state respecting the redesignation and to submit written comments and recommendations. The Governor or the Governor's designee shall publish a list of any inconsistency between such redesignation and such recommendations, together with the reasons for making such redesignation against the recommendation of the Federal Land Manager, if any Federal Land Manager has submitted written comments and recommendations.~~
  - ~~5. The redesignation is proposed after consultation with the elected leadership of local governments in the area covered by the proposed redesignation.~~
  - ~~6. The redesignation is submitted to the Administrator as a revision to the SIP.~~
- ~~F. The Governor or the Governor's designee may redesignate areas of the state as Class III if all of the following criteria are met:~~
  - ~~1. Such redesignation meets the requirements of subsection (E);~~
  - ~~2. Such redesignation has been approved after consultation with the appropriate committee of the legislature if it is in session or with the leadership of the legislature if it is not in session.~~

**R18-2-216. Interpretation of Ambient Air Quality Standards and Evaluation of Air Quality Data**

Unless otherwise specified, interpretation of all ambient air quality standards contained in this Article shall be in accordance with 40 CFR 50, incorporated by reference in Appendix 2 of this Chapter.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-216 repealed, new Section R9-3-216 adopted effective August 29, 1980 (Supp. 80-4). Former Section R9-3-216 renumbered without change as Section R18-2-216 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Amended by final rulemaking at 15 A.A.R. 281, effective March 7, 2009 (Supp. 09-1).

~~**R18-2-217. Designation and Classification of Attainment Areas**~~

- ~~A. All attainment and unclassified areas or parts thereof shall be classified as either Class I, Class II or Class III.~~
- ~~B. All of the following areas which were in existence on August 7, 1977, including any boundary changes to those areas which occurred subsequent to the date of enactment of the Clean Air Act Amendments of 1977 and before March 12, 1993, shall be Class I areas irrespective of attainment status and shall not be redesignated:~~
- ~~1. International parks;~~
  - ~~2. National wilderness areas which exceed 5,000 acres in size;~~
  - ~~3. National memorial parks which exceed 5,000 acres in size; and~~
  - ~~4. National parks which exceed 6,000 acres in size.~~

- ~~2. A national park or national wilderness area after August 7, 1977, which exceeds 10,000 acres in size.~~
- ~~D. All other areas shall be Class II areas unless redesignated under subsections (E) or (F).~~
- ~~E. The Governor or the Governor's designee may redesignate areas of the state as Class I or Class II, provided that the following requirements are fulfilled:~~
  - ~~1. At least one public hearing is held in or near the area affected;~~
  - ~~2. Other states, Indian governing bodies and Federal Land Managers, whose land may be affected by the proposed redesignation are notified at least 60 days prior to the public hearing.~~
  - ~~3. A discussion document of the reasons for the proposed redesignation including a description and analysis of health, environmental, economic, social and energy effects of the proposed redesignation is prepared by the Governor or the Governor's designee. The discussion document shall be made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing shall contain appropriate notification of the availability of such discussion document.~~
  - ~~4. Prior to the issuance of notice respecting the redesignation of an area which includes any federal lands, the Governor or the Governor's designee has provided written notice to the appropriate Federal Land Manager and afforded the Federal Land Manager adequate opportunity, not in excess of 60 days, to confer with the state respecting the redesignation and to submit written comments and recommendations. The Governor or the Governor's designee shall publish a list of any inconsistency between such redesignation and such recommendations, together with the reasons for making such redesignation against the recommendation of the Federal Land Manager, if any Federal Land Manager has submitted written comments and recommendations.~~
  - ~~5. The redesignation is proposed after consultation with the elected leadership of local governments in the area covered by the proposed redesignation.~~
  - ~~6. The redesignation is submitted to the Administrator as a revision to the SIP.~~
- ~~F. The Governor or the Governor's designee may redesignate areas of the state as Class III if all of the following criteria are met:~~
  - ~~1. Such redesignation meets the requirements of subsection~~

~~Such redesignation has been approved after consultation with the appropriate committee of the legislature if it is in session or with the leadership of the legislature if it is not in session.~~
  - ~~3. The general purpose units of local government representing a majority of the residents of the area to be redesignated concur in the redesignation;~~
  - ~~4. Such redesignation shall not cause, or contribute to, concentration of any air pollutant which exceeds any maximum allowable increase or maximum allowable~~



**R18-2-217. Designation and Classification of Attainment Areas**

- A.** All ~~attainment and unclassified areas or parts thereof~~ shall be classified as either Class I, Class II or Class III.
- B.** All of the following areas which were in existence on August 7, 1977; ~~including any boundary changes to those areas which occurred subsequent to the date of enactment of the Clean Air Act Amendments of 1977 and before March 12, 1993;~~ shall be Class I areas irrespective of attainment status and shall not be redesignated:
  - 1. International parks;
  - 2. National wilderness areas which exceed 5,000 acres in size;
  - 3. National memorial parks which exceed 5,000 acres in size; and
  - 4. National parks which exceed 6,000 acres in size.
- C.** Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.
- D.** Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this Section.
- E.** The following areas shall be designated only as Class I or II:
  - 1. An area which as of August 7, 1977, exceeds 10,000 acres in size and is one of the following:
    - a. A national monument,
    - b. A national primitive area,
    - c. A national preserve,
    - d. A national recreational area,
    - e. A national wild and scenic river,
    - f. A national wildlife refuge,
    - g. A national lakeshore or seashore.
  - 2. A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.
- ~~**D.** All other areas shall be Class II areas unless redesignated under subsections (E) or (F).~~
- E.** Except as otherwise provided in subsections (B) to (E), the Governor or the Governor's designee may redesignate areas of the state as Class I or Class II, provided that the following requirements are fulfilled:
  - 1. At least one public hearing is held in or near the area affected in accordance with 40 CFR 51.102;
  - 2. Other states, Indian governing bodies and Federal Land Managers, whose land may be affected by the proposed redesignation are notified at least 30 days prior to the public hearing.
  - 3. A discussion document of the reasons for the proposed redesignation including a description and analysis of health, environmental, economic, social and energy effects of the proposed redesignation is prepared by the Governor or the Governor's designee. The discussion document shall be made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing shall contain appropriate notification of the availability of such discussion document.
  - 4. Prior to the issuance of notice respecting the redesignation of an area which includes any federal lands, the Governor or the Governor's designee has provided written notice to the appropriate Federal Land Manager and afforded the Federal Land Manager adequate opportunity, not in excess of 60 days, to confer with the state respecting the redesignation and to submit written comments and recommendations. The Governor or the Governor's designee shall publish a list of any inconsistency between such redesignation and such recommendations, together with the reasons for making such redesignation against the recommendation of the Federal Land Manager, if any Federal Land Manager has submitted written comments and recommendations.
  - 5. The redesignation is proposed after consultation with the elected leadership of local governments in the area covered by the proposed redesignation.
  - 6. The redesignation is submitted to the Administrator as a revision to the SIP.
- ~~**F.** Except as otherwise provided in subsections (B) to (E), the Governor or the Governor's designee may redesignate areas of the state as Class III if all of the following criteria are met:~~
- F.** Except as otherwise provided in subsections (B) to (E), the Governor or the Governor's designee may redesignate areas of the state as Class III if all of the following criteria are met:
  - 1. Such redesignation meets the requirements of subsection ~~(E)~~ (F);
  - 2. Such redesignation has been approved after consultation with the appropriate committee of the legislature if it is in session or with the leadership of the legislature if it is not in session.
  - 3. The general purpose units of local government representing a majority of the residents of the area to be redesignated concur in the redesignation;
  - 4. Such redesignation shall not cause, or contribute to, a concentration of any air pollutant which exceeds any national ambient air quality standard or any maximum allowable increase or maximum allowable concentration permitted under the classification of any area allowed under R18-2-218;
  - 5. For any new major source as defined in R18-2-401 or a major modification of such source which may be permitted to be constructed and operated only if the area in question is redesignated as Class III, any permit application ~~or related and materials submitted as part of the application~~ shall be made available for public inspection prior to ~~a~~ any public hearing on the redesignation of the area as Class III.
  - 6. The redesignation is submitted to the Administrator as a revision to the SIP.
- G.** A redesignation shall not be effective until approved by the Administrator as part of an applicable implementation plan. If the Administrator disapproves the redesignation, the classification of the area shall be that which was in effect before the disapproved redesignation.
- H.** Lands within the exterior boundaries of Indian reservations may be redesignated only by the appropriate Indian governing body.

**R18-2-218. Limitation of Pollutants in Classified Attainment Areas**

- A. Areas designated as Class I, II, or III shall be limited to the following increases in air pollutant concentrations occurring over the baseline concentration; provided that for any period other than an annual period, the applicable maximum allowable increase may be exceeded once per year at any one location:

**CLASS I**

Maximum Allowable  
Increase (Micrograms  
per cubic meter)

Particulate matter: PM<sub>2.5</sub>

Annual arithmetic mean	1
24-hr maximum	2

Particulate matter: PM<sub>10</sub>

Annual arithmetic mean	4
24-hour maximum	8

Sulfur dioxide:

Annual arithmetic mean	2
24-hour maximum	5
3-hour maximum	25

Nitrogen dioxide:

Annual arithmetic mean	2.5
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**CLASS II**

Particulate matter: PM<sub>2.5</sub>

Annual arithmetic mean	4
24-hr maximum	9

Particulate matter: PM<sub>10</sub>

Annual arithmetic mean	17
24-hour maximum	30

Sulfur dioxide:

Annual arithmetic mean	20
24-hour maximum	91
3-hour maximum	512

Nitrogen dioxide:

Annual arithmetic mean	25
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**CLASS III**

Particulate matter: PM<sub>2.5</sub>

Annual arithmetic mean	8
24-hr maximum	18

Particulate matter: PM<sub>10</sub>

Annual arithmetic mean	34
24-hour maximum	60

Sulfur dioxide:

Annual arithmetic mean	40
24-hour maximum	182
3-hour maximum	700

Nitrogen dioxide:

Annual arithmetic mean	50
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- B. The baseline concentration ~~shall be~~ is that ambient concentration level which exists in the baseline area at the time of the applicable minor source baseline data.
1. The major source baseline date is:
    - a. January 6, 1975, for sulfur dioxide and PM<sub>10</sub>.
    - b. February 8, 1988, for nitrogen dioxide.





- c. October 20, 2010, for PM<sub>2.5</sub>.
2. The minor source baseline date shall be the earliest date after the trigger date on which a major source as defined in R18-2-401 or major modification subject to 40 CFR 52.21 or R18-2-406 submits a complete application under the relevant regulations.
  - a. The trigger date is:
    - ai. August 7, 1977, for PM<sub>10</sub> and sulfur dioxide.
    - bii. February 8, 1988, for nitrogen dioxide.
    - ei. October 20, 2011, for PM<sub>2.5</sub>.
  - b. Any minor source baseline date established originally for total suspended particulates shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that the Department may rescind any such minor source baseline date where it can be shown, to the satisfaction of the Department, that the emissions increase from the major source, or the net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM-10 emissions.
3. A baseline concentration shall be determined for each pollutant for which there is a minor source baseline date and shall include both:
  - a. The actual emissions representative of sources in existence on the minor source baseline date, except as provided in subsection (B)(4); and
  - b. The allowable emissions of major sources as defined in R18-2-401 which commenced construction before the major source baseline date but were not in operation by the applicable minor source baseline date.
4. The following shall not be included in the baseline concentration and shall affect the applicable maximum allowable increase:
  - a. Actual emissions from any major source as defined in R18-2-401 on which construction commenced after the major source baseline date; and
  - b. Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.
- C. The baseline date shall be established for each pollutant for which maximum allowable increases or other equivalent measures have been established if both:
  1. The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21 or R18-2-406; and
  2. In the case of a major source as defined in R18-2-401, the pollutant would be emitted in significant amounts, or in the case of a major modification, there would be a significant net emissions increase of the pollutant.
- D. The baseline area shall be the AQCR that contains the area, designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act, in which the major source as defined in R18-2-401 or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the minor source baseline date is established, as follows: greater than or equal to 1 microgram per cubic meter (annual average) for sulfur dioxide, nitrogen dioxide or PM<sub>10</sub>; or greater than or equal to 0.3 microgram per cubic meter (annual average) for PM<sub>2.5</sub>.
  1. Area redesignations under ~~R18-2-217~~ section 107(d)(1)(A)(ii) or (iii) of the Act that would redesignate a baseline area may not intersect or be smaller than the area of impact of any new major source as defined in R18-2-401 or a major modification which either:
    - ~~1a.~~ Establishes a minor source baseline date, or
    - ~~2b.~~ Is subject to either 40 CFR 52.21 or R18-2-406 and would be constructed in Arizona.
  2. Any baseline area established originally for total suspended particulates shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that such baseline area shall not remain in effect if the Department rescinds the corresponding minor source baseline date in accordance with subsection (B)(2)(b).
- E. The maximum allowable concentration of any air pollutant in any area to which subsection (A) applies shall not exceed a concentration for each pollutant equal to the concentration permitted under the national ambient air quality standards ~~contained in this Article~~.
- F. For purposes of determining compliance with the maximum allowable increases in ambient concentrations of an air pollutant, the following concentrations of such pollutant shall not be taken into account:
  1. Concentration of such pollutant attributable to the increase in emissions from major and stationary sources which have converted from the use of petroleum products, or natural gas, or both, by reason of a natural gas curtailment order which is in effect under the provisions of sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. 792, over the emissions from such sources before the effective date of such order;
  2. The concentration of such pollutant attributable to the increase in emissions from major and stationary sources which have converted from using gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, 16 U.S.C. 792 - 825r, over the emissions from such sources before the effective date of the natural gas curtailment plan;
  3. Concentrations of PM<sub>10</sub> or PM<sub>2.5</sub> attributable to the increase in emissions from construction or other temporary emission related activities of a new or modified source;
  4. The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration; and
  5. Concentrations attributable to the temporary increase in emissions of sulfur dioxide, nitrogen oxides, PM<sub>2.5</sub>, or PM<sub>10</sub> from major sources as defined in R18-2-401 when the following conditions are met:
    - a. ~~The operating permit permits issued to such sources specifies~~ specify the time period during which the temporary emissions increase of sulfur dioxide, nitrogen oxides, PM<sub>2.5</sub> or PM<sub>10</sub> would occur. Such time period shall not be renewable and shall not exceed two years ~~unless a longer period is specifically approved by the Director.~~
    - b. ~~No emissions increase shall be approved which would either~~ The temporary emissions increase will not:
      - i. Impact any ~~portion of any~~ Class I area or any ~~portion of any other~~ area where ~~an applicable incremental ambient standard~~ a maximum increase allowed by subsection (A) is known to be violated ~~in that portion~~; or
      - ii. Cause or contribute to the violation of a ~~state~~ national ambient air quality standard.



- c. The operating permit issued to such sources specifies that, at the end of the time period described in subsection (F)(5)(a), the emissions levels from the sources would not exceed the levels occurring before the temporary emissions increase was approved.
- 6. The exception granted by subsections (F)(1) and (2) with respect to ~~increment consumption under subsections (F)(1) and (2)~~ maximum increases allowed under subsection (A) shall not apply more than five years after the effective date of the order or natural gas curtailment plan on which the exception is based.
- G. If the Director or the Administrator determines that the SIP is substantially inadequate to prevent significant deterioration or that an applicable maximum allowable increase as specified in subsection (A) is being violated, the SIP shall be revised to correct the inadequacy or the violation. The SIP shall be revised within 60 days of such a finding by the Director or within 60 days following notification by the Administrator, or by such later date as prescribed by the Administrator after consultation with the Director.
- H. The Director shall review the adequacy of the SIP on a periodic basis and within 60 days of such time as information becomes available that an applicable maximum allowable increase is being violated.

## R18-2-220. Air pollution emergency episodes

- A. Procedures shall be implemented by the Director in order to prevent the occurrence of ambient air pollutant concentrations which would cause significant harm to the health of persons, as specified in subsection (B)(4) of this Section. The procedures and actions required for each stage are described in the Department's "Procedures for Prevention of Emergency Episodes," amended as of October 18, 1988 (and no future editions), which is incorporated herein by reference and on file with the Office of the Secretary of State.
- B. The following stages are identified by air quality criteria in order to provide for sequential emissions reductions, public notification, and increased Department monitoring and forecast responsibilities. The declaration of any stage, and the area of the state affected, shall be based on air quality measurements and meteorological analysis and forecast.

1. A Stage I air pollution alert shall be declared when any of the alert level concentrations listed in paragraph (4) of this subsection are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of alert level concentrations for the same pollutant during the subsequent 24-hour period. If, 48 hours after an alert has been initially declared, air pollution concentrations and meteorological conditions do not improve, the warning stage control actions shall be implemented but no warning shall be declared, unless air quality has deteriorated to the extent described in paragraph (2) of this subsection.
2. A Stage II air pollution warning shall be declared when any of the warning level concentrations listed in paragraph (4) of this subsection are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations of the same pollutant exceeding the warning level during the subsequent 24-hour period. If, 48 hours after a warning has been initially declared, air pollution concentrations and meteorological conditions do not improve, the emergency stage shall be declared and its control actions implemented.
3. A Stage III air pollution emergency shall be declared when any of the emergency level concentrations listed in paragraph (4) of this subsection are exceeded at any monitoring site and when meteorological conditions indicate that there will be a continuance or recurrence of concentrations of the same pollutant exceeding the emergency level during the subsequent 24-hour period.
4. Summary of emergency episode and significant harm levels:

Pollutant	Averaging Time	Alert	Warning	Emergency	Significant Harm
Carbon monoxide (mg/m[3])	1-hr				144
	4-hr				86.3
	8-hr	17	34	46	57.5
Nitrogen dioxide (µg/m[3])	1-hr	1,130	2,260	3,000	3,750
	24-hr	282	565	750	938
Ozone (ppm)	1-hr	.2	.4	.5	.6
PM10 (µg/m[3])	24-hr	350	420	500	600
Sulfur dioxide (µg/m[3])	24-hr	800	1,600	2,100	2,620

**ARTICLE 3. PERMITS AND PERMIT REVISIONS****R18-2-301. Definitions**

The following definitions apply to this Article:

1. "Alternative method" means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to produce results adequate for the Director's determination of compliance in accordance with R18-2-311(D).
2. "Billable permit action" means the issuance or denial of a new permit, significant permit revision, or minor permit revision, or the renewal of an existing permit.
3. "Capacity factor" means the ratio of the average load on a machine or equipment for the period of time considered to the capacity rating of the machine or equipment.
4. "CEM" means a continuous emission monitoring system as defined in R18-2-101.
5. "Complete" means, in reference to an application for a permit, permit revision or registration, that the application contains all the information necessary for processing the application. Designating an application complete for purposes of a permit, permit revisions or registration processing does not preclude the Director from requesting or accepting any additional information.

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6. "Dispersion technique" means any technique which attempts to affect the concentration of a pollutant in the ambient air by any of the following:
  - a. Using that portion of a stack which exceeds good engineering practice stack height;
  - b. Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or
  - c. Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise. This shall not include any of the following:
    - i. The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream.
    - ii. The merging of exhaust gas streams under any of the following conditions:
      - (1) The source owner or operator demonstrates that the facility was originally designed and constructed with such merged gas streams;
      - (2) After July 8, 1985, such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant, applying only to the emission limitation for that pollutant; or
      - (3) Before July 8, 1985, such merging was part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the reviewing agency shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the reviewing agency shall deny credit for the effects of such merging in calculating the allowable emissions for the source.
    - iii. Smoke management in agricultural or silvicultural prescribed burning programs.
    - iv. Episodic restrictions on residential woodburning and open burning.
    - v. Techniques which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.
7. "Emissions allowable under the permit" means a permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or an emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.
8. "Fossil fuel-fired steam generator" means a furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.
9. "Fuel oil" means Number 2 through Number 6 fuel oils as specified in ASTM D-396-90a (Specification for Fuel Oils), gas turbine fuel oils Numbers 2-GT through 4-GT as specified in ASTM D-2880-90a (Specification for Gas Turbine Fuel Oils), or diesel fuel oils Numbers 2-D and 4-D as specified in ASTM D-975-90a (Specification for Diesel Fuel Oils).
10. "Itemized bill" means a breakdown of the permit processing time into the categories of pre-application activities, completeness review, substantive review, and public involvement activities, and within each category, a further breakdown by employee name.
11. "Major source threshold" means the lowest applicable emissions rate for a pollutant that would cause the source to be a major source at the particular time and location, under the definition of major source in R18-2-101.
12. "Maximum capacity to emit" means the maximum amount a source is capable of emitting under its physical and operational design without taking any limitations on operations or air pollution controls into account.
13. "Maximum capacity to emit with any elective limits" means the maximum amount a source is capable of emitting under its physical and operational design taking into account the effect on emissions of any elective limits included in the source's registration under R18-2-302.01(F).
14. "Minor NSR Modification" means any of the following changes that do not qualify as a major source or major modification:
  - a. Any physical change in or change in the method of operation of an emission unit or a stationary source that either:
    - i. Increases the potential to emit of a regulated minor NSR pollutant by an amount greater than or equal to the permitting exemption thresholds, or
    - ii. Results in emissions of a regulated minor NSR pollutant not previously emitted by such emission unit or stationary source in an amount greater than or equal to the permitting exemption thresholds.
  - b. Construction of one or more new emissions units that have the potential to emit regulated minor NSR pollutants at an amount greater than or equal to the permitting exemption threshold.
  - c. A change covered by subsection (12)(a) or (b) of this Section constitutes a minor NSR modification regardless of whether there will be a net decrease in total source emissions or a net increase in total source emissions that is less than the permitting exemption threshold as a result of decreases in the potential to emit of other emission units at the same stationary source.
  - d. For the purposes of this subsection (the) following do not constitute a physical change or change in the method of operation:
    - i. A change consisting solely of the construction of, or changes to, a combination of emissions units qualifying as a categorically exempt activity.

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- ii. For a stationary source that is required to obtain a Class II permit under R18-2-302 and that is subject to source-wide emissions caps under R18-2-306.01 or R18-2-306.02, a change that will not result in the violation of the existing emissions cap for that regulated minor NSR pollutant.
- iii. Replacement of an emission unit by a unit with a potential to emit regulated minor NSR pollutants that is less than or equal to the potential to emit of the existing unit, provided the replacement does not cause an increase in emissions at other emission units at the stationary source. A unit installed under this provision is subject to any limits applicable to the unit it replaced.
- iv. Routine maintenance, repair, and replacement.
- v. 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 to 825r.
- vi. Use of an alternative fuel by reason of an order or rule under Section 125 of the Act.
- vii. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
- viii. Use of an alternative fuel or raw material by a stationary source that either:
  - (1) The source was capable of accommodating before December 12, 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) The source is approved to use under any permit issued under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.
- ix. 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 12, 1976, under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.
- x. Any change in ownership at a stationary source.
- xi. 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.
- xii. 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.
- xiii. 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.
- e. For purposes of this subsection:
  - i. "Potential to emit" means the lower of a source's or emission unit's potential to emit or its allowable emissions.
  - ii. In determining potential to emit, the fugitive emissions of a stationary source shall not be considered unless the source belongs to a section 302(j) category.
  - iii. All of the roadways located at a stationary source constitute a single emissions unit.
- 15. "NAICS" means the five- or six-digit North American Industry Classification System-United States, 1997, number for industries used by the U.S. Department of Commerce.
- 16. "Permit processing time" means all time spent by Air Quality Division staff or consultants on tasks specifically related to the processing of an application for the issuance or renewal of a particular permit or permit revision, including time spent processing an application that is denied.
- 17. "Quantifiable" means, with respect to emissions, including the emissions involved in equivalent emission limits and emission trades, capable of being measured or otherwise determined in terms of quantity and assessed in terms of character. Quantification may be based on emission factors, stack tests, monitored values, operating rates and averaging times, materials used in a process or production, modeling, or other reasonable measurement practices.
- 18. "Registration" means a registration under R18-2-302.01.
- 19. "Replicable" means, with respect to methods or procedures, sufficiently unambiguous that the same or equivalent results would be obtained by the application of the method or procedure by different users.
- 20. "Responsible official" means one of the following:
  - a. For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
    - i. The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
    - ii. The delegation of authority to such representatives is approved in advance by the permitting authority;
  - b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
  - c. For a municipality, state, federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this Article, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA); or
  - d. For affected sources:



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- i. The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Act or the regulations promulgated thereunder are concerned; and
  - ii. The designated representative for any other purposes under 40 CFR 70.
21. "Screening model" means air dispersion modeling performed with screening techniques in accordance with 40 CFR 51, Appendix W as of June 30, 2017 (and no future amendments or additions).
  22. "Small source" means a source with a potential to emit, without controls, less than the rate defined as permitting exemption thresholds in R18-2-101, but required to obtain a permit solely because it is subject to a standard under 40 CFR 63.
  23. "Startup" means the setting in operation of a source for any purpose.
  24. "Synthetic minor" means a source with a permit that contains voluntarily accepted emissions limitations, controls, or other requirements (for example, a cap on production rates or hours of operation, or limits on the type of fuel) under R18-2-306.01 to reduce the potential to emit to a level below the major source threshold.

**Historical Note**

Former Section R18-2-301 renumbered to R18-2-302, new Section R18-2-301 adopted effective September 26, 1990 (Supp. 90-3). Correction to table in subsection (A)(13) (Supp. 93-1). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

Amended effective August 1, 1995 (Supp. 95-3).

Amended by final rulemaking at 5 A.A.R. 4074, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 6 A.A.R. 343, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 7 A.A.R. 5670, effective January 1, 2002 (Supp. 01-4). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2). Amended by final rulemaking at 23 A.A.R. 333, effective March 21, 2017 (Supp. 17-1).

Amended by final rulemaking at 25 A.A.R. 3630, effective February 1, 2020 (Supp. 19-4).

**R18-2-302. Applicability; Registration; Classes of Permits**

- A. Except as otherwise provided in this Article, no person shall begin actual construction of, operate, or make a modification to any stationary source subject to regulation under this Article, without obtaining a registration, permit or permit revision from the Director.
- B. Class I and II permits and registrations shall be required as follows:
  1. A Class I permit shall be required for a person to begin actual construction of or operate any of the following:
    - a. Any major source,
    - b. Any solid waste incineration unit required to obtain a permit pursuant to Section 129(e) of the Act,
    - c. Any affected source, or
    - d. Any stationary source in a source category designated by the Administrator pursuant to 40 CFR 70.3 and adopted by the Director by rule.
  2. Unless a Class I permit is required, a Class II permit shall be required for:
    - a. A person to begin actual construction of or operate any stationary source that emits, or has the maximum capacity to emit with any elective limits, any regulated NSR pollutant in an amount greater than or equal to the significant level.

- b. A person to make a physical or operational change to a stationary source that would cause the source to emit, or have the maximum capacity to emit with any elective limits, any regulated NSR pollutant in an amount greater than or equal to the significant level.
  - c. A person to begin actual construction of or modify a stationary source that otherwise would be subject to registration but that the Director has determined requires a permit under R18-2-302.01(C)(4) or (D).
3. Unless a Class I or II permit is required, registration shall be required for:
    - a. A person to begin actual construction of or operate any stationary source that emits or has the maximum capacity to emit any regulated minor NSR pollutant in an amount greater than or equal to a permitting exemption threshold.
    - b. A person to begin actual construction of or operate any stationary source subject to a standard under section 111 of the Act, except that a stationary source is not required to register solely because it is subject to any of the following standards:
      - i. 40 CFR 60, Subpart AAA (Residential Wood Heaters).
      - ii. 40 CFR 60, Subpart IIII (Stationary Compression Ignition Internal Combustion Engines).
      - iii. 40 CFR 60, Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines).
      - iv. 40 CFR 60, Subpart QQQQ (Residential Hydronic Heaters and Forced-Air Furnaces).
    - c. A person to begin actual construction of or operate any stationary source, including an area source, subject to a standard under section 112 of the Act, except that a stationary source is not required to register solely because it is subject to any of the following standards:
      - i. 40 CFR 61.145.
      - ii. 40 CFR 63, Subpart ZZZZ (Reciprocating Internal Combustion Engines).
      - iii. 40 CFR 63, Subpart WWWW (Ethylene Oxide Sterilizers).
      - iv. 40 CFR 63, Subpart CCCCCC (Gasoline Distribution).
      - v. 40 CFR 63, Subpart HHHHHH (Paint Stripping and Miscellaneous Surface Coating Operations).
      - vi. 40 CFR 63, Subpart JJJJJJ (Industrial, Commercial, and Institutional Boilers Area Sources), published at 76 FR 15554 (March 21, 2011).
      - vii. A regulation or requirement under section 112(r) of the Act.
    - d. A physical or operational change to a source that would cause the source to emit or have the maximum capacity to emit any regulated minor NSR pollutant in an amount greater than or equal to the permitting exemption threshold.
  - C. Notwithstanding subsections (A) and (B), the following stationary sources do not require a permit or registration unless the source is a major source, or unless operation without a permit would result in a violation of the Act:
    1. A stationary source that consists solely of a single categorically exempt activity plus any combination of trivial activities.
    2. Agricultural equipment used in normal farm operations. "Agricultural equipment used in normal farm operations"

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does not include equipment classified as a source that requires a permit under Title V of the Act, or that is subject to a standard under 40 CFR 60, 61 or 63.

- D. No person may construct or reconstruct any major source of hazardous air pollutants, unless the Director determines that maximum achievable control technology emission limitation (MACT) for new sources under Section 112 of the Act will be met. If MACT has not been established by the Administrator, such determination shall be made on a case-by-case basis pursuant to 40 CFR 63.40 through 63.44, as incorporated by reference in R18-2-1101(B). For purposes of this subsection, constructing and reconstructing a major source shall have the meaning prescribed in 40 CFR 63.41.
- E. Elective limits or controls adopted under R18-2-302.01(F) shall not be considered in determining whether a source requires registration or a Class I permit but shall be considered in determining any of the following:
  1. Whether the registration is subject to the public participation requirements of R18-2-330, as provided in R18-2-302.01(B)(3).
  2. Whether review for possible interference with attainment or maintenance of ambient standards is required under R18-2-302.01(C).
  3. Whether the source requires a Class II permit, as provided in subsection (B)(2)(a) or (b).
- F. The fugitive emissions of a stationary source shall not be considered in determining whether the source requires a Class II permit under subsection (B)(2)(a) or (b) or a registration under subsection (B)(3)(a) or (d), unless the source belongs to a section 302(j) category. If a permit is required for a stationary source, the fugitive emissions of the source shall be subject to all of the requirements of this Article.
- G. Notwithstanding subsections (A) and (B) of this Section, a person may begin actual construction, but not operation, of a source requiring a Class I permit or Class I permit revision upon the Director's issuance of the proposed final permit or proposed final permit revision.

**Historical Note**

Amended effective August 7, 1975 (Supp. 75-1).  
 Amended as an emergency effective December 15, 1975 (Supp. 75-2). Amended effective May 10, 1976 (Supp. 76-3). Amended effective April 12, 1977 (Supp. 77-2).  
 Amended effective March 24, 1978 (Supp. 78-2). Former Section R9-3-301 repealed, new Section R9-3-301 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Amended effective July 9, 1980 (Supp. 80-4). Amended effective May 28, 1982 (Supp. 82-3). Amended subsections (B) and (C) effective September 22, 1983 (Supp. 83-5). Amended subsection (B), paragraph (3) effective September 28, 1984 (Supp. 84-5). Former Section R9-3-301 renumbered without change as Section R18-2-301 (Supp. 87-3). Former Section R18-2-302 renumbered to R18-2-302.01, new Section R18-2-302 renumbered from R18-2-301 and amended effective September 26, 1990 (Supp. 90-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended effective June 4, 1998 (Supp. 98-2). Amended by final rulemaking at 12 A.A.R. 1953, effective January 1, 2007 (Supp. 06-2). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2). Amended by final rulemaking at 23 A.A.R. 333, effective March 21, 2017 (Supp. 17-1).

**R18-2-302.01. Source Registration Requirements**

- A. Application. An application for registration shall be submitted on the form specified by the Director and shall include the following information:
  1. The name of the applicant.
  2. The physical location of the source, including the street address, city, county, zip code and latitude and longitude coordinates.
  3. The source's maximum capacity to emit with any elective limits each regulated minor NSR pollutant.
  4. Identification of any elective limits or controls adopted under subsection (F).
  5. In the case of a modification, each increase in the source's maximum capacity to emit with any elective limits that exceeds the applicable threshold in subsection (G)(1)(a).
  6. Identification of the method used to determine the maximum capacity to emit under R18-2-302(B)(3)(a), a change in the maximum capacity to emit under R18-2-302(B)(3)(d), or the maximum capacity to emit with any elective limits under subsection (G)(1)(a) of this Section.
  7. Process information for the source, including a list of emission units, design capacity, operations schedule, and identification of emissions control devices.
- B. Registration Processing Procedures.
  1. The Department shall complete a review of a registration application for administrative completeness within 30 calendar days, calculated in accordance with A.A.C. R18-1-503, after its receipt.
  2. The Department shall complete a substantive review and take final action on a registration application within 60 calendar days if no hearing is requested, and 90 calendar days if a hearing is requested, calculated in accordance with A.A.C. R18-1-504, after the application is administratively complete.
  3. Except as provided in subsection (B)(5), a registration for construction of a source shall be subject to the public notice and participation requirements of R18-2-330. The materials relevant to the registration decision made available to the public under R18-2-330(D) shall include any determination made or modeling conducted by the Director under subsection (C).
  4. The Department shall also send a copy of the notice required by subsection (B)(3) to the administrator through the appropriate regional office, and to all other state and local air pollution control agencies having jurisdiction in the region in which the source subject to the registration will be located. The notice shall also be sent to any other agency in the region having responsibility for implementing the procedures required under 40 CFR 51, Subpart I.
  5. A registration for construction of a source shall not be subject to subsection (B)(3) or (4), if the source's maximum capacity to emit with any elective limits each regulated minor NSR pollutant is less than the applicable permitting exemption threshold.
- C. Review for National Ambient Air Quality Standards Compliance; Requirement to Obtain a Permit.
  1. The Director shall review each application for registration of a source with the maximum capacity to emit with any elective limits any regulated minor NSR pollutant in an amount equal to or greater than the permitting exemption threshold. The purpose of the review shall be to determine whether the new or modified source may interfere with attainment or maintenance of a national ambient air quality standard in any area. In making the determina-

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tion required by this subsection, the Director shall take into account the following factors:

- a. The source's emission rates, including fugitive emission rates, taking into account any elective limits or controls adopted under subsection (F).
  - b. The location of emission units within the facility and their proximity to the ambient air.
  - c. The terrain in which the source is or will be located.
  - d. The source type.
  - e. The location and emissions of nearby sources.
  - f. Background concentrations of regulated minor NSR pollutants.
2. The Director may undertake the review specified in subsection (C)(1) for a source with the maximum capacity to emit with any elective limits regulated minor NSR pollutants in an amount less than the permitting exemption threshold.
  3. If the Director determines under subsection (C)(1) or (C)(2) that a source's emissions may interfere with attainment or maintenance of a national ambient air quality standard, the Director shall perform a screening model run for each regulated minor NSR pollutant for which that determination has been made.
  4. If the Director determines, based on performance of the screening model pursuant to subsection (C)(3), that a source's emissions, taking into account any elective limits or controls adopted under subsection (F), will interfere with attainment or maintenance of a national ambient air quality standard, the Director shall deny the application for registration. Notwithstanding R18-2-302(B)(3), the owner or operator of the source shall be required to obtain a permit under R18-2-302 and shall comply with R18-2-334 before beginning actual construction of the source or modification.
- D. Requirement to Obtain a Permit.** Notwithstanding R18-2-302(B)(3)(b) and (c), the Director shall deny an application for registration for a source subject to a standard under section 111 or 112 of the Act and require the owner or operator to obtain a permit under R18-2-302, if the Director determines based on the following factors that the requirement to obtain a permit is warranted:
1. The size and complexity of the source.
  2. The complexity of the section 111 or 112 standard applicable to the source.
  3. The public health or environmental risks posed by the pollutants subject to regulation under the section 111 or 112 standard.
- E. Registration Contents.** A registration shall contain the following elements:
1. Enforceable emission limitations and standards, including operational requirements and limitations, that ensure compliance with all applicable SIP requirements at the time of issuance and any testing, monitoring, recordkeeping and reporting obligations imposed by the applicable requirement or by R18-2-312.
  2. Any elective limits or controls and associated operating, maintenance, monitoring and recordkeeping requirements adopted pursuant to subsection (F).
  3. A requirement to retain any records required by the registration at the source for at least three years in a form that is suitable for expeditious inspection and review.
  4. For any source that has adopted elective limits or controls under subsection (F), a requirement to submit an annual compliance report on the form provided by the Director in the registration.
- F. Elective Limits or Controls.** The owner or operator of a source requiring registration may elect to include any of the following emission limitations in the registration, provided the Department approves the limitation and the registration also includes the operating, maintenance, monitoring, and recordkeeping requirements specified below for the limitation.
1. A limitation on the hours of operation of any process or combination of processes.
    - a. The registration shall express the limitation in terms of hours per rolling 12-month period and shall specify the process or combination of processes subject to the limitation.
    - b. The owner or operator shall maintain a log or readily available business records showing actual operating hours through the preceding operating day for the process or processes subject to the limitation.
  2. A limitation on the production rate for any process or combination of processes.
    - a. The registration shall express the limitation in terms of an appropriate unit of mass or production per rolling 12-month period and shall specify the process or combination of processes subject to the limitation.
    - b. The owner or operator shall maintain a log or readily available business records showing the actual production rate through the preceding operating day for the process or processes subject to the limitation. The owner or operator shall update the log or business records at least once per operating day.
  3. A requirement to operate a fabric filter for the control of particulate matter emissions.
    - a. The owner or operator shall operate the fabric filter at all times that the emission unit controlled by the fabric filter is operated.
    - b. The owner or operator shall inspect the fabric filter at least once per month for tears and leaks and shall promptly repair any tears or leaks identified. If the fabric filter is subject to a limit on the opacity of emissions, the inspection shall include an opacity observation in accordance with the applicable reference method.
    - c. The owner or operator shall operate and maintain the fabric filter in substantial compliance with the manufacturer's operation and maintenance recommendations.
    - d. The owner or operator shall keep a log or readily available business records of the inspections required by subsection (F)(3)(b) and the maintenance activities required by subsection (F)(3)(c). The owner or operator shall update the log or business records within 24 hours after an inspection or maintenance activity is performed.
    - e. The registration shall identify the fabric filters and processes subject to this requirement.
  4. Limitations on the total amount of VOC or hazardous air pollutants in solvents, coatings or other process materials used at the registered source.
    - a. The registration shall identify the pollutants and processes covered by the limitations and shall express the limitations in terms of pounds per rolling 12-month period.
    - b. The owner or operator shall maintain a log or readily available business records showing the concentration of each covered VOC or hazardous air pollutant in each VOC or hazardous air pollutant containing material used at the source. The owner or operator shall update the records whenever the concentration

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in any material changes or a new material is used. The presence at the source of a current material safety data sheet for a material used without dilution or other alteration satisfies this requirement.

- c. The owner or operator shall maintain a spreadsheet or database to record the amount of each material containing a covered VOC or hazardous air pollutant used. The spreadsheet or database shall calculate the total pounds of the VOC or hazardous air pollutant used by multiplying the concentration of VOC or hazardous air pollutant in a material by the amount of material used and shall employ appropriate units of measurement and conversion factors. The owner or operator shall update the spreadsheet or database at least once per operating day.

**G. Revised Registrations.**

1. Unless a Class II permit is required under R18-2-302(B)(2)(b), the owner or operator of a registered source shall file a revised registration on the occurrence of any of the following:
  - a. A modification to the source that would result in an increase in the source's maximum capacity to emit with any elective limits exceeding any of the following amounts:
    - i. 2.5 tons per year for NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, VOC or CO.
    - ii. 0.3 tons per year for lead.
  - b. Relocation of a portable source.
  - c. The transfer of the source to a new owner.
2. The requirements of subsection (B) shall not apply to a revised registration. The owner or operator may begin actual construction and operation of the modified, relocated or transferred source on filing the revised registration.

**H. Registration Term.**

1. A source's registration shall expire five years after the date of issuance of the last registration for the source or any modification to the source.
2. A source shall submit an application for renewal of a registration not later than six months before expiration of the registration's term.
3. If a source submits a timely and complete application for renewal of a registration, the source's authorization to operate under its existing registration shall continue until the Director takes final action on the application.
4. The Director may terminate a registration under R18-2-321(C). If the Director terminates a registration under R18-2-321(C)(3), the owner or operator shall be required to apply for a permit for the source under R18-2-302.

**I. Issuance of a registration shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state, or federal law.**

**Historical Note**

Amended effective August 7, 1975 (Supp. 75-1); Former Section R9-3-302 repealed, new Section R9-3-302 adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-302 repealed, new Section R9-3-302 adopted effective October 2, 1979 (Supp. 79-5). Former Section R9-3-302 repealed, new Section R9-3-302 adopted effective May 28, 1982 (Supp. 82-3). Former Section R9-3-302 renumbered without change as Section R18-2-302 (Supp. 87-3). Section R18-2-302.01 renumbered from Section R18-2-302 and amended effective September 26, 1990 (Supp. 90-3). Section repealed effective November 15, 1993 (Supp. 93-4). New Section made by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2). Amended by final rulemaking at 23

A.A.R. 333, effective March 21, 2017 (Supp. 17-1).  
Amended by final rulemaking at 25 A.A.R. 3630, effective February 1, 2020 (Supp. 19-4).

**R18-2-303. Transition from Installation and Operating Permit Program to Unitary Permit Program; Registration Transition; Minor NSR Transition**

- A. An installation or operating permit issued before September 1, 1993, and the authority to operate, as provided in Laws 1992, Ch. 299, § 65, continues in effect until the installation or operating permit is terminated, or until the Director issues or denies a Class I or Class II permit to the source, whichever is earlier.
- B. The terms and conditions of installation permits issued before September 1, 1993, or in permits or permit revisions issued under R18-2-302 and authorizing the construction or modification of a stationary source, remain federal applicable requirements unless modified or revoked by the Director.
- C. All sources in existence on September 1, 2012, requiring a registration shall provide notice to the Director by no later than December 1, 2012, on a form provided by the Director.
- D. All sources requiring a registration that are in existence on the date R18-2-302.01 becomes effective under R18-2-302.01(I) may submit applications for registration at any time after R18-2-302.01 is effective and shall submit an application no later than 180 days after receipt of written notice from the Director that an application is required. Applications to register construction or modification of a source must be submitted, and the registration must be issued, before the applicant begins actual construction of the source or modification.
- E. Sources in existence on the date R18-2-334 becomes effective under R18-2-334(I) are not subject to R18-2-334, unless the source undertakes a minor NSR modification. Notwithstanding any other provision of this Chapter, R18-2-334 shall apply only to applications for permits or permit revisions filed after the date R18-2-334 takes effect under R18-2-334(I).

**Historical Note**

Amended effective August 7, 1975 (Supp. 75-1).  
Amended effective August 6, 1976 (Supp. 76-4). Former  
Section R9-3-303 repealed, new Section R9-3-303  
adopted effective May 14, 1979 (Supp. 79-1). Former  
Section R9-3-303 repealed, new Section R9-3-303  
adopted effective October 2, 1979 (Supp. 79-5).  
Amended effective May 28, 1982 (Supp. 82-3). Amended  
subsection (D), paragraph (1) effective September 28,  
1984 (Supp. 84-5). Former Section R9-3-303 renumbered  
without change as Section R18-2-303 (Supp. 87-3).  
Amended effective September 26, 1990 (Supp. 90-3).  
Section repealed, new Section adopted effective Novem-  
ber 15, 1993 (Supp. 93-4). Amended by final rulemaking  
at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).



**R18-2-304. Permit Application Processing Procedures**

- A.** Unless otherwise noted, this Section applies to each source requiring a Class I or II permit or permit revision.
- B.** Standard Application Form and Required Information. To apply for a permit required by this Chapter, applicants shall complete the applicable standard application form provided by the Director and supply all information required by the form's filing instructions. The application forms and filing instructions for Class I Permits shall at a minimum require submission of the following elements:
  - 1. Identifying information, including company name and address (or plant name and address if different from the company name), owner's name and agent, and telephone number and names of plant site manager/contact.
  - 2. A description of the source's processes and products (by Standard Industrial Classification (SIC) Code), including

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- those associated with any proposed alternative operating scenarios (AOS) identified by the source.
3. The following emission-related information:
    - a. All emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. A permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, except as otherwise provided in R18-2-304(F)(8). The Director shall require additional information related to the emissions of air pollutants sufficient to verify which requirements are applicable to the source, and other information necessary to collect any permit fees owed under R18-2-326.
    - b. Identification and description of all points of emissions described in subsection (B)(3)(a) of this Section in sufficient detail to establish the basis for fees and applicability of requirements.
    - c. Emissions rate in tons per year (tpy) and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method. For emissions units subject to an annual emissions cap, tpy can be reported as part of the aggregate emissions associated with the cap, except where more specific information is needed, including where necessary to determine and/or assure compliance with an applicable requirement.
    - d. The following information to the extent it is needed to determine or regulate emissions: fuels, fuel use, raw materials, production rates, and operating schedules.
    - e. Identification and description of air pollution control equipment and compliance monitoring devices or activities.
    - f. Limitations on source operation affecting emissions or any work practice standards, where applicable, for all regulated pollutants at the Class I source.
    - g. Other information required by any applicable requirement (including information related to stack height limitations in R18-2-332).
    - h. Calculations on which the information in subsections (B)(3)(a) through (g) of this Section is based.
  4. The following air pollution control requirements:
    - a. Citation and description of all applicable requirements, and
    - b. Description of or reference to any applicable test method for determining compliance with each applicable requirement.
  5. Other specific information that may be necessary to implement and enforce other applicable requirements or to determine the applicability of such requirements.
  6. An explanation of any proposed exemptions from otherwise applicable requirements.
  7. Additional information as determined to be necessary by the Director to define proposed AOS identified by the source pursuant to R18-2-306(A)(11) or to define permit terms and conditions implementing any AOS under R18-2-306(A)(11) or implementing R18-2-317, R18-2-306(A)(12), R18-2-306(A)(14), or R18-2-306.02. The permit application shall include documentation demonstrating that the source has obtained all authorizations required under the applicable requirements relevant to any proposed AOS, or a certification that the source has submitted all relevant materials to the Director for obtaining such authorizations.
  8. A compliance plan for all Class I sources that contains all of the following:
    - a. A description of the compliance status of the source with respect to all applicable requirements.
    - b. A description as follows:
      - i. For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements.
      - ii. For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis.
      - iii. For requirements for which the source is not in compliance at the time of permit issuance, a narrative description of how the source will achieve compliance with such requirements.
      - iv. For applicable requirements associated with a proposed AOS, a statement that the source will meet such requirements upon implementation of the AOS. If a proposed AOS would implicate an applicable requirement that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis.
    - c. A compliance schedule as follows:
      - i. For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements.
      - ii. For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis. A statement that the source will meet, in a timely manner, applicable requirements that become effective during the permit term shall satisfy this provision, unless a more detailed schedule is expressly required by the applicable requirement.
      - iii. A schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance. Such a schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the source will be in noncompliance at the time of permit issuance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction non-compliance with, the applicable requirements on which it is based.
      - iv. For applicable requirements associated with a proposed AOS, a statement that the source will meet such requirements upon implementation of the AOS. If a proposed AOS would implicate an applicable requirement that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis. A statement that the source will meet, in a timely manner, applicable requirements that become effective during the permit term will satisfy this provision, unless a more detailed schedule is expressly required by the applicable requirement.

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- d. A schedule for submission of certified progress reports no less frequently than every 6 months for sources required to have a schedule of compliance to remedy a violation.
  - e. The compliance plan content requirements specified in subsection (B)(8) shall apply and be included in the acid rain portion of a compliance plan for an affected source, except as specifically superseded by regulations promulgated under title IV of the Act with regard to the schedule and methods the source will use to achieve compliance with the acid rain emissions limitations.
9. Requirements for compliance certification, including the following:
- a. A certification of compliance with all applicable requirements by a responsible official, which shall include:
    - i. Identification of the applicable requirement that is the basis of the certification;
    - ii. The method used for determining the compliance status of the source, including a description of monitoring, recordkeeping, and reporting requirements and test methods;
    - iii. The compliance status; and
    - iv. Such other facts as the Director may require;
  - b. A schedule for submission of compliance certifications during the permit term, to be submitted no less frequently than annually, or more frequently if specified by the underlying applicable requirement or by the permitting authority;
  - c. A statement indicating the source's compliance status with any applicable enhanced monitoring and compliance certification requirements of the Act; and
  - d. A certification of truth, accuracy, and completeness pursuant to R18-2-304(I).
10. The use of nationally-standardized forms for acid rain portions of permit applications and compliance plans, as required by regulations promulgated under title IV of the act.
- C. The Director, either upon the Director's own initiative or on the request of a permit applicant, may waive a requirement that specific information or data be submitted in the application for a Class II permit for a particular source or category of sources if the Director determines that the information or data would be unnecessary to determine all of the following:
- 1. The applicable requirements to which the source may be subject;
  - 2. That the source is so designed, controlled, or equipped with such air pollution control equipment that it may be expected to operate without emitting or without causing to be emitted air contaminants in violation of the provisions of A.R.S. Title 49, Chapter 3, Article 2 and this Chapter;
  - 3. The fees to which the source may be subject; and
  - 4. A proposed emission limitation, control, or other requirement that meets the requirements of R18-2-306.01 or R18-2-306.02.
- D. A timely application is:
- 1. For a source, that becomes subject to the permit program as a result of a change in regulation and not as a result of construction or a physical or operational change, one that is submitted within 12 months after the source becomes subject to the permit program.
  - 2. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration.
  - 3. Any source under R18-2-326(A)(3) which becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act shall, within 12 months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.
- E. If an applicable implementation plan allows the determination of an alternative emission limit, a source may, in its application, propose an emission limit that is equivalent to the emission limit otherwise applicable to the source under the applicable implementation plan. The source shall also demonstrate that the equivalent limit is quantifiable, accountable, enforceable, and subject to replicable compliance determination procedures.
- F. A complete application shall comply with all of the following:
- 1. To be complete, an application shall provide all information required by subsection (B) (standard application form section). An application for permit revision only need supply information related to the proposed change, unless the source's proposed permit revision will change the permit from a Class II permit to a Class I permit. A responsible official shall certify the submitted information consistent with subsection (I) (Certification of Truth, Accuracy, and Completeness).
  - 2. An application for a new permit or permit revision shall contain an assessment of the applicability of the requirements of Article 4 of this Chapter. If the applicant determines that the proposed new source is a major source as defined in R18-2-401, or the proposed permit revision constitutes a major modification as defined in R18-2-101, then the application shall comply with all applicable requirements of Article 4.
  - 3. An application for a new permit or permit revision shall contain an assessment of the applicability of Minor New Source Review requirements in R18-2-334. If the applicant determines that the proposed new source is subject to R18-2-334, or the proposed permit revision constitutes a Minor NSR Modification, then the application shall comply with all applicable requirements of R18-2-334.
  - 4. Except for proposed new major sources or major modifications subject to the requirements of Article 4 of this Chapter, an application for a new permit, a permit revision, or a permit renewal shall be deemed to be complete unless, within 60 days of receipt of the application, the Director notifies the applicant by certified mail that the application is not complete.
  - 5. If a source wishes to voluntarily enter into an emissions limitation, control, or other requirement pursuant to R18-2-306.01, the source shall describe that emissions limitation, control, or other requirement in its application, along with proposed associated monitoring, recordkeeping, and reporting requirements necessary to demonstrate that the emissions limitation, control, or other requirement is permanent, quantifiable, and otherwise enforceable as a practical matter.
  - 6. If, while processing an application that has been determined or deemed to be complete, the Director determines that additional information is necessary to evaluate or take final action on that application, the Director may request such information in writing and set a reasonable deadline for a response. Except for minor permit revisions as set forth in R18-2-319, a source's ability to continue operating without a permit, as set forth in

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subsection (K), shall be in effect from the date the application is determined to be complete until the final permit is issued, provided that the applicant submits any requested additional information by the deadline specified by the Director.

7. The completeness determination shall not apply to revisions processed through the minor permit revision process.
  8. Activities which are insignificant pursuant to the definition of insignificant activities in R18-2-101 shall be listed in the application. Except as necessary to complete the assessment required by subsection (F)(2) or (3), the application need not provide emissions data regarding insignificant activities. If the Director determines that an activity listed as insignificant does not meet the requirements of the definition of insignificant activities in R18-2-101 or that emissions data for the activity is required to complete the assessment required by subsection (F)(2) or (3), the Director shall notify the applicant in writing and specify additional information required.
  9. If a permit applicant requests terms and conditions allowing for the trading of emission increases and decreases in the permitted facility solely for the purpose of complying with a federally enforceable emission cap that is established in the permit independent of otherwise applicable requirements, the permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable.
  10. The Director is not in disagreement with a notice of confidentiality submitted with the application pursuant to A.R.S. § 49-432.
- G.** A source applying for a Class I permit that has submitted information with an application under a claim of confidentiality pursuant to A.R.S. § 49-432 and R18-2-305 shall submit a copy of such information directly to the Administrator.
- H.** Duty to Supplement or Correct Application. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.
- I.** Certification of Truth, Accuracy, and Completeness. Any application form, report, or compliance certification submitted pursuant to this Chapter shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this Article shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- J.** Action on Application.
1. The Director shall issue or deny each permit according to the provisions of A.R.S. § 49-427. The Director may issue a permit with a compliance schedule for a source that is not in compliance with all applicable requirements at the time of permit issuance.
  2. In addition, a permit may be issued, revised, or renewed only if all of the following conditions have been met:
    - a. The application received by the Director for a permit, permit revision, or permit renewal shall be complete according to subsection (F).
    - b. Except for revisions qualifying as administrative or minor under R18-2-318 and R18-2-319, all of the requirements for public notice and participation under R18-2-330 shall have been met.
  - c. For Class I permits, the Director shall have complied with the requirements of R18-2-307 for notifying and responding to affected states, and if applicable, other notification requirements of R18-2-402(D)(2) and R18-2-410(C)(2).
  - d. For Class I and II permits, the conditions of the permit shall require compliance with all applicable requirements.
  - e. For permits for which an application is required to be submitted to the Administrator under R18-2-307(A), and to which the Administrator has properly objected to its issuance in writing within 45 days of receipt of the proposed final permit and all necessary supporting information from the Department, the Director has revised and submitted a proposed final permit in response to the objection and EPA has not objected to this proposed final permit within 45 days of receipt.
  - f. For permits to which the Administrator has objected to issuance pursuant to a petition filed under 40 CFR 70.8(d), the Administrator's objection has been resolved.
  - g. For a Class II permit that contains voluntary emission limitations, controls, or other requirements established pursuant to R18-2-306.01, the Director shall have complied with the requirement of R18-2-306.01(C) to provide the Administrator with a copy of the proposed permit.
3. If the Director denies a permit under this Section, a notice shall be served on the applicant by certified mail, return receipt requested. The notice shall include a statement detailing the grounds for the denial and a statement that the permit applicant is entitled to a hearing.
4. The Director shall provide a statement that sets forth the legal and factual basis for the proposed permit conditions including references to the applicable statutory or regulatory provisions. The Director shall send this statement to any person who requests it and, for Class I permits, to the Administrator.
5. Priority shall be given by the Director to taking action on applications for construction or modification submitted pursuant to Title I, Parts C (Prevention of Significant Deterioration) and D (New Source Review) of the Act.
- K.** Requirement for a Permit. Except as noted under the provisions in R18-2-317 and R18-2-319, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued pursuant to this Chapter. However, if a source under R18-2-326(A)(3) submits a timely and complete application for continued operation under a permit revision or renewal, the source's failure to have a permit is not a violation of this Article until the Director takes final action on the application. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Director, any additional information identified as being needed to process the application. This subsection does not affect a source's obligation to obtain a permit revision before making a modification to the source.

**Historical Note**

Amended effective August 7, 1975 (Supp. 75-1). Former Section R9-3-304 repealed, new Section R9-3-304 formerly Section R9-3-305 renumbered and amended effective August 6, 1976 (Supp. 76-4). Former Section R9-3-

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304 repealed, new Section R9-3-304 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Former Section R9-3-304 repealed, new Section R9-3-304 adopted effective May 28, 1982 (Supp. 82-3). Former Section R9-3-304 renumbered without change as Section R18-2-304 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended effective October 7, 1994 (Supp. 94-4). Amended effective August 1, 1995 (Supp. 95-3). The reference to R18-2-101(54) in subsection (E)(8) corrected to reference R18-2-101(57) (Supp. 99-3). Amended by final rulemaking at 6 A.A.R. 343, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 12 A.A.R. 1953, effective January 1, 2007 (Supp. 06-2). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2). Amended by final rulemaking at 23 A.A.R. 333, effective March 21, 2017 (Supp. 17-1). Amended by final rulemaking at 25 A.A.R. 3630, February 1, 2020 (Supp. 19-4).

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**R18-2-306. Permit Contents**

- A. Each permit issued by the Director shall include the following elements:
1. The date of issuance and the permit term.
  2. Enforceable emission limitations and standards, including operational requirements and limitations that ensure compliance with all applicable requirements at the time of issuance and operational requirements and limitations that have been voluntarily accepted under R18-2-306.01.
    - a. The permit shall specify and reference the origin of and authority for each term or condition and identify any difference in form as compared to the applicable requirement upon which the term or condition is based.
    - b. The permit shall state that, if an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
    - c. Any permit containing an equivalency demonstration for an alternative emission limit submitted under R18-2-304(E) shall contain provisions to ensure that any resulting emissions limit has been demonstrated to be quantifiable, accountable, enforceable, and based on replicable procedures.
    - d. The permit shall specify applicable requirements for fugitive emission limitations, regardless of whether the source category in question is included in the list of sources contained in the definition of major source in R18-2-101.
  3. Each permit shall contain the following requirements with respect to monitoring:
    - a. All monitoring and analysis procedures or test methods required under applicable monitoring and testing requirements, including:
      - i. Monitoring and analysis procedures or test methods under 40 CFR 64;
      - ii. Other procedures and methods promulgated under sections 114(a)(3) or 504(b) of the Act; and
      - iii. Monitoring and analysis procedures or test methods required under R18-2-306.01.
    - b. 40 CFR 64 as adopted July 1, 1998, is incorporated by reference and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments. If more than one monitoring or testing requirement applies, the permit may specify a streamlined set of monitoring or testing provisions if the specified monitoring or testing is adequate to assure compliance at least to the same extent as the monitoring or testing applicable requirements not included in the permit as a result of such streamlining;
    - c. If the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit as reported under subsection (A)(4). The monitoring requirements shall ensure use of terms, test methods, units, averaging



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- periods, and other statistical conventions consistent with the applicable requirement, and as otherwise required under R18-2-306.01. Recordkeeping provisions may be sufficient to meet the requirements of this subsection; and
- d. As necessary, requirements concerning the use, maintenance, and, if appropriate, installation of monitoring equipment or methods.
4. The permit shall incorporate all applicable recordkeeping requirements including recordkeeping requirements established under R18-2-306.01, for the following:
    - a. Records of required monitoring information that include the following:
      - i. The date, place as defined in the permit, and time of sampling or measurement;
      - ii. The date any analyses was performed;
      - iii. The name of the company or entity that performed the analysis;
      - iv. A description of the analytical technique or method used;
      - v. The results of any analysis; and
      - vi. The operating conditions existing at the time of sampling or measurement;
    - b. Retention of records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit.
  5. The permit shall incorporate all applicable reporting requirements including reporting requirements established under R18-2-306.01 and require the following:
    - a. Submittal of reports of any required monitoring. All instances of deviations from permit requirements shall be clearly identified in the reports. All required reports shall be certified by a responsible official consistent with R18-2-304(I) and R18-2-309(A)(5) and shall be submitted with the following frequency:
      - i. For a Class I permit, at least once every six months;
      - ii. For a Class II permit, at least once per year.
    - b. Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of the deviations, and any corrective actions or preventive measures taken. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable requirement does not address the timeframe for reporting deviations, the permittee shall submit reports of deviations in compliance with the following schedule:
      - i. Notice that complies with timeframe in R18-2-310.01(A) is prompt for deviations that constitute excess emissions;
      - ii. Except as otherwise provided in the permit, notice that complies with subsection (A)(5)(a) is prompt for all other types of deviation.
  6. A permit condition prohibiting emissions exceeding any allowances the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder.
    - a. A permit revision is not required for increases in emissions that are authorized by allowances acquired under the acid rain program, if the increases do not require a permit revision under any other applicable requirement.
  - b. A limit shall not be placed on the number of allowances held by the source. The source shall not, however, use allowances as a defense to noncompliance with any other applicable requirement.
  - c. Any allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.
  - d. Any permit issued under the requirements of this Chapter and Title V of the Act to a unit subject to the provisions of Title IV of the Act shall include conditions prohibiting all of the following:
    - i. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owner or operator of the unit or the designated representative of the owner or operator,
    - ii. Exceedances of applicable emission rates,
    - iii. Use of any allowance before the year for which it is allocated, and
    - iv. Contravention of any other provision of the permit.
  7. A severability clause to ensure the continued validity of the various permit requirements in the event of a challenge to any portion of the permit.
  8. Provisions stating the following:
    - a. The permittee shall comply with all conditions of the permit including all applicable requirements of Arizona air quality statutes A.R.S. Title 49, Chapter 3, and the air quality rules, 18 A.A.C. 2. Any permit noncompliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in a permit is a violation of the Act.
    - b. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
    - c. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
    - d. The permit does not convey any property rights of any sort, or any exclusive privilege to the permit holder.
    - e. The permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon the Director's request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee shall furnish a copy of the records directly to the Administrator along with a claim of confidentiality.
    - f. For any major source operating in a nonattainment area for all pollutants for which the source is classified as a major source, the source shall comply with reasonably available control technology.

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9. A provision to ensure that the source pays fees to the Director under A.R.S. § 49-426(E), R18-2-326, and R18-2-511.
  10. A provision stating that a permit revision shall not be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes provided for in the permit.
  11. Terms and conditions for reasonably anticipated operating scenarios identified by the source in its application as approved by the Director. The terms and conditions shall:
    - a. Require the source, contemporaneously with making a change from one operating scenario to another, to record in a log at the permitted facility a record of the scenario under which it is operating;
    - b. Extend the permit shield described in R18-2-325 to all terms and conditions under each such operating scenario; and
    - c. Ensure that the terms and conditions of each such alternative scenario meet all applicable requirements and the requirements of this Chapter.
  12. Terms and conditions, if the permit applicant requests them, and as approved by the Director, for the trading of emissions increases and decreases in the permitted facility, to the extent that the applicable requirements provide for trading the increases and decreases without a case-by-case approval of each emissions trade. The terms and conditions:
    - a. Shall include all terms required under subsections (A) and (C) to determine compliance;
    - b. Shall not extend the permit shield in subsection (D) to all terms and conditions that allow the increases and decreases in emissions;
    - c. Shall not include trading that involves emission units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades; and
    - d. Shall meet all applicable requirements and requirements of this Chapter.
  13. Terms and conditions, if the permit applicant requests them and they are approved by the Director, setting forth intermittent operating scenarios including potential periods of downtime. If the terms and conditions are included, the state's emissions inventory shall not reflect the zero emissions associated with the periods of downtime.
  14. Upon request of a permit applicant, the Director shall issue a permit that contains terms and conditions allowing for the trading of emission increases and decreases in the permitted facility solely for the purpose of complying with a federally enforceable emission cap established in the permit independent of otherwise applicable requirements. The permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Director shall not include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall also require compliance with all applicable requirements. Changes made under this subsection (shall) not include modifications under any provision of Title I of the Act and shall not exceed emissions allowable under the permit. The terms and conditions shall provide, for Class I sources, for notice that conforms to R18-2-317(D) and (E), and for Class II sources, for logging that conforms to R18-2-317.02(B)(5). In addition, the notices for Class I and Class II sources shall describe how the increases and decreases in emissions will comply with the terms and conditions of the permit.
  15. Other terms and conditions as are required by the Act, A.R.S. Title 49, Chapter 3, Articles 1 and 2, and the rules adopted in 18 A.A.C. 2.
- B. Federally-enforceable Requirements.**
1. The following permit conditions shall be enforceable by the Administrator and citizens under the Act:
    - a. Except as provided in subsection (B)(2), all terms and conditions in a Class I permit, including any provision designed to limit a source's potential to emit;
    - b. Terms or conditions in a Class II permit setting forth federal applicable requirements; and
    - c. Terms and conditions in any permit entered into voluntarily under R18-2-306.01, as follows:
      - i. Emissions limitations, controls, or other requirements; and
      - ii. Monitoring, recordkeeping, and reporting requirements associated with the emissions limitations, controls, or other requirements in subsection (B)(1)(c)(i).
  2. Notwithstanding subsection (B)(1)(a), the Director shall specifically designate as not being federally enforceable under the Act any terms and conditions included in a Class I permit that are not required under the Act or under any of its applicable requirements.
- C. Each permit shall contain a compliance plan as specified in R18-2-309.**
- D. Each permit shall include the applicable permit shield provisions under R18-2-325.**
- E. Emergency provision.**
1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that requires immediate corrective action to restore normal operation and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
  2. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of subsection (E)(3) are met.
  3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
    - a. An emergency occurred and the permittee can identify the cause or causes of the emergency;
    - b. At the time of the emergency the permitted facility was being properly operated;
    - c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
    - d. The permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the

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- emergency, any steps taken to mitigate emissions, and corrective action taken.
4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
  5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
- F.** A Class I permit issued to a major source shall require that revisions be made under R18-2-321 to incorporate additional applicable requirements adopted by the Administrator under the Act that become applicable to a source with a permit with a remaining permit term of three or more years. A revision shall not be required if the effective date of the applicable requirement is after the expiration of the permit. The revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of the standards and regulations. Any permit revision required under this subsection (shall) comply with R18-2-322 for permit renewal and shall reset the five-year permit term.
2. All voluntarily accepted emissions limitations, controls, or other requirements will be permanent, quantifiable, and otherwise enforceable as a practical matter.
- C.** At the same time as notice of proposed issuance is first published pursuant to A.R.S. § 49-426(D), the Director shall send a copy of any Class II permit proposed to be issued pursuant to this Section to the Administrator for review during the comment period described in the notice pursuant to R18-2-330(C)(3).
- D.** The Director shall send a copy of each final permit issued pursuant to this Section to the Administrator.

**Historical Note**

Adopted effective August 1, 1995 (Supp. 95-3).  
 Amended by final rulemaking at 12 A.A.R. 1953, effective January 1, 2007 (Supp. 06-2). Amended by final rulemaking at 23 A.A.R. 333, effective March 21, 2017 (Supp. 17-1).

**Historical Note**

Adopted effective August 7, 1975 (Supp. 75-1). Former Section R9-3-307 renumbered as Section R9-3-306 effective August 6, 1976. Reference changed to conform (Supp. 76-4). Former Section R9-3-306 repealed, new Section R9-3-306 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Amended effective July 9, 1980 (Supp. 80-4). Amended subsection (A) effective May 28, 1982 (Supp. 82-3). Amended subsection (A) effective September 28, 1984 (Supp. 84-5). Former Section R9-3-306 renumbered without change as R18-2-306 (Supp. 87-3). Amended subsection (I) effective December 1, 1988 (Supp. 88-4). Amended effective September 26, 1990 (Supp. 90-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended effective August 1, 1995 (Supp. 95-3). Amended effective June 4, 1998 (Supp. 98-2). Amended by final rulemaking at 5 A.A.R. 4074, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 6 A.A.R. 343, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 23 A.A.R. 333, effective March 21, 2017 (Supp. 17-1).

**R18-2-306.01. Permits Containing Voluntarily Accepted Emission Limitations and Standards**

- A.** A source may voluntarily propose in its application, and accept in its permit, emissions limitations, controls, or other requirements that are permanent, quantifiable, and otherwise enforceable as a practical matter in order to avoid classification as a source that requires a Class I permit or to avoid one or more other applicable requirements. For the purposes of this Section, "enforceable as a practical matter" means that specific means to assess compliance with an emissions limitation, control, or other requirement are provided for in the permit in a manner that allows compliance to be readily determined by an inspection of records and reports.
- B.** In order for a source to obtain a permit containing voluntarily accepted emissions limitations, controls, or other requirements, the source shall demonstrate all of the following in its permit application:
1. The emissions limitations, controls, or other requirements to be imposed for the purpose of avoiding an applicable requirement are at least as stringent as the emissions limitations, controls, or other requirements that would otherwise be applicable to that source, including those that originate in an applicable implementation plan; and the

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- A. Except as provided in R18-2-304(F) and as waived by the Administrator, for each Class I permit a copy of each of the following shall be provided to the Administrator as follows:
1. The applicant shall provide a complete copy of the application including any attachments, compliance plans, and

**R18-2-310.01. Reporting Requirements**

- A.** The owner or operator of any source shall report to the Director any emissions in excess of the limits established by this Chapter or the applicable permit. The report shall be in 2 parts as specified below:
1. Notification by telephone or facsimile within 24 hours of the time the owner or operator first learned of the occurrence of excess emissions that includes all available information from subsection (B).
  2. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under subsection (1).
- B.** The excess emissions report shall contain the following information:
1. The identity of each stack or other emission point where the excess emissions occurred;
  2. The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
  3. The time and duration or expected duration of the excess emissions;
  4. The identity of the equipment from which the excess emissions emanated;
  5. The nature and cause of the emissions;
  6. The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunctions;
  7. The steps that were or are being taken to limit the excess emissions; and
  8. If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the permit procedures.
- C.** In the case of continuous or recurring excess emissions, the notification requirements of this Section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsections (A) and (B).



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rence of excess emissions that includes all available information from subsection (B).

2. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under subsection (A)(1).

**B.** The excess emissions report shall contain the following information:

1. The identity of each stack or other emission point where the excess emissions occurred;
2. The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
3. The time and duration or expected duration of the excess emissions;
4. The identity of the equipment from which the excess emissions emanated;
5. The nature and cause of the emissions;
6. The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunctions;
7. The steps that were or are being taken to limit the excess emissions; and
8. If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the permit procedures.

- C.** In the case of continuous or recurring excess emissions, the notification requirements of this Section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsections (A) and (B).

**Historical Note**

New Section adopted by final rulemaking at 7 A.A.R. 1164, effective February 15, 2001 (Supp. 01-1).  
Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

**R18-2-311. Test Methods and Procedures**

- A.** Except as otherwise specified in this Chapter, the applicable procedures and testing methods contained in the Arizona Testing Manual; 40 CFR 52, Appendices D and E; 40 CFR 60, Appendices A through F; and 40 CFR 61, Appendices B and C shall be used to determine compliance with the requirements established in this Chapter or contained in permits issued pursuant to this Chapter.
- B.** Except as otherwise provided in this subsection the opacity of visible emissions shall be determined by Reference Method 9 of the Arizona Testing Manual. A permit may specify a method, other than Method 9, for determining the opacity of emissions from a particular emissions unit, if the method has been promulgated by the Administrator in 40 CFR 60, Appendix A.
- C.** Except as otherwise specified in this Chapter, the heat content of solid fuel shall be determined according to ASTM method D-3176-89, (Practice for Ultimate Analysis of Coal and Coke) and ASTM method D-2015-91, (Test Method for Gross Calorific Value of Coal and Coke by the Adiabatic Bomb Calorimeter).

- D.** Except for ambient air monitoring and emissions testing required under Articles 9 and 11 of this Chapter, alternative and equivalent test methods in any test plan submitted to the Director may be approved by the Director for the duration of that plan provided that the following three criteria are met:

1. The alternative or equivalent test method measures the same chemical and physical characteristics as the test method it is intended to replace.
2. The alternative or equivalent test method has substantially the same or better reliability, accuracy, and precision as the test method it is intended to replace.
3. Applicable quality assurance procedures are followed in accordance with the Arizona Testing Manual, 40 CFR 60 or other quality assurance methods which are consistent with principles contained in the Arizona Testing Manual or 40 CFR 60 as approved by the Director.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980 (Supp. 80-4). Amended effective September 28, 1984 (Supp. 84-5). Former Section R9-3-311 renumbered without change as R18-2-311 (Supp. 87-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

**R18-2-312. Performance Tests**

- A.** Within 60 days after a source subject to the permit requirements of this Article has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial start-up of such source and at such other times as may be required by the Director, the owner or operator of such source shall conduct performance tests and furnish the Director a written report of the results of the tests.
- B.** Performance tests shall be conducted and data reduced in accordance with the test method and procedures contained in the Arizona Testing Manual unless the Director:
  1. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
  2. Approves the use of an equivalent method;
  3. Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance; or
  4. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Director's satisfaction that the source is in compliance with the standard.
  5. Nothing in this Section shall be construed to abrogate the Director's authority to require testing.
- C.** Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the source. The owner or operator shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.
- D.** The owner or operator of a permitted source shall provide the Director two weeks prior notice of the performance test to afford the Director the opportunity to have an observer present.
- E.** The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:
  1. Sampling ports adequate for test methods applicable to such facility.
  2. Safe sampling platform(s).
  3. Safe access to sampling platform(s).

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rence of excess emissions that includes all available information from subsection (B).

2. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under subsection (A)(1).

**B.** The excess emissions report shall contain the following information:

1. The identity of each stack or other emission point where the excess emissions occurred;
2. The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
3. The time and duration or expected duration of the excess emissions;
4. The identity of the equipment from which the excess emissions emanated;
5. The nature and cause of the emissions;
6. The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunctions;
7. The steps that were or are being taken to limit the excess emissions; and
8. If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the permit procedures.

- C.** In the case of continuous or recurring excess emissions, the notification requirements of this Section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsections (A) and (B).

**Historical Note**

New Section adopted by final rulemaking at 7 A.A.R. 1164, effective February 15, 2001 (Supp. 01-1).  
Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

**R18-2-311. Test Methods and Procedures**

- A.** Except as otherwise specified in this Chapter, the applicable procedures and testing methods contained in the Arizona Testing Manual; 40 CFR 52, Appendices D and E; 40 CFR 60, Appendices A through F; and 40 CFR 61, Appendices B and C shall be used to determine compliance with the requirements established in this Chapter or contained in permits issued pursuant to this Chapter.
- B.** Except as otherwise provided in this subsection the opacity of visible emissions shall be determined by Reference Method 9 of the Arizona Testing Manual. A permit may specify a method, other than Method 9, for determining the opacity of emissions from a particular emissions unit, if the method has been promulgated by the Administrator in 40 CFR 60, Appendix A.
- C.** Except as otherwise specified in this Chapter, the heat content of solid fuel shall be determined according to ASTM method D-3176-89, (Practice for Ultimate Analysis of Coal and Coke) and ASTM method D-2015-91, (Test Method for Gross Calorific Value of Coal and Coke by the Adiabatic Bomb Calorimeter).

- D.** Except for ambient air monitoring and emissions testing required under Articles 9 and 11 of this Chapter, alternative and equivalent test methods in any test plan submitted to the Director may be approved by the Director for the duration of that plan provided that the following three criteria are met:

1. The alternative or equivalent test method measures the same chemical and physical characteristics as the test method it is intended to replace.
2. The alternative or equivalent test method has substantially the same or better reliability, accuracy, and precision as the test method it is intended to replace.
3. Applicable quality assurance procedures are followed in accordance with the Arizona Testing Manual, 40 CFR 60 or other quality assurance methods which are consistent with principles contained in the Arizona Testing Manual or 40 CFR 60 as approved by the Director.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980 (Supp. 80-4). Amended effective September 28, 1984 (Supp. 84-5). Former Section R9-3-311 renumbered without change as R18-2-311 (Supp. 87-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

**R18-2-312. Performance Tests**

- A.** Within 60 days after a source subject to the permit requirements of this Article has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial start-up of such source and at such other times as may be required by the Director, the owner or operator of such source shall conduct performance tests and furnish the Director a written report of the results of the tests.
- B.** Performance tests shall be conducted and data reduced in accordance with the test method and procedures contained in the Arizona Testing Manual unless the Director:
  1. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
  2. Approves the use of an equivalent method;
  3. Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance; or
  4. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Director's satisfaction that the source is in compliance with the standard.
  5. Nothing in this Section shall be construed to abrogate the Director's authority to require testing.
- C.** Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the source. The owner or operator shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.
- D.** The owner or operator of a permitted source shall provide the Director two weeks prior notice of the performance test to afford the Director the opportunity to have an observer present.
- E.** The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:
  1. Sampling ports adequate for test methods applicable to such facility.
  2. Safe sampling platform(s).
  3. Safe access to sampling platform(s).



4. Utilities for sampling and testing equipment.
- F. Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Director's approval, be determined using the arithmetic means of the results of the two other runs. If the Director, or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director, or the Director's designee is not present, tests may only be stopped for good cause, which includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the operator's control. Termination of testing without good cause after the first run is commenced shall constitute a failure of the test.
- G. Except as provided in subsection (H) compliance with the emission limits established in this Chapter or as prescribed in permits issued pursuant to this Chapter shall be determined by the performance tests specified in this Section or in the permit.
- H. In addition to performance tests specified in this Section, compliance with specific emission limits may be determined by:
1. Opacity tests.
  2. Emission limit compliance tests specifically designated as such in the regulation establishing the emission limit to be complied with.
  3. Continuous emission monitoring, where applicable quality assurance procedures are followed and where it is designated in the permit or in an applicable requirement to show compliance.
- I. Nothing in this Section shall be so construed as to prevent the utilization of measurements from emissions monitoring devices or techniques not designated as performance tests as evidence of compliance with applicable good maintenance and operating requirements.

#### Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective September 28, 1984 (Supp. 84-5). Former Section R9-3-312 renumbered without change as R18-2-312 (Supp. 87-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

#### **R18-2-313. Existing Source Emission Monitoring**

- A. Every source subject to an existing source performance standard as specified in this Chapter shall install, calibrate, operate, and maintain all monitoring equipment necessary for continuously monitoring the pollutants and other gases specified in this Section for the applicable source category.
1. Applicability.
    - a. Fossil-fuel fired steam generators, as specified in subsection (C)(1), shall be monitored for opacity, nitrogen oxides emissions, sulfur dioxide emissions, and oxygen or carbon dioxide.
    - b. Fluid bed catalytic cracking unit catalyst regenerators, as specified in subsection (C)(4), shall be monitored for opacity.
    - c. Sulfuric acid plants, as specified in subsection (C)(3) of this Section, shall be monitored for sulfur dioxide emissions.

- d. Nitric acid plants, as specified in subsection (C)(2), shall be monitored for nitrogen oxides emissions.
2. Emission monitoring shall not be required when the source of emissions is not operating.
  3. Variations.
    - a. Unless otherwise prohibited by the Act, the Director may approve, on a case-by-case basis, alternative monitoring requirements different from the provisions of this Section if the installation of a continuous emission monitoring system cannot be implemented by a source due to physical plant limitations or extreme economic reasons. Alternative monitoring procedures shall be specified by the Director on a case-by-case basis and shall include, as a minimum, annual manual stack tests for the pollutants identified for each type of source in this Section. Extreme economic reasons shall mean that the requirements of this Section would cause the source to be unable to continue in business.
    - b. Alternative monitoring requirements may be prescribed when installation of a continuous emission monitoring system or monitoring device specified by this Section would not provide accurate determinations of emissions (e.g., condensed, uncombined water vapor may prevent an accurate determination of opacity using commercially available continuous emission monitoring systems).
    - c. Alternative monitoring requirements may be prescribed when the affected facility is infrequently operated (e.g., some affected facilities may operate less than one month per year).
  4. Monitoring system malfunction: A temporary exemption from the monitoring and reporting requirements of this Section may be provided during any period of monitoring system malfunction, provided that the source owner or operator demonstrates that the malfunction was unavoidable and is being repaired expeditiously.
- B. Installation and performance testing required under this Section shall be completed and monitoring and recording shall commence within 18 months of the effective date of this Section.
- C. Minimum monitoring requirements:
1. Fossil-fuel fired steam generators: Each fossil-fuel fired steam generator, except as provided in the following subsections, with an annual average capacity factor of greater than 30%, as reported to the Federal Power Commission for calendar year 1976, or as otherwise demonstrated to the Department by the owner or operator, shall conform with the following monitoring requirements when such facility is subject to an emission standard for the pollutant in question.
    - a. A continuous emission monitoring system for the measurement of opacity which meets the performance specifications of this Section shall be installed, calibrated, maintained, and operated in accordance with the procedures of this Section by the owner or operator of any such steam generator of greater than 250 million Btu per hour heat input except where:
      - i. Gaseous fuel is the only fuel burned; or
      - ii. Oil or a mixture of gas and oil are the only fuels burned and the source is able to comply with the applicable particulate matter and opacity regulations without utilization of particulate matter collection equipment, and where the source has never been found to be in violation

The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to such facility.
  2. Safe sampling platform(s).
  3. Safe access to sampling platform(s).
  4. Utilities for sampling and testing equipment.
- F. Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Director's approval, be determined using the arithmetic means of the results of the two other runs. If the Director, or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director, or the Director's designee is not present, tests may only be stopped for good cause, which includes forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the operator's control. Termination of testing without good cause after the first run is commenced shall constitute a failure of the test.
- G. Except as provided in subsection (H) compliance with the emission limits established in this Chapter or as prescribed in permits issued pursuant to this Chapter shall be determined by the performance tests specified in this Section or in the permit.
- H. In addition to performance tests specified in this Section, compliance with specific emission limits may be determined by:
1. Opacity tests.
  2. Emission limit compliance tests specifically designated as such in the regulation establishing the emission limit to be complied with.
  3. Continuous emission monitoring, where applicable quality assurance procedures are followed and where it is designated in the permit or in an applicable requirement to show compliance.
- I. Nothing in this Section shall be so construed as to prevent the utilization of measurements from emissions monitoring devices or techniques not designated as performance tests as evidence of compliance with applicable good maintenance and operating requirements.
- b. Fluid bed catalytic cracking unit catalyst regenerators, as specified in subsection (C)(4), shall be monitored for opacity.
  - c. Sulfuric acid plants, as specified in subsection (C)(3) of this Section, shall be monitored for sulfur dioxide emissions.
  - d. Nitric acid plants, as specified in subsection (C)(2), shall be monitored for nitrogen oxides emissions.
2. Emission monitoring shall not be required when the source of emissions is not operating.
3. Variations.
- a. Unless otherwise prohibited by the Act, the Director may approve, on a case-by-case basis, alternative monitoring requirements different from the provisions of this Section if the installation of a continuous emission monitoring system cannot be implemented by a source due to physical plant limitations or extreme economic reasons. Alternative monitoring procedures shall be specified by the Director on a case-by-case basis and shall include, as a minimum, annual manual stack tests for the pollutants identified for each type of source in this Section. Extreme economic reasons shall mean that the requirements of this Section would cause the source to be unable to continue in business.
  - b. Alternative monitoring requirements may be prescribed when installation of a continuous emission monitoring system or monitoring device specified by this Section would not provide accurate determinations of emissions (e.g., condensed, uncombined water vapor may prevent an accurate determination of opacity using commercially available continuous emission monitoring systems).
  - c. Alternative monitoring requirements may be prescribed when the affected facility is infrequently operated (e.g., some affected facilities may operate less than one month per year).
4. Monitoring system malfunction: A temporary exemption from the monitoring and reporting requirements of this Section may be provided during any period of monitoring system malfunction, provided that the source owner or operator demonstrates that the malfunction was unavoidable and is being repaired expeditiously.
- B. Installation and performance testing required under this Section shall be completed and monitoring and recording shall commence within 18 months of the effective date of this Section.
- C. Minimum monitoring requirements:
1. Fossil-fuel fired steam generators: Each fossil-fuel fired steam generator, except as provided in the following subsections, with an annual average capacity factor of greater than 30%, as reported to the Federal Power Commission for calendar year 1976, or as otherwise demonstrated to the Department by the owner or operator, shall conform with the following monitoring requirements when such facility is subject to an emission standard for the pollutant in question.
    - a. A continuous emission monitoring system for the measurement of opacity which meets the performance specifications of this Section shall be installed, calibrated, maintained, and operated in accordance with the procedures of this Section by the owner or operator of any such steam generator of greater than 250 million Btu per hour heat input except where:
      - i. Gaseous fuel is the only fuel burned; or

#### Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective September 28, 1984 (Supp. 84-5). Former Section R9-3-312 renumbered without change as R18-2-312 (Supp. 87-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

#### R18-2-313. Existing Source Emission Monitoring

- A. Every source subject to an existing source performance standard as specified in this Chapter shall install, calibrate, operate, and maintain all monitoring equipment necessary for continuously monitoring the pollutants and other gases specified in this Section for the applicable source category.
1. Applicability.
    - a. Fossil-fuel fired steam generators, as specified in subsection (C)(1), shall be monitored for opacity, nitrogen oxides emissions, sulfur dioxide emissions, and oxygen or carbon dioxide.



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- ii. Oil or a mixture of gas and oil are the only fuels burned and the source is able to comply with the applicable particulate matter and opacity regulations without utilization of particulate matter collection equipment, and where the source has never been found to be in violation through any administrative or judicial proceedings, or accepted responsibility for any violation of any visible emission standard.
  - b. A continuous emission monitoring system for the measurement of sulfur dioxide which meets the performance specifications of this Section shall be installed, calibrated, using sulfur dioxide calibration gas mixtures or other gas mixtures approved by the Director, maintained and operated on any fossil-fuel fired steam generator of greater than 250 million Btu per hour heat input which has installed sulfur dioxide pollutant control equipment.
  - c. A continuous emission monitoring system for the measurement of nitrogen oxides which meets the performance specification of this Section shall be installed, calibrated using nitric oxide calibration gas mixtures or other gas mixtures approved by the Director, maintained and operated on fossil-fuel fired steam generators of greater than 1000 million Btu per hour heat input when such facility is located in an air quality control region where the Director has specifically determined that a control strategy for nitrogen dioxide is necessary to attain the ambient air quality standard specified in R18-2-205, unless the source owner or operator demonstrates during source compliance tests as required by the Department that such a source emits nitrogen oxides at levels 30% or more below the emission standard within this Chapter.
  - d. A continuous emission monitoring system for the measurement of the percent oxygen or carbon dioxide which meets the performance specifications of this Section shall be installed, calibrated, operated, and maintained on fossil-fuel fired steam generators where measurements of oxygen or carbon dioxide in the flue gas are required to convert either sulfur dioxide or nitrogen oxides continuous emission monitoring data, or both, to units of the emission standard within this Chapter.
- 2. Nitric acid plants: Each nitric acid plant of greater than 300 tons per day production capacity, the production capacity being expressed as 100% acid located in an air quality control region where the Director has specifically determined that a control strategy for nitrogen dioxide is necessary to attain the ambient air quality standard specified in R18-2-205, shall install, calibrate using nitrogen dioxide calibration gas mixtures, maintain, and operate a continuous emission monitoring system for the measurement of nitrogen oxides which meets the performance specifications of this Section for each nitric acid producing facility within such plant.
  - 3. Sulfuric acid plants: Each sulfuric acid plant as defined in R18-2-101, of greater than 300 tons per day production capacity, the production being expressed as 100% acid, shall install, calibrate using sulfur dioxide calibration gas mixtures or other gas mixtures approved by the Director, maintain and operate a continuous emission monitoring system for the measurement of sulfur dioxide which meets the performance specifications of this Section for each sulfuric acid producing facility within such a plant.
  - 4. Fluid bed catalytic cracking unit catalyst regenerators at petroleum refineries. Each catalyst regenerator for fluid bed catalytic cracking units of greater than 20,000 barrels per day fresh-feed capacity shall install, calibrate, maintain and operate a continuous emission monitoring system for the measurement of opacity which meets the performance specifications of this Section for each regenerator within such refinery.
- D. Minimum specifications: Owners or operators of monitoring equipment installed to comply with this Section shall demonstrate compliance with the following performance specifications.
- 1. The performance specifications set forth in Appendix B of 40 CFR 60 are incorporated herein by reference and shall be used by the Director to determine acceptability of monitoring equipment installed pursuant to this Section. However where reference is made to the Administrator in Appendix B of 40 CFR 60, the Director may allow the use of either the state-approved reference method or the federally approved reference method as published in 40 CFR 60. The performance specifications to be used with each type of monitoring system are listed below.
    - a. Continuous emission monitoring systems for measuring opacity shall comply with performance specification 1.
    - b. Continuous emission monitoring systems for measuring nitrogen oxides shall comply with performance specification 2.
    - c. Continuous emission monitoring systems for measuring sulfur dioxide shall comply with performance specification 2.
    - d. Continuous emission monitoring systems for measuring sulfur dioxide shall comply with performance specification 3.
    - e. Continuous emission monitoring systems for measuring carbon dioxide shall comply with performance specification 3.
  - 2. Calibration gases: Span and zero gases shall be traceable to National Bureau of Standards reference gases whenever these reference gases are available. Every six months from date of manufacture, span and zero gases shall be reanalyzed by conducting triplicate analyses using the reference methods in Appendix A of 40 CFR 60 (Chapter 1) as amended: For sulfur dioxide, use Reference Method 6; for nitrogen oxides, use Reference method 7; and for carbon dioxide or oxygen, use Reference Method 3. The gases may be analyzed at less frequent intervals if longer shelf lives are guaranteed by the manufacturer.
  - 3. Cycling time: Time includes the total time required to sample, analyze, and record an emission measurement.
    - a. Continuous emission monitoring systems for measuring opacity shall complete a minimum of one cycle of sampling and analyzing for each successive six-minute period.
    - b. Continuous emission monitoring systems for measuring oxides of nitrogen, carbon dioxide, oxygen, or sulfur dioxide shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
  - 4. Monitor location: All continuous emission monitoring systems or monitoring devices shall be installed such that representative measurements of emissions of process parameter (i.e., oxygen, or carbon dioxide) from the affected facility are obtained. Additional guidance for location of continuous emission monitoring systems to

obtain representative samples are contained in the applicable performance specifications of Appendix B of 40 CFR 60.

5. Combined effluents: When the effluents from two or more affected facilities of similar design and operating characteristics are combined before being released to the atmosphere through more than one point, separate monitors shall be installed.
6. Zero and drift: Owners or operators of all continuous emission monitoring systems installed in accordance with the requirements of this Section shall record the zero and span drift in accordance with the method prescribed by the manufacturer's recommended zero and span check at least once daily, using calibration gases specified in subsection (C) as applicable, unless the manufacturer has recommended adjustments at shorter intervals, in which case such recommendations shall be followed; shall adjust the zero span whenever the 24-hour zero drift or 24-hour calibration drift limits of the applicable performance specifications in Appendix B of Part 60, Chapter 1, Title 40 CFR are exceeded.
7. Span: Instrument span should be approximately 200% of the expected instrument data display output corresponding to the emission standard for the source.

E. Minimum data requirement: The following subsections set forth the minimum data reporting requirements for sources employing continuous monitoring equipment as specified in this Section. These periodic reports do not relieve the source operator from the reporting requirements of R18-2-310.01.

1. The owners or operators of facilities required to install continuous emission monitoring systems shall submit to the Director a written report of excess emissions for each calendar quarter and the nature and cause of the excess emissions, if known. The averaging period used for data reporting shall correspond to the averaging period specified in the emission standard for the pollutant source category in question. The required report shall include, as a minimum, the data stipulated in this subsection.
2. For opacity measurements, the summary shall consist of the magnitude in actual percent opacity of all six-minute opacity averages greater than any applicable standards for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced, instantaneous opacity measurements per minute. Any time periods exempted shall be deleted before determining any averages in excess of opacity standards.
3. For gaseous measurements the summary shall consist of emission averages in the units of the applicable standard for each averaging period during which the applicable standard was exceeded.
4. The date and time identifying each period during which the continuous emission monitoring system was inoperative, except for zero and span checks and the nature of system repair or adjustment shall be reported. The Director may require proof of continuous emission monitoring system performance whenever system repairs or adjustments have been made.
5. When no excess emissions have occurred and the continuous emission monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.
6. Owners or operators of affected facilities shall maintain a file of all information reported in the quarterly summaries, and all other data collected either by the continuous emission monitoring system or as necessary to convert

monitoring data to the units of the applicable standard for a minimum of two years from the date of collection of such data or submission of such summaries.

F. Data reduction: Owners or operators of affected facilities shall use the following procedures for converting monitoring data to units of the standard where necessary.

1. For fossil-fuel fired steam generators the following procedures shall be used to convert gaseous emission monitoring data in parts per million to g/million cal (lb/million Btu) where necessary.
  - a. When the owner or operator of a fossil-fuel fired steam generator elects under subsection (C)(1)(d) to measure oxygen in the flue gases, the measurements of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry).
    - i. When measurements are on a wet basis, except where wet scrubbers are employed or where moisture is otherwise added to stack gases, the following conversion procedure shall be used:

$$E(Q) = C(ws)F(w) \left[ \frac{20.9}{20.9(1 - B(wa)) - \%O(2ws)} \right]$$

- ii. When measurements are on a wet basis and the water vapor content of the stack gas is determined at least once every 15 minutes the following conversion procedure shall be used:

$$E(Q) = C(ws)F \left[ \frac{20.9}{20.9(1 - B(wa))\%O(2ws)} \right]$$

Use of this equation is contingent upon demonstrating the ability to accurately determine B(ws) such that any absolute error in B(ws) will not cause an error of more than ±1.5% in the term:

$$\left[ \frac{20.9}{20.9(1 - B(wa)) - \%O(2ws)} \right]$$

- iii. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E(Q) = CF \left[ \frac{20.9}{20.9 - \%O(2ws)} \right]$$

- b. When the owner or operator elects under subsection (C)(1)(d) to measure carbon dioxide in the flue gases, the measurement of the pollutant concentration and the carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure used;

$$E(Q) = CF(c) \left[ \frac{100}{\%CO(2)} \right]$$

- c. The values used in the equations under subsection (F)(1) above are derived as follows:



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$E(Q)$  = pollutant emission, g/million cal (lb/million Btu).

$C$  = pollutant concentration, g/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each hourly period by  $4.16 \times 10^{-5}$  M g/dscm per ppm ( $2.64 \times 10^{-9}$  M lb/dscf per ppm) where  $M$  = pollutant molecular weight, g/g-mole (lb/lb-mole),  $M = 64$  for sulfur dioxide and 46 for oxides of nitrogen.

$C(ws)$  = pollutant concentrations at stack conditions, g/wscm (lb/wscf), determined by multiplying the average concentration (ppm) for each one-hour period by  $4.15 \times 10^{-5}$  M lb/wscm per ppm ( $2.59 \times 10^{-5}$  M lb/wscf per ppm) where  $M$  = pollutant molecular weight, g/g mole (lb/lb mole),  $M = 64$  for sulfur dioxide and 46 for nitrogen oxides.

$\%O(2), \%CO(2)$  = Oxygen or carbon dioxide volume (expressed as percent) determined with equipment specified under subsection (D)(1)(d).

$F, F(c)$  = A factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted ( $F$ ), a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted ( $F(c)$ ), respectively. Values of  $F$  and  $F(c)$  are given in 40 CFR 60.45(f) (Chapter 1).

$F(w)$  = A factor representing a ratio of the volume of wet flue gases generated to the calorific value of the fuel combusted. Values of  $F(w)$  are given in Reference Method 19 of the Arizona Testing Manual.

$B(wa)$  = Proportion by volume of water vapor in the ambient air. Approval may be given for determination of  $B(wa)$  by on-site instrumental measurement provided that the absolute accuracy of the measurement technique can be demonstrated to be within  $\pm 0.7\%$  water vapor. Estimation methods for  $B(wa)$  are given in Reference Method 19 of the Arizona Testing Manual.

$B(ws)$  = Proportion by volume of water vapor in the stack gas.

2. For sulfuric acid plants as defined in R18-2-101, the owner or operator shall:
  - a. Establish a conversion factor three times daily according to the procedures of 40 CFR 60.84(b) (Chapter 1),
  - b. Multiply the conversion factor by the average sulfur dioxide concentration in the flue gases to obtain average sulfur dioxide emissions in Kg/metric ton (lb/short ton), and
  - c. Report the average sulfur dioxide emission for each averaging period in excess of the applicable emission standard in the quarterly summary.
3. For nitric acid plants, the owner or operator shall:
  - a. Establish a conversion factor according to the procedures of 40 CFR 60.73(b) (Chapter 1),
  - b. Multiply the conversion factor by the average nitrogen oxides concentration in the flue gases to obtain the nitrogen oxides emissions in the units of the applicable standard,
  - c. Report the average nitrogen oxides emission for each averaging period in excess of applicable emission standard in the quarterly summary.

4. The Director may allow data reporting or reduction procedures varying from those set forth in this Section if the owner or operator of a source shows to the satisfaction of the Director that his procedures are at least as accurate as those in this Section. Such procedures may include but are not limited to the following:

- a. Alternative procedures for computing emission averages that do not require integration of data (e.g., some facilities may demonstrate that the variability of their emissions is sufficiently small to allow accurate reduction of data based upon computing averages from equally spaced data points over the averaging period).
- b. Alternative methods of converting pollutant concentration measurements to the units of the emission standards.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Editorial correction, subsection (C), paragraph (1), subparagraph (d) (Supp. 80-2). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-313 renumbered without change as R18-2-313 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 7 A.A.R. 1164, effective February 15, 2001 (Supp. 01-1).

**R18-2-314. Quality Assurance**

Facilities subject to the permit requirements of this Article shall submit a quality assurance plan to the Director that meets the requirements of R18-2-311(D)(3) within 12 months of the effective date of this Section. Facilities subject to the requirements of R18-2-313 shall submit a quality assurance plan as specified in the permit.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-314 renumbered without change as R18-2-314 (Supp. 87-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

**R18-2-315. Posting of Permit**

- A. Any person who has been granted an individual or general permit shall post such permit or a certificate of permit issuance on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:
  1. The current permit number,
  2. A serial number or other equipment number that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on the site.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-315 renumbered without change as R18-2-315 (Supp. 87-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

**R18-2-316. Notice by Building Permit Agencies**

All agencies of the county or political subdivisions of the county that issue or grant building permits or approvals shall examine the plans and specifications submitted by an applicant for a permit or approval to determine if an air pollution permit will possibly be required under the provisions of this Chapter. If it appears that an air pollution permit will be required, the agency or political subdi-



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per ppm) where  $M$  = pollutant molecular weight, g/g-mole (lb/lb-mole),  $M = 64$  for sulfur dioxide and 46 for oxides of nitrogen.

$C(ws)$  = pollutant concentrations at stack conditions, g/wscm (lb/wscf), determined by multiplying the average concentration (ppm) for each one-hour period by  $4.15 \times 10^{-5}$  M lb/wscm per ppm ( $2.59 \times 10^{-5}$  M lb/wscf per ppm) where  $M$  = pollutant molecular weight, g/g mole (lb/lb mole).  $M = 64$  for sulfur dioxide and 46 for nitrogen oxides.

%O(2), %CO(2) = Oxygen or carbon dioxide volume (expressed as percent) determined with equipment specified under subsection (D)(1)(d).

$F, F(c)$  = A factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted ( $F$ ), a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted ( $F(c)$ ), respectively. Values of  $F$  and  $F(c)$  are given in 40 CFR 60.45(f) (Chapter 1).

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  - b. Multiply the conversion factor by the average sulfur dioxide concentration in the flue gases to obtain average sulfur dioxide emissions in Kg/metric ton (lb/short ton), and
  - c. Report the average sulfur dioxide emission for each averaging period in excess of the applicable emission standard in the quarterly summary.
3. For nitric acid plants, the owner or operator shall:
  - a. Establish a conversion factor according to the procedures of 40 CFR 60.73(b) (Chapter 1),
  - b. Multiply the conversion factor by the average nitrogen oxides concentration in the flue gases to obtain the nitrogen oxides emissions in the units of the applicable standard,
  - c. Report the average nitrogen oxides emission for each averaging period in excess of applicable emission standard in the quarterly summary.
4. The Director may allow data reporting or reduction procedures varying from those set forth in this Section if the owner or operator of a source shows to the satisfaction of the Director that his procedures are at least as accurate as those in this Section. Such procedures may include but are not limited to the following:
  - a. Alternative procedures for computing emission averages that do not require integration of data (e.g., some facilities may demonstrate that the variability of their emissions is sufficiently small to allow accurate reduction of data based upon computing averages from equally spaced data points over the averaging period).
  - b. Alternative methods of converting pollutant concentration measurements to the units of the emission standards.

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  1. The current permit number,
  2. A serial number or other equipment number that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on the site.

**Historical Note**

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**R18-2-316. Notice by Building Permit Agencies**

All agencies of the county or political subdivisions of the county that issue or grant building permits or approvals shall examine the plans and specifications submitted by an applicant for a permit or approval to determine if an air pollution permit will possibly be required under the provisions of this Chapter. If it appears that an air pollution permit will be required, the agency or political subdivision shall give written notice to the applicant to contact the Director and shall furnish a copy of that notice to the Director.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-316 renumbered without change as R18-2-316 (Supp. 87-3).

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

**R18-2-317. Facility Changes Allowed Without Permit Revisions - Class I**

- A.** A facility with a Class I permit may make changes that contravene an express permit term without a permit revision if all of the following apply:
1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(24);
  2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;
  3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;
  4. The changes satisfy all requirements for a minor permit revision under R18-2-319(A);
  5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements; and
  6. The changes do not constitute a minor NSR modification.
- B.** The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if the substitution meets all of the requirements of subsections (A), (D), and (E).
- C.** Except for sources with authority to operate under general permits, permitted sources may trade increases and decreases in emissions within the permitted facility, as established in the permit under R18-2-306(A)(12), if an applicable implementation plan provides for the emissions trades without applying for a permit revision and based on the seven working days notice prescribed in subsection (D). This provision is available if the permit does not provide for the emissions trading as a minor permit revision.
- D.** For each change under subsections (A) through (C), a written notice by certified mail or hand delivery shall be received by the Director and the Administrator a minimum of seven working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than seven working days in advance of the change but must be provided as far in advance of the change or, if advance notification is not practicable, as soon after the change as possible.
- E.** Each notification shall include:
1. When the proposed change will occur;
  2. A description of the change;

3. Any change in emissions of regulated air pollutants;
  4. The pollutants emitted subject to the emissions trade, if any;
  5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade;
  6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply; and
  7. Any permit term or condition that is no longer applicable as a result of the change.
- F.** The permit shield described in R18-2-325 shall not apply to any change made under subsections (A) through (C). Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the implementation plan authorizing the emissions trade.
- G.** Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under R18-2-306(A)(11) shall not require any prior notice under this Section.
- H.** The Director shall make available to the public monthly summaries of all notices received under this Section.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-317 renumbered without change as R18-2-317 (Supp. 87-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 5 A.A.R. 4074, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 12 A.A.R. 1953, effective January 1, 2007 (Supp. 06-2). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

**R18-2-317.01. Facility Changes that Require a Permit Revision - Class II**

- A.** The following changes at a source with a Class II permit shall require a permit revision:
1. A change that would trigger a new applicable requirement or violate an existing applicable requirement.
  2. Establishment of, or change in, an emissions cap under R18-2-306.02;
  3. A change that will require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
  4. A change that results in emissions that are subject to monitoring, recordkeeping or reporting under R18-2-306(A)(3), (4), or (5) if the emissions cannot be measured or otherwise adequately quantified by monitoring, recordkeeping, or reporting requirements already in the permit;
  5. A change that will authorize the burning of used oil, used oil fuel, hazardous waste, or hazardous waste fuel, or any other fuel not currently authorized by the permit;
  6. A change that requires the source to obtain a Class I permit;
  7. Replacement of an item of air pollution control equipment listed in the permit with one that does not have the same or better pollutant removal efficiency;
  8. Establishment or revision of a limit under R18-2-306.01;
  9. Increasing operating hours or rates of production above the permitted level;
  10. A change that relaxes monitoring, recordkeeping, or reporting requirements, except when the change results:

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- a. From removing equipment that results in a permanent decrease in actual emissions, if the source keeps onsite records of the change in a log that satisfies Appendix 3 of this Chapter and if the requirements that are relaxed are present in the permit solely for the equipment that was removed; or
  - b. From a change in an applicable requirement; and
  - 11. A minor NSR modification.
- B.** A source with a Class II permit may make any physical change or change in the method of operation without revising the source's permit unless the change is specifically prohibited in the source's permit or is a change described in subsection (A). A change that does not require a permit revision may still be subject to requirements in R18-2-317.02.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R.

4074, effective September 22, 1999 (Supp. 99-3).

Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

**R18-2-317.02. Procedures for Certain Changes that Do Not Require a Permit Revision - Class II**

- A.** Except for a physical change or change in the method of operation at a Class II source requiring a permit revision under R18-2-317.01, or a change subject to logging or notice requirements in subsection (B) or (C), a change at a Class II source shall not be subject to revision, notice, or logging requirements under this Chapter.
- B.** Except as otherwise provided in the conditions applicable to an emissions cap created under R18-2-306.02, the following changes may be made if the source keeps onsite records of the changes according to Appendix 3:
  - 1. Implementing an alternative operating scenario, including raw material changes;
  - 2. Changing process equipment, operating procedures, or making any other physical change if the permit requires the change to be logged;
  - 3. Engaging in any new insignificant activity listed in the definition of insignificant activities in R18-2-101 but not listed in the permit;
  - 4. Replacing an item of air pollution control equipment listed in the permit with an identical (same model, different serial number) item. The Director may require verification of efficiency of the new equipment by performance tests; and
  - 5. A change that results in a decrease in actual emissions if the source wants to claim credit for the decrease in determining whether the source has a net emissions increase for any purpose. The logged information shall include a description of the change that will produce the decrease in actual emissions. A decrease that has not been logged is creditable only if the decrease is quantifiable, enforceable, and otherwise qualifies as a creditable decrease.
- C.** Except as provided in the conditions applicable to an emissions cap created under R18-2-306.02, the following changes may be made if the source provides written notice to the Department in advance of the change as provided below:
  - 1. Replacing an item of air pollution control equipment listed in the permit with one that is not identical but that is substantially similar and has the same or better pollutant removal efficiency: seven days. The Director may require verification of efficiency of the new equipment by performance tests;
  - 2. A physical change or change in the method of operation that increases actual emissions more than 10% of the major source threshold for any conventional pollutant but does not require a permit revision: seven days;
  - 3. Replacing an item of air pollution control equipment listed in the permit with one that is not substantially similar but that has the same or better efficiency: 30 days. The Director may require verification of efficiency of the new equipment by performance tests;
  - 4. A change that would trigger an applicable requirement that already exists in the permit: 30 days unless otherwise required by the applicable requirement;
  - 5. A change that amounts to reconstruction of the source or an affected facility: seven days. For purposes of this subsection, reconstruction of a source or an affected facility shall be presumed if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new source or affected facility and the changes to the components have occurred over the 12 consecutive months beginning with commencement of construction; and
  - 6. A change that will result in the emissions of a new regulated air pollutant above an applicable regulatory threshold but that does not trigger a new applicable requirement for that source category: 30 days. For purposes of this requirement, an applicable regulatory threshold for a conventional air pollutant shall be 10% of the applicable major source threshold for that pollutant.
- D.** For each change under subsection (C), the written notice shall be by certified mail or hand delivery and shall be received by the Director the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice shall include:
  - 1. When the proposed change will occur,
  - 2. A description of the change,
  - 3. Any change in emissions of regulated air pollutants, and
  - 4. Any permit term or condition that is no longer applicable as a result of the change.
- E.** A source may implement any change in subsection (C) without the required notice by applying for a minor permit revision under R18-2-319 and complying with R18-2-319(D)(2) and (G).
- F.** The permit shield described in R18-2-325 shall not apply to any change made under this Section, other than implementation of an alternate operating scenario under subsection (B)(1).
- G.** Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under this Section over the term of the permit, constitutes a change under R18-317.01(A).
- H.** If a source change is described under both subsections (B) and (C), the source shall comply with subsection (C). If a source change is described under both subsection (C) and R18-2-317.01(B), the source shall comply with R18-2-317.01(B).
- I.** A copy of all logs required under subsection (B) shall be filed with the Director within 30 days after each anniversary of the permit issue date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.

**Historical Note**

New Section adopted by final rulemaking at 5 A.A.R.

4074, effective September 22, 1999 (Supp. 99-3).

Amended by final rulemaking at 18 A.A.R. 1542, effective

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tive August 7, 2012 (Supp. 12-2).

impacts on visibility or maximum increases allowed under R18-2-218;

4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. The terms and conditions include:
    - a. A federally enforceable emissions cap that the source would assume to avoid classification as a modification under any provision of Title I of the Act; and
    - b. An alternative emissions limit approved under regulations promulgated under the section 112(i)(5) of the Act.
  5. Are not modifications under any provision of Title I of the Act;
  6. Are not changes in fuels not represented in the permit application or provided for in the permit;
  7. Are not minor NSR modifications subject to R18-2-334; and
  8. Are not required to be processed as a significant permit revision under R18-2-320.
- B.** Minor permit revision procedures shall be used for the following changes at a Class II source:
1. A change that triggers a new applicable requirement if all of the following apply:
    - a. The change is not a minor NSR modification subject to R18-2-334;
    - b. A case-by-case determination of an emission limitation or other standard is not required; and
    - c. The change does not require the source to obtain a Class I permit.
  2. A change that increases emissions above the permitted level unless the increase otherwise creates a condition that requires a significant permit revision;
  3. A change in fuel from fuel oil or coal, to natural gas or propane, if not authorized in the permit;
  4. A change that results in emissions subject to monitoring, recordkeeping, or reporting under R18-2-306(A)(3),(4), or (5) and that cannot be measured or otherwise adequately quantified by monitoring, recordkeeping, or reporting requirements already in the permit;
  5. A decrease in the emissions permitted under an emissions cap unless the decrease requires a change in the conditions required to enforce the cap or to ensure that emissions trades conducted under the cap are quantifiable and enforceable; and
  6. Replacement of an item of air pollution control equipment listed in the permit with one that does not have the same or better efficiency.
- C.** As approved by the Director, minor permit revision procedures may be used for permit revisions involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that the minor permit revision procedures are explicitly provided for in an applicable implementation plan or in applicable requirements promulgated by the Administrator.
- D.** An application for minor permit revision shall be on the standard application form provided under R18-2-304(B) and include the following:
1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

**R18-2-319. Minor Permit Revisions**

- A.** Minor permit revision procedures may be used only for those changes at a Class I source that satisfy all of the following:
1. Do not violate any applicable requirement;
  2. Do not involve substantive changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
  3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or an analysis of

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2. For Class I sources, and any source that is making the change immediately after it files the application, the source's suggested draft permit;
  3. Certification by a responsible official, consistent with standard permit application requirements, that the proposed revision meets the criteria for use of minor permit revision procedures and a request that the procedures be used;
- E.** EPA and affected state notification. For Class I permits, within five working days of receipt of an application for a minor permit revision, the Director shall notify the Administrator and affected states of the requested permit revision in accordance with R18-2-307.
- F.** For Class I permits, the Director shall not issue a final permit revision until after the Administrator's 45-day review period or until the Administrator has notified the Director that the Administrator will not object to issuance of the permit revision, whichever is first, although the Director may approve the permit revision before that time. Within 90 days of the Director's receipt of an application under minor permit revision procedures, or 15 days after the end of the Administrator's 45-day review period, whichever is later, the Director shall do one or more of the following:
1. Issue the permit revision as proposed,
  2. Deny the permit revision application,
  3. Determine that the proposed permit revision does not meet the minor permit revision criteria and should be reviewed under the significant revision procedures, or
  4. Revise the proposed permit revision and transmit to the Administrator the new proposed permit revision as required in R18-2-307.
- G.** The source may make the change proposed in its minor permit revision application immediately after it files the application. After a Class I source makes a change allowed by the preceding sentence, and until the Director takes any of the actions specified in subsection (F), the source shall comply with both the applicable requirements governing the change and the proposed revised permit terms and conditions. During this time period, the Class I source need not comply with the existing permit terms and conditions it seeks to modify. However, if the Class I source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to revise may be enforced against it.
- H.** The permit shield under R18-2-325 shall not extend to minor permit revisions.
- I.** Notwithstanding any other part of this Section, the Director may require a permit to be revised under R18-2-320 for any change that, when considered together with any other changes submitted by the same source under this Section or R18-2-317.02 over the life of the permit, do not satisfy subsection (A) for Class I sources or subsection (B) for Class II sources.
- J.** The Director shall make available to the public monthly summaries of all applications for minor permit revisions.
- A.** For Class I sources, a significant revision shall be used for an application requesting a permit revision that does not qualify as a minor permit revision or as an administrative amendment. A significant revision that is only required because of a change described in R18-2-319(A)(6) or (7) shall not be considered a significant permit revision under part 70 for the purposes of 40 CFR 64.5(a)(2). Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall follow significant revision procedures.
- B.** A source with a Class II permit shall make the following changes only after the permit is revised following the public participation requirements of R18-2-330:
1. Establishing or revising a voluntarily accepted emission limitation or standard as described by R18-2-306.01 or R18-2-306.02, except a decrease in the limitation authorized by R18-2-319(B)(5);
  2. Making any change in fuel not authorized by the permit and that is not fuel oil or coal, to natural gas or propane;
  3. A change that is a minor NSR modification subject to R18-2-334;
  4. A change that relaxes monitoring, recordkeeping, or reporting requirements, except when the change results from:
    - a. Removing equipment that results in a permanent decrease in actual emissions, if the source keeps onsite records of the change in a log that satisfies Appendix 3 of this Chapter and if the requirements that are relaxed are present in the permit solely for the equipment that was removed; or
    - b. A change in an applicable requirement.
  5. A change that will cause the source to violate an existing applicable requirement including the conditions establishing an emissions cap;
  6. A change that will require any of the following:
    - a. A case-by-case determination of an emission limitation or other standard;
    - b. A source-specific determination of ambient impacts, or an analysis of impacts on visibility or maximum allowable increases allowed under R18-2-218; or
    - c. A case-by-case determination of a monitoring, recordkeeping, and reporting requirement.
  7. A change that requires the source to obtain a Class I permit.
- C.** Any modification to a major source of federally listed hazardous air pollutants, and any reconstruction of a source, or a process or production unit, under section 112(g) of the Act and regulations promulgated thereunder, shall follow significant permit revision procedures and any rules adopted under A.R.S. § 49-426.03.
- D.** Significant permit revisions shall meet all requirements of this Article for applications, public participation, review by affected states, and review by the Administrator that apply to permit issuance and renewal. Notwithstanding R18-2-330(C), the Director may provide notice for changes requiring a significant permit revision solely under subsection (B)(2), (4) or (6)(c) by posting a notice on the Department's web site, sending e-mails to persons who have requested electronic notification of the Department's proposed air quality permit actions and by mailing a copy of the notice as provided in R18-2-330(C)(1).
- E.** When an existing source applies for a significant permit revision to revise its permit from a Class II permit to a Class I permit, it shall submit a Class I permit application in accordance with R18-2-304. The Director shall issue the entire permit, and not just the portion being revised, in accordance with Class I

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-319 renumbered without change as R18-2-319 (Supp. 87-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 5 A.A.R. 4074, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2). Amended by final rulemaking at 23 A.A.R. 333, effective March 21, 2017 (Supp. 17-1).

**R18-2-320. Significant Permit Revisions**

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permit content and issuance requirements, including requirements for public, affected state, and EPA review, contained in R18-2-307 and R18-2-330.

**Historical Note**

Adopted effective September 26, 1990 (Supp. 90-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended effective June 4, 1998 (Supp. 98-2). Amended by final rulemaking at 5 A.A.R. 4074, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 6 A.A.R. 343, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2). Amended by final rulemaking at 23 A.A.R. 333, effective March 21, 2017 (Supp. 17-1).

**R18-2-321. Permit Reopenings; Revocation and Reissuance; Termination****A. Reopening for Cause.**

1. Each issued permit shall include provisions specifying the conditions under which the permit shall be reopened prior to the expiration of the permit. A permit shall be reopened and revised under any of the following circumstances:



- a. Additional applicable requirements under the Act become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to R18-2-322(B). Any permit revision required pursuant to this subsection shall comply with provisions in R18-2-322 for permit renewal and shall reset the five-year permit term.
  - b. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.
  - c. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  - d. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
2. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under subsection (A)(1)(a), affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
  3. Reopenings under subsection (A)(1) shall not be initiated before a notice of such intent is provided to the source by the Director at least 30 days in advance of the date that the permit is to be reopened, except that the Director may provide a shorter time period in the case of an emergency.
  4. When a permit is reopened and revised pursuant to this Section, the Director may make appropriate revisions to the permit shield established pursuant to R18-2-325.
- B.** Within 10 days of receipt of notice from the Administrator that cause exists to reopen a Class I permit, the Director shall notify the source. The source shall have 30 days to respond to the Director. Within 90 days of receipt of notice from the Administrator that cause exists to reopen a permit, or within any extension to the 90 days granted by EPA, the Director shall forward to the Administrator and the source a proposed determination of termination, revision, or revocation and reissuance of the permit. Within 90 days of receipt of an EPA objection to the Director's proposal, the Director shall resolve the objection and act on the permit.
- C.** The Director may issue a notice of termination of a permit or registration issued pursuant to this Chapter if:
1. The Director has reasonable cause to believe that the permit or registration was obtained by fraud or misrepresentation.
  2. The person applying for the permit or registration failed to disclose a material fact required by the application form or the regulation applicable to the permit or registration, of which the applicant had or should have had knowledge at the time the application was submitted.
  3. The terms and conditions of the permit or registration have been or are being violated.

- D.** If the Director issues a notice of termination under this Section, the notice shall be served on the permittee by certified mail, return receipt requested. The notice shall include a statement detailing the grounds for the revocation and a statement that the permittee is entitled to a hearing.

#### Historical Note

Adopted effective September 22, 1983 (Supp. 83-5). Former Section R9-3-321 renumbered without change as R18-2-321 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

#### **R18-2-322. Permit Renewal and Expiration**

- A.** A permit being renewed is subject to the same procedural requirements, including any for public participation and affected states and Administrator review, that would apply to that permit's initial issuance.
- B.** Except as provided in R18-2-303(A), permit expiration terminates the source's right to operate unless a timely application for renewal that is sufficient under A.R.S. § 41-1064 has been submitted in accordance with R18-2-304. Any testing that is required for renewal shall be completed before the proposed permit is issued by the Director.
- C.** The Director shall act on an application for a permit renewal within the same time-frames as on an initial permit.

#### Historical Note

Adopted effective September 22, 1983 (Supp. 83-5). Former Section R9-3-322 renumbered without change as R18-2-322 (Supp. 87-3). Amended effective December 1, 1988 (Supp. 88-4). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

#### **R18-2-323. Permit Transfers**

- A.** Except as provided in A.R.S. § 49-429 and subsection (B), a Class I or II permit may be transferred to another person if the person who holds the permit gives notice to the Director in writing at least 30 days before the proposed transfer. The notice shall contain the following:
1. The permit number and expiration date;
  2. The name, address, and telephone number of the current permit holder;
  3. The name, address and telephone number of the person to receive the permit;
  4. The name and title of the individual within the organization who is accepting responsibility for the permit along with a signed statement by that person indicating such acceptance;
  5. A description of the equipment to be transferred;
  6. A written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee;
  7. Provisions for the payment of any fees pursuant to R18-2-326 or R18-2-501 that will be due and payable before the effective date of transfer;
  8. Sufficient information about the source's technical and financial capabilities of operating the source to allow the Director to make the decision in subsection (B) including:
    - a. The qualifications of each person principally responsible for the operation of the source;
    - b. A statement by the chief financial officer of the new permittee that it is financially capable of operating the facility in compliance with the law, and the information that provides the basis for that statement;

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- c. A brief description of any action for the enforcement of any federal or state law, or any county, city, or local government ordinance relating to the protection of the environment, instituted against any person employed by the new permittee and principally responsible for operating the facility during the five years preceding the date of application. In lieu of this description, the new permittee may submit a copy of the certificate of disclosure or 10-K form required under A.R.S. § 49-109, or a statement that this information has been filed in compliance with A.R.S. § 49-109.
- B. The Director shall deny the transfer if the Director determines that the organization receiving the permit is not capable of operating the source in compliance with A.R.S. Title 49, Chapter 3, Article 2, the provisions of this Chapter or the provisions of the permit. Notice of the denial shall be sent to the original permit holder by certified mail stating the reason for the denial within 10 working days of the Director's receipt of the application. If the transfer is not denied within 10 working days after receipt of the notice, it shall be deemed approved.
- C. To appeal the transfer denial:
  1. Both the transferor and transferee shall petition the Office of Administrative Hearings in writing for a public hearing; and
  2. All parties shall follow the appeal process for a permit.
- D. The Director shall make available to the public monthly summaries of all notices received under this Section.

**Historical Note**

Adopted effective September 22, 1983 (Supp. 83-5). Former Section R9-3-323 renumbered without change as R18-2-323 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 12 A.A.R. 4698, effective February 3, 2007 (Supp. 06-4).

**R18-2-324. Portable Sources**

- A. A portable source that will operate for the duration of its permit solely in one county that has established a local air pollution control program pursuant to A.R.S. § 49-479 shall obtain a permit from that county. A portable source with a county permit shall not operate in any other county. A portable source that has a permit issued by the Director and obtains a county permit shall request that the Director terminate the permit. Upon issuance of the county permit, the permit issued by the Director is no longer valid.
- B. A portable source which has a county permit but proposes to operate outside that county shall obtain a permit from the Director. A portable source that has a permit issued by a county and obtains a permit issued by the Director shall request that the county terminate the permit. Upon issuance of a permit by the Director, the county permit is no longer valid. Before commencing operation in the new county, the source shall notify the Director and the control officer who has jurisdiction in the county that includes the new location according to subsection (D).
- C. An owner of portable source equipment which requires a permit under this Chapter shall obtain the permit prior to renting or leasing said equipment. This permit shall be provided by the owner to the renter or lessee, and the renter or lessee shall be bound by the permit provisions. In the event a copy of the permit is not provided to the renter or lessee, both the owner and the lessee or renter shall be responsible for the operation of this equipment in compliance with the permit conditions and any violations thereof.

- D. A portable source may be transferred from one location to another provided that the owner or operator of such equipment notifies the Director and any control officer who has jurisdiction over the geographic area that includes the new location of the transfer by certified mail at least 10 working days before the transfer. The notification required under this subsection shall include:
  1. A description of the equipment to be transferred including the permit number for such equipment;
  2. A description of the present location;
  3. A description of the location to which the equipment is to be transferred, including the availability of all utilities, such as water and electricity, necessary for the proper operation of all control equipment;
  4. The date on which the equipment is to be moved; and
  5. The date on which operation of the equipment will begin at the new location.

- E. Any permit for a portable source shall contain conditions that will assure compliance with all applicable requirements at all authorized locations.

**Historical Note**

Adopted effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

**R18-2-325. Permit Shields**

- A. Each Class I or II permit issued under this Chapter shall specifically identify all federal, state, and local air pollution control requirements applicable to the source at the time the permit is issued. The permit shall state that compliance with the conditions of the permit shall be deemed compliance with any applicable requirement as of the date of permit issuance, provided that such applicable requirements are included and expressly identified in the permit. The Director may include in a permit determinations that other requirements specifically identified are not applicable. Any permit under this Chapter that does not expressly state that a permit shield exists shall not provide such a shield.
- B. Nothing in this Section or in any permit shall alter or affect the following:
  1. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that Section;
  2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  3. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
  4. The ability of the Administrator or the Director to obtain information from a source pursuant to Section 114 of the Act, or any provision of state law;
  5. The authority of the Director to require compliance with new applicable requirements adopted after the permit is issued.
- C. In addition to the provisions of R18-2-321, a permit may be reopened by the Director and the permit shield revised when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.

**Historical Note**

Emergency rule adopted effective September 17, 1991, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 91-3). Emergency rule re-adopted without change effective December 16, 1991, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 91-4). Emergency expired; text deleted (Supp. 93-1). New Section adopted effective November 15, 1993 (Supp. 93-4).

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- no later than June 1 every three years beginning June 1, 2021.
- ii. At the Director's request, sources requiring a Class II permit under R18-2-302 B) may be required to complete and submit emissions inventory questionnaires in addition to the triennial emissions inventory questionnaire required under subsection A 1 b i). The Director shall notify the owner or operator of the source in writing of the decision to require additional emissions inventory questionnaires.
- 2. These requirements apply whether or not a permit has been issued and whether or not a permit application has been filed.
- 3. The emissions inventory questionnaire shall be on an electronic or paper form provided by the Director and shall include the following information for the previous calendar year:
  - a. The source's name, description, mailing address, contact person and contact person phone number, and physical address and location, if different than the mailing address.
  - b. Process information for the source, including design capacity, throughput, operations schedule, and emissions control devices, their description and efficiencies.
  - c. The actual quantity of emissions from permitted emission points and fugitive emissions as provided in the permit, including documentation of the method of measurement, calculation, or estimation, determined pursuant to subsection (C , of the following regulated air pollutants:
    - i. Any single regulated air pollutant in a quantity greater than 1 ton or the amount listed for the pollutant in the definition of "significant" in R18-2-101 131 a) or b), whichever is less.
    - ii. Any combination of regulated air pollutants in a quantity greater than 2 1/2 tons.
  - d. A certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 4. An amendment to an emissions inventory questionnaire, containing the documentation required by subsection A 3 , shall be submitted to the Director by any source whenever it discovers or receives notice, within two years of the original submittal, that incorrect or insufficient information was submitted to the Director by a previous emissions inventory questionnaire. The amendment shall be submitted to the Director within 30 days of discovery or receipt of notice. If the incorrect or insufficient information resulted in an incorrect annual emissions fee, the Director shall require that additional payment be made or shall apply an amount as a credit to a future annual emissions fee. The submittal of an amendment under this subsection shall not subject the owner or operator to an enforcement action or a civil or criminal penalty if the original submittal of incorrect or insufficient information was not due to willful neglect.
- 5. The Director may require submittal of supplemental emissions inventory questionnaires for air contaminants pursuant to A.R.S. §§ 49-422, 49-424, and 49-426.03 through 49-426.08.

**B. Emissions Statement Requirements****R18-2-326.01. Expired****Historical Note**

New Section made by exempt rulemaking at 16 A.A.R. 844, effective July 1, 2010 Supp. 10-2). Section expired under A.R.S. § 41-1056 J at 23 A.A.R. 613, effective February 14, 2017(Supp. 17-1 .

**R18-2-327. Emissions Inventory Questionnaire and Emissions Statement****A. Emissions Inventory Questionnaire Requirements**

- 1. Every source subject to permit requirements under this Chapter shall complete and submit to the Director an emissions inventory questionnaire as follows:
  - a. Sources Requiring a Class I Permit under R18-2-302 B . Sources requiring a Class I permit under R18-2-302(B shall complete and submit to the Director an emissions inventory questionnaire no later than June 1 of each year.
  - b. Sources Requiring a Class II Permit under R18-2-302 B
    - i. Sources requiring a Class II permit under R18-2-302(B shall complete and submit to the Director an emissions inventory questionnaire



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1. Any stationary source located in an ozone nonattainment area that has actual emissions of 25 tons or more of nitrogen oxides  $\text{NO}_x$  or volatile organic compounds (VOCs) during the calendar year shall complete and submit to the Director an emissions statement no later than June 1 of the following year, except as provided in subsection B 5).
  2. The emissions statement shall be on an electronic or paper form provided by the Director and shall require the following information for the previous calendar year:
    - a. The source's name, description, mailing address, contact person and contact person phone number, and physical address and location, if different than the mailing address.
    - b. Process information for the source, including design capacity, throughput, operations schedule, and emissions control devices, their description and efficiencies.
    - c. Actual emissions of  $\text{NO}_x$  and VOC including documentation of the method of measurement, calculation, or estimation, determined pursuant to subsection C .
    - d. A certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
  3. If either  $\text{NO}_x$  or VOC annual emissions are greater than or equal to 25 tons, the other pollutant shall be included in the emissions statement even if less than 25 tons.
  4. An amendment to an emissions statement, containing the documentation required by subsection B 2), shall be submitted to the Director by any source whenever it discovers or receives notice, within two years of the original submittal, that incorrect or insufficient information was submitted to the Director by a previous emissions statement. The amendment shall be submitted to the Director within 30 days of discovery or receipt of notice. The submittal of an amendment under this subsection shall not subject the owner or operator to an enforcement action or a civil or criminal penalty if the original submittal of incorrect or insufficient information was not due to willful neglect.
  5. A source that submits an emissions inventory questionnaire under subsection A is exempt from subsection B requirements for that submission year.
- C. Emissions Estimation Methodology**
1. Actual quantities of emissions shall be determined using the following emission factors or data.
    - a. Whenever available, emissions estimates shall either be calculated from continuous emissions monitors certified pursuant to 40 CFR 75, Subpart C and referenced appendices, or data quality assured pursuant to Appendix F of 40 CFR 60.
    - b. When sufficient data pursuant to subsection C 1 a) is not available, emissions estimates shall be calculated from data from source performance tests conducted pursuant to R18-2-312 in the calendar year being reported or, when not available, conducted in the most recent calendar year representing the operating conditions of the year being reported.
    - c. When sufficient data pursuant to subsection C 1)(a) or b) is not available, emissions estimates shall be calculated using emissions factors from EPA Publication No. AP-42 "Compilation of Air Pollutant Emission Factors," Volume I: Stationary Point and Area Sources, Fifth Edition, 1995, U.S. Environmental Protection Agency, Research Triangle Park, NC, including Supplements A through F and all updates published through July 1, 2011 and no future editions). AP-42 is incorporated by reference and is on file with the Department of Environmental Quality and can be obtained from the Government Printing Office, 732 North Capitol Street, NW, Washington, D.C. 20401, telephone 202) 512-1800, or by downloading the document from the website for the EPA Clearinghouse for Emission Inventories and Emission Factors.
    - d. When sufficient data pursuant to subsections C 1 a) through c) is not available, emissions estimates shall be calculated from material balance using engineering knowledge of process.
    - e. When sufficient data pursuant to subsections C 1 a) through d) is not available, emissions estimates shall be calculated by equivalent methods approved by the Director. The Director shall only approve methods that are demonstrated as accurate and reliable as one of the methods in subsections C 1 (a through d) .
  2. Actual quantities of emissions calculated under subsection C shall be determined on the basis of actual operating hours, production rates, in-place process control equipment, operational process control data, and types of materials processed, stored, or combusted.

**Historical Note**

Emergency rule adopted effective September 17, 1991, pursuant to A.R.S. § 41-1026, valid for only 90 days Supp. 91-3). Emergency rule re-adopted without change effective December 16, 1991, pursuant to A.R.S. § 41-1026, valid for only 90 days Supp. 91-4). Emergency expired; text deleted Supp. 93-1). New Section adopted effective November 15, 1993 Supp. 93-4 . Amended effective December 7, 1995 Supp. 95-4). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 Supp. 12-2 . Amended by final rulemaking at 23 A.A.R. 333, effective March 21, 2017 Supp. 17-1 . Amended by final rulemaking at 26 A.A.R. 3092, effective January 19, 2021 (Supp. 20-4.)

## Copies of Rules Submitted by Arizona Department of Environmental Quality on April 28, 2017 for Approval into the Arizona SIP

\*Note that EPA has modified the text of the relevant Arizona Administrative Register Notice of Final Rulemaking documents so that the documents in this section reflect only the Arizona Department of Environmental Quality rules submitted for EPA approval as part of the current proposed SIP action.

### Arizona Administrative Code, Title 18, Chapter 2, Article 3

Rule	Title	State Effective Date
R18-2-330	Public Participation	March 21, 2017
R18-2-332	Stack Height Limitation	March 21, 2017



**R18-2-330. Public Participation**

- A. The Director shall provide public notice, an opportunity for public comment, and an opportunity for a hearing before taking any of the following actions:
1. ~~A permit issuance or renewal of a permit~~ The issuance or denial of a permit or permit renewal.
  2. The issuance or denial of a ~~A~~ significant permit revision,
  3. ~~Revocation~~ The revocation and reissuance or reopening of a permit,
  4. The grant of any ~~Any~~ conditional orders pursuant to R18-2-328,
  5. ~~Granting a variance from a general permit under R18-2-507 and R18-2-1705.~~ The issuance or denial of a registration for the construction of a source, except as provided in R18-2-302.01(B)(5).
- B. The Director shall provide public notice of receipt of complete applications for permits or permit revisions subject to Article 4 of this Chapter by publishing a notice in a newspaper of general circulation in the county where the source is or will be located.
- C. The Director shall provide the notice required pursuant to subsection (A) as follows:
1. The Director shall publish the notice once each week for two consecutive weeks in two newspapers of general circulation in the county where the source is or will be located.
  2. The Director shall mail a copy of the notice to persons on a mailing list developed by the Director consisting of those persons who have requested in writing to be placed on such a mailing list.
- ~~D3.~~ The notice ~~required by subsection (C)~~ shall include the following:
- ~~1a.~~ Identification of the affected facility;
  - ~~2b.~~ Name and address of the permittee or applicant;
  - ~~3c.~~ Name and address of the permitting authority processing the permit action;
  - ~~4d.~~ The activity or activities involved in the permit action;
  - ~~5e.~~ The emissions change involved in any permit revisions;
  - ~~6f.~~ The air contaminants to be emitted;
  - ~~7g.~~ If applicable, that a notice of confidentiality has been filed under R18-2-305;
  - ~~8h.~~ If applicable, that the source has submitted a risk management analysis under R18-2-1708;
  - ~~9i.~~ A statement that any person may submit written comments, or a written request for a public hearing, or both, on the proposed permit action, along with the deadline for such requests or comments;
  - ~~10j.~~ The name, address, and telephone number of a person from the Department from whom additional information may be obtained;
  - ~~11k.~~ Locations where ~~copies of the permit or permit revision application, the proposed permit, and all other materials available to the Director that are relevant to the permit decision~~ the materials identified in subsection (D) may be reviewed, ~~including the closest Department office,~~ and the times at which they shall be available for public inspection.
  - ~~12l.~~ The Director shall include a statement in the public notice if the permit or permit revision would result in the generation of emission reduction credits under R18-2-1204, or the utilization of emission reduction credits under R18-2-1206.
- D. By no later than the date notice is first published under subsection (A), the Department shall make copies of the following materials available at a public location in the same county as the stationary source that is the subject of the application and at the closest Department office:
1. The application;
  2. The proposed permit or permit revision, if applicable;
  3. The Department's analysis in support of the grant or denial of the permit or permit revision; and
  4. All other materials available to the Director that are relevant to the permit decision.
- E. The Director shall hold a public hearing to receive comments on petitions for conditional orders which would vary from requirements of the applicable implementation plan. For all other actions involving a proposed permit, the Director shall hold a public hearing only



upon written request. If a public hearing is requested, the Director shall schedule the hearing and publish notice as described in A.R.S. § 49-444 and subsection (D). The Director shall give notice of any public hearing at least 30 days in advance of the hearing.

- F. At the time the Director publishes the first notice under subsection (C)(1), the applicant shall post a notice containing the information required in subsection ~~(D)~~ (C)(3) at the site where the source is or may be located. Consistent with federal, state, and local law, the posting shall be prominently placed at a location under the applicant's legal control, adjacent to the nearest public roadway, and visible to the public using the public roadway. If a public hearing is to be held, the applicant shall place an additional posting providing notice of the hearing. Any posting shall be maintained until the public comment period is closed.
- G. The Director shall provide at least 30 days from the date of its first notice for public comment to receive comments and requests for a hearing. The Director shall keep a record of the commenters and of the issues raised during the public participation process and shall prepare written responses to all comments received. At the time a final proposed permit is submitted to EPA, in the case of a Class I permit, or a final decision is made, in the case of a Class II permit, the record and copies of the Director's responses shall be made available to the applicant and all commenters.

**R18-2-332. Stack Height Limitation**

- A. The degree of emission limitation required of any source for control of any pollutant shall not be affected by so much of the source's stack height that exceeds good engineering practice or by any other dispersion technique, except as provided in subsection (B). This section does not require the plan to restrict, in any manner, the actual stack height of any source.
- ~~AB.~~ The limitations set forth herein Subsection (A) shall not apply to: stacks or dispersion techniques used by the owner or operator prior to December 31, 1970, for which the owner or operator had:
  - 1. ~~1. Begun, or caused to begin, a continuous program of physical on-site construction of the stack;~~
  - 2. ~~2. Entered into building 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~~ Stacks in existence, or dispersion techniques implemented, on or before December 31, 1970, unless the stationary source or emission unit emitting pollutants through the stack, or employing the dispersion technique, was constructed, reconstructed or underwent a major modification after December 31, 1970; or
  - 32. Coal-fired steam electric generating units, subject to the provisions of Section 118 of the Act which commenced operation before July 1, ~~1975~~ 1957, with stacks constructed under a construction contract awarded before February 8, 1974.
- ~~BC.~~ GEP-Good engineering practice stack height is calculated as the greater of the following four numbers in subsections (1) through (4) heights:
  - 1. 213.25 feet (65 meters) measured from the ground-level elevation at the base of the stack;
  - 2. The result of one of the following equations, where "Hg" = good engineering practice stack height measured from the ground-level elevation at the base of the stack; "H" = height of nearby structures measured from the ground-level elevation at the base of the stack; and "L" = lesser dimension (height or projected width) of nearby structures:
    - a. For stacks in existence on January 12, 1979, and for which the owner or operator had obtained all applicable preconstruction permits or approvals required under 40 CFR ~~Parts 51 and 52 and R18-2-403~~,  $H_g = 2.5H$ , provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation; or
    - 3b. For all other stacks,  $H_g = H + 1.5L$ , ~~where~~
      - $H_g$  = good engineering practice stack height, measured from the ground-level elevation at the base of the stack;
      - $H$  = height of nearby structure measured from the ground-level elevation at the base of the stack;
      - $L$  = lesser dimension (height or projected width) of nearby structure;
      - provided that the EPA, the Director, or local control agency may require the use of a field study or fluid model to verify GEP good engineering practice stack height for the source; or
  - 43. The height demonstrated by a fluid model or a field study approved by the reviewing agency, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures, or nearby terrain ~~obstacles~~ features;
- D. As used in this Section:
  - 51. For a specific structure or terrain feature, "nearby" ~~shall be means:~~
    - a. For purposes of applying the formulae in ~~subsections (B)(2) and (3)~~ subsection (C)(2), that distance up to five times the lesser of the height or the width dimension of a structure but not greater than 0.8 km (1/2 mile).
    - b. For conducting demonstrations under subsection ~~(B)(4)~~ (C)(3), ~~means~~ not greater than 0.8 km (1/2 mile). An exception is that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to 10 times the maximum height ~~(H+)~~ (Ht) of the feature, not to exceed 2 miles if such feature achieved a height ~~(H+)~~ (Ht) 0.8 km from the stack. ~~The height shall be that is at least 40% of the GEP good engineering practice stack height determined by the formula provided in subsection (B)(3) (C)(2)(b), or 85 feet (26 meters), whichever is greater, as measured from the ground-level elevation at the base of the stack.~~
  - 62. "Excessive concentrations" ~~means, for the purpose of determining good engineering practice stack height under subsection (B)(4):~~
    - a. For sources seeking credit for stack height exceeding that established under ~~subsections (B)(2) and (3)~~ subsection (C)(2), a maximum ground-level concentration due to emissions from a stack due in whole or in part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least 40% in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contributes to a total concentration due to emissions from all sources that is greater than ~~an ambient air quality standard~~ a national ambient air quality standard. For sources subject to the requirements for permits or permit revisions under Article 4 of this Chapter R18-2-406, an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes or eddy effects produced by nearby structures or nearby terrain features which individually is at least 40% in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than the applicable maximum allowable increase contained in R18-2-218. The allowable





- emission rate to be used in making demonstrations under subsection ~~(B)(4)~~ (C)(3) shall be prescribed by the new source performance standard which is applicable to the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the Director, an alternative emission rate shall be established in consultation with the source owner or operator;
- b. For sources seeking credit after October 11, 1983, for increases in existing stack heights up to the heights established under ~~subsections (B)(2) and (3)~~ subsection (C)(2), either:
    - i. A maximum ground-level concentration due in whole or in part to downwash, wakes, or eddy effects as provided in subsection ~~(B)(6)(a)~~ (D)(2)(a), except that emission rate specified by any applicable SIP (or, in the absence of such a limit, the actual emission rate) shall be used; or
    - ii. The actual presence of a local nuisance caused by the existing stack, as determined by the Director; and
  - c. For sources seeking credit after January 12, 1979, for a stack height determined under ~~subsections (B)(2) and (3)~~ subsection (C)(2), where the Director requires the use of a field study or fluid model to verify ~~GEP~~ good engineering practice stack height, for sources seeking stack height credit after November 9, 1984, based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970, based on the aerodynamic influence of structures not adequately represented by the equations in ~~subsections (B)(2) and (3)~~ subsection (C)(2), a maximum ground-level concentration due in whole or in part to downwash, wakes, or eddy effects that is at least 40% in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.
- ~~C.~~ The degree of emission limitation required of any source after the respective date given in subsection (A) above for control of any pollutant shall not be affected by so much of any source's stack height that exceeds good engineering practice or by any other dispersion technique.
  - ~~D.~~ The good engineering practice (GEP) stack height for any source seeking credit because of plume impaction which results in concentrations in violation of national ambient air quality standards or applicable maximum allowable increases under R18-2-218 can be adjusted by determining the stack height necessary to predict the same maximum air pollutant concentration on any elevated terrain feature as the maximum concentration associated with the emission limit which results from modelling the source using the GEP stack height as determined herein and assuming the elevated terrain features to be equal in elevation to the GEP stack height. If this adjusted GEP stack height is greater than stack height the source proposes to use, the source's emission limitation and air quality impact shall be determined using the proposed stack height and the actual terrain heights.
  - E. Before the Director issues a permit or permit revision under this Article R18-2-334 or Article 4 to a source based on a good engineering practice stack height that exceeds the height allowed by subsection ~~(B)~~ (B)(1) or (2), the Director shall notify the public of the availability of the demonstration study and provide opportunity for a public hearing in accordance with the requirements of ~~R18-402~~ R18-2-330.

**R18-2-334. Minor New Source Review****A. Applicability.**

1. Except as provided in subsection (A)(4), this Section shall apply to the following activities:
  - a. Construction of any new Class I or Class II source, including the construction of any source requiring a Class II permit under R18-2-302.01(C)(4); or
  - b. Any minor NSR modification to a Class I or Class II source.
2. This Section shall apply to a regulated minor NSR pollutant emitted by a new stationary source subject to this Section, if the source will have the potential to emit that pollutant at an amount equal to or greater than the permitting exemption threshold.
3. This Section shall apply to an increase in emissions of a regulated minor NSR pollutant from a minor NSR modification, if the modification would increase the source's

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- potential to emit that pollutant by an amount equal to or greater than the permitting exemption threshold.
4. This Section shall not apply to the emissions of a pollutant from any of the activities identified in this subsection, if the emissions of that pollutant are subject to Article 4 of this Chapter.
- B.** No person shall begin actual construction of a new stationary source, or minor NSR modification, subject to this Section without first obtaining a permit, a permit revision, a proposed final permit, or a proposed final permit revision from the Director in accordance with R18-2-304.
- C.** The Director shall not issue a proposed final Class I permit or permit revision or a Class II permit or permit revision subject to this Section to a person proposing to construct a new source or make a minor NSR modification unless the source or modification meets one of the following conditions for each regulated minor NSR pollutant subject to this Section:
1. The owner or operator elects to implement RACT.
    - a. In the case of a new source, the owner or operator shall implement RACT for each emissions unit that has the potential to emit a regulated minor NSR pollutant in an amount equal to or greater than 20% of the permitting exemption threshold.
    - b. In the case of a minor NSR modification, the owner or operator shall implement RACT for each emissions unit that will experience an increase in the potential to emit a regulated minor NSR pollutant equal to or greater than 20% of the permitting exemption threshold.
    - c. When it is technically feasible and otherwise consistent with the definition of RACT to apply the same devices, systems, process modifications, work practices or other apparatus or techniques to a group of emissions units, that group of emissions units shall be treated as a single emissions unit for purposes of subsections (C)(1)(a) and (b). The following are examples of situations to which this subsection (may) apply:
      - i. Emissions from a group of emissions units can be vented to a single control device.
      - ii. A low-VOC coating can be used in several spray-painting booths.
  2. An ambient air quality assessment demonstrates that emissions from the source or minor NSR modification will not interfere with attainment or maintenance of a national ambient air quality standard in any area.
    - a. An owner or operator may elect to have the Director perform a screening model of its emissions. If the results of the screening model indicate that the source or minor NSR modification will interfere with attainment or maintenance of a national ambient air quality standard, the owner or operator may perform a more refined model to make the demonstration required by this subsection.
    - b. The requirements of this subsection shall be satisfied, if the results of the screening or more refined model conducted pursuant to subsection (B)(2)(a) demonstrate either of the following:
      - i. Ambient concentrations resulting from emissions from the source or modification combined with existing concentrations of regulated minor NSR pollutants will not interfere with attainment or maintenance of a national ambient air quality standard.
      - ii. Emissions from the source or minor modification will have an ambient impact below the significance levels as defined in R18-2-401.
    - c. The assessment required by this subsection shall take into account any limitations, controls or emissions decreases that are or will be enforceable in the permit or permit revision for the source.
- D.** RACT Determinations.
1. Except as otherwise provided in this subsection, the Director shall determine RACT on the basis of a case-by-case analysis performed by the permit applicant of the emission reduction methods available for each emission unit subject to the RACT requirement under subsection (C)(1).
  2. The Director shall accept a requirement proposed by a permit applicant as RACT under subsection (C)(1) if it complies with the most recently adopted of the following guidelines or standards in effect at the time of the application:
    - a. A control technique guideline issued by the Administrator under section 108(f)(1) of the Act.
    - b. An emissions standard established or revised by the Administrator for the same type of source under section 111 or 112 of the Act after November 15, 1990.
    - c. An applicable requirement of this Chapter or of air quality control regulations adopted by a County under A.R.S. § 49-479 that has been specifically identified as constituting RACT.
    - d. A RACT standard imposed on the same type of source by a general permit.
    - e. A RACT standard imposed on the same type of source under this Section no more than 10 years before submission of the application by the permit applicant. To facilitate identification of previously imposed RACT standards, the Director shall establish an online database of RACT determinations made under this Section.
- E.** Notwithstanding an election to adopt RACT under subsection (C)(1), a permit applicant subject to this Section shall conduct an ambient air quality impact assessment under subsection (C)(2) upon the Director's request. The Director shall make such a request, if there is reason to believe that a source or minor NSR modification could interfere with attainment or maintenance of a national ambient air quality standards. In making that determination, the Director shall take into consideration:
1. The source's emission rates.
  2. The location of emission units within the facility and their proximity to the ambient air.
  3. The terrain in which the source is or will be located.
  4. The source type.
  5. The location and emissions of nearby sources.
  6. Background concentrations of regulated minor NSR pollutants.
- F.** The Director shall deny an application for a Class I permit or permit revision or a Class II permit or permit revision subject to this Section, if an assessment conducted pursuant to subsection (C)(2) demonstrates that the source or modification will interfere with attainment or maintenance of a national ambient air quality standard.
- G.** A copy of the notice required by R18-2-330 for permits or significant permit revisions subject to this Section must also be sent to the Administrator through the appropriate regional office, and to all other state and local air pollution control agencies having jurisdiction in the region in which the source subject to the permit or permit revision will be located. The

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notice also must be sent to any other agency in the region having responsibility for implementing the procedures required under 40 CFR 51, Subpart I.

- H. All modeling required pursuant to this Section shall be conducted in accordance with 40 CFR 51, Appendix W as of June 30, 2017 (and no future amendments or additions).
- I. The Director shall specify those conditions in the permit that are implemented pursuant to this Section. The specified conditions shall be included in subsequent permit renewals unless modified pursuant to this Section or Article 4 of this Chapter.
- J. The issuance of a permit or permit revision under this Section shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state, or federal law.

**Historical Note**

New Section made by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2). Amended by final rulemaking at 23 A.A.R. 333, effective March 21, 2017 (Supp. 17-1). Amended by final rulemaking at 25 A.A.R. 3630, effective February 1, 2020 (Supp. 19-4).

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### Arizona Administrative Code, Title 18, Chapter 2, Article 4

Rule	Title	State Effective Date
R18-2-401	Definitions	March 21, 2017
R18-2-402	General	March 21, 2017
R18-2-403	Permits for Sources Located in Nonattainment Areas	March 21, 2017
R18-2-404	Offset Standards	March 21, 2017
R18-2-405	Special Rule for Major Sources of VOC or Nitrogen Oxides in Ozone Nonattainment Areas Classified as Serious or Severe	March 21, 2017
R18-2-406	Permit Requirements for Sources Located in Attainment and Unclassifiable Areas	March 21, 2017
R18-2-407	Air Quality Impact Analysis and Monitoring Requirements	March 21, 2017
R18-2-408	Innovative Control Technology	March 21, 2017
R18-2-410	Visibility and Air Quality Related Value Protection	March 21, 2017
R18-2-411	Permit Requirements for Sources that Locate in Attainment or Unclassifiable Areas and Cause or Contribute to a Violation of Any National Ambient Air Quality Standard	March 21, 2017
R18-2-412	PALs	March 21, 2017



**ARTICLE 4. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES**

**R18-2-401. Definitions**

The following definitions apply to this Article:

1. “Adverse impact on visibility” means visibility impairment that interferes with the management, protection, preservation, or enjoyment of the visitor’s visual experience of a federal Class I area, as determined according to R18-2-410. This determination



must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairments, and how these factors correlate with times of visitor use of the federal Class I area and the frequency and timing of natural conditions that reduce visibility. This term does not include effects on integral vistas.

2. "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with subsections (2)(a) through ~~(e)~~ (d).
  - a. For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the five-year period immediately preceding when the owner or operator begins actual construction of the project. The Director shall allow the use of a different time period upon a determination that it is more representative of normal source operation.
    - i. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
    - ii. The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.
    - iii. For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.
    - iv. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subsection (2)(a)(ii).
  - b. For any existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Administrator for a permit required under 40 CFR 52.21 or by the Director for a permit required under the state implementation plan, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.
    - i. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
    - ii. The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period. This provision applies to excess emissions associated with a malfunction.
    - iii. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major source must currently comply, had such major source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under 40 CFR 63, the baseline actual emissions need only be adjusted if the state of Arizona has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G) submitted to the Administrator pursuant to section 110(a)(1) of the Act.
    - iv. For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units affected by the project. A different consecutive 24-month period may be used for each regulated NSR pollutant.
    - v. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subsection (2)(b)(ii) or (iii).
  - c. For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.
  - d. For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures in subsection (2)(a), for other existing emissions units in accordance with the procedures contained in subsection (2)(b), and for new emissions units in accordance with the procedures contained in subsection (2)(c).
3. "Basic design parameter" means:
  - a. Except as provided in subsection (3)(c), for a process unit at a steam electric generating facility, the owner or operator may select as its basic design parameters either maximum hourly heat input and maximum hourly fuel consumption rate or maximum hourly electric output rate and maximum steam flow rate. When establishing fuel consumption specifications in terms of weight or volume, the minimum fuel quality based on Btu content shall be used for determining the basic design parameters for a coal-fired electric utility steam generating unit.
  - b. Except as provided in subsection (3)(c), the basic design parameters for any process unit that is not at a steam electric generating facility are maximum rate of fuel or heat input, maximum rate of material input, or maximum rate of product output. Combustion process units will typically use maximum rate of fuel input. For sources having multiple end products and raw materials, the owner or operator should consider the primary product or primary raw material when selecting a basic design parameter.
  - c. If the owner or operator believes the basic design parameters in subsections (3)(a) and (b) are not appropriate for a specific industry or type of process unit, the owner or operator may propose to the Director an alternative basic design parameters for the source's process unit. If the Director approves of the use of an alternative basic design parameters, the Director shall issue a permit that is legally enforceable that records such basic design parameters and requires the owner or operator to comply with such parameters.





- d. The owner or operator shall use credible information, such as results of historic maximum capability tests, design information from the manufacturer, or engineering calculations, in establishing the magnitude of the basic design parameters specified in subsections (3)(a) and (b).
- e. If design information is not available for a process unit, then the owner or operator shall determine the process unit's basic design parameters using the maximum value achieved by the process unit in the five-year period immediately preceding the planned activity.
- f. Efficiency of a process unit is not a basic design parameter.
- g. The replacement activity shall not cause the process unit to exceed any emission limitation, or operational limitation that has the effect of constraining emissions, that applies to the process unit and that is legally enforceable.
4. "Complete" means, in reference to an application for a permit or permit revision, that the application contains all the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the Department from requesting or accepting any additional information.
5. "Dispersion technique" means any technique that attempts to affect the concentration of a pollutant in the ambient air by any of the following:
  - a. Using that portion of a stack that exceeds good engineering practice stack height;
  - b. Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or
  - c. Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams that increases the exhaust gas plume rise. This shall not include any of the following:
    - i. The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream.
    - ii. The merging of exhaust gas streams under any of the following conditions:
      - (1) The source owner or operator demonstrates that the facility was originally designed and constructed with the merged gas streams;
      - (2) After July 8, 1985, the merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant, applying only to the emission limitation for that pollutant; or
      - (3) Before July 8, 1985, the merging was part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the Department shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the Department shall deny credit for the effects of the merging in calculating the allowable emissions for the source.
    - iii. Smoke management in agricultural or silvicultural prescribed burning programs.
    - iv. Episodic restrictions on residential woodburning and open burning.
    - v. Techniques that increase final exhaust gas plume rise if the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.
6. "Existing emissions unit" is any emissions unit that is currently in existence and that is not a new emissions unit. A replacement unit is an existing emissions unit.
7. "Federal Class I area" means an area designated as Class I under R18-2-217.
78. "High terrain" means any area having an elevation of 900 feet or more above the base of the stack of a source.
89. "Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice, or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.
910. "Low terrain" means any area other than high terrain.
4011. "Lowest achievable emission rate" (LAER) means, for any source, the more stringent rate of emissions based on one of the following:
  - a. The most stringent emissions limitation that is contained in any implementation plan approved or promulgated under sections 110 or 172 of the Act for the class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that the limitation is not achievable; or
  - b. The most stringent emissions limitation that is achieved in practice by the class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. The application of this term shall not permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under the applicable standards of performance in Articles 9 and 11 of this Chapter new source performance standards.
12. "Major emissions unit" means:
  - a. Any emissions unit that emits or has the potential to emit 100 tons per year or more of the PAL pollutant in an attainment area; or
  - b. Any emissions unit that emits or has the potential to emit the PAL pollutant in an amount that is equal to or greater than the major source threshold for the PAL pollutant for nonattainment areas. For example, in accordance with the definition of major stationary source in section 182(c) of the Act, an emissions unit would be a major emissions unit for VOC if the emissions unit is located in a serious ozone nonattainment area and it emits or has the potential to emit 50 or more tons of VOC per year.

~~14~~13. “Major source” ~~means~~ is defined as follows:

- a. ~~For purposes of determining the applicability of R18-2-403 through R18-2-405 or R18-2-411, major source means any~~ Any stationary source ~~located in a nonattainment area~~ that emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant, except that the following thresholds shall apply in areas subject to subpart 2, subpart 3 or subpart 4 of part D, Title I of the Act:

Pollutant Emitted	Nonattainment Pollutant and Classification	Quantity Threshold tons/year or more
Carbon Monoxide (CO)	CO, Serious, if stationary sources contribute significantly to CO levels in the area as determined under rules issued by the Administrator	50
VOC	Ozone, Serious	50
VOC	Ozone, Severe	25
PM <sub>10</sub>	PM <sub>10</sub> , Serious	70
PM <sub>2.5</sub>	PM <sub>2.5</sub> , Serious	70
PM <sub>2.5</sub> precursors identified in R18-2-101(124)(a)	PM <sub>2.5</sub> , Serious	70
NO <sub>x</sub>	Ozone, Serious	50
NO <sub>x</sub>	Ozone, Severe	25

- b. ~~For purposes of determining the applicability of R18-2-406 through R18-2-408 or R18-2-410, major source means any~~ Any stationary source ~~located in an attainment or unclassifiable area~~ that emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant if the source is classified as a ~~Categorical Source~~ categorical source, or 250 tons per year or more of any regulated NSR pollutant if the source is not classified as a ~~Categorical Source~~ categorical source;
- c. ~~Any stationary source that emits, or has the potential to emit, five or more tons of lead per year;~~
- d. ~~A major source includes a physical change that would occur at a stationary source, not otherwise qualifying under subsection (13)(a) or (b) as a major source, if the change would constitute a major source by itself.~~
- e. ~~A major source that is major for VOC or nitrogen oxides shall be considered major for ozone; or,~~
- f. ~~The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this Section whether it is a major stationary source, unless the source belongs to a section 302(j) category.~~
14. “Mandatory federal Class I area” means an area identified in R18-2-217(B).
- ~~15~~15. “New emissions unit” means any emissions unit which is (or will be) newly constructed and which has existed for less than two years from the date such emissions unit first operated.
- ~~16~~16. “Plantwide applicability limitation” or “PAL” means an emission limitation that is based on the baseline actual emissions of all emissions units at the stationary source that emit or have the potential to emit the PAL pollutant, expressed in tons per year, for a pollutant at a major source, that is enforceable as a practical matter and established source-wide in accordance with this Section.
- ~~17~~17. “PAL allowable emissions” means “allowable emissions” as defined in R18-2-101, except that the allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit’s potential to emit.



- ~~15~~18. PAL effective date generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- ~~16~~19. "PAL effective period" means the period beginning with the PAL effective date and ending 10 years later.
- ~~17~~20. "PAL major modification" means any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.
- ~~18~~21. "PAL permit" means the permit issued by the Director that establishes a PAL for a major source under Article 3 or 4 of this Chapter.
- ~~19~~22. "PAL pollutant" means the pollutant for which a PAL is established at a major source.
- ~~20~~23. "Projected actual emissions" means:
- The maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant during any 12-month period in the 60 calendar months following the date the unit resumes regular operation after the project, or in any 12-month period in the 120 calendar months following that date if the project involves increasing the design capacity or potential to emit of any emissions unit for that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major source.
  - In determining the projected actual emissions before beginning actual construction, the owner or operator of the major source:
    - Shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the county, state or federal regulatory authorities, and compliance plans under these regulations; and
    - Shall include fugitive emissions to the extent quantifiable;
    - Shall include emissions associated with startups, ~~and~~ shutdowns, and malfunctions ~~except emissions from a shutdown associated with a malfunction;~~ and
    - Shall exclude, only for calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or
  - In lieu of using the method set out subsections ~~(20)(b)(i)~~ 23(b)(i) through (iv), the owner or operator may elect to use the emissions unit's potential to emit, in tons per year.
- ~~21. "Reconstruction" of sources located in nonattainment areas shall be presumed to have taken place if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new stationary source, as determined in accordance with the provisions of 40 CFR 60.15(f)(1) through (3).~~
- ~~22~~24. "Replacement unit" means an emissions unit for which all the criteria listed in subsections ~~(22)(a)~~ (24)(a) through (d) are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.
- The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.
  - The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
  - The replacement does not alter the basic design parameters of the process unit.
  - The replaced emissions unit is permanently removed from the major source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.
- ~~23~~25. "Resource recovery project" means any facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse. Only energy conversion facilities that utilize solid waste that provides more than 50% of the heat input shall be considered a resource recovery project under this Article.
- ~~24~~26. "Significant emissions unit" means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit.
- ~~25~~27. "Significance levels" means the following ambient concentrations for the enumerated pollutants:

Averaging Time					
Pollutant	Annual	24-Hour	8-Hour	3-Hour	1-Hour
SO <sub>2</sub>	1 µg/m <sup>3</sup>	5 µg/m <sup>3</sup>		25 µg/m <sup>3</sup>	
NO <sub>2</sub>	1 µg/m <sup>3</sup>				
CO			0.5 mg/m <sup>3</sup>		2 mg/m <sup>3</sup>
PM <sub>10</sub>	1 µg/m <sup>3</sup>	5 µg/m <sup>3</sup>			
PM <sub>2.5</sub> federal Class I area	0.06 µg/m <sup>3</sup>	0.07 µg/m <sup>3</sup>			
PM <sub>2.5</sub> federal Class II area	0.3 µg/m <sup>3</sup>	1.2 µg/m <sup>3</sup>			
PM <sub>2.5</sub> federal Class III area	0.3 µg/m <sup>3</sup>	1.2 µg/m <sup>3</sup>			



Except for the annual pollutant concentrations, the Department shall deem that exceedance of significance levels has occurred when the ambient concentration of the above pollutant is exceeded more than once per year at any one location. If the concentration occurs at a specific location and at a time when ~~Arizona ambient air quality standards~~ the national ambient air quality standards for the pollutant are not violated, the significance level does not apply.

~~2628.~~ "Small emissions unit" means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant.

**R18-2-402. General**

- A. The preconstruction review requirements of this Article shall apply to the construction of any new major source or any project at an existing major source.
- B. The requirements of R18-2-403 through R18-2-410 apply to the construction of ~~a~~ any new major source or ~~a~~ any major modification of any existing ~~stationary~~ major source, except as this Article otherwise provides.
- C. No person shall begin actual construction of a new major source or a major modification subject to the requirements of R18-2-403 through R18-2-410 without first obtaining a proposed final permit from the Director, pursuant to R18-2-307(A)(2), stating that the major source or major modification shall meet those requirements.
- D. The requirements of this Article apply to projects at major sources in accordance with the following principles.
  - 1. Except as otherwise provided in subsection (E), a project is a major modification for a regulated NSR pollutant if it causes both a significant emissions increase and a significant net emissions increase. The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.
  - 2. The procedure for calculating before beginning actual construction whether a significant emissions increase will occur depends upon the types of emissions units being modified as set forth in subsections (D)(3) through (6). The procedure for calculating before beginning actual construction whether a significant net emissions increase will occur at the major source is set forth in the definition of net emissions increase in R18-2-101. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.
  - 3. Actual-to-projected-actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions, for each existing emissions unit, equals or exceeds the significant amount for that pollutant.
  - 4. Actual-to-potential applicability test for projects that only involve new emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit from each new emissions unit following completion of the project and the baseline actual emissions of these units before the project equals or exceeds the significant amount for that pollutant.
  - 5. [Reserved.]
  - 6. Hybrid applicability test for projects that involve both new emissions units and existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in ~~subsection~~ subsections (D)(3) through (D)(4), as applicable with respect to each emissions unit, equals or exceeds the significant amount for that pollutant.
- E. Any major source with a PAL for a regulated NSR pollutant shall comply with R18-2-412.
- F. This subsection applies with respect to any regulated NSR pollutant emitted from projects at existing emissions units at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility, within the meaning of subsection (F)(6) ~~of this Section~~, that a project that is not a part of a major modification may result in a significant emissions increase of such pollutant and the owner or operator elects to use the method specified in ~~R18-2-401(20)(b)(i)~~ R18-2-401(23)(b)(i) through (iv) of the definition of projected actual emissions for calculating projected actual emissions.
  - 1. Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:
    - a. A description of the project;
    - b. Identification of the emissions unit(s) with emissions of a regulated NSR pollutant that could be affected by the project;
    - c. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, ~~the amount of emissions excluded under R18-2-401(20)(b)(iii)~~ R18-2-401(23)(b)(iv) of the definition of projected actual emissions, and an explanation for why such amount was excluded; and
    - d. Any netting calculations, if applicable.
  - 2. If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in subsection (F)(1) to the Director. Nothing in this subsection shall be construed to require the owner or operator of such a unit to obtain any determination from the Director before beginning actual construction.
  - 3. The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in subsection (F)(1)(b); and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR pollutant at such emissions unit. For purposes of this subsection, fugi-



tive emissions (to the extent quantifiable) shall be monitored if the emissions unit is part of a section 302(j) category or if the emissions unit is located at a major stationary source that belongs to a section 302(j) category.

4. The owner or operator shall submit a report to the Director if for a calendar year the annual emissions, in tons per year, from the project identified in subsection ~~(F)(1)(a)~~ (F)(1) exceed the sum of the baseline actual emissions, as documented and maintained under subsection (F)(1)(c), by a significant amount for that regulated NSR pollutant, and if the emissions differ from the preconstruction projection as documented and maintained under subsection (F)(1)(c). The owner or operator shall submit the report to the Director within 60 days after the end of the calendar year. The report shall contain the following:
  - a. The name, address and telephone number of the major source;
  - b. The annual emissions as calculated pursuant to subsection (F)(3); and
  - c. Any other information that the owner or operator wishes to include in the report, such as an explanation as to why the emissions differ from the preconstruction projection.
5. Notwithstanding subsection (F)(4), if any existing emissions unit identified in subsection (F)(1)(b) is an electric utility steam generating unit, the owner or operator shall submit a report to the Director within 60 days after the end of each calendar year during which the owner or operator must generate records under subsection (F)(3). The report shall document the unit's post-project annual emissions during the calendar year that preceded submission of the report.
6. A "reasonable possibility" under subsection (F) occurs when the owner or operator calculates the project to result in one of the following:
  - a. A projected actual emissions increase of at least 50% of the amount that is a significant emissions increase (without reference to the amount that is a significant net emissions increase) for the regulated NSR pollutant.
  - b. A projected actual emissions increase that, added to the amount of emissions excluded under subsection ~~(R18-2-401(20)(b)(iv))~~ R18-2-401(23)(b)(iv) of the definition of projected actual emissions, sums to at least 50% of the amount that is a significant emissions increase (without reference to the amount that is a significant net emissions increase) for the regulated NSR pollutant. For a project for which a reasonable possibility occurs only within the meaning of subsection (F)(6)(b), and not also within the meaning of subsection (F)(6)(a), subsections (F)(2) through (5) do not apply to the project.
7. The owner or operator of the source shall make the information required to be documented and maintained under subsection (F) available for review upon request for inspection by the Department or the general public.
- G. An application for a permit or permit revision under this Article, other than a PAL permit pursuant to R18-2-412, shall not be considered complete unless the application demonstrates that:
  1. The requirements in subsection (H) are met;
  2. The more stringent of the applicable new source performance standards in ~~Article 9 of this Chapter~~ or the existing source performance standards in Article 7 of this Chapter are applied to the proposed new major source or major modification of a major source;
  3. The visibility requirements contained in R18-2-410 are satisfied;
  4. All applicable provisions of Article 3 of this Chapter are met;
  5. The new major source or major modification will be in compliance with whatever emission limitation, design, equipment, work practice or operational standard, or combination thereof is applicable to the source or modification. The degree of emission limitation required for control of any pollutant under this Article shall not be affected in any manner by:
    - a. Stack height in excess of GEP stack height except as provided in R18-2-332; or
    - b. Any other dispersion technique, unless implemented prior to December 31, 1970;
  6. The new major source or major modification will not exceed the applicable standards for hazardous air pollutants contained in this Chapter;
  7. The new major source or major modification will not exceed the limitations, if applicable, on emission from nonpoint sources contained in Article 6 of this Chapter;
  8. ~~A stationary source that will emit five or more tons of lead per year will not violate the ambient air quality standards for lead contained in R18-2-206;~~
  9. The new major source or major modification will not have an adverse impact on visibility, as determined according to R18-2-410.
- H. Except for assessing air quality impacts within federal Class I areas, the air impact analysis required to be conducted as part of a permit application shall initially consider only the geographical area located within a 50 kilometer radius from the point of greatest emissions for the new major source or major modification. The Director, on his own initiative or upon receipt of written notice from any person shall have the right at any time to request an enlargement of the geographical area for which an air quality impact analysis is to be performed by giving the person applying for the permit or permit revision written notice thereof, specifying the enlarged radius to be so considered. In performing an air impact analysis for any geographical area with a radius of more than 50 kilometers, the person applying for the permit or permit revision may use monitoring or modeling data obtained from major sources having comparable emissions or having emissions which are capable of being accurately used in such demonstration, and which are subjected to terrain and atmospheric stability conditions which are comparable or which may be extrapolated with reasonable accuracy for use in such demonstration.
- I. ~~Unless the requirement has been satisfied pursuant to Article 3 of this Chapter, the~~ The Director shall comply with following requirements with respect to an application for a permit or permit revision subject to this Article:
  1. Within 60 days after receipt of ~~an the~~ application ~~for a permit or permit revision subject to this Article~~, or any addition to ~~such the~~ application, the Director shall advise the applicant of any deficiency. The date of receipt of ~~the a complete~~ application shall be, for the purpose of this Section, the date on which the Director ~~received receives~~ all required information. The permit application shall not be deemed complete if the Director fails to meet the requirements of this subsection.
  2. Within one year after receipt of a complete application, the Director shall do all of the following:
    - a. Make a preliminary determination as to whether the permit or permit revision should be granted or denied.

- b. Make the application, all materials the applicant submitted, the preliminary determination, and materials relating to the application available under R18-2-330(D).
  - c. Notify the public of the application, the preliminary determination and the opportunity for a public hearing and to submit written comments in accordance with R18-2-330(C). In the case of an application subject to R18-2-406, the notice shall include the degree of consumption of the maximum allowable increases allowed under R18-2-218 that is expected to occur as a result of emissions from the proposed source or modification.
  - d. Take final action on the application by denying the permit or permit revision or issuing a proposed final permit or permit revision.
  - e. Notify the applicant in writing of the approval or denial and make the notification, comments on the proposed action, and materials supporting the final action available for public inspection at the location where materials relating to the proposed action were placed under R18-2-330(D).
23. A copy of any notice required by R18-2-330 and subsection (I)(2)(c) shall be sent to the permit applicant, to the Administrator, and to the following officials and agencies having cognizance over the location where the proposed major source or major modification would occur:
- a. The air pollution control officer, if one exists, for the county wherein the proposed or existing source that is the subject of the permit or permit revision application is located;
  - b. The county manager for the county wherein the proposed or existing source that is the subject of the permit or permit revision application is located;
  - c. The city or town managers of the city or town which contains, and any city or town the boundaries of which are within 5 miles of, the location of the proposed or existing source that is the subject of the permit or permit revision application;
  - d. Any regional land use planning agency with authority for land use planning in the area where the proposed or existing source that is the subject of the permit or permit revision application is located; and
  - e. Any state, Federal Land Manager, or Indian governing body whose lands may be affected by emissions from the proposed source or modification.
3. ~~The Director shall take final action on the application within one year of the proper filing of the completed application. The Director shall notify the applicant in writing of his approval or denial.~~
- 4J. The authority to construct and operate a new major source or major modification under a permit or permit revision issued under this Article shall terminate if the owner or operator does not commence the proposed construction or major modification within 18 months of issuance or if, during the construction or major modification, the owner or operator suspends work for more than 18 months. The Director may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

**R18-2-403. Permits for Sources Located in Nonattainment Areas**

- A. Except as provided in subsections (C) through (G) below, no permit or permit revision shall be issued under this Article to a person proposing to construct a new major source or make a major modification that is major for the pollutant for which the area is designated nonattainment unless:
  - 1. The person demonstrates that the new major source or the major modification will meet an emission limitation which is the lowest achievable emission rate (LAER) for that source for that regulated NSR pollutant.
  - 2. The person demonstrates that all existing major sources owned or operated by that person (or any entity controlling, controlled by, or under common control with that person) in the state are in compliance with, or on a schedule of compliance for, all conditions contained in permits of each of the sources and all other applicable emission limitations and standards under the Act and this Chapter.
  - 3. The person demonstrates that emission reductions for the specific pollutant(s) from source(s) in existence in the allowable offset area of the new major source or major modification (whether or not under the same ownership) meet the offset requirements of R18-2-404.
  - 4. The Administrator has not determined that the applicable implementation plan is not being adequately implemented for the nonattainment area in which the proposed source is to be constructed or modified in accordance with the requirements in this Section.
- B. No permit or permit revision under this Article shall be issued to a person proposing to construct a new major source or make a major modification to a major source located in a nonattainment area unless:
  - 1. The person performs an analysis of alternative sites, sizes, production processes, and environmental control techniques for such new major source or major modification; and
  - 2. The Director determines that the analysis demonstrates that the benefits of the new major source or major modification significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.
- C. At such time that a particular source or modification becomes a major source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as restriction on hours of operation, then the requirements of this Section shall apply to the source or modification as though construction had not yet commenced on the source or modification.
- D. Secondary emissions shall not be considered in determining the potential to emit of a new source or modification and therefore whether the new source or modification is major. However, if a new source or modification is subject to this Section on the basis of its direct emissions, a permit or permit revision under this Article to construct the new source or modification shall be denied unless the requirements of R18-2-403(A)(3) and R18-2-404 are met for reasonably quantifiable secondary emissions caused by the new source or modification.
- E. A permit to construct a new major source or major modification shall be denied unless the conditions specified in subsections (A)(1), (2), and (3) are met for fugitive emissions caused by the new source or modification. However, these conditions shall not apply to a new major source or major modification that would be a major source or major modification only if fugitive emissions, to the extent



quantifiable, are considered in calculating the potential emissions of the source or modification, and the source does not belong to a section 302(j) category.

- F. The requirements of subsection (A)(3) shall not apply to temporary emissions units, such as pilot plants, portable facilities that will be relocated outside of the nonattainment area and the construction phase of a new source, if those units will operate for no more than 24 months in the nonattainment area, are otherwise in compliance with the requirement to obtain a permit under this Chapter and are in compliance with the conditions of that permit.
- G. A decrease in actual emissions shall be considered in determining the potential of a new source or modification to emit only to the extent that the Director has not relied on it in issuing any permit or permit revision under this Article or the state has not relied on it in demonstrating attainment or reasonable further progress.
- H. The Director shall transmit to the Administrator a copy of each permit application relating to a major stationary source or major modification under this Section. Within 30 days of the issuance of any permit under this Section, the Director shall also submit control technology information from the permit to the Administrator for the purposes listed in Section 173(d) of the Act.
- I. The issuance of a permit or permit revision under this Article in accordance with this Section shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state, or federal law.

#### **R18-2-404. Offset Standards**

- A. Increased emissions by a major source or major modification subject to R18-2-403 of each pollutant for which the area has been designated as nonattainment and for which the source or modification is classified as major shall be offset by real reductions in the actual emissions of each the pollutant for which the area has been designated as nonattainment and for which the source or modification is classified as major. Offsets shall be for the same regulated NSR Pollutant, except that emissions of the ozone precursors NOx and VOC may be offset by reductions in emissions of either of those pollutants, provided that all other applicable requirements of this Section and R18-2-405 are satisfied. Except as provided in R18-2-405, ~~emissions increases shall be offset by decreases at a ratio of and subsection (J), the ratio of the total actual reductions to the emissions increase shall be~~ at least 1 to 1.
- B. Except as provided in subsection (B)(1) or (2), for sources and modifications subject to this Section, the baseline for determining credit for emissions reductions is the emissions limit for the source generating the offset credit under the applicable implementation plan in effect at the time the application for a permit or permit revision is filed.
  - 1. The offset baseline shall be the actual emissions of the source from which offset credit is obtained where either of the following conditions is satisfied:
    - a. The demonstration of reasonable further progress and attainment of ambient air quality standards is based upon the actual emissions of sources located within a designated nonattainment area for which the preconstruction review program was adopted.
    - b. The applicable implementation plan does not contain an emissions limitation for that source or source category.
  - 2. Where the emissions limit under the applicable implementation plan allows greater emissions than the potential to emit of the source, emissions offset credit will be allowed only for control below this potential.
- C. For an existing fuel combustion source, emissions offset credit shall be based on the allowable emissions under the applicable implementation plan for the type of fuel being burned at the time the application to construct is filed. If the existing source commits to switch to a cleaner fuel at some future date, emissions offset credit based on the allowable or actual emissions for the fuels involved is not acceptable, unless the permit for the existing source is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emissions reduction should the source switch back to a fuel generating higher emissions. The owner or operator of the existing source must demonstrate that adequate long-term supplies of the new fuel are available before granting emissions offset credit for fuel switches.
- D. Offset Credit for Shutdowns.
  - 1. Emissions reductions achieved by shutting down an existing emission unit or curtailing production or operating hours may be credited for offsets if they meet both of the following conditions.
    - a. The reductions are surplus, permanent, quantifiable, and federally enforceable.
    - b. The shutdown or curtailment occurred after the last day of the base year for the SIP planning process. For purposes of this subsection, the Director may choose to consider a prior shutdown or curtailment to have occurred after the last day of the base year if the projected emissions inventory used to develop the attainment demonstration explicitly includes the emissions from such previously shutdown or curtailed emission units. However, in no event may credit be given for shutdowns that occurred before August 7, 1977.
  - 2. Emissions reductions achieved by shutting down an existing emissions unit or curtailing production or operating hours and that do not meet the requirements in subsection (D)(1)(b) may be credited only if one of the following conditions is satisfied:
    - a. The shutdown or curtailment occurred on or after the date the construction permit application is filed.
    - b. The applicant can establish that the proposed new emissions unit is a replacement for the shutdown or curtailed emissions unit, and the emissions reductions achieved by the shutdown or curtailment met the requirements of subsection (D)(1)(a).
- E. No emissions credit may be allowed for replacing one hydrocarbon compound with another of lesser reactivity, except for those compounds listed in Table 1 of EPA's "Recommended Policy on Control of Volatile Organic Compounds," 42 FR 35314 (July 8, 1977).
- F. All emission reductions claimed as offset credits shall be federally enforceable by the time a proposed final permit is issued to the owner or operator of the major source subject to this Section and shall be in effect by the time the new or modified source subject to the permit commences operation.
- G. The owner or operator of a major source or major modification subject to this Section must obtain offset credits from the same source or from other sources in the same nonattainment area, except that the Director may allow the owner or operator to obtain offset credits from another nonattainment area if both of the following conditions are satisfied:
  - 1. The other area has an equal or higher nonattainment classification than the area in which the source is located.
  - 2. Emissions from such other area contribute to a violation of the national ambient air quality standard in the nonattainment area in which the source is located.



- H. Credit for an emissions reduction can be claimed to the extent that the Director has not relied on it in issuing any permit under this Article, R18-2-334, or the state has not relied on it in a demonstration of attainment or reasonable further progress.
- I. The total tonnage of increased emissions, in tons per year, resulting from a major modification that must be offset under this Section shall be determined by summing the difference between the allowable emissions after the modification and the actual emissions before the modification for each emissions unit.
- J. In ozone nonattainment areas classified as marginal, total emissions of VOC and oxides of nitrogen from other sources shall offset those proposed or permitted from the major source or major modification by a ratio of at least 1.10 to 1. In ozone nonattainment areas classified as moderate, total emissions of VOC and oxides of nitrogen from other sources shall offset those proposed or permitted from the major source or major modification by a ratio of at least 1.15 to 1. New major sources and major modifications in serious and severe ozone nonattainment areas shall comply with this Section and R18-2-405.

**R18-2-405. Special Rule for Major Sources of VOC or Nitrogen Oxides in Ozone Nonattainment Areas Classified as Serious or Severe**

- A. Applicability. The provisions of this Section only apply to stationary sources of VOC or nitrogen oxides in ozone nonattainment areas classified as serious or severe. Unless otherwise provided in this Section, all requirements of Articles 3 and 4 of this Chapter apply.
- B. "Significant" means, ~~for the purposes of a major modification of any major stationary source of VOC or nitrogen oxides, or for determining whether an otherwise minor source is major under the definition of major source in R18-2-401, any physical change or change in the method of operations that results in net increases in emissions of either pollutant by more than 25 tons when aggregated with all other creditable increases and decreases in emissions from the source over the previous five consecutive calendar years, including the calendar year in which the increase is proposed~~ in reference to an emissions increase or a net emissions increase, any increase in actual emissions of volatile organic compounds or nitrogen oxides that would result from any physical change in, or change in the method of operation of, a major source, if the emissions increase of volatile organic compounds or nitrogen oxides exceeds 25 tons per year.
- C. For any major source that emits or has the potential to emit less than 100 tons of VOC or oxides of nitrogen per year, a physical or operational change that results in a significant increase in VOC or oxides of nitrogen, respectively, from any discrete operation, unit, or other pollutant emitting activity at the source shall constitute a major modification, except that the increase shall not constitute a major modification, if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of VOC or oxides of nitrogen, as applicable, from other operations, units or activities at the source at an internal offset ratio of at least 1.3 to 1. If the owner or operator does not make such an election, the change shall constitute a major modification but BACT shall be substituted for LAER when applying R18-2-403(A)(1) to the major modification.
- D. For any stationary source that emits or has the potential to emit 100 tons or more of VOC or oxides of nitrogen per year, a physical or operational change that results in any significant increase in VOC from any discrete operation, unit or other pollutant emitting activity at the source or oxides of nitrogen, respectively, shall constitute a major modification except that if the owner or operator of the source elects to offset the increase by a greater reduction in emissions of VOC or oxides of nitrogen, as applicable, from other operations, units or activities within the source at an internal offset ratio of at least 1.3 to 1, R18-2-403(A)(1) shall not apply to the change.
- E. For any new major source or major modification that is classified as major because of emissions or potential to emit VOC or nitrogen oxides in an ozone nonattainment area classified as serious, the increase in emissions of these pollutants from the source or modification shall be offset at a ratio of 1.2 to 1. The offset shall be made in accordance with the provisions of R18-2-404.
- F. For any new major source or major modification that is classified as such because of emissions or potential to emit VOC or nitrogen oxides in an ozone nonattainment area classified as severe, the increase in emissions of these pollutants from the source or modification shall be offset at a ratio of 1.3 to 1. These offsets shall be made in accordance with the provisions of R18-2-404.

**R18-2-406. Permit Requirements for Sources Located in Attainment and Unclassifiable Areas**

- A. Except as provided in subsections (B) through (J) and R18-2-408 (Innovative control technology), no permit or permit revision under this Article shall be issued to a person proposing to construct a new major source or make a major modification to a major source that would be constructed in an area designated as attainment or unclassifiable for any regulated NSR pollutant unless the source or modification meets the following conditions:
1. A new major source shall apply best available control technology (BACT) for each regulated NSR pollutant for which the potential to emit is significant.
  2. A major modification shall apply BACT for each regulated NSR pollutant for which the project would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.
  3. For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of BACT for the source.
  4. BACT shall be determined on a case-by-case basis and may constitute application of production processes or

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available methods, systems, and techniques, including fuel cleaning or treatment, clean fuels, or innovative fuel combustion techniques, for control of such pollutant. In no event shall such application of BACT result in emissions of any pollutant, which would exceed the emissions allowed by any applicable new source performance standard or national emission standard for hazardous air pollutants or by the applicable implementation plan. If the Director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice, or operation and shall provide for compliance by means which achieve equivalent results.

5. The person applying for the permit or permit revision under this Article performs an air impact analysis and monitoring as specified in R18-2-407, and the analysis demonstrates that allowable emission increases from the proposed new major source or major modification, in conjunction with all other applicable emission increases or reductions, including secondary emissions, would not cause or contribute to concentrations of conventional air pollutants in violation of:
  - a. Any national ambient air quality standard in any air quality control region; or
  - b. Any applicable maximum increase allowed under R18-2-218 over the baseline concentration in any area.
6. Air quality models:
  - a. All estimates of ambient concentrations required under this Section shall be based on the applicable air quality models, databases, and other requirements specified in 40 CFR 51, Appendix W, "Guideline On Air Quality Models," as of June 30, 2017 (and no future amendments or editions), which shall be referred to hereinafter as "Guideline" and is adopted by reference and is on file with the Department.
  - b. Where an air quality impact model specified in the "Guideline" is not applicable, the model may be modified or another model substituted. Such a change shall be subject to notice and opportunity for public comment under R18-2-330. Written approval of the EPA Administrator shall be obtained for any modification or substitution.
- B. This Section and R18-2-407 shall not apply to a new major source or major modification to a source with respect to a particular pollutant if the person applying for the permit or permit revision under this Article demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment for the pollutant. This exemption shall not apply to an area designated nonattainment for a revoked national ambient air quality standard in 40 CFR 81.
- C. This Section, R18-2-407, and R18-2-410(B), (F), and (G) shall not apply to a new major source or a major modification if the source or modification would be a major source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential emissions of the source or modification, and the source does not belong to a section 302(j) category.
- D. This Section, R18-2-407, and R18-2-410(B), (F), and (G) shall not apply to a new major source or major modification to a source when the owner or operator of the source is a nonprofit health or educational institution.
- E. This Section, R18-2-407, and R18-2-410(B), (F) and (G) shall not apply to a portable source which would otherwise be a new major source or major modification to an existing source if all of the following conditions are satisfied:
  1. The portable source proposes to relocate and will operate for no more than 24 months at its new location.
  2. The source is subject to a permit or permit revision issued under this Section or 40 CFR 52.21.
  3. The source is in compliance with the conditions of that permit or permit revision.
  4. Emissions from the source will not impact a federal Class I area or an area where an applicable maximum increase allowed under R18-2-218 is known to be violated.
  5. Reasonable notice is given to the Director prior to the relocation identifying the proposed new location and the probable duration of operation at the new location at least 10 calendar days in advance of the proposed relocation, unless a different time duration is previously approved by the Director.
- F. Subsection (A)(5), R18-2-407, and R18-2-410(B) shall not apply to a proposed major source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification, would be temporary and impact no federal Class I area and no area where a maximum increase allowed under R18-2-218 is known to be violated.
- G. Subsection (A)(5), R18-2-407, and R18-2-410(B) as they relate to any maximum allowable increase for a Class II area shall not apply to a modification of a major stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of best available control technology would be less than 50 tons per year.
- H. Subsection (A)(5)(b) shall not apply to a stationary source or modification with respect to any maximum increase allowed for nitrogen oxides under R18-2-218 if the owner or operator of the source or modification submitted an application for a permit under the applicable permit program approved or promulgated under the Act before the provisions embodying the maximum allowable increase took effect as part of the state implementation plan and the Director subsequently determined that the application as submitted before that date was complete.
- I. Subsection (A)(5)(b) shall not apply to a stationary source or modification with respect to any maximum increase allowed for PM<sub>10</sub> under R18-2-218 if the owner or operator of the source or modification submitted an application for a permit under the applicable permit program approved under the Act before the provisions embodying the maximum allowable increases for PM<sub>10</sub> took effect as part of the state implementation plan and the Director subsequently determined that the application as submitted before that date was complete. Instead, subsection (A)(5)(b) shall apply with respect to the maximum allowable increases for total suspended particulate as in effect on the date the application was submitted.
- J. Subsection (A)(5)(a) shall not apply to a stationary source or modification with respect to the national ambient air quality standards for PM<sub>2.5</sub> in effect on March 18, 2013 if either of the following is true:
  1. The Director determined a permit application subject to this Section was complete on or before December 14, 2012. Instead, subsection (A)(5)(a) shall apply with respect to the national ambient air quality standards for

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- PM<sub>2.5</sub> in effect at the time the Director determined the permit application to be complete.
2. The Director first published before March 18, 2013 a public notice of a proposed permit subject to this Section. Instead, subsection (A)(5)(a) shall apply with respect to the national ambient air quality standards for PM<sub>2.5</sub> in effect at the time of first publication of the public notice.
- K.** Subsection (A)(5)(a) shall not apply to a stationary source or modification with respect to the revised national ambient air quality standards for ozone published on October 26, 2015 if:
1. The Director has determined the permit application subject to this Section to be complete on or before October 1, 2015. Instead, subsection (A)(5)(a) shall apply with respect to the national ambient air quality standards for ozone in effect at the time the Director determined the permit application to be complete.
  2. The Director has first published, before December 25, 2015, a public notice of a preliminary determination or draft permit for the permit application subject to this Section. Instead, subsection (A)(5)(a) shall apply with respect to the national ambient air quality standards for ozone in effect at the time the Director determined the permit application to be complete.
- L.** The owner or operator of a proposed source or modification shall submit all information necessary to perform any analysis or make a determination required under this Section. The owner or operator shall also provide information regarding:
1. The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact, and
  2. The air quality impacts and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.
- M.** The issuance of a permit or permit revision under this Article in accordance with this Section shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state, or federal law.
- N.** At such time that a particular source or modification becomes a major source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of this Section shall apply to the source or modification as though construction had not yet commenced on the source or modification.

**Historical Note**

Former Section R9-3-405, renumbered effective September 17, 1975 (Supp. 75-1). Former Section R9-3-406 repealed, new Section R9-3-406 adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-406 renumbered without change as Section R18-2-406 (Supp. 87-3). Section R18-2-406 renumbered to R18-2-606, new Section R18-2-406 adopted effective November 15, 1993 (Supp. 93-4). Amended effective February 28, 1995 (Supp. 95-1). The references to R18-2-101(97)(a) in subsection (A)(1) and (2) amended to reference R18-2-101(104)(a) (Supp. 99-3). Amended by final rulemaking at 12 A.A.R. 1953, effective January 1, 2007 (Supp. 06-2). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2). Amended by final rulemaking at 23 A.A.R. 333, effective March 21, 2017 (Supp. 17-1). Amended by final rulemaking at 25 A.A.R. 3630, effective February 1, 2020 (Supp. 19-4).



**R18-2-407. Air Quality Impact Analysis and Monitoring Requirements**

- A. Any application for a permit or permit revision under ~~this Article R18-2-406~~ to construct a new major source or major modification to a major source shall contain an analysis of ambient air quality in the area that the new major source or major modification would affect for each of the following pollutants:
  1. For the new source, each pollutant that it would have the potential to emit in a significant amount;
  2. For the modification, each pollutant for which it would result in a significant net emissions increase.
- B. With respect to any such pollutant for which no ~~Arizona national~~ ambient air quality standard exists, the analysis shall contain all air quality monitoring data as the Director determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of the pollutant would affect.
- C. With respect to any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.
- D. In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application, except that, if the Director determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than four months), the data that is required shall have been gathered over at least that shorter period.
- E. The owner or operator of a proposed stationary source or modification to a source of volatile organic compounds who satisfies all conditions of 40 CFR 51, Appendix S, Section IV, may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under subsections (B), (C), and (D) above.
- F. Post-construction monitoring. The owner or operator of a new major source or major modification shall, after construction of the source or modification, conduct such ambient monitoring as the Director determines is necessary to determine the effect emissions from the new source or modification may have, or are having, on air quality in any area.
- G. Operations of monitoring stations. The owner or operator of a new major source or major modification shall meet the requirements of 40 CFR 58, Appendix B, during the operation of monitoring stations for purposes of satisfying subsections (B) through (F) above.
- H. The requirements of subsections (B) through (G) above shall not apply to a new major source or major modification to an existing source with respect to monitoring for a particular pollutant if:
  1. The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification would cause, in any area, air quality impacts less than the following amounts:
    - a. Carbon Monoxide - 575  $\mu\text{g}/\text{m}^3$ , eight-hour average;
    - b. Nitrogen dioxide - 14  $\mu\text{g}/\text{m}^3$ , annual average;
    - c. ~~PM<sub>2.5</sub> - 04  $\mu\text{g}/\text{m}^3$ , 24-hour average;~~
    - d. PM<sub>10</sub> - 10  $\mu\text{g}/\text{m}^3$ , 24-hour average;
    - e. Sulfur dioxide - 13  $\mu\text{g}/\text{m}^3$ , 24-hour average;
    - f. Lead - 0.1  $\mu\text{g}/\text{m}^3$ , ~~24-hour average~~ 3-month average;
    - g. Fluorides - 0.25  $\mu\text{g}/\text{m}^3$ , 24-hour average;
    - h. Total reduced sulfur - 10  $\mu\text{g}/\text{m}^3$ , one-hour average;
    - i. Hydrogen sulfide - 0.04  $\mu\text{g}/\text{m}^3$ , one-hour average;
    - j. Reduced sulfur compounds - 10  $\mu\text{g}/\text{m}^3$ , one-hour average;
    - k. Ozone - ~~increased emissions~~ net emissions increases of less than 100 tons per year of volatile organic compounds or oxides of nitrogen; ~~or~~
  2. The concentrations of the pollutant in the area that the new source or modification would affect are less than the concentrations listed in subsection (H)(1) ~~above, or~~
  3. The pollutant is not listed in subsection (H)(1).
- ~~I. Any application for permit or permit revision under this Article to construct a new major source or major modification to a source shall contain:~~
  - ~~1. An analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the new source or modification and general commercial, residential, industrial, and other growth associated with the new source or modification. The applicant need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.~~
  - ~~2. An analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the new source or modification.~~

**R18-2-408. Innovative Control Technology**

- A. Notwithstanding the provisions of R18-2-406(A)(1) through (3), the owner or operator of a proposed new major source or major modification may request that the Director approve a system of innovative control technology rather than the best available control technology requirements otherwise applicable to the new source or modification.
- B. The Director shall approve the installation of a system of innovative control technology if the following conditions are met:
  1. The owner or operator of the proposed source or modification satisfactorily demonstrates that the proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;
  2. The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under ~~R18-2-406(A)(2)~~ R18-2-406(A)(1) or (2) by a date specified in the permit or permit revision under this Article for the source. Such date shall not be later than four years from the time of start-up or seven years from the issuance of a permit or permit revision under this Article;



3. The source or modification would meet requirements equivalent to those in R18-2-406(A) based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified in the permit or permit revision under this Article.
  4. Before the date specified in the permit or permit revision under this Article, the source or modification would not:
    - a. Cause or contribute to any violation of an applicable ~~state~~ national ambient air quality standard; or
    - b. Impact any area where an applicable ~~increment~~ maximum increase allowed under R18-2-208 is known to be violated.
  5. All other applicable requirements including those for public participation have been met.
  6. The Director receives the consent of the governors of other affected states.
  7. ~~The limits on pollutants contained in R18-2-218~~ requirements of R18-2-410 for federal Class I areas will be met for all periods during the life of the source or modification.
- C. The Director shall withdraw any approval to employ a system of innovative control technology made under this Section if:
1. The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or
  2. The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or
  3. The Director decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.
- D. If the new source or major modification fails to meet the required level of continuous emissions reduction within the specified time period, or if the approval is withdrawn in accordance with subsection (C) above, the Director may allow the owner or operator of the source or modification up to an additional three years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.



emissions from the new source or modification may have, or are having, on air quality in any area.

- G.** Operations of monitoring stations. The owner or operator of a new major source or major modification shall meet the requirements of 40 CFR 58, Appendix B, during the operation of monitoring stations for purposes of satisfying subsections (B) through (F) above.
- H.** The requirements of subsections (B) through (G) above shall not apply to a new major source or major modification to an existing source with respect to monitoring for a particular pollutant if:
1. The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification would cause, in any area, air quality impacts less than the following amounts:
    - a. Carbon Monoxide - 575  $\mu\text{g}/\text{m}^3$ , eight-hour average;
    - b. Nitrogen dioxide - 14  $\mu\text{g}/\text{m}^3$ , annual average;
    - c. ~~PM<sub>2.5</sub> - 4  $\mu\text{g}/\text{m}^3$ , 24-hour average;~~
    - d. ~~PM<sub>10</sub> - 10  $\mu\text{g}/\text{m}^3$ , 24-hour average;~~
    - e. Sulfur dioxide - 13  $\mu\text{g}/\text{m}^3$ , 24-hour average;
    - f. Lead - 0.1  $\mu\text{g}/\text{m}^3$ , 24-hour average;
    - g. Fluorides - 0.25  $\mu\text{g}/\text{m}^3$ , 24-hour average;
    - h. Total reduced sulfur - 10  $\mu\text{g}/\text{m}^3$ , one-hour average;
    - i. Hydrogen sulfide - 0.04  $\mu\text{g}/\text{m}^3$ , one-hour average;
    - j. Reduced sulfur compounds - 10  $\mu\text{g}/\text{m}^3$ , one-hour average;
    - k. Ozone - increased emissions of less than 100 tons per year of volatile organic compounds or oxides of nitrogen; or
  2. The concentrations of the pollutant in the area that the new source or modification would affect are less than the concentrations listed in subsection (H)(1) above.
- I.** Any application for permit or permit revision under this Article to construct a new major source or major modification to a source shall contain:
1. An analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the new source or modification and general commercial, residential, industrial, and other growth associated with the new source or modification. The applicant need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.
  2. An analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the new source or modification.

#### Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-407 renumbered without change as Section R18-2-407 (Supp. 87-3). Section R18-2-407 renumbered to R18-2-607, new Section R18-2-407 adopted effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

#### **R18-2-408. Innovative Control Technology**

- A.** Notwithstanding the provisions of R18-2-406(A)(1) through (3), the owner or operator of a proposed new major source or major modification may request that the Director approve a system of innovative control technology rather than the best available control technology requirements otherwise applicable to the new source or modification.
- B.** The Director shall approve the installation of a system of innovative control technology if the following conditions are met:
1. The owner or operator of the proposed source or modification satisfactorily demonstrates that the proposed con-

trol system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;

2. The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under R18-2-406(A)(2) by a date specified in the permit or permit revision under this Article for the source. Such date shall not be later than four years from the time of start-up or seven years from the issuance of a permit or permit revision under this Article;
  3. The source or modification would meet requirements equivalent to those in R18-2-406(A) based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified in the permit or permit revision under this Article.
  4. Before the date specified in the permit or permit revision under this Article, the source or modification would not:
    - a. Cause or contribute to any violation of an applicable state ambient air quality standard; or
    - b. Impact any area where an applicable increment is known to be violated.
  5. All other applicable requirements including those for public participation have been met.
  6. The Director receives the consent of the governors of other affected states.
  7. The limits on pollutants contained in R18-2-218 for Class I areas will be met for all periods during the life of the source or modification.
- C.** The Director shall withdraw any approval to employ a system of innovative control technology made under this Section if:
1. The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or
  2. The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or
  3. The Director decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.
- D.** If the new source or major modification fails to meet the required level of continuous emissions reduction within the specified time period, or if the approval is withdrawn in accordance with subsection (C) above, the Director may allow the owner or operator of the source or modification up to an additional three years to meet the requirement for the application of best available control technology through use of a demonstrated system of control.

#### Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Former Section R9-3-408 renumbered without change as Section R18-2-408 (Supp. 87-3). Section R18-2-408 renumbered to R18-2-608, new Section R18-2-408 adopted effective November 15, 1993 (Supp. 93-4).

#### **R18-2-409. Air Quality Models**

- A.** Where the Director requires a person requesting a permit or permit revision under this Article to perform air quality impact modeling to obtain such permit or permit revision under this Article, the modeling shall be performed in a manner consistent with the Guideline specified in R18-2-406(A)(6)(a).
- B.** Where the person requesting a permit or permit revision under this Article can demonstrate that an air quality impact model specified in the Guideline is inappropriate, the model may be modified or another model substituted. However, before such



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modification or substitution can occur, the Director shall make a written finding that:

1. No model in the Guideline is appropriate for a particular permit or permit revision under this Article under consideration, or
  2. The data base required for the appropriate model in the Guideline is not available, and
  3. The model proposed as a substitute or modification is likely to produce results equal or superior to those obtained by models in the Guideline, and
  4. The model proposed as a substitute or modification has been approved by the Administrator.
- C. The substitution or modification of an air quality model under this Section shall be included in the public notice under R18-2-330(C).

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-409 renumbered without change as Section R18-2-409 (Supp. 87-3). Section R18-2-409 renumbered to R18-2-609, new Section R18-2-409 adopted effective November 15, 1993 (Supp. 93-4).

**R18-2-410. Visibility Protection**

- A. For any new major source or major modification subject to the provisions of this Chapter, no permit or permit revision under this Article shall be issued to a person proposing to construct or modify the source unless the applicant has provided:
1. An analysis of the anticipated impacts of the proposed source on visibility in any Class I areas which may be affected by the emissions from that source; and
  2. Results of monitoring of visibility in any area near the proposed source for such purposes and by such means as the Director determines is necessary and appropriate.
- B. A determination of an adverse impact on visibility shall be made based on consideration of all of the following factors:
1. The times of visitor use of the area;
  2. The frequency and timing of natural conditions in the area that reduce visibility;
  3. All of the following visibility impairment characteristics:
    - a. Geographic extent,
    - b. Intensity,
    - c. Duration,
    - d. Frequency,
    - e. Time of day;
  4. The correlation between the characteristics listed in subsection (B)(3) and the factors described in subsections (B)(1) and (2).
- C. The Director shall not issue a permit or permit revision pursuant to this Article or Article 3 of this Chapter for any new major source or major modification subject to this Chapter unless the following requirements have been met:
1. The Director shall notify the individuals identified in subsection (C)(2) within 30 days of receipt of any advance notification of any such permit or permit revision under this Article.
  2. Within 30 days of receipt of an application for a permit or permit revision under this Article for a source whose emissions may affect a Class I area, the Director shall provide written notification of the application to the Federal Land Manager and the federal official charged with direct responsibility for management of any lands within any such area. The notice shall:
    - a. Include a copy of all information relevant to the permit or permit revision under this Article,

- b. Include an analysis of the anticipated impacts of the proposed source on visibility in any area which may be affected by emissions from the source, and
  - c. Provide for no less than a 30-day period within which written comments may be submitted.
3. The Director shall consider any analysis provided by the Federal Land Manager that is received within the comment period provided in subsection (C)(2).
- a. Where the Director finds that the analysis provided by the Federal Land Manager does not demonstrate to the satisfaction of the Director that an adverse impact on visibility will result in the area, the Director shall, within the public notice required under R18-2-330, either explain the decision or specify where the explanation can be obtained.
  - b. When the Director finds that the analysis provided by the Federal Land Manager demonstrates to the satisfaction of the Director that an adverse impact on visibility will result in the area, the Director shall not issue a permit or permit revision under this Article for the proposed major new source or major modification.
4. When the proposed permit decision is made, pursuant to R18-2-304(I), and available for public review, the Director shall provide the individuals identified in subsection (C)(2) with a copy of the proposed permit decision and shall make available to them any materials used in making that determination.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-410 renumbered without change as Section R18-2-410 (Supp. 87-3). Section R18-2-410 renumbered to R18-2-610, new Section R18-2-410 adopted effective November 15, 1993 (Supp. 93-4).

**R18-2-411. Repealed****Historical Note**

Adopted effective November 15, 1993 (Supp. 93-4). Section repealed by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

**R18-2-412. PALs**

- A. Applicability.
1. The Director may approve the use of a PAL for any existing major source if the PAL meets the requirements of this Section.
  2. Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements of this Section, and complies with the PAL permit:
    - a. Is not a major modification for the PAL pollutant,
    - b. Does not have to be approved through the PSD program, and
    - c. Is not subject to the provisions in R18-2-403(C) or R18-2-406(H).
  3. Except as provided under subsection (A)(2)(c), a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.
- B. Permit application requirements. As part of a permit application requesting a PAL, the owner or operator of a major source shall submit the following information to the Director for approval:

**R18-2-410. Visibility and Air Quality Related Value Protection**

- ~~A.~~** For any new major source or major modification subject to the provisions of this Chapter, no permit or permit revision under this Article shall be issued to a person proposing to construct or modify the source unless the applicant has provided:
- ~~1. An analysis of the anticipated impacts of the proposed source on visibility in any Class I areas which may be affected by the emissions from that source; and~~
  - ~~2. Results of monitoring of visibility in any area near the proposed source for such purposes and by such means as the Director determines is necessary and appropriate.~~
- ~~B.~~** A determination of an adverse impact on visibility shall be made based on consideration of all of the following factors:
- ~~1. The times of visitor use of the area;~~
  - ~~2. The frequency and timing of natural conditions in the area that reduce visibility;~~
  - ~~3. All of the following visibility impairment characteristics:~~
    - ~~a. Geographic extent;~~
    - ~~b. Intensity;~~
    - ~~c. Duration;~~
    - ~~d. Frequency;~~
    - ~~e. Time of day;~~
  - ~~4. The correlation between the characteristics listed in subsection (B)(3) and the factors described in subsections (B)(1) and (2).~~
- ~~C.~~** The Director shall not issue a permit or permit revision pursuant to this Article or Article 3 of this Chapter for any new major source or major modification subject to this Chapter unless the following requirements have been met:
- ~~1. The Director shall notify the individuals identified in subsection (C)(2) within 30 days of receipt of any advance notification of any such permit or permit revision under this Article.~~
  - ~~2. Within 30 days of receipt of an application for a permit or permit revision under this Article for a source whose emissions may affect a Class I area, the Director shall provide written notification of the application to the Federal Land Manager and the federal official charged with direct responsibility for management of any lands within any such area. The notice shall:~~
    - ~~a. Include a copy of all information relevant to the permit or permit revision under this Article;~~
    - ~~b. Include an analysis of the anticipated impacts of the proposed source on visibility in any area which may be affected by emissions from the source, and~~
    - ~~c. Provide for no less than a 30-day period within which written comments may be submitted.~~
  - ~~3. The Director shall consider any analysis provided by the Federal Land Manager that is received within the comment period provided in subsection (C)(2):~~
    - ~~a. Where the Director finds that the analysis provided by the Federal Land Manager does not demonstrate to the satisfaction of the Director that an adverse impact on visibility will result in the area, the Director shall, within the public notice required under R18-2-330, either explain the decision or specify where the explanation can be obtained.~~
    - ~~b. When the Director finds that the analysis provided by the Federal Land Manager demonstrates to the satisfaction of the Director that an adverse impact on visibility will result in the area, the Director shall not issue a permit or permit revision under this Article for the proposed major new source or major modification.~~
  - ~~4. When the proposed permit decision is made, pursuant to R18-2-304(J), and available for public review, the Director shall provide the individuals identified in subsection (C)(2) with a copy of the proposed permit decision and shall make available to them any materials used in making that determination.~~
- A.** Applicability.
1. All of the requirements of this Section apply to a new major source or major modification that would be constructed in an area that is designated attainment or unclassifiable.
  2. Subsections (B) to (D) apply to the following:
    - a. A new major source or major modification that may have an impact on any integral vista of a mandatory federal Class I area, if it is identified in accordance with 40 CFR 51.304 by the Federal Land Manager at least twelve months before submission of a complete permit application for the source or modification, except where the Federal Land Manager has pro-



vided notice and opportunity for public comment on the integral vista, in which case the review must include impacts on any integral vista identified at least six months before submission of a complete permit application. This subsection shall not apply if the Director determines under 40 CFR 51.304(d) that the identification was not in accordance with the identification criteria.

- b. A new major source or major modification that proposes to locate in an area designated as nonattainment and that may have an impact on visibility in any mandatory federal Class I area.

**B. Application Requirements.** Any application for a permit or permit revision to construct a major source or major modification subject to this section shall contain:

- 1. An analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the new source or modification and general commercial, residential, industrial, and other growth associated with the new source or modification. The applicant need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.
- 2. An analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the new source or modification.

**C. Notification Requirements.**

- 1. The Director shall provide written notice of the application for a permit or permit revision subject to this section to the Administrator, the Federal Land Manager and the federal official charged with direct responsibility for management of any lands within any Class I area that may be affected by the source or modification. The notice shall be provided within 30 days of receipt of the application and at least 60 days before any public hearing on the application. The notice shall:
  - a. Include a copy of the application and all information relevant to the permit or permit revision under this Article;
  - b. Include an analysis of the anticipated impacts of the proposed source on visibility in any federal Class I area; and
  - c. Provide for no less than a 30-day period within which written comments may be submitted.
- 2. The Director shall notify the individuals identified in subsection (C)(1) within 30 days of receipt of any advance notification of any such permit or permit revision.
- 3. The Director shall notify the individuals identified in subsection (C)(1) of the preliminary determination for the application under R18-2-402(I)(2)(c) and shall make available any materials used in making that determination.
- 4. The Director shall provide notice to the administrator of every action related to the consideration of such permit or permit revision.

**D. Consideration of Federal Land Manager Analysis.**

- 1. The Federal Land Manager and the federal official charged with direct responsibility for management of federal Class I areas have an affirmative responsibility to protect the air quality related values, including visibility, of any such areas and to consider, in consultation with the Administrator, whether a proposed source or modification would have an adverse impact on such values.
- 2. The Director shall consider any analysis performed by the Federal Land Manager and provided within 30 days of the notification required by subsection (C)(1) that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in a federal Class I area or integral vista.
- 3. In considering the analysis, the Director shall ensure that the source's emissions will be consistent with making reasonable progress toward the national visibility goal referred to in 40 CFR 51.300(a), taking into account the costs of compliance, the time necessary for compliance, the energy and nonair quality environmental impacts of compliance, and the useful life of the source.
- 4. If the Director concurs with the analysis, the Director shall deny the permit or permit revision.
- 5. If the Director finds that the analysis does not demonstrate to the satisfaction of the Director that an adverse impact on visibility will result in the federal Class I area or integral vista, the Director shall, in the notice required by R18-2-402(I)(2)(c), either explain that decision or give notice as to where the explanation can be obtained.

**E. Federal Land Manager Analysis Showing Adverse Impact Despite Compliance with Maximum Allowable Increases for Class I Area.**

- 1. Within 30 days after the notification required by subsection (C)(3), the Federal Land Manager may present to the Director a demonstration that the emissions attributed to a new major source or major modification would have an adverse impact on visibility or other specifically defined air quality related values of any mandatory federal Class I area, even though the change in air quality resulting from emissions attributable to the source or modification will not cause or contribute to concentrations that exceed the maximum increases allowed for the area in R18-2-218.
- 2. If the Director concurs with the demonstration, the Director shall not issue a permit or permit revision for the major source or major modification.

**F. Class I Variance with Federal Land Manager Concurrence.**

- 1. The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that emissions from the source will have no adverse impact on the air quality related values (including visibility) of federal Class I areas, even though the change in air quality resulting from emissions from the source or modification are projected to cause or contribute to concentrations that exceed the maximum increases allowed for a Class I area under R18-2-218.
- 2. If the Federal land manager concurs with the demonstration and so certifies to the Director, the Director may issue the permit, provided that:
  - a. Applicable requirements are otherwise met; and
  - b. The permit contains emission limits necessary to assure that emissions of sulfur dioxide, PM<sub>2.5</sub>, PM<sub>10</sub>, and nitrogen oxides will not cause increases in ambient concentrations of those pollutants exceeding the following maximum allowable increases over minor source baseline concentrations:

<u>Pollutant</u>	<u>Maximum allowable increase (micrograms per cubic meter)</u>
<u>PM<sub>2.5</sub></u>	



<u>Annual arithmetic mean</u>	<u>4</u>
<u>24-hr maximum</u>	<u>9</u>
<u>PM<sub>10</sub>:</u>	
<u>Annual arithmetic mean</u>	<u>17</u>
<u>24-hr maximum</u>	<u>30</u>
<u>Sulfur dioxide:</u>	
<u>Annual arithmetic mean</u>	<u>20</u>
<u>24-hr maximum</u>	<u>91</u>
<u>3-hr maximum</u>	<u>325</u>
<u>Nitrogen dioxide</u>	
<u>Annual arithmetic mean</u>	<u>25</u>

**G. Class I Sulfur Dioxide Variance by Governor with Concurrence by Federal Land Manager or President.**

1. The owner or operator of a proposed source or modification that cannot be approved under subsection (F) may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for a period of twenty-four hours or less applicable to any Class I area and, in the case of mandatory federal Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from the maximum allowable increase. If the variance is granted, the Director shall issue a permit or permit to the source or modification pursuant to the requirements of subsection (G)(3), provided that the applicable requirements of R18-2-406 are otherwise met.
2. In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if the President finds that the variance is in the national interest. If the variance is approved, the Director shall issue a permit pursuant to subsection (G)(3), provided that the applicable requirements of R18-2-406 are otherwise met.
3. In the case of a permit issued pursuant to subsection (G)(1) or (G)(2) the source or modification shall comply with emission limitations necessary to assure that emissions of sulfur dioxide from the source or modification will not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations that would exceed the following maximum allowable increases over the baseline concentration and to assure that the emissions will not cause or contribute to concentrations that exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

<u>Maximum Allowable Increase</u> <u>[Micrograms per cubic meter]</u>		
<u>Period of exposure</u>	<u>Terrain areas</u>	
	<u>Low</u>	<u>High</u>
<u>24-hr maximum</u>	<u>36</u>	<u>62</u>
<u>3-hr maximum</u>	<u>130</u>	<u>221</u>

**H. Visibility Monitoring.** The Director may require monitoring of visibility in any federal Class I area near a proposed major source or major modification for such purposes and by such means as the Director deems necessary and appropriate.

**R18-2-411. Permit Requirements for Sources that Locate in Attainment or Unclassifiable Areas and Cause or Contribute to a Violation of Any National Ambient Air Quality Standard.**

- Except as provided in subsection (C) or (D), the Director shall deny a permit or permit revision to any major source or major modification that would locate in any attainment or unclassified area, if the source or modification would cause or contribute to a violation of any national ambient air quality standard.
- A major source or major modification will be considered to cause or contribute to a violation of a national ambient air quality standard when the source or modification would, at a minimum, cause an increase in the concentrations of a regulated NSR pollutant that exceeds the significance level at any locality that does not, or as a result of the increase would not, meet the standard.
- A proposed major source or major modification subject to subsection (A) may reduce the impact of its emissions upon air quality by obtaining sufficient emission reductions to, at a minimum, compensate for its adverse ambient impact where the major source or major modification would otherwise cause or contribute to a violation of any national ambient air quality standard.



- D.** Subsection (A) shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment pursuant to section 107 of the Act.

**R18-2-412. PALs**

- A.** Applicability.
1. The Director may approve the use of a PAL for any existing major source if the PAL meets the requirements of this Section.
  2. Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements of this Section, and complies with the PAL permit:
    - a. Is not a major modification for the PAL pollutant,
    - b. Does not have to be approved ~~through the PSD program under R18-2-403 or R18-2-406~~, and
    - c. Is not subject to the provisions in R18-2-403(C) or ~~R18-2-406(H)~~ R18-2-406(M).
  3. Except as provided under subsection (A)(2)(c), a major stationary source shall continue to comply with all applicable federal or state requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.
- B.** Permit application requirements. As part of a permit application requesting a PAL, the owner or operator of a major source shall submit the following information to the Director for approval:
1. A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit.
  2. Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions shall include emissions associated not only with operation of the unit, but also emissions associated with the startup, shutdown and malfunction.
  3. The calculation procedures that the major source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by subsection (L)(1).
- C.** General requirements for establishing PALs.
1. The Director is allowed to establish a PAL at a major source, provided that at a minimum, the following requirements are met:
    - a. The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month sum, rolled monthly). For each month during the first 11 months from the PAL effective date, the major source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.
    - b. The PAL shall be established in a PAL permit that meets the requirements in subsection (D).
    - c. The PAL permit shall contain all the requirements of subsection (F).
    - d. The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major source.
    - e. Each PAL shall regulate emissions of only one pollutant.
    - f. Each PAL shall have a PAL effective period of 10 years.
    - g. The owner or operator of the major source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in subsections (K) through (M) for each emissions unit under the PAL through the PAL effective period.
  2. At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under R18-2-404 unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.
- D.** Action on PAL permit application. A PAL permit application shall be processed in accordance with one of the following:
1. As an initial Class I permit pursuant to R18-2-304.
  2. As a renewal of a Class I permit pursuant to R18-2-322.
  3. As a significant revision to a Class I permit pursuant to R18-2-320.
- E.** Setting the 10-year actuals PAL level.
1. Except as provided in subsection (E)(2), the PAL level for a major source shall be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant. When establishing the PAL level, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level. The Director shall specify a reduced PAL level(s) (in tons/yr) in the PAL permit to become effective on the future compliance date(s) of any applicable federal or state regulatory requirement(s) that the Director is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO<sub>x</sub> to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).
  2. For newly constructed units (which do not include modifications to existing units) on which actual construction began after the 24-month period, in lieu of adding the baseline actual emissions as specified in subsection (E)(1), the emissions must be added to the PAL level in an amount equal to the potential to emit of the units.
- F.** Contents of the PAL permit. The PAL permit must contain, at a minimum, the following information:
1. The PAL pollutant and the applicable source-wide emission limitation in tons per year.
  2. The PAL permit effective date and the expiration date of the PAL (PAL effective period).



3. Specification in the PAL permit that if a major source owner or operator applies to renew a PAL in accordance with subsection (I) before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the Director.
  4. A requirement that emission calculations for compliance purposes must include emissions from startups, shutdowns, and malfunctions.
  5. A requirement that, once the PAL expires, the major source is subject to the requirements of subsection (H).
  6. The calculation procedures that the major source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by subsection (L)(1).
  7. A requirement that the major source owner or operator monitor all emissions units in accordance with the provisions under subsection (K).
  8. A requirement to retain the records required under subsection (L) onsite. Such records may be retained in an electronic format.
  9. A requirement to submit the reports required under subsection (M) by the required deadlines.
  10. Any other requirements that the Director deems necessary to implement and enforce the PAL.
- G. PAL effective period and reopening of the PAL permit.**
1. PAL effective period. The Director shall specify a PAL effective period of 10 years.
  2. Reopening of the PAL permit.
    - a. During the PAL effective period, the Director must reopen the PAL permit to:
      - i. Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL,
      - ii. Reduce the PAL if the owner or operator of the major source creates creditable emissions reductions for use as offsets under R18-2-404, and
      - iii. Revise the PAL to reflect an increase in the PAL as provided under subsection (J).
    - b. The Director shall have discretion to reopen the PAL permit for the following:
      - i. Reduce the PAL to reflect new federal applicable requirements with compliance dates after the PAL effective date;
      - ii. Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the state may impose on the major source under the State Implementation Plan; and
      - iii. Reduce the PAL if the Director determines that a reduction is necessary to avoid causing or contributing to a ~~NAAQS or PSD increment violation of a national ambient air quality standard or a maximum increase allowed under R18-2-208~~, or to an adverse impact on an air quality related value that has been identified for a ~~Federal~~ federal Class I area by a Federal Land Manager and for which information is available to the general public.
    - c. Except for the permit reopening in subsection (G)(2)(a)(i) for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of subsection (D).
- H. Expiration of a PAL.** Any PAL that is not renewed in accordance with the procedures in subsection (I) shall expire at the end of the PAL effective period, and the following requirements shall apply.
1. Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the following procedures.
    - a. Within the time-frame specified for PAL renewals in subsection (I)(2), the major source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate) by distributing the PAL allowable emissions for the major source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as would be required under subsection (I)(5), such distribution shall be made as if the PAL had been adjusted.
    - b. The Director shall decide how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the Director determines is appropriate.
  2. Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The Director may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.
  3. Until the Director issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under subsection (H)(1)(b), the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
  4. Any physical change or change in the method of operation at the major source will be subject to ~~the applicability criteria set forth at subsection (C)~~ the nonattainment major NSR requirements if such change meets the definition of major modification.
  5. The major source owner or operator shall continue to comply with any applicable requirements that may have applied either during the PAL effective period or before the PAL effective period except for those emission limitations that had been established pursuant to R18-2-403(C) or R18-2-406(H), but were eliminated by the PAL in accordance with subsection (A)(2)(c). Emission limitations that were eliminated by the PAL in accordance with subsection (A)(2)(c) shall not be reinstated.
- I. Renewal of a PAL.**
1. The Director shall follow the procedures specified in subsection ~~(F)~~ (D) in approving any request to renew a PAL for a major source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the Director.
  2. Application deadline. A major source owner or operator shall submit a timely application to the Director to request renewal of a PAL. A timely application is one that is submitted at least six months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.
  3. Application requirements. The application to renew a PAL permit shall contain the following information.



- a. The information required in subsections (B)(1) through (3).
    - b. A proposed PAL level.
    - c. The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).
    - d. Any other information the owner or operator wishes the Director to consider in determining the appropriate level for renewing the PAL.
  4. PAL adjustment. In determining whether and how to adjust the PAL, the Director shall consider the options outlined in subsections (I)(4)(a) and (b). However, in no case may any such adjustment fail to comply with subsection (I)(4)(c).
    - a. If the emissions level calculated in accordance with subsection ~~(F)(E)~~ is equal to or greater than 80% of the PAL level, the Director may renew the PAL at the same level without considering the factors set forth in subsection (I)(4)(b); or
    - b. The Director may set the PAL at a level that the Director determines to be more representative of the source's baseline actual emissions, or that the Director determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Director in the Director's written rationale.
    - c. Notwithstanding subsections (I)(4)(a) and (b):
      - i. If the potential to emit of the major source is less than the PAL, the Director shall adjust the PAL to a level no greater than the potential to emit of the source; and
      - ii. The Director shall not approve a renewed PAL level higher than the current PAL, unless the PAL has been increased in accordance with subsection (J).
  5. If the compliance date for an applicable requirement that applies to the PAL source occurs during the PAL effective period, and if the Director has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or renewal of the source's Class I permit, whichever occurs first.
- J. Increasing a PAL during the PAL effective period.**
1. The Director may increase a PAL emission limitation only if the following requirements are met:
    - a. The owner or operator of the major source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major source's emissions to equal or exceed its PAL.
    - b. As part of this application, the major source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT or LAER equivalent controls, plus the sum of the PAL allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would result from BACT or LAER equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT or LAER analysis at the time the application is submitted, as applicable for the particular PAL pollutant, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.
    - c. The owner or operator obtains a major NSR permit for all emissions unit(s) identified in subsection (J)(1)(a), regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.
    - d. The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
  2. The Director shall calculate the new PAL level as the sum of the PAL allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT or LAER equivalent controls as determined in accordance with subsection (J)(1)(b), plus the sum of the baseline actual emissions of the small emissions units.
  3. The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of subsection (D).
- K. Monitoring requirements for PALs.**
1. General requirements.
    - a. Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.
    - b. The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in subsections (K)(2)(a) through (d) and must be approved by the Director.
    - c. Notwithstanding subsection (K)(1)(b), the owner or operator may also employ an alternative monitoring approach if approved by the Director as meeting the requirements of subsection (K)(1)(a).
    - d. Failure to use a monitoring system that meets the requirements of this Section renders the PAL invalid.
  2. Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in subsections (K)(3) through (9):
    - a. Mass balance calculations for activities using coatings or solvents,
    - b. CEMS,
    - c. CPMS or PEMS, and
    - d. Emission factors.
  3. Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:



- a. Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;
- b. Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and
- c. Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Director determines there is site-specific data or a site-specific monitoring program to support another content within the range.
4. CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
  - a. CEMS must comply with applicable Performance Specifications found in 40 CFR 60, Appendix B; and
  - b. CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.
5. CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:
  - a. The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and
  - b. Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the Director, while the emissions unit is operating.
6. Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
  - a. All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
  - b. The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and
  - c. If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within six months of PAL permit issuance, unless the Director determines that testing is not required.
7. A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.
8. Notwithstanding the requirements in subsections (K)(3) through (7), where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the Director shall, at the time of permit issuance:
  - a. Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s), or
  - b. Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.
9. Re-validation. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the Director. Such testing must occur at least once every five years after issuance of the PAL.
- L. Recordkeeping requirements.**
  1. The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of this Section and with the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for five years from the date of such record.
  2. The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus five years:
    - a. A copy of the PAL permit application and any applications for revisions to the PAL, and
    - b. Each annual certification of compliance pursuant to R18-2-309(2) and the data relied on in certifying compliance.
- M. Reporting and notification requirements.** The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the Director in accordance with R18-2-306(A)(5). The reports shall meet the following requirements:
  1. Semi-annual report. The semi-annual report shall be submitted to the Director within 30 days of the end of each reporting period. This report shall contain the following information:
    - a. The identification of owner and operator and the permit number.
    - b. Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to subsection (L)(1).
    - c. All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
    - d. A list of any emissions units modified or added to the major source during the preceding six-month period.
    - e. The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
    - f. A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by subsection (K)(7).
    - g. A certification by the responsible official consistent with ~~R18-2-304(H)~~ R18-2-304(I).
  2. Deviation report. The major source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL permit requirements, including periods where no monitoring is available, in accordance with R18-2-306(A)(5). The reports shall contain the following information:
    - a. The identification of owner and operator and the permit number,



- b. The PAL permit requirement that experienced the deviation or that was exceeded,
  - c. Emissions resulting from the deviation or the exceedance, and
  - d. A certification by the responsible official consistent with ~~R18-2-304(H)~~ R18-2-304(I).
3. Re-validation results. The owner or operator shall submit to the Director the results of any re-validation test or method within three months after completion of such test or method.

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**R18-2-522. Renumbered****Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980 (Supp. 80-4). Amended subsection (A) effective May 28, 1982 (Supp. 82-3). Amended subsection (A) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-522 renumbered without change as Section R18-2-522 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-722 effective November 15, 1993 (Supp. 93-4).

**R18-2-523. Renumbered****Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-523 renumbered without change as Section R18-2-523 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-2). Renumbered to R18-2-723 effective November 15, 1993 (Supp. 93-4).

**R18-2-524. Renumbered****Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980 (Supp. 80-4). Amended subsection (A) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-524 renumbered without change as Section R18-2-524 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-724 effective November 15, 1993 (Supp. 93-4).

**R18-2-525. Renumbered****Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Editorial correction, subsection (B) (Supp. 79-6). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-525 renumbered without change as Section R18-2-525 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-725 effective November 15, 1993 (Supp. 93-4).

**R18-2-526. Renumbered****Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-526 renumbered without change as Section R18-2-526 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-726 effective November 15, 1993 (Supp. 93-4).

**R18-2-527. Renumbered****Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-527 renumbered without change as Section R18-2-527 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-727 effective November 15, 1993 (Supp. 93-4).

**R18-2-528. Renumbered****Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-528 renumbered without change as Section R18-2-528 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-728 effective November 15, 1993 (Supp. 93-4).

**R18-2-529. Renumbered****Historical Note**

Adopted effective September 22, 1983 (Supp. 83-5). Former Section R9-3-529 renumbered without change as Section R18-2-529 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-729 effective November 15, 1993 (Supp. 93-4).

**R18-2-530. Renumbered****Historical Note**

Adopted effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-730 effective November 15, 1993 (Supp. 93-4).

**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, 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.

**Historical Note**

Former Section R9-3-601 repealed, new Section R9-3-601 adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-601 renumbered without change as Section R18-2-601 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-601 renumbered to R18-2-801, new Section R18-2-601 renumbered from R18-2-401 and amended effective November 15, 1993 (Supp. 93-4). Section updated to reflect corrected citation reference (Supp. 08-1).

**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 one 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

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**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, heater-planners, and conveyor transfer points shall not be considered to have identifiable plumes. Any affected facility subject to regulation under Article 7 of this Chapter or 9 A.A.C. 3, Article 8, shall not be subject to regulation under this Article.

**Historical Note**

Former Section R9-3-601 repealed, new Section R9-3-601 adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-601 renumbered without change as Section R18-2-601 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-601 renumbered to R18-2-801, new Section R18-2-601 renumbered from R18-2-401 and amended effective November 15, 1993 (Supp. 93-4).

**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 one 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 multi-

ple 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.
  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, 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

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(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.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Correction, subsection (C) repealed effective October 2, 1979, not shown (Supp. 80-1). Former Section R9-3-602 renumbered without change as Section R18-2-602 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-602 renumbered to R18-2-802, new Section R18-2-602 renumbered from R18-2-401 effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

**R18-2-603. Repealed**

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-603 renumbered without change as Section R18-2-603 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-603 renumbered to R18-2-803, new Section R18-2-603 renumbered from R18-2-403 effective November 15, 1993 (Supp. 93-4). Repealed effective October 8, 1996 (Supp. 96-4).

**R18-2-604. Open Areas, Dry Washes, or Riverbeds**

- A. No person shall cause, suffer, allow, or permit a building or its appurtenances, or a building or subdivision site, or a driveway, or a parking area, or a vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, without taking reasonable precautions to limit excessive amounts of particulate matter from becoming airborne. Dust and other types of air contaminants shall be kept to a minimum by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means.
- B. No person shall cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, trucks, cars, cycles, bikes, or buggies, or by animals such as horses, without taking reasonable precautions to limit excessive amounts of particulates from becoming airborne. Dust shall be kept to a minimum by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means.
- C. No person shall operate a motor vehicle for recreational purposes in a dry wash, riverbed or open area in such a way as to cause or contribute to visible dust emissions which then cross property lines into a residential, recreational, institutional, educational, retail sales, hotel or business premises. For purposes of this subsection "motor vehicles" shall include, but not be limited to trucks, cars, cycles, bikes, buggies and 3-wheelers. Any person who violates the provisions of this subsection shall be subject to prosecution under A.R.S. § 49-463.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-604 renumbered without change as Section R18-2-604 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-604 renumbered to R18-2-804, new Section R18-2-604 renumbered from R18-2-404 and amended effective November 15, 1993 (Supp. 93-4).

**R18-2-605. Roadways and Streets**

- A. No person shall cause, suffer, allow or permit the use, repair, construction or reconstruction of a roadway or alley without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust suppressants, wetting down, detouring or by other reasonable means.
- B. No person shall cause, suffer, allow or permit transportation of materials likely to give rise to airborne dust without taking reasonable precautions, such as wetting, applying dust suppressants, or covering the load, to prevent particulate matter from becoming airborne. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits.

~~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.~~

#### **Historical Note**

~~Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Correction, subsection (C) repealed effective October 2, 1979, not shown (Supp. 80-1). Former Section R9-3-602 renumbered without change as Section R18-2-602 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-602 renumbered to R18-2-802, new Section R18-2-602 renumbered from R18-2-401 effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).~~

#### **R18-2-603. Repealed**

#### **Historical Note**

~~Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-603 renumbered without change as Section R18-2-603 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-603 renumbered to R18-2-803, new Section R18-2-603 renumbered from R18-2-403 effective November 15, 1993 (Supp. 93-4). Repealed effective October 8, 1996 (Supp. 96-4).~~

#### **R18-2-604. Open Areas, Dry Washes, or Riverbeds**

- A. No person shall cause, suffer, allow, or permit a building or its appurtenances, or a building or subdivision site, or a driveway, or a parking area, or a vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, without taking reasonable precautions to limit excessive amounts of particulate matter from becoming airborne. Dust and other types of air contaminants shall be kept to a minimum by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means.
- B. No person shall cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, trucks, cars, cycles, bikes, or buggies, or by animals such as horses, without taking reasonable precautions to limit excessive amounts of particulates from becoming airborne. Dust shall be kept to a minimum by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means.
- C. No person shall operate a motor vehicle for recreational purposes in a dry wash, riverbed or open area in such a way as to cause or contribute to visible dust emissions which then cross property lines into a residential, recreational, institutional, educational, retail sales, hotel or business premises. For purposes of this subsection "motor vehicles" shall include, but not be limited to trucks, cars, cycles, bikes, buggies and 3-wheelers. Any person who violates the provisions of this subsection shall be subject to prosecution under A.R.S. § 49-463.

#### **Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-604 renumbered without change as Section R18-2-604 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-604 renumbered to R18-2-804, new Section R18-2-604

renumbered from R18-2-404 and amended effective November 15, 1993 (Supp. 93-4).

#### **R18-2-605. Roadways and Streets**

- A. No person shall cause, suffer, allow or permit the use, repair, construction or reconstruction of a roadway or alley without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust suppressants, wetting down, detouring or by other reasonable means.
- B. No person shall cause, suffer, allow or permit transportation of materials likely to give rise to airborne dust without taking reasonable precautions, such as wetting, applying dust suppressants, or covering the load, to prevent particulate matter from becoming airborne. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits.

#### **Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-605 renumbered without change as Section R18-2-605 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-605 renumbered to R18-2-805, new Section R18-2-605 renumbered from R18-2-405 effective November 15, 1993 (Supp. 93-4).

#### **R18-2-606. Material Handling**

No person shall cause, suffer, allow or permit crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust without taking reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne.

#### **Historical Note**

Section R18-2-606 renumbered from R18-2-406 effective November 15, 1993 (Supp. 93-4).

#### **R18-2-607. Storage Piles**

- A. No person shall cause, suffer, allow, or permit organic or inorganic dust producing material to be stacked, piled, or otherwise stored without taking reasonable precautions such as chemical stabilization, wetting, or covering to prevent excessive amounts of particulate matter from becoming airborne.
- B. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to prevent excessive amounts of particulate matter from becoming airborne.

#### **Historical Note**

Section R18-2-607 renumbered from R18-2-407 effective November 15, 1993 (Supp. 93-4).

#### **~~R18-2-608. Mineral Tailings~~**

~~No person shall cause, suffer, allow, permit construction of, or otherwise own or operate, mineral tailing piles without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Reasonable precautions shall mean wetting, chemical stabilization, revegetation or such other measures as are approved by the Director.~~

#### **Historical Note**

~~Section R18-2-608 renumbered from R18-2-408, new Section R18-2-408 adopted effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 15 A.A.R. 228, effective March 7, 2009 (Supp. 09-1).~~



Department of Environmental Quality – Air Pollution Control

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.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Correction, subsection (C) repealed effective October 2, 1979, not shown (Supp. 80-1). Former Section R9-3-602 renumbered without change as Section R18-2-602 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-602 renumbered to R18-2-802, new Section R18-2-602 renumbered from R18-2-401 effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

**R18-2-603. Repealed**

**Historical Note**

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- B. No person shall cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, trucks, cars, cycles, bikes, or buggies, or by animals such as horses, without taking reasonable precautions to limit excessive amounts of particulates from becoming airborne. Dust shall be kept to a minimum by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means.
- C. No person shall operate a motor vehicle for recreational purposes in a dry wash, riverbed or open area in such a way as to cause or contribute to visible dust emissions which then cross property lines into a residential, recreational, institutional, educational, retail sales, hotel or business premises. For pur-

poses of this subsection "motor vehicles" shall include, but not be limited to trucks, cars, cycles, bikes, buggies and 3-wheelers. Any person who violates the provisions of this subsection shall be subject to prosecution under A.R.S. § 49-463.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-604 renumbered without change as Section R18-2-604 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-604 renumbered to R18-2-804, new Section R18-2-604 renumbered from R18-2-404 and amended effective November 15, 1993 (Supp. 93-4).

**R18-2-605. Roadways and Streets**

- A. No person shall cause, suffer, allow or permit the use, repair, construction or reconstruction of a roadway or alley without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust suppressants, wetting down, detouring or by other reasonable means.
- B. No person shall cause, suffer, allow or permit transportation of materials likely to give rise to airborne dust without taking reasonable precautions, such as wetting, applying dust suppressants, or covering the load, to prevent particulate matter from becoming airborne. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits.

**Historical Note**

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-605 renumbered without change as Section R18-2-605 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-605 renumbered to R18-2-805, new Section R18-2-605 renumbered from R18-2-405 effective November 15, 1993 (Supp. 93-4).

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**Historical Note**

Section R18-2-606 renumbered from R18-2-406 effective November 15, 1993 (Supp. 93-4).

**R18-2-607. Storage Piles**

- A. No person shall cause, suffer, allow, or permit organic or inorganic dust producing material to be stacked, piled, or otherwise stored without taking reasonable precautions such as chemical stabilization, wetting, or covering to prevent excessive amounts of particulate matter from becoming airborne.
- B. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to prevent excessive amounts of particulate matter from becoming airborne.

**Historical Note**

Section R18-2-607 renumbered from R18-2-407 effective November 15, 1993 (Supp. 93-4).

**R18-2-608. Mineral Tailings**

No person shall cause, suffer, allow, permit construction of, or otherwise own or operate, mineral tailing piles without taking reason-

able precautions to prevent excessive amounts of particulate matter from becoming airborne. Reasonable precautions shall mean wetting, chemical stabilization, revegetation or such other measures as are approved by the Director.

#### Historical Note

Section R18-2-608 renumbered from R18-2-408, new Section R18-2-408 adopted effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 15 A.A.R. 228, effective March 7, 2009 (Supp. 09-1).

#### ~~R18-2-609. Agricultural Practices~~

A person shall not cause, suffer, allow, or permit the performance of agricultural practices outside the Phoenix and Yuma planning areas, as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210, including tilling of land and application of fertilizers without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne.

#### Historical Note

Section R18-2-609 renumbered from R18-2-409 effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 6 A.A.R. 2009, effective May 12, 2000 (Supp. 00-2). Amended by final rulemaking at 11 A.A.R. 2210, effective July 18, 2005 (Supp. 05-2).

#### R18-2-610. Definitions for R18-2-611

The definitions in Article 1 of this Chapter and the following definitions apply to R18-2-611:

1. "Access restriction" means restricting or eliminating public access to noncropland with signs or physical obstruction.
2. "Aggregate cover" means gravel, concrete, recycled road base, caliche, or other similar material applied to non-cropland.
3. "Area A" means the area delineated according to A.R.S. § 49-541(1).
4. "Artificial wind barrier" means a physical barrier to the wind.
5. "Best management practice" means a technique verified by scientific research that on a case-by-case basis is practical, economically feasible, and effective in reducing PM<sub>10</sub> emissions from a regulated agricultural activity.
6. "Chemical irrigation" means applying a fertilizer, pesticide, or other agricultural chemical to cropland through an irrigation system.
7. "Cessation of Night Tilling" means the discontinuation of night tilling on high pollution advisory days during stagnant air conditions.
8. "Combining tractor operations" means performing two or more tillage, cultivation, planting, or harvesting operations with a single tractor or harvester pass.
9. "Commercial farm" means 10 or more contiguous acres of land used for agricultural purposes within the boundary of the Maricopa PM<sub>10</sub> nonattainment area and Maricopa County portion of Area A.
10. "Commercial farmer" means an individual, entity, or joint operation in general control of a commercial farm.
11. "Committee" means the Governor's Agricultural Best Management Practices Committee.
12. "Cover crop" means plants or a green manure crop grown for seasonal soil protection or soil improvement.
13. "Critical area planting" means using trees, shrubs, vines, grasses, or other vegetative cover on noncropland.

#### 14. "Cropland" means land on a commercial farm that:

- a. Is within the time-frame of final harvest to plant emergence;
  - b. Has been tilled in a prior year and is suitable for crop production, but is currently fallow; or
  - c. Is a turn-row.
15. "Cross-wind ridges" means soil ridges formed by a tillage operation.
  16. "Cross-wind strip-cropping" means planting strips of alternating crops within the same field.
  17. "Cross-wind vegetative strips" means herbaceous cover established in one or more strips within the same field.
  18. "Equipment modification" means modifying agricultural equipment to prevent or reduce particulate matter generation from cropland.
  19. "Forage Crop" means a product grown for consumption by any domestic animal.
  20. "Genetically Modified" means a living organism whose genetic material has been altered, changing one or more of its characteristics.
  21. "GMO: Genetically Modified Organism" means a plant that has been altered by a genetic exchange with another organism.
  22. "GPS: Global Position Satellite System" means using a satellite navigation system on farm equipment to calculate position in the field.
  23. "Green Chop" means the harvesting of a forage crop without allowing it to dry in the field.
  24. "High Pollution Advisory" means a public notification issued by the Department when the ambient concentrations of PM<sub>10</sub> may exceed the federal health standard.
  25. "Integrated Pest Management" means the use of a combination of techniques including organic, conventional, and biological farming practices.
  26. "Limited activity during a high-wind event" means performing no tillage or soil preparation activity when the measured wind speed at 6 feet in height is more than 25 mph at the commercial farm site.
  27. "Manure application" means applying animal waste or biosolids to a soil surface.
  28. "Maricopa PM<sub>10</sub> nonattainment area" means the Phoenix planning area as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210.
  29. "Mulching" means applying plant residue or other material that is not produced onsite to a soil surface.
  30. "Multi-year crop" means a crop, pasture, or orchard that is grown, or will be grown, on a continuous basis for more than one year.
  31. "Noncropland" means any commercial farm land that:
    - a. Is no longer used for agricultural production;
    - b. Is no longer suitable for production of crops;
    - c. Is subject to a restrictive easement or contract that prohibits use for the production of crops; or
    - d. Includes a private farm road, ditch, ditch bank, equipment yard, storage yard, or well head.
  32. "Night Tilling" means preparing the land for the raising of crops between the hours of 2:00 a.m. and 8:00 a.m.
  33. "Organic Farming Practices" means using biological or non-chemical agricultural methods.



property lines into a residential, recreational, institutional, educational, retail sales, hotel or business premises. For purposes of this subsection "motor vehicles" shall include, but not be limited to trucks, cars, cycles, bikes, buggies and 3-wheelers. Any person who violates the provisions of this subsection shall be subject to prosecution under A.R.S. § 49-463.

#### Historical Note

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A person shall not cause, suffer, allow, or permit the performance of agricultural practices outside the Phoenix and Yuma planning areas, as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210, including tilling of land and application of fertilizers without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne.

#### Historical Note

Section R18-2-609 renumbered from R18-2-409 effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 6 A.A.R. 2009, effective May 12, 2000 (Supp. 00-2). Amended by final rulemaking at 11 A.A.R. 2210, effective July 18, 2005 (Supp. 05-2).

#### R18-2-610. Definitions for R18-2-610.01, R18-2-610.02, and R18-2-610.03

The definitions in R18-2-101 and the following definitions apply to R18-2-610.01, R18-2-610.02, and R18-2-610.03:

1. "Access restriction" means reducing PM emissions by reducing the number of trips driven on agricultural aprons and access roads by restricting or eliminating public access to noncropland or commercial farm roads with signs or physical obstruction at locations that effectively control access to the area.
2. "Aggregate cover" means reducing PM emissions and wind erosion and stabilizing soil by applying and maintaining gravel, concrete, recycled road base, caliche, or other similar material to noncropland or commercial farm roads. The aggregate should be clean, hard and durable, and should be applied and maintained to a depth sufficient to reduce PM emissions.
3. "Area A" means the area delineated according to A.R.S. § 49-541(1).
4. "Best management practice" (BMP) means a technique verified by scientific research, that on a case-by-case basis is practical, economically feasible, and effective in reducing PM emissions from a regulated agricultural activity.
5. "Cessation of Night Tilling" means the discontinuation of tillage from sunset to sunrise on a day identified by the Maricopa or Pinal County Dust Control Forecast as being high risk of dust generation.
6. "Chemical irrigation" means reducing a minimum of one ground operation across a commercial farm by applying a fertilizer, pesticide, or other agricultural chemical to cropland through an irrigation system, which reduces soil disturbance and increases efficiency of application.
7. "Chips/ mulches" means reducing PM emissions and soil movement and preserving soil moisture by applying and maintaining nontoxic chemical or organic dust suppressants to a depth sufficient to reduce PM emissions. Materials shall meet all specifications required by federal, state, or local water agencies, and is not prohibited for use by any applicable regulations.



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8. "Combining tractor operations" means reducing soil compaction and a minimum of one tillage or ground operation across a commercial farm by using a tractor, implement, harvester, or other farming support vehicle to perform two or more tillage, cultivation, planting, or harvesting operations at the same time. If Equipment modification is also chosen as a BMP, and uses the same practices as described in this BMP, this action is considered one BMP.
9. "Commercial farm" means 10 or more contiguous acres of land used for agricultural purposes within the boundary of the Maricopa PM nonattainment area and Maricopa County portion of Area A, a PM nonattainment area designated after June 1, 2009 as stated in A.R.S. § 49-457(P)(1)(f), or the Pinal County PM Nonattainment Area.
10. "Commercial farm road" means a road that is unpaved, owned by a commercial farmer, and is used exclusively to service a commercial farm.
11. "Commercial farmer" means an individual, entity, or joint operation in general control of a commercial farm.
12. "Committee" means the Governor's Agricultural Best Management Practices Committee as established by A.R.S. § 49-457.
13. "Conservation Tillage" means a tillage system that reduces a minimum of three tillage operations. This system reduces soil and water loss by planting into existing plant stubble on the field after harvest as well as managing the stubble so that it remains intact during the planting season.
14. "Cover crop" means establishing cover crops that maintain a minimum of 60 percent ground cover. Native or volunteer vegetation that meets the minimum ground cover requirement is acceptable. Compliance shall be determined by the Line Transect Test Method, NRCS National Agronomy Manual, Subpart 503.51, Estimating Crop Residue Cover, amended through February 2011 (and no future editions).
15. "Critical area planting" means reducing PM<sub>10</sub> emissions and wind erosion by planting trees, shrubs, vines, grasses, or other vegetative cover on noncropland in order to maintain at least 60 percent ground cover. Compliance shall be determined by the Line Transect Test Method, NRCS National Agronomy Manual, Subpart 503.51, Estimating Crop Residue Cover, amended through February 2011 (and no future editions).
16. "Cropland" means land on a commercial farm that:
  - a. Is within the time-frame of final harvest to plant emergence, but does not include tillage activities;
  - b. Has been tilled in a prior year and is suitable for crop production, but is currently fallow; or
  - c. Is a turn-row.
17. "Cross-wind ridges" means stabilizing soil and reducing PM emissions and wind erosion by creating soil ridges in a commercial farm by tillage or planting operations. Ridges should be at least four inches in height, and be aligned as perpendicular as possible to the prevailing wind direction.
18. "Dust Control Forecast" means a forecast, which shall identify a low, moderate or high risk of dust generation for the next five consecutive days and shall be issued by noon on each day the forecast is generated. When developing these forecasts, the department shall consider all of the following:
  - a. Projected meteorological conditions, including:
    - i. Wind speed and direction,
    - ii. Stagnation,
    - iii. Recent precipitation, and
    - iv. Potential for precipitation;
  - b. Existing concentrations of air pollution at the time of the forecast; and
  - c. Historic air pollution concentrations that have been observed during meteorological conditions similar to those that are predicted to occur in the forecast.
19. "Equipment modification" means reducing PM emissions and soil erosion during tillage or ground operations by modifying and maintaining an existing piece of agricultural equipment, installing shielding equipment, modifying land planting and land leveling, matching the equipment to row spacing, or grafting to new varieties or technological improvements. If combining tractor operations is also chosen as a BMP, and uses the same practices as described in this BMP, this action is considered one BMP.
20. "Fallow Field" means an area of land that is routinely cultivated, planted and harvested and is unplanted for one or more growing seasons or planting cycles, but is intended to be placed back in agricultural production.
21. "Field Capacity" means the amount of water remaining in the soil two days after having been saturated and after free drainage has ceased.
22. "Forage Crop" means a product grown for consumption by any domestic animal.
23. "Genetically Modified" (GMO) means a living organism whose genetic material has been altered, changing one or more of its characteristics.
24. "GPS: Global Position Satellite System" means using a satellite navigation system on farm equipment to calculate position in the field.
25. "Green chop" means reducing soil compaction, soil disturbance and a minimum of one ground operation across a commercial farm by harvesting a Forage Crop without allowing it to dry in the field.
26. "Ground operation" means an agricultural operation that is not a tillage operation, which involves equipment passing across the field. A ground operation includes harvest activities. A pass through the field may be a subset of a ground operation.
27. "Harvest" means the time after planting up through harvest, including gathering mature crops from a commercial farm, as well as all actions taken immediately after crop removal, such as cooling, sorting, cleaning, and packing.
28. "Integrated Pest Management" means reducing soil compaction and a minimum of one ground operation across a commercial farm for spraying by using a combination of techniques including organic, conventional, and biological farming practices to suppress pest problems.
29. "Limited harvest activity" means performing no ground operations on a day identified by the Maricopa or Pinal County Dust Control Forecast to be high risk for dust generation.
30. "Limited tillage activity" means performing no tillage operations on a day identified by the Maricopa or Pinal County Dust Control Forecast to be high risk for dust generation.
31. "Maricopa PM nonattainment area" means the Phoenix planning area as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210.
32. "Multi-year crop" means reducing PM emissions from wind erosion and a minimum of one tillage and ground operation across a commercial farm, by protecting the



- soil surface by growing a crop, pasture, or orchard that is grown, or will be grown, on a continuous basis for more than one year.
33. "Noncropland" means any commercial farm land that:
    - a. Is no longer used for agricultural production;
    - b. Is no longer suitable for production of crops;
    - c. Is subject to a restrictive easement or contract that prohibits use for the production of crops; or
    - d. Includes a ditch, ditch bank, equipment yard, storage yard, or well head.
  34. "NRCS" means the Natural Resource Conservation Service.
  35. "Organic material cover" means reducing PM emissions and wind erosion and preserving soil moisture by applying and maintaining cover material such as animal waste or plant residue, to a soil surface to reduce soil movement. Material shall be evenly applied and maintained to a depth sufficient to reduce PM emissions and coverage should be a minimum of 70 percent.
  36. "Permanent cover" means reducing PM emissions and wind erosion by maintaining a long-term perennial vegetative cover on cropland that is temporarily not producing a major crop. Perennial species such as grasses and/or legumes shall be used to establish at least 60 percent cover. Compliance shall be determined by the Line Transect Test Method, NRCS National Agronomy Manual, Subpart 503.51, Estimating Crop Residue Cover, amended through February 2011 (and no future editions).
  37. "Pinal County PM Nonattainment Area" means the West Pinal PM<sub>10</sub> planning area and the West Central PM<sub>2.5</sub> planning area, as defined in 40 CFR 81.303, and incorporated by reference in R18-2-210.
  38. "Plant stubble" means stubble on the soil surface, which insulates soil to reduce evaporation of moisture, and also protects the soil from wind and water erosion.
  39. "Planting based on soil moisture" means reducing PM emissions and wind erosion by applying water or having enough moisture in the soil to germinate the seed prior to planting. Soil must have a minimum soil moisture content of 60% of field capacity at planting depth. Compliance shall be determined by NRCS Estimating Soil Moisture by Feel and Appearance Method, amended through April 1998 (and no future editions).
  40. "PM" includes both 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; and 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, as incorporated by reference in Appendix 2.
  41. "Precision Farming" means reducing the number of passes across a commercial farm by at least 12 inches per pass by using GPS to precisely guide farm equipment in the field.
  42. "Reduce vehicle speed" means reducing PM emissions and soil erosion from the operation of farm vehicles or farm equipment on noncropland or commercial farm roads at speeds not to exceed 15. This can be achieved through installation of engine speed governors, signage, or speed control devices.
  43. "Reduced harvest activity" means reducing soil disturbance, soil and water loss, and the number of mechanical harvest passes by a minimum of one ground operation across a commercial farm, by means other than equipment modification or combining tractor operations.
  44. "Reduced tillage system" means reducing soil disturbance, soil and water loss, by using a single piece of equipment that reduces a minimum of three tillage operations, by means other than equipment modification or combining tractor operations.
  45. "Regulated agricultural activity" means a regulated agricultural activity as defined in A.R.S. § 49-457(P)(1)(a) through (P)(1)(d).
  46. "Regulated area" means the regulated area as defined in A.R.S. § 49-457(P)(6).
  47. "Residue management" means reducing PM emissions and wind erosion by maintaining a minimum of 60 percent ground cover of crop and other plant residues on a soil surface between the time of harvest of one crop and the commencement of tillage for a new crop. Compliance shall be determined by the Line Transect Test Method, NRCS National Agronomy Manual, Subpart 503.51, Estimating Crop Residue Cover, amended through February 2011 (and no future editions).
  48. "Sequential cropping" means reducing PM emissions and wind erosion by growing crops in a sequence or close rotation that limits the amount of time bare soil is exposed on a commercial farm to 30 days or less.
  49. "Shuttle System/Larger Carrier" means reducing one out of every four trips across a commercial farm by using multiple or larger bins/trailers to haul commodity from the field.
  50. "Significant Agricultural Earth Moving Activities" means either leveling activities conducted on a commercial farm that disturb the soil more than 4 inches below the surface, or the creation, maintenance and relocation of: ditches, canals, ponds, irrigation lines, tailwater recovery systems (agricultural sumps) and other water conveyances, not to include activities performed on cropland for tillage, ground operations or harvest.
  51. "Silt content test method" means the test method as described in Appendix 2.
  52. "Stabilization of soil prior to plant emergence" means reducing PM emissions by applying water to soil prior to crop emergence in order to cause the soil to form a visible crust.
  53. "Surface roughening" means reducing PM emissions or wind erosion by manipulating a soil surface by means such as rough discing or tillage in order to produce or maintain clods on the land surface. Compliance shall be determined by NRCS Practice Code 609, Surface Roughening, amended through November 2008 (and no future editions).
  54. "Synthetic particulate suppressant" means reducing PM emissions and wind erosion by providing a stabilized soil surface on noncropland or commercial farm roads with a manufactured product such as lignosulfate, calcium chloride, magnesium chloride, an emulsion of a petroleum product, an enzyme product, or polyacrylamide that is used to control particulate matter.
  55. "Tillage" means any mechanical practice that physically disturbs the soil, and includes preparation for planting, such as plowing, ripping, or discing.
  56. "Tillage based on soil moisture" means reducing PM emissions by irrigating fields to the depth of the proposed cut prior to soil disturbances or conducting tillage to coincide with precipitation. Soil must have a minimum soil moisture content of 40-60% of field capacity at planting depth. Compliance shall be determined by NRCS Esti-



mating Soil Moisture by Feel and Appearance Method, amended through April 1998 (and no future editions).

57. "Timing of a tillage operation" means reducing wind erosion and PM emissions by performing tillage operations that minimize the amount of time within 45 days.
58. "Tillage operation" means an agricultural operation that mechanically manipulates the soil for the enhancement of crop production. Examples include disking or bedding. A pass through the field may be a subset of a tillage operation.
59. "Track-out control system" means minimizing any and all material that adheres to and agglomerates on all vehicles and equipment from noncropland or commercial farm roads or and falls onto paved public roads or shoulders to paved public roads by using a device or system to remove mud or soil from a vehicle or equipment before the vehicle enters a paved public road. Devices such as a grizzly, a gravel pad or a wheel wash system can be used.
60. "Transgenic Crops" means reducing a minimum of one tillage or ground operation, the number of chemical spray applications, or soil disturbances by using plants that are genetically modified.
61. "Transplanting" means reducing a minimum of one ground operation across a commercial farm and minimizing soil disturbance by utilizing plants already in a growth state as compared to seeding.
62. "VDT" (Vehicle trips per day) means trips per day made by one vehicle, in one direction.
63. "Watering" means reducing PM emissions and wind erosion by applying water to noncropland or commercial farm road bare soil surfaces during periods of high traffic until the surfaces are visibly moist.
64. "Watering on a high risk day" means reducing PM emissions and wind erosion by applying water to commercial farm road bare soil surfaces until the surfaces are visibly moist, on a day forecast to be high risk for dust generation by the Maricopa or Pinal County Dust Control Forecast.
65. "Wind barrier" means reducing PM emissions and wind erosion by constructing a fence or structure, or providing a woody vegetative barrier by planting a row of trees or shrubs, perpendicular or across the prevailing wind direction to reduce wind speed by changing the pattern of air flow over the land surface. For fences and structures, the wind barrier shall have a density of no less than 50% and the height of the wind barrier must be proportionate to the downwind protected area. The downwind protected area is considered ten times the height of the wind barrier. For vegetative barriers, compliance shall be determined by NRCS Conservation Practice Standard, Code 380, Windbreak/Shelterbelt Establishment, amended through August 21, 2009 (and no future editions).

#### Historical Note

Former Section R18-2-610 renumbered to R18-2-612; new Section R18-2-610 adopted by final rulemaking at 6 A.A.R. 2009, effective May 12, 2000 (Supp. 00-2).

Amended by exempt rulemaking at 13 A.A.R. 4326, effective November 14, 2007 (Supp. 07-4). Amended by exempt rulemaking at 18 A.A.R. 137, effective December 29, 2011 (Supp. 11-4). Subsection (A) corrected at the request of the Department, Office File No. M12-133, filed April 5, 2012 (Supp. 11-4). Amended by exempt rulemaking pursuant to Laws 2011, Ch. 214, § 4, at 21 A.A.R. 1156, effective July 2, 2015 (Supp. 15-3).

#### ~~ations; Maricopa County PM Nonattainment Area~~

- ~~A. A commercial farmer within the Maricopa County PM Nonattainment Area shall implement at least two best management practices from each category to reduce PM emissions.~~
- ~~B. A commercial farmer shall implement from the following best management practices, as described in subsection (A), to reduce PM emissions during tillage, harvest or ground operation activities:~~
  - ~~1. Chemical irrigation,~~
  - ~~2. Combining tractor operations,~~
  - ~~3. Equipment modification,~~
  - ~~4. Green Chop,~~
  - ~~5. Integrated Pest Management,~~
  - ~~6. Limited harvest activity ,~~
  - ~~7. Limited tillage activity ,~~
  - ~~8. Multi-year crop,~~
  - ~~9. Cessation of Night Tilling,~~
  - ~~10. Planting based on soil moisture,~~
  - ~~11. Precision Farming,~~
  - ~~12. Reduced harvest activity,~~
  - ~~13. Reduced tillage system,~~
  - ~~14. Tillage based on soil moisture,~~
  - ~~15. Timing of a tillage operation,~~
  - ~~16. Transgenic Crops,~~
  - ~~17. Transplanting,~~
  - ~~18. Shuttle System/Larger Carrier, or~~
  - ~~19. Conservation Tillage.~~
- ~~C. A commercial farmer shall implement from the following best management practices, as described in subsection (A), to reduce PM emissions from noncropland and commercial farm roads:~~
  - ~~1. Access restriction,~~
  - ~~2. Aggregate cover,~~
  - ~~3. Wind barrier,~~
  - ~~4. Critical area planting,~~
  - ~~5. Organic material cover,~~
  - ~~6. Reduce vehicle speed,~~
  - ~~7. Synthetic particulate suppressant,~~
  - ~~8. Track-out control system, or~~
  - ~~9. Watering.~~
- ~~D. A commercial farmer shall implement from the following best management practices, as described in subsection (A), to reduce PM emissions from cropland:~~
  - ~~1. Wind barrier,~~
  - ~~2. Cover crop,~~
  - ~~3. Cross-wind ridges,~~
  - ~~4. Chips/mulches,~~
  - ~~5. Multi-year crop,~~
  - ~~6. Permanent cover,~~
  - ~~7. Stabilization of soil prior to plant emergence,~~
  - ~~8. Residue management,~~
  - ~~9. Sequential cropping, or~~
  - ~~10. Surface roughening.~~
- ~~E. A commercial farmer shall implement from the following best management practices, as described in subsection (A), to reduce PM emissions when conducting Significant Agricultural Earth Moving Activities as defined in R18-2-610:~~
  - ~~1. Apply water prior to conducting Significant Agricultural Earth Moving Activities and/or time Significant Agricultural Earth Moving Activities to coincide with precipitation. Soil must have a minimum soil moisture content of 50% of field capacity. Compliance shall be determined by NRCS Estimating Soil Moisture by Feel and Appearance Method, amended through April 1998 (and no future editions);~~

~~R18-2-610.01. Agricultural PM General Permit for Crop Oper-~~



Method, amended through April 1998 (and no future editions);

2. Apply water during Significant Agricultural Earth Moving Activities. Soil must have a minimum soil moisture content of 30% of field capacity. Compliance shall be determined by NRCS Estimating Soil Moisture by Feel and Appearance Method, amended through April 1998 (and no future editions);
  3. Limit activities on a day identified by the Maricopa or Pinal County Dust Control Forecast to be high risk for dust generation; or
  4. Conduct Significant Agricultural Earth Moving Activities in a manner to reduce a minimum of one ground operation across a commercial farm by using equipment that is the most efficient means of moving the soil.
- F.** From and after December 31, 2015, a commercial farmer who engages in a regulated agricultural activity shall complete and maintain a Best Management Practices Program General Permit Record Form demonstrating compliance with this Section. Thereafter, a new Best Management Practices Program General Permit Record Form shall be completed every year by March 31. The Form shall be provided to the Director within two business days of notice to the commercial farmer. The Best Management Practice Program General Permit Record Form shall include the following information:
1. The name of the commercial farmer, signature, and date signed;
  2. The mailing address or physical address of the commercial farm; and
  3. The best management practice selected for tillage, harvest and ground operation activities, cropland, noncropland and commercial farm roads, and significant earth moving activities (if applicable).
- G.** Records of any changes to the Best Management Practices shall be noted on the Best Management Practices Program General Permit Record Form and shall be kept by the commercial farmer onsite and made available for review by the Director within two business days of notice to the commercial farmer.
- H.** A person may develop different practices to control PM emissions not contained in subsections (B), (C), (D), or (E) and may submit such practices that are proven effective through on-farm demonstration trials to the Committee. The proposed new practices shall not become effective unless submitted as described in A.R.S. § 49-457(L).
- I.** A commercial farmer shall maintain a record demonstrating compliance with this Section for three years. Records shall include a copy of the complete Best Management Practice Program General Permit Record Form to confirm implementation of each best management practice.
- J.** The Director shall not assess a fee to a commercial farmer for coverage under the agricultural PM general permit.
- K.** A commercial farmer shall ensure that the implementation of all selected best management practices does not violate any other local, state, or federal law.
- L.** The Director shall document noncompliance with this Section before issuing a compliance order.
- M.** A commercial farmer who is not in compliance with this Section is subject to the provisions in A.R.S. § 49-457(I), (J), and (K).

#### Historical Note

New Section made by exempt rulemaking pursuant to Laws 2011, Ch. 214, § 4, at 21 A.A.R. 1156, effective July 2, 2015 (Supp. 15-3).

#### ations; Pinal County PM Nonattainment Area

- A.** On the day before and during the day that is forecast to be high risk for dust generation by the Pinal County Dust Control Forecast, a commercial farmer shall ensure implementation of best management practices as described in sections (B)(1)(b), (B)(2)(b), (B)(3)(b), (B)(4)(b), and (B)(5)(b).
- B.** On all days, a commercial farmer shall implement at least one best management practice from each category to reduce PM emissions, as described below in subsections (1)(a), (2)(a), (3)(a), (4)(a), and (6), and at least two best management practices from subsection (5)(a). If a commercial farmer implements the Conservation tillage or Reduced tillage system best management practice for the tillage category, they do not have to implement a best management practice from the subsections (2)(a), (2)(b), (5)(a) and (5)(b).
1. Tillage:
    - a. A commercial farmer shall implement at least one of the following:
      - i. Combining tractor operations,
      - ii. Equipment modification,
      - iii. Multi-year crop,
      - iv. Cessation of night tilling,
      - v. Planting based on soil moisture,
      - vi. Precision farming,
      - vii. Tillage based on soil moisture,
      - viii. Timing of a tillage operation,
      - ix. Transgenic crops,
      - x. Transplanting,
      - xi. Reduced tillage system, or
      - xii. Conservation tillage.
    - b. Unless choosing limited tillage activity (subsection iv, below), on the day before and during the day that is forecast to be high risk for dust generation by the Pinal County Dust Control Forecast, a commercial farmer shall ensure implementation of at least one of the following:
      - i. Multi-year crop,
      - ii. Planting based on soil moisture,
      - iii. Tillage based on soil moisture,
      - iv. Limited tillage activity,
      - v. Reduced tillage system, or
      - vi. Conservation tillage.
  2. Ground Operations and Harvest:
    - a. A commercial farmer shall implement at least one of the following:
      - i. Combining tractor operations,
      - ii. Equipment modification,
      - iii. Chemical irrigation,
      - iv. Green chop,
      - v. Integrated pest management,
      - vi. Multi-year crop,
      - vii. Precision farming,
      - viii. Reduced harvest activity,
      - ix. Transgenic crops, or
      - x. Shuttle System/Larger Carrier.
    - b. Unless choosing limited harvest activity (subsection iv, below), on the day before and during the day that is forecast to be high risk for dust generation by the Pinal County Dust Control Forecast, a commercial farmer shall ensure implementation of at least one of the following:
      - i. Green chop,
      - ii. Integrated pest management,
      - iii. Multi-year crop, or
      - iv. Limited harvest activity.
  3. Noncropland:



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- a. A commercial farmer shall implement at least one of the following best management practices:
    - i. Access restriction,
    - ii. Aggregate cover,
    - iii. Wind barrier,
    - iv. Critical area planting,
    - v. Organic material cover,
    - vi. Reduce vehicle speed,
    - vii. Synthetic particulate suppressant, or
    - viii. Watering.
  - b. Unless choosing watering on a high risk day (subsection vi, below), on the day before and during a day forecast to be high risk for dust generation by the Pinal County Dust Control Forecast, on a non-cropland area that experiences more than 20 VDT from 2 or more axle vehicles, commercial farmer shall ensure implementation of at least one of the following best management practices:
    - i. Aggregate cover,
    - ii. Wind barrier,
    - iii. Critical area planting,
    - iv. Organic material cover,
    - v. Synthetic particulate suppressant, or
    - vi. Watering on a high risk day.
4. Commercial farm roads:
- a. A commercial farmer shall implement at least one of the following best management practices:
    - i. Access restriction,
    - ii. Reduce vehicle speed,
    - iii. Track-out control system,
    - iv. Aggregate cover,
    - v. Synthetic particulate suppressant,
    - vi. Watering, or,
    - vii. Organic material cover.
  - b. Unless choosing watering on a high risk day (subsection vi, below), on the day before and during a day forecast to be high risk for dust generation by the Pinal County Dust Control Forecast, on a road that experiences more than 20 VDT from 2 or more axle vehicles, a commercial farmer shall ensure implementation of at least one of the following best management practices:
    - i. Aggregate cover,
    - ii. Synthetic particulate suppressant,
    - iii. Wind barrier,
    - iv. Organic material cover,
    - v. Roads are stabilized as determined by the silt content test method,
    - vi. Watering on a high risk day.
5. Cropland:
- a. A commercial farmer shall implement at least two of the following best management practices, one from subsection (i) through (vii), and one from subsection (viii) through (xi), to reduce PM emissions from cropland:
    - i. Wind barrier,
    - ii. Cover crop,
    - iii. Cross-wind ridges,
    - iv. Chips/mulches,
    - v. Sequential cropping
    - vi. Residue management,
    - vii. Surface roughening,
    - viii. Multi-year crop,
    - ix. Permanent cover, or
    - x. Stabilization of soil prior to plant emergence.
  - b. On the day before and during the day that is forecast to be high risk for dust generation by the Pinal County Dust Control Forecast, a commercial farmer shall ensure implementation of at least one of the following:
    - i. Wind barrier,
    - ii. Cover crop,
    - iii. Cross-wind ridges,
    - iv. Chips/mulches,
    - v. Surface roughening,
    - vi. Multi-year crop,
    - vii. Permanent cover,
    - viii. Stabilization of soil prior to plant emergence, or
    - ix. Residue management.
6. A commercial farmer shall implement at least one of the following best management practices, when conducting Significant Agricultural Earth Moving Activities as defined in R18-2-610:
- a. Apply water prior to conducting Significant Agricultural Earth Moving Activities and/or time Significant Agricultural Earth Moving Activities to coincide with precipitation. Soil must have a minimum soil moisture content of 50% of field capacity. Compliance shall be determined by NRCS Estimating Soil Moisture by Feel and Appearance Method, amended through April 1998 (and no future editions);
  - b. Apply water during Significant Agricultural Earth Moving Activities. Soil must have a minimum soil moisture content of 30% of field capacity. Compliance shall be determined by NRCS Estimating Soil Moisture by Feel and Appearance Method, amended through April 1998 (and no future editions);
  - c. Limit activities on a day identified by the Maricopa or Pinal County Dust Control Forecast to be high risk for dust generation; or
  - d. Conduct Significant Agricultural Earth Moving Activities in a manner to reduce a minimum of one ground operation across a commercial farm by using equipment that is the most efficient means of moving the soil.
- C. From and after December 31, 2015, a commercial farmer who engages in a regulated agricultural activity shall complete a Best Management Practices Program General Permit Record Form demonstrating compliance with this rule. Thereafter, a new Best Management Practices Program General Permit Record Form shall be completed every year by March 31. The Form shall be provided to the Director within two business days of notice to the commercial farmer. The Best Management Practice Program General Permit Record Form shall include the following information:
- 1. The name of the commercial farmer, signature, and date signed;
  - 2. The mailing address or physical address of the commercial farm; and
  - 3. The best management practices selected for tillage, ground operations and harvest, cropland, noncropland, commercial farm roads, and significant earth moving activities (if applicable); and
  - 4. Any additional best management practices selected for high risk days as predicted by the Pinal County Dust Control Forecast.
- D. Beginning in calendar year 2017, and no more than once every subsequent three calendar years, the Director, in conjunction with the Arizona Department of Agriculture, shall provide the commercial farmer with a Best Management Practices Pro-



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gram 3-year Survey. The commercial farmer shall complete the Survey with data from the preceding calendar year and submit the Survey to the Arizona Department of Agriculture (ADA) by January 31, 2018, and every three years thereafter. The Survey information submitted to the ADA shall be compiled by the ADA without reference to a commercial farmer's name, shall aggregate the data from the Surveys received, and be submitted to the Department. The 3-year Survey shall include the following information:

1. The name, business address, and phone number of the commercial farmer responsible for the preparation and implementation of the best management practices;
  2. The signature of the commercial farmer and the date the form was signed;
  3. The acreage of each crop type planted/growing during the calendar year that the survey is conducted;
  4. The total miles of commercial farm roads at the commercial farm;
  5. The total acreage of the noncropland at the commercial farm;
  6. The best management practices selected for tillage, ground operations and harvest, cropland, noncropland, commercial farm roads, and significant earth moving activities (if applicable); and
  7. Any additional best management practices selected for high risk days as predicted by the Pinal County Dust Control Forecast.
- E.** Records of any changes to the Best Management Practices shall be noted on the Best Management Practices Program General Permit Record Form and shall be kept by the commercial farmer onsite and made available for review by the Director within two business days of notice to the commercial farmer.
- F.** A person may develop different practices to control PM emissions not contained in subsections (B)(1) through (B)(6) and may submit such practices that are proven effective through on-farm demonstration trials to the Committee. The proposed new practices shall not become effective unless submitted as described in A.R.S. § 49-457(L).
- G.** A commercial farmer shall maintain a record demonstrating compliance with this Section for three years. Records shall include a copy of the complete Best Management Practice Program General Permit Record Form to confirm implementation of each best management practice.
- H.** The Director shall not assess a fee to a commercial farmer for coverage under the agricultural PM general permit.
- I.** A commercial farmer shall ensure that the implementation of all selected best management practices does not violate any other local, state, or federal law.
- J.** The Director shall document noncompliance with this Section before issuing a compliance order.
- K.** A commercial farmer who is not in compliance with this Section is subject to the provisions in A.R.S. § 49-457(I), (J), and (K).

**Historical Note**

New Section made by exempt rulemaking pursuant to Laws 2011, Ch. 214, § 4, at 21 A.A.R. 1156, effective July 2, 2015 (Supp. 15-3).

**~~R18-2-611. Definitions for R18-2-611.01, R18-2-611.02, and R18-2-611.03~~**

The definitions in R18-2-101 and the following definitions apply to R18-2-611.01, R18-2-611.02, and R18-611.03:

1. The following definitions apply to a commercial dairy operation, a commercial beef feedlot, a commercial poultry facility, and commercial swine facility:

- a. ~~"Animal waste handling and transporting" means the processes by which any animal excretions and mixtures containing animal excretions are collected and transported.~~
- b. ~~"Arenas, corrals and pens" means areas where animals are confined for the purposes of, but not limited to, feeding, displaying, safety, racing, exercising, or husbandry.~~
- c. ~~"Commercial animal operation" means a commercial dairy operation, a commercial beef feedlot, a commercial poultry facility, and a commercial swine facility, as defined in this Section.~~
- d. ~~"Commercial animal operator" means an individual, entity, or joint operation in general control of a commercial animal operation.~~
- e. ~~"Dust Control Forecast" means a forecast, which shall identify a low, moderate or high risk of dust generation for the next five consecutive days and shall be issued by noon on each day the forecast is generated. When developing these forecasts, the department shall consider all of the following:~~
  - i. ~~Projected meteorological conditions, including:~~
    - (1) ~~Wind speed and direction,~~
    - (2) ~~Stagnation,~~
    - (3) ~~Recent precipitation, and~~
    - (4) ~~Potential for precipitation;~~
  - ii. ~~Existing concentrations of air pollution at the time of the forecast; and~~
  - iii. ~~Historic air pollution concentrations that have been observed during meteorological conditions similar to those that are predicted to occur in the forecast.~~
- f. ~~"High traffic areas" means areas that experience more than 20 VDT from 2 or more axle vehicles.~~
- g. ~~"Maricopa PM nonattainment area" means the Phoenix planning area as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210.~~
- h. ~~"Paved Public Road" means any paved roadways that are open to public travel and maintained by a City, County, State, or Federal entities.~~
- i. ~~"Pinal County PM Nonattainment Area" means the West Pinal PM<sub>10</sub> planning area and the West Central PM<sub>2.5</sub> planning area, as defined in 40 CFR 81.303, and incorporated by reference in R18-2-210.~~
- j. ~~"PM" includes both 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; and 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, as incorporated by reference in Appendix 2.~~
- k. ~~"Regulated agricultural activity" means a regulated agricultural activity as defined in A.R.S. § 49-457(P)(5).~~
- l. ~~"Regulated area" means the regulated area as defined in A.R.S. § 49-457(P)(6).~~
- m. ~~"Track-out control device" means minimizing any and all material that adheres to and agglomerates on all vehicles and equipment from unpaved access connections and falls onto paved public roads or shoulders to paved public roads by using a device or system to remove mud or soil from a vehicle or~~

**R18-2-611. Agricultural PM10 General Permit: Maricopa PM10 Nonattainment Area**

- A. A commercial farmer shall comply with this Section by December 31, 2001.**
- B. A commercial farmer, who begins a regulated agricultural activity after December 31, 2000, shall comply with this Section within 18 months of beginning the regulated agricultural activity.**
- C. A commercial farmer shall implement at least 1 best management practice from each of the following categories:**
- 1. Tillage and harvest, subsection (E);**
  - 2. Noncropland, subsection (F); and**
  - 3. Cropland, subsection (G).**
- A commercial farmer may implement more than 1 best management practice for 1 or more of the categories.**
- D. A commercial farmer shall ensure that the implementation of each selected best management practice does not violate any other local, state, or federal law.**
- E. A commercial farmer shall implement at least 1 of the following best management practices to reduce PM10 emissions during tillage and harvest activities:**
- 1. Chemical irrigation,**
  - 2. Combining tractor operations,**
  - 3. Equipment modification,**
  - 4. Limited activity during a high-wind event,**
  - 5. Multi-year crop,**
  - 6. Planting based on soil moisture,**
  - 7. Reduced harvest activity,**
  - 8. Reduced tillage system,**
  - 9. Tillage based on soil moisture, or**
  - 10. Timing of a tillage operation.**
- F. A commercial farmer shall implement at least 1 of the following best management practices to reduce PM10 emissions from noncropland:**
- 1. Access restriction;**
  - 2. Aggregate cover;**
  - 3. Artificial wind barrier;**
  - 4. Critical area planting;**
  - 5. Manure application;**
  - 6. Reduce vehicle speed;**
  - 7. Synthetic particulate suppressant;**
  - 8. Track-out control system;**
  - 9. Tree, shrub, or windbreak planting; or**
  - 10. Watering.**
- G. A commercial farmer shall implement at least 1 of the following best management practices to reduce PM10 emissions from cropland:**
- 1. Artificial wind barrier;**
  - 2. Cover crop;**
  - 3. Cross-wind ridges;**
  - 4. Cross-wind strip-cropping;**
  - 5. Cross-wind vegetative strips;**
  - 6. Manure application;**
  - 7. Mulching;**
  - 8. Multi-year crop;**
  - 9. Permanent cover;**
  - 10. Planting based on soil moisture;**
  - 11. Residue management;**
  - 12. Sequential cropping;**
  - 13. Surface roughening; or**
  - 14. Tree, shrub, or windbreak planting.**
- H. A person may develop different practices not contained in subsections (E), (F), or (G) that reduce PM10. A person may submit practices that are proven effective through on-farm demonstration trials to the Committee. The Committee may meet to review the submitted practices.**
- I. A commercial farmer shall maintain a record demonstrating compliance with this Section. The record shall be provided to the Director within 2 business days of notice to the commercial farmer. The record shall contain:**
- 1. The name of the commercial farmer,**
  - 2. The mailing address or physical address of the commercial farm, and**
  - 3. The best management practices selected for tillage and harvest, noncropland, and cropland.**
- J. The Director shall not assess a fee to a commercial farmer for coverage under the agricultural PM10 general permit.**
- K. The Director shall document noncompliance with this Section before issuing a compliance order.**
- L. A commercial farmer who is not in compliance with this Section is subject to the provisions in A.R.S. § 49-457 (I), (J), and (K).**



1. The name, business address, and phone number of the commercial farmer responsible for the preparation and implementation of the best management practices;
  2. The signature of the commercial farmer and the date the form was signed;
  3. The number of animals in a commercial dairy operation, beef cattle feed lot, poultry facility or swine facility;
  4. The total miles of unpaved roads at the commercial dairy operation, beef cattle feed lot, poultry facility or swine facility;
  5. The total acreage of the unpaved access connections and equipment areas at the commercial dairy operation, beef cattle feed lot, poultry facility or swine facility;
  6. The best management practices selected for each category; and
  7. For commercial dairy operations and beef cattle feedlots, an acknowledgement that water was applied on the day of a high risk day as predicted by the Pinal County Dust Control Forecast.
- J.** Beginning January 1, 2016, a commercial animal operator shall maintain records demonstrating compliance with this Section for three years. Records shall include a copy of the complete Best Management Practice Program General Permit Record Form to confirm implementation of each best management practice and any changes to the best management practices. Records shall be kept by the commercial animal operator onsite and made available for review by the Director within two business days of notice to the commercial animal operator.
- K.** A person may develop different practices not contained in subsection (D), (E), (F) or (G) that reduce PM and may submit such practices that are proven effective through on-operation demonstration trials to the Committee. The new best management practices shall not become effective unless submitted as described in A.R.S. § 49-457(L).
- L.** The Director shall not assess a fee to a commercial animal operator for coverage under the agricultural PM general permit.
- M.** A commercial animal operator shall ensure that the implementation of all selected best management practices does not violate any other local, state, or federal law.
- N.** The Director shall document noncompliance with this Section before issuing a compliance order.
- O.** A commercial animal operator who is not in compliance with this Section is subject to the provisions in A.R.S. § 49-457(I), (J), and (K).

#### Historical Note

New Section made by exempt rulemaking pursuant to Laws 2011, Ch. 214, § 4, at 21 A.A.R. 1156, effective July 2, 2015 (Supp. 15-3).

#### R18-2-612. Definitions for R18-2-612.01

The definitions in R18-2-101 and the following definitions apply to R18-2-612.01:

1. "Access restriction" means reducing PM emission by reducing the number of trips driven on unpaved operation and maintenance and unpaved utility roads by restricting or eliminating public access by the use of signs or physical obstruction at locations that effectively control access to roads.
2. "Aggregate cover" means reducing PM emissions, wind erosion and stabilizing soil by applying and maintaining gravel, concrete, recycled road base, caliche, or other similar material to unpaved roads. The aggregate should be clean, hard and durable, and should be applied a depth sufficient to create soil stabilization in accordance with

material specifications. A minimum depth of three inches is the standard in the absence of such specifications.

3. "Apply and maintain water" means reducing PM emissions and wind erosion by applying water to bare soil surfaces until the surfaces are visibly moist.
4. "Best management practice" means a technique verified by scientific research, that on a case-by-case basis is practical, economically feasible, and effective in reducing PM emissions from a regulated agricultural activity.
5. "Biological control of aquatic weeds" means reducing at least one trip, or to one trip if only one trip is needed, per treatment, made by vehicles for the purposes of removing aquatic weeds from canals by using fish, and other biologic means, within the canal through the use of to control the growth of aquatic weeds that reduce operating capacities and create debris that causes other operational issues.
6. "Canals" means facilities constructed for the sole purpose of the control, conveyance, and delivery of water. These facilities may be either open earthen channels, lined or unlined, or buried pipelines, which are used to convey water uphill and under obstructions, such as roadways and wash and river channels. These facilities include, but are not limited to, gate, inlet, outlet, safety, and measuring structures required to control water along the canals and deliver water to irrigation district customers, as well as compacted earthen banks constructed to protect these facilities from storm runoff events.
7. "Committee" means the Governor's Agricultural Best Management Practices Committee.
8. "Debris" means trash, rubble, and other non-soil materials.
9. "Dredge canals" means reducing PM emissions by mechanically removing muck, debris, and other foreign objects from canals while material is still wet or damp.
10. "Dust Control Forecast" means a forecast, which shall identify a low, moderate or high risk of dust generation for the next five consecutive days and shall be issued by noon on each day the forecast is generated. When developing these forecasts, the department shall consider all of the following:
  - a. Projected meteorological conditions, including:
    - i. Wind speed and direction,
    - ii. Stagnation,
    - iii. Recent precipitation, and
    - iv. Potential for precipitation;
  - b. Existing concentrations of air pollution at the time of the forecast; and
  - c. Historic air pollution concentrations that have been observed during meteorological conditions similar to those that are predicted to occur in the forecast.
11. "Earth materials" means natural materials covering the ground surface, which includes, but are not limited to, dirt, rocks, or soil.
12. "Grading roadways" means mechanically smoothing and compacting the roadway surface.
13. "Irrigation District" means a political subdivision, governed by title 48, chapter 19.
14. "Limit activity" means performing only critical operational or emergency activity on a day forecast to be high risk for dust generation as forecasted by the Pinal County Dust Control Forecast.
15. "Major earth moving activities" means the mechanical movement of earth materials to reconstruct, relocate, reshape, reconfigure canals, including operation and maintenance roads and utility access roads.



16. "Maricopa PM nonattainment area" means the Phoenix planning area as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210.
17. "Minor earth moving activities" means the mechanical movement of earth materials to repair and maintain the existing configuration, location, bank slopes, or inclines of canals.
18. "Muck" means water that is saturated with mud, dirt, and soil, which accumulates over time along the bottom of canals.
19. "Paved Public Road" means any paved roadways that are open to public travel and maintained by a City, County, or the State.
20. "Pinal County PM Nonattainment Area" means the West Pinal PM<sub>10</sub> planning area and the West Central PM<sub>2.5</sub> planning area, as defined in 40 CFR 81.303, and incorporated by reference in R18-2-210.
21. "PM" includes both 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; and 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, as incorporated by reference in Appendix 2.
22. "Reduce vehicle speed" means reducing PM emissions and soil erosion from the use of vehicles owned or operated by the irrigation district on unpaved operation, maintenance, and utility access roads, at speeds not to exceed 25 mph. This can be achieved through worker behavior modifications, signage, or any other necessary means.
23. "Regulated agricultural activity" means activities of an irrigation district, which affects those lands and facilities that are under the jurisdiction and control of an irrigation district, as described in § 49-457(P)(1)(f) and A.R.S. § 49-457(P)(5)(b).
24. "Regulated area" means a regulated area as defined in A.R.S. § 49-457(P)(6)(c).
25. "Sediment" means muck that has dried after removal from canals.
26. "Supervisory control system" means a system that allows the irrigation district to control operational structures from a remote computer location in order to reduce at least one trip made by vehicles to access structures for operational purposes.
27. "Synthetic or natural particulate suppressant" means reducing PM emissions and wind erosion by providing a stabilized soil surface with organic material, such as muck, animal waste or biosolids, or with a manufactured product such as lignosulfate, calcium chloride, magnesium chloride, an emulsion of a petroleum product, an enzyme product, or polyacrylamide.
28. "Track-out control system" means minimizing any and all material that adheres to and agglomerates on all vehicles and equipment and falls onto paved public roads or shoulders to paved public roads by using a device or system to remove mud or soil from a vehicle or equipment before the vehicle enters a paved public road. Devices such as a grizzly, a gravel pad or a wheel wash system can be used.
29. "Unauthorized use" means any travel or access by non-district personnel in non-district vehicles along roadways under the control of an irrigation district without the permission of the irrigation district.
30. "Unpaved operation and maintenance roads" means unpaved roadways that lay adjacent to canals, which provide access for irrigation district personnel and equipment for direct operation and maintenance of canals, and are under the control of the irrigation district.
31. "Unpaved utility access roads" means unpaved roadways used to provide access to canals, and also includes office and shop facilities, equipment yards, staging areas and other lands under the control of the irrigation district.
32. "Weed management" means reducing at least one trip made by vehicles for the purposes of removing weeds by using a combination of techniques, including organic, chemical, or biological means, to control weeds along canal banks and land surfaces not used for conveying water, excluding unpaved roadways.
33. "Wind barrier" means reducing PM<sub>10</sub> emissions and wind erosion by constructing a fence or structure, or providing a woody vegetative barrier by planting a row of trees or shrubs, perpendicular or across the prevailing wind direction to reduce wind speed by changing the pattern of air flow over the land surface. For fences and structures, the wind barrier shall have a density of no less than 50% and the height of the wind barrier must be proportionate to the downwind protected area. The downwind protected area is considered ten times the height of the wind barrier. For vegetative barriers, compliance shall be determined by NRCS Conservation Practice Standard, Code 380, Windbreak/Shelterbelt Establishment, amended through August 21, 2009 (and no future editions).

#### Historical Note

New Section R18-2-612 renumbered from R18-2-610 at 6 A.A.R. 2009, effective May 12, 2000 (Supp. 00-2). Former Section R18-2-612 renumbered to R18-2-614; new Section R18-2-612 made by final rulemaking at 11 A.A.R. 2210, effective July 18, 2005 (Supp. 05-2). Amended by exempt rulemaking pursuant to Laws 2011, Ch. 214, § 4, at 21 A.A.R. 1156, effective July 2, 2015 (Supp. 15-3).

#### R18-2-612.01. Agricultural PM General Permit For Irrigation Districts; PM Nonattainment Areas Designated After June 1, 2009

- A. An irrigation district within a PM Nonattainment Area, designated after June 1, 2009, shall implement at least one best management practice from each of the following categories to reduce PM emissions:
  1. Unpaved operation and maintenance roads:
    - a. Access restriction,
    - b. Apply and maintain aggregate cover,
    - c. Install supervisory control system to limit vehicle travel,
    - d. Limit activity,
    - e. Install signage to limit vehicle speed to 25 mph,
    - f. Post warning signs for unauthorized use at point of entry to roads,
    - g. Reduce vehicle speed,
    - h. Install and maintain a track-out control system,
    - i. Apply and maintain synthetic or natural particulate suppressant,
    - j. Apply and maintain water before, during, and after major and minor earth moving activities,
    - k. Apply and maintain water when grading roadways,
    - l. Use paved non-district or paved public roads to access structures, or
    - m. Install wind barriers.
  2. Canals:



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- a. Dredge canals while muck or debris is still wet,
  - b. Dispose of muck or debris while still damp,
  - c. Weed management,
  - d. Biological control of aquatic weeds, or
  - e. Apply and maintain water before, during and after major and minor earth moving activities.
3. Unpaved utility access roads:
  - a. Access restriction,
  - b. Apply and maintain aggregate cover,
  - c. Limit activity,
  - d. Install signage to limit vehicle speed to 25 mph,
  - e. Post warning signs for unauthorized use at points of entry to roads,
  - f. Reduce vehicle speed,
  - g. Install and maintain a track-out control system,
  - h. Apply and maintain pavement,
  - i. Apply and maintain synthetic or natural particulate suppressant,
  - j. Apply and maintain water before, during and after major and minor earth moving activities,
  - k. Apply and maintain water when grading roadways,
  - l. Use paved non-district or paved public roads to access structures, or
  - m. Install wind barriers.
- B. From and after December 31, 2015, an irrigation district engaged in a regulated agricultural activity shall complete a Best Management Practices Program General Permit Record Form. Thereafter, a new Best Management Practices Program General Permit Record Form shall be completed every year by March 31. The Form shall be provided to the Director within two business days of notice to the irrigation district. The Best Management Practice Program General Permit Record form shall include the following information:
  1. The name, business address, and the irrigation district representative responsible for the preparation and implementation of the best management practices;
  2. The signature of the irrigation district representative and the date the form was signed; and
  3. The best management practice selected for unpaved operation and utility roads, canals, and unpaved utility access roads.
- C. Beginning in calendar year 2017, and no more than once every subsequent three calendar years, the Director, in conjunction with the Arizona Department of Agriculture, shall provide the irrigation district with a Best Management Practices Program 3-year Survey. The irrigation district shall complete the Survey with data from the preceding calendar year and submit the Survey to the Arizona Department of Agriculture (ADA) by January 31, 2018, and every three years thereafter. The Survey information submitted to the ADA shall be compiled by the ADA then be submitted to the Department. The 3-year Survey shall include the following information:
  1. The name, business address, and phone number of the irrigation district representative responsible for the preparation and implementation of the best management practices;
  2. The signature of the irrigation district representative and the date the form was signed;
  3. The total miles of canals that the irrigation district controls;
  4. The total miles of unpaved operation and maintenance roads;
  5. The total miles of the unpaved utility access roads; and
  6. The best management practices selected for unpaved operation and utility roads, canals, and unpaved utility access roads.
- D. Records of any changes to those Best Management Practices shall be noted on the Best Management Practices Program General Permit Record Form and shall be kept by the irrigation district onsite and made available for review by the Director within two business days of notice to the irrigation district by the Department.
- E. An irrigation district may develop different practices not contained in either of the categories of subsection (A)(1), (A)(2), or (A)(3) that reduce PM and may submit such practices that are proven effective through in-district trials. The proposed new practices shall not become effective unless submitted as described in A.R.S. § 49-457(L).
- F. An irrigation district shall maintain a record demonstrating compliance with this Section for three years. Records shall include a copy of the complete Best Management Practice Program General Permit Record Form to confirm implementation of each best management practice.
- G. The Director shall not assess a fee to an irrigation district for coverage under the agricultural PM general permit.
- H. An irrigation district shall ensure that the implementation of all selected best management practices does not violate any other local, state, or federal law.
- I. The Director shall document noncompliance with this Section before issuing a compliance order.
- J. An irrigation district that is not in compliance with this Section is subject to the provisions in A.R.S. § 49-457(I), (J), and (K).

**Historical Note**

New Section made by exempt rulemaking pursuant to  
Laws 2011, Ch. 214, § 4, at 21 A.A.R. 1156, effective  
July 2, 2015 (Supp. 15-3).

**~~R18-2-613. Definitions for R18-2-613.01~~**

1. "Access restriction" means restricting or eliminating public access to noncropland with signs or physical obstruction.
2. "Aggregate cover" means gravel, concrete, recycled road base, caliche, or other similar material applied to noncropland.
3. "Artificial wind barrier" means a physical barrier to the wind.
4. "Bed row spacing" means increasing or decreasing the size of a planting bed area to reduce the number of passes and soil disturbance by increasing plant density.
5. "Best management practice" means a technique verified by scientific research, that on a case-by-case basis is practical, economically feasible, and effective in reducing PM<sub>10</sub> emissions from a regulated agricultural activity.
6. "Chemical irrigation" means applying a fertilizer, pesticide, or other agricultural chemical to cropland through an irrigation system.
7. "Combining tractor operations" means performing two or more tillage, cultivation, planting, or harvesting operations with a single tractor or harvester pass.
8. "Commercial farm" means 10 or more contiguous acres of land used for agricultural purposes within the boundary of the Yuma PM<sub>10</sub> nonattainment area.
9. "Commercial farmer" means an individual, entity, or joint operation in general control of a commercial farm.
10. "Conservation irrigation" means the use of drips, sprinklers, or underground lines to conserve water, and to reduce the weed population, the need for tillage, and soil compaction.
11. "Conservation tillage" means types of tillage that reduce the number of passes and the amount of soil disturbance.
12. "Cover crop" means plants or a green manure crop grown for seasonal soil protection or soil improvement.

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**R18-2-614. Evaluation of Nonpoint Source Emissions**

Opacity of an emission from any nonpoint source shall not be greater than 40% measured according to the 40 CFR 60, Appendix A, Reference Method 9. An open fire permitted under R18-2-602 or regulated under Article 15 is exempt from this requirement.

**Historical Note**

Section R18-2-614 renumbered from R18-2-612; amended by final rulemaking at 11 A.A.R. 2210, effective July 18, 2005 (Supp. 05-2). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

**ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS****R18-2-701. Definitions**

For purposes of this Article:

1. "Acid mist" means sulfuric acid mist as measured in the Arizona Testing Manual and 40 CFR 60, Appendix A.
2. "Architectural coating" means a coating used commercially or industrially for residential, commercial or industrial buildings and their appurtenances, structural steel, and other fabrications such as storage tanks, bridges, beams and girders.
3. "Asphalt concrete plant" means any facility used to manufacture asphalt concrete by heating and drying aggregate and mixing with asphalt cements. This is limited to facilities, including drum dryer plants that introduce asphalt into the dryer, which employ two or more of the following processes:
  - a. A dryer
  - b. Systems for screening, handling, storing, and weighing hot aggregate.
  - c. Systems for loading, transferring, and storing mineral filler.
  - d. Systems for mixing asphalt concrete.
  - e. The loading, transferring, and storage systems associated with emission control systems.
4. "Black liquor" means waste liquor from the brown stock washer and spent cooking liquor which have been concentrated in the multiple-effect evaporator system.
5. "Boiler" means an enclosed fossil- or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.
6. "Bottoming-cycle cogeneration unit" means a cogeneration unit in which the energy input to the unit is first used to produce useful thermal energy and at least some of the reject heat from the useful thermal energy application or process is then used for electricity production.
7. "Calcine" means the solid materials produced by a lime plant.
8. "Coal" means any solid fuel classified as anthracite, bituminous, subbituminous, or lignite by the ASTM Standard Specification for Classification of Coals by Rank D388-77, 90, 91, 95, or 98a.
9. "Coal-derived fuel" means any fuel (whether in a solid, liquid, or gaseous state) produced by the mechanical, thermal or chemical processing of coal.
10. "Coal-fired" means combusting any amount of coal or coal-derived fuel, alone or in combination with any amount of any other fuel, during any year.
11. "Cogeneration unit" means a stationary coal-fired boiler or stationary coal-fired combustion turbine:
  - a. Having equipment used to produce electricity and useful thermal energy for industrial, commercial, heating, or cooling purposes through the sequential use of energy; and
  - b. Producing during the 12-month period starting on the date the unit first produces electricity and during any calendar year after which the unit first produces electricity:
    - i. For a topping-cycle cogeneration unit: useful thermal energy not less than 5% of total energy output; and useful power that, when added to one-half of useful thermal energy produced, is not less than 42.5% of total energy input, if useful thermal energy produced is 15% or more of total energy output, or not less than 45% of total energy input, if useful thermal energy produced is less than 15% of total energy output; and
    - ii. For a bottoming-cycle cogeneration unit, useful power not less than 45% of total energy input.
12. "Combustion turbine" means:
  - a. An enclosed device comprising a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine; and
  - b. If the enclosed device under subsection (12)(a) is combined cycle, any associated heat recovery steam generator and steam turbine.
13. "Commercial operation" means the time when the owner or operator supplies electricity for sale or use, including test generation.
14. "Concentrate" means enriched copper ore recovered from the froth flotation process.
15. "Concentrate dryer" means any facility in which a copper sulfide ore concentrate charge is heated in the presence of air to eliminate a portion of the moisture from the charge, provided less than 5% of the sulfur contained in the charge is eliminated in the facility.
16. "Concentrate roaster" means any facility in which a copper sulfide ore concentrate is heated in the presence of air to eliminate 5% or more of the sulfur contained in the charge.
17. "Condensate stripper system" means a column, and associated condensers, used to strip, with air or steam, TRS compounds from condensate streams from various processes within a kraft pulp mill.
18. "Control device" means the air pollution control equipment used to remove particulate matter or gases generated by a process source from the effluent gas stream.
19. "Converter" means any vessel to which copper matte is charged and oxidized to copper.
20. "Electric generating plant" means all electric generating units located at a stationary source.
21. "Electric generating unit" means:
  - a. A stationary, coal-fired boiler or stationary coal-fired combustion turbine, other than a boiler or turbine that qualifies as a cogeneration unit, serving at any time since the start-up of a unit's combustion chamber a generator with nameplate capacity of more than 25 megawatts electric producing electricity for sale. If a unit qualifies as a cogeneration unit during the 12-month period starting the date the unit first produces electricity but subsequently no longer qualifies as a cogeneration unit, the unit shall be an electric generating unit on the day which the unit no longer qualifies as a cogeneration unit.
  - b. A cogeneration unit serving at any time a generator with nameplate capacity of more than 25 megawatts and supplying in any calendar year more than one