TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY AIR POLLUTION CONTROL

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Article 2, consisting of Sections R18-2-201 through R18-2-290, adopted effective August 8, 1991 (Supp. 91-3).

Article 2, consisting of Sections R18-2-201 through R18-2-220, repealed effective August 8, 1991 (Supp. 91-3).

Article 2 consisting of Sections R9-3-201, R9-3-202, R9-3-204 through R9-3-207, and R9-3-215 through R9-3-219 renumbered as Article 2, Sections R18-2-201, R18-2-202, R18-2-204 through R18-2-207, and R18-2-215 through R18-2-219 (Supp. 87-3).

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Article 3, consisting of Sections R9-3-301 through R9-3-319, and R9-3-321 through R9-3-323 repealed effective November 15, 1993 (Supp. 93-4).

Article 3 consisting of Sections R9-3-301 through R9-3-319 and R9-3-321 through R9-3-323 renumbered as Article 3, Sections R18-2-301 through R18-2-319 and R18-2-321 through R18-2-323 (Supp. 87-3).

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Article 4, consisting of Sections R18-2-401 through R18-2-410, renumbered as Article 6, Sections R18-2-601 through R18-2-610 (Supp. 93-4).

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Article 5, consisting of Sections R18-2-501 through R18-2-530, renumbered as Article 7, Sections R18-2-701 through R18-2-730 (Supp. 93-4).

Article 5 consisting of Sections R9-3-501 through R9-3-529 renumbered as Article 5, Sections R18-2-501 through R18-2-529 (Supp. 87-3).

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Article 6, consisting of Sections R18-2-601 through R18-2-605, renumbered to Article 8, Sections R18-2-801 through R18-2-805 (Supp. 93-4).

Article 6 consisting of Sections R9-3-601 through R9-3-605 renumbered as Article 6, Sections R18-2-601 through R18-2-605 (Supp. 87-3).

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Article 7 consisting of Sections R18-2-701 through R18-2-709 repealed effective September 26, 1990 (Supp. 90-3).

Article 7 consisting of Sections R9-3-701 through R9-3-709 renumbered as Article 7, Sections R18-2-701 through R18-2-709 (Supp. 87-3).

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Article 8, consisting of Sections R18-2-801 through R18-2-805, renumbered to Article 9, Sections R18-2-901 through R18-2-905 (Supp. 93-4).

Article 8 consisting of Sections R18-2-801 through R18-2-805 adopted effective February 26, 1988.

Former Article 8 consisting of Sections R9-3-801 through R9-3-829, R9-3-831, R9-3-832, R9-3-835 through R9-3-838, R9-3-840 through R9-3-848, and R9-3-857 through R9-3-859 repealed effective February 26, 1988.

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Article 9, consisting of Sections R18-2-901 through R18-2-905, renumbered from Article 8, Sections R18-2-801 through R18-2-805 (Supp. 93-4).

Article 9, consisting of Sections R18-2-901 through R18-2-905, renumbered to Article 11, Sections R18-2-1101 through R18-2-1105 (Supp. 93-4).

Article 9 consisting of Sections R18-2-901 and R18-2-902 adopted effective February 26, 1988.

Former Article 9 consisting of Sections R9-3-901, R9-3-903 through R9-3-906, R9-3-910, R9-3-913, and R9-3-922 repealed effective February 26, 1988.

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Article 11, consisting of Sections R18-2-1101 and R18-2-1102 adopted effective November 15, 1993 (Supp. 93-4).

Article 11 consisting of Sections R18-2-1101 and R18-2-1102 repealed effective September 26, 1990 (Supp. 90-3).

Article 11 consisting of Sections R9-3-1101, R9-3-1102, and Appendices 1 through 11 renumbered as Article 11, Sections R18-2-1101, R18-2-1102, and Appendices 1 through 11 (Supp. 87-3).

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ARTICLE 12. EMISSIONS BANK

Article 12, consisting of Sections R18-2-1201 through R18-2-1208, made by final rulemaking at 8 A.A.R. 1815, effective March 18, 2002 (Supp. 02-1).

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Article 15, consisting of R18-2-1501 through R18-2-1515, adopted effective October 8, 1996 (Supp. 96-4).

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ARTICLE 16. VISIBILITY; REGIONAL HAZE

Article 16, consisting of Sections R18-2-1601 through R18-2-1606, made by final rulemaking at 9 A.A.R. 4541, effective December 2, 2003 (Supp. 03-4).

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ARTICLE 1. GENERAL

R18-2-101. Definitions

In addition to the definitions prescribed in A.R.S. §§ 49-101, 49-401.01, 49-421, 49-471, and 49-541, in this Chapter, unless otherwise specified:

1. "Act" means the Clean Air Act of 1963 (P.L. 88-206; 42 U.S.C. 7401 through 7671q) as amended by the Clean Air Act Amendments of 1990 (P.L. 101-549).
2. "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in subsections (a) through (e).
   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 two-year 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 demonstration 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. If there is inadequate information to determine actual historical emissions, 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 at a Class I source, other than an electric utility steam generating unit in subsection (e), that 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 at a Class II source that 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. For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit), actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, if the source owner or operator maintains and submits to the Director, on an annual basis for a period of five years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by the Director if the Director determines the longer period to be more representative of normal source post-change operations.
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 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.

9. "Air pollution control equipment" means equipment used to eliminate, reduce or control the emission of air pollutants into the ambient air.
10. "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.
11. "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 New Source Performance Standards or National Emission Standards for Hazardous Air Pollutants, as contained in Articles 9 or 11 of this Chapter;
    b. The applicable existing source performance standard, as approved for the SIP and contained in Article 7 of this Chapter; or,
    c. The emissions rate specified in any federally promulgated rule or federally enforceable permit conditions applicable to the state of Arizona.
12. "Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access.
13. "Applicable implementation plan" means those provisions of the state implementation plan approved by the Administrator or a federal implementation plan promulgated in accordance with Title I of the Act.
14. "Applicable requirement" means any of the following:
    a. Any federal applicable requirement.
    b. Any other requirement established pursuant to this Chapter or A.R.S. Title 49, Chapter 3.
15. "Arizona Testing Manual" means the Arizona Testing Manual for Air Pollutant Emissions.
16. "ASTM" means the American Society for Testing and Materials.
17. "Attainment area" means an area so designated by the Administrator acting pursuant to Section 107 of the Act as having ambient air pollutant concentration equal to or less than national primary or secondary ambient air quality standards for a particular pollutant or pollutants.
18. "Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation this term refers to those on-site activities, other than preparatory activities, which mark the initiation of the change.
19. "Best available control technology" (BACT) means an emission limitation, including a visible emissions standard, based on the maximum degree of reduction for each air pollutant listed in R18-2-101(97)(a) 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.
20. "Btu" means British thermal unit, which is the quantity of heat required to raise the temperature of one pound of water 1° F.
21. "CFR" means the Code of Federal Regulations, 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."
22. "Charge" means the addition of metal bearing materials, scrap, or fluxes to a furnace, converter or refining vessel.
23. "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.
24. "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.
25. "Coal" means all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D-388-91, (Classification of Coals by Rank).
26. "Combustion" means the burning of matter.
27. "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 on-site 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.
28. "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 actual emissions.
29. "Continuous monitoring system" or "continuous emission monitoring system" means the total equipment, required under the emission monitoring provisions in this Chapter, used to sample and, if applicable, to condition, to analyze, and to provide, on a continuous basis, a permanent record of emission or process parameters.
30. "Controlled atmosphere incinerator" means one or more refractory-lined chambers in which complete combustion

is promoted by recirculation of gases by mechanical means.

31. "Discharge" means the release or escape of an effluent from a source into the atmosphere.
32. "Dust" means finely divided solid particulate matter occurring naturally or created by mechanical processing, handling or storage of materials in the solid state.
33. "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.
34. "Effluent" means any air contaminant which is emitted and subsequently escapes into the atmosphere.
35. "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.
36. "Emission" means an air contaminant or gas stream, or the act of discharging an air contaminant or a gas stream, visible or invisible.
37. "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.
38. "Emissions unit" means any part of a stationary source which emits or would have the potential to emit any regulated air pollutant.
39. "Equivalent method" means any method of sampling and analyzing for an air pollutant which has been demonstrated under R18-2-311(D) to have a consistent and quantitatively known relationship to the reference method, under specified conditions.
40. "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.
41. "Existing source" means any source which does not have an applicable new source performance standard under Article 9 of this Chapter.
42. "Federal applicable requirement" means any of the following as they apply to emissions units covered by a Class I or II permit (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 Section 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 increment 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.
43. "Federal Land Manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.
44. "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 contained in Articles 9 and 11 of this Chapter;
    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 programs that have been approved by the Administrator;
    c. The requirements of any applicable implementation plan;
    d. Emissions limitations, controls, and other requirements, and any associated monitoring, recordkeeping, and reporting requirements, which are entered into voluntarily by a source pursuant to R18-2-306.01.
45. "Final permit" means the version of a permit issued by the Department after completion of all review required by this Chapter.
46. "Fixed capital cost" means the capital needed to provide all the depreciable components.
47. "Fuel" means any material which is burned for the purpose of producing energy.
48. "Fuel burning equipment" means any machine, equipment, incinerator, device or other article, except stationary rotating machinery, in which combustion takes place.

49. "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
50. "Fume" means solid particulate matter resulting from the condensation and subsequent solidification of vapors of melted solid materials.
51. "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.
52. "Good engineering practice (GEP) stack height" means a stack height meeting the requirements described in R18-2-332.
53. "Heat input" means the quantity of heat in terms of Btu's generated by fuels fed into the fuel burning equipment under conditions of complete combustion.
54. "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.
55. "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.
56. "Indian reservation" means any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.
57. "Insignificant activity" means an activity in an emissions unit that is not otherwise subject to any applicable requirement and which belongs to one of the following categories:
    a. Landscaping, building maintenance, or janitorial activities.
    b. Gasoline storage tanks with capacity of 10,000 gallons or less.
    c. Diesel and fuel oil storage tanks with capacity of 40,000 gallons or less.
    d. Batch mixers with rated capacity of 5 cubic feet or less.
    e. 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.
    f. Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of ceramic art work, precision parts, leather, metals, plastics, fiberboard, masonry, carbon, glass, or wood.
    g. Powder coating operations.
    h. Internal combustion (IC) engine-driven compressors, IC engine-driven electrical generator sets, and IC engine-driven water pumps used only for emergency replacement or standby service.
    i. Lab equipment used exclusively for chemical and physical analyses.
    j. Any other activity which the Director determines is not necessary, because of its emissions due to size or production rate, to be included in an application in order to determine all applicable requirements and to calculate any fee under this Chapter.
58. "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.
59. "Lead" means elemental lead or alloys in which the predominant component is lead.
60. "Lime hydrator" means a unit used to produce hydrated lime product.
61. "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.
62. "Lime product" means any product produced by the calcination of limestone.
63. "Major modification" means any physical change or change in the method of operation of a major source that would result in a significant net emissions increase of any regulated air pollutant.
    a. Any net emissions increase that is significant for volatile organic compounds is significant for ozone.
    b. Any net emissions increase that is significant for oxides of nitrogen is significant for ozone for ozone nonattainment areas classified as marginal, moderate, serious, or severe.
    c. For the purposes of this definition the following are not a physical change or change in the method of operation:
        i. Routine maintenance, repair, and replacement;
        ii. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. 792, or by reason of a natural gas curtailment plan under the Federal Power Act, 16 U.S.C. 792 - 825r;
        iii. Use of an alternative fuel by reason of an order or rule under Section 125 of the Act;
        iv. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
        v. 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.
        vi. 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.
        vii. Any change in ownership at a stationary source;
        viii. The addition, replacement, or use of a pollution control project at an existing electric utility steam generating unit, unless the Director determines that the addition, replacement, or use renders the unit less environmentally beneficial, or except:

(1) When the Director has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent Title I air quality impact analysis in the area, if any, and

(2) The Director determines that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation;

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.

64. "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 one of the following categories of stationary source:

i. Coal cleaning plants (with thermal dryers).

ii. Kraft pulp mills.

iii. Portland cement plants.

iv. Primary zinc smelters.

v. Iron and steel mills.

vi. Primary aluminum ore reduction plants.

vii. Primary copper smelters.

viii. Municipal incinerators capable of charging more than 50 tons of refuse per day.

ix. Hydrofluoric, sulfuric, or nitric acid plants.

x Petroleum refineries.

xi. Lime plants.

xii. Phosphate rock processing plants.

xiii. Coke oven batteries.

xiv. Sulfur recovery plants.

xv. Carbon black plants (furnace process).

xvi. Primary lead smelters.

xvii. Fuel conversion plants.

xviii. Sintering plants.

xix. Secondary metal production plants.

xx. Chemical process plants.

xxi. Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input.

xxii. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels.

xxiii. Taconite ore processing plants.

xxiv. Glass fiber processing plants.

xxv. Charcoal production plants.

xxvi. Fossil-fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input.

xxvii. Any other stationary source category, which as of August 7, 1980, is being regulated under Section 111 or 112 of the Act.

65. "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.

66. "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.

67. "Minor source baseline area" means the air quality control region in which the source is located.

68. "Monitoring device" means the total equipment, required under the applicable provisions of this Chapter, used to measure and record, if applicable, process parameters.

69. "Motor vehicle" means any self-propelled vehicle designed for transporting persons or property on public highways.

70. "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.

71. "Natural conditions" includes naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.

72. "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.

73. "Net emissions increase" means:
    a. The amount by which the sum of subsections (69)(a)(i) and (ii) exceeds zero:
        i. Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and
        ii. Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.
    b. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
        i. The date five years before construction on the particular change commences; and
        ii. The date that the increase from the particular change occurs.
    c. An increase or decrease in actual emissions is creditable only if the Director has not relied on it in issuing a permit, which is in effect when the increase in actual emissions from the particular change occurs. In addition, in nonattainment areas, a decrease in actual emissions shall be considered in determining net emissions increase due to modifications only if the state has not relied on it in demonstrating attainment or reasonable further progress.
    d. An increase or decrease in actual emissions of sulfur dioxide, nitrogen oxides, or PM_{10} which occurs before the applicable baseline date, as described in R18-2-218, is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
    e. An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
    f. A decrease in actual emissions is creditable only to the extent that:
        i. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
        ii. It is federally enforceable at and after the time that actual construction on the particular change begins;
        iii. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and
        iv. The emissions unit was actually operated and emitted the specific pollutant.
    g. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
74. "New source" means any stationary source of air pollution which is subject to an applicable new source performance standard under Article 9 of this Chapter.
75. "Nitric acid plant" means any facility producing nitric acid 30% to 70% in strength by either the pressure or atmospheric pressure process.
76. "Nitrogen oxides" means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in the Appendices to 40 CFR 60.
77. "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.
78. "Nonpoint source" means a source of air contaminants which lacks an identifiable plume or emission point.
79. "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.
80. "Operation" means any physical or chemical action resulting in the change in location, form, physical properties, or chemical character of a material.
81. "Owner or operator" means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.
82. "Particulate matter" means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.
83. "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.
84. "Pollution control project" means any activity or project undertaken at an existing electric utility steam generating unit to reduce emissions from the unit. The activities or projects are limited to:
    a. The installation of conventional or innovative pollution control technology, including advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls, and electrostatic precipitators;
    b. An activity or project to accommodate switching to a fuel less polluting than the fuel used before the activity or project, including natural gas or coal reburning, or the co-firing of natural gas and other fuels for the purpose of controlling emissions;
    c. A permanent clean coal technology demonstration project conducted under Title II, section 101(d) of the Further Continuing Appropriations Act of 1985 (42 U.S.C. 5903(d), or subsequent appropriations, 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, or
    d. A permanent clean coal technology demonstration project that constitutes a repowering project.
85. "PM_{10}" 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.
86. "PM_{10} 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.
87. "Plume" means visible effluent.
88. "Pollutant" means an air contaminant the emission or ambient concentration of which is regulated pursuant to this Chapter.
89. "Portable source" means any building, structure, facility, or installation subject to regulation pursuant to A.R.S. §

49-426 which emits or may emit any air pollutant and is capable of being operated at more than one location.

90. "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 federally enforceable.
91. "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.
92. "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.
93. "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).
94. "Proposed final permit" means the version of a Class I permit that the Department proposes to issue and forwards to the Administrator for review in compliance with R18-2-307(A).
95. "Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with commencing commercial operations by a coal-fired utility unit after a period of discontinued operation if the unit:
    a. Has not been in operation for the two-year period before enactment of the Clean Air Act Amendments of 1990, and the emissions from the unit continue to be carried in the Director's emissions inventory at the time of enactment;
    b. Was equipped before shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85% and a removal efficiency for particulates of no less than 98%;
    c. Is equipped with low-NOx burners before commencement of operations following reactivation; and
    d. Is otherwise in compliance with the Act.
96. "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.
97. "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 52, Appendices D and E; 40 CFR 60, Appendices A through F; and 40 CFR 61, Appendices B and C.
98. "Regulated air pollutant" means any of the following:
    a. Any conventional air pollutant as defined in A.R.S. § 49-401.01.
    b. Nitrogen oxides and volatile organic compounds.
    c. Any air contaminant that is subject to a standard contained in Article 9 of this Chapter.
    d. Any hazardous air pollutant as defined in A.R.S. § 49-401.01.
    e. Any Class I or II substance listed in Section 602 of the Act.
99. "Repowering" means:
    a. Replacing an existing coal-fired boiler with one of the following clean coal technologies:
        i. Atmospheric or pressurized fluidized bed combustion;
        ii. Integrated gasification combined cycle;
        iii. Magnetohydrodynamics;
        iv. Direct and indirect coal-fired turbines;
        v. Integrated gasification fuel cells; or
        vi. As determined by the Administrator, in consultation with the United States Secretary of Energy, a derivative of one or more of the above technologies; and
        vii. Any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.
    b. Repowering also includes any oil, gas, or oil and gas-fired unit that has been awarded clean coal technology demonstration funding as of January 1, 1991, by the United States Department of Energy.
    c. The Director shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under section 409 of the Act.
100. "Representative actual annual emissions" means the average rate, in tons per year, at which a source is projected to emit a pollutant for the 2-year period after a physical change or change in the method of operation of a unit, (or a different consecutive 2-year period within 10 years after that change, if the Director determines that the different period is more representative of source operations), considering the effect the change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the Director shall:
    a. Consider all relevant information, including historical operational data, the company's representations, filings with Arizona or federal regulatory authorities, and compliance plans under Title IV of the Act; and
    b. Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.
101. "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.
102. "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.
103. "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 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.

104. "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.
105. "Significant" means:
    a. In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant	Emissions Rate
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy
PM_{10}	15 tpy
VOC	40 tpy
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H_2S)	10 tpy
Total reduced sulfur (including H_2S)	10 tpy
Reduced sulfur compounds (including H_2S)	10 tpy
Municipal waste combustor organics (measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzo-furans)	3.5×10^{-6} 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 non-methane organic compounds)	50 tpy

    b. In ozone nonattainment areas classified as serious or severe, significant emissions of VOC shall be determined under R18-2-405.
    c. For a regulated air pollutant that is not listed in subsection (a), is not a Class I or II substance listed in Section 602 of the Act, and is not a hazardous air pollutant according to A.R.S. § 49-401.01(11), any emission rate.
    d. Notwithstanding the emission amount listed in subsection (a), any emissions rate or any net emissions increase associated with a major source or major modification, which would be constructed within 10 kilometers of a Class I area and have an impact on the ambient air quality of such area equal to or greater than 1 $\mu g/m^3$ (24-hour average).
106. "Smoke" means particulate matter resulting from incomplete combustion.
107. "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.
108. "Stack in existence" means that the owner or operator had either:
    a. Begun, or caused to begin, a continuous program of physical on-site construction of the stack;
    b. Entered into binding agreements or contractual obligations, which could not be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed in a reasonable time.
109. "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.
110. "State implementation plan" (SIP) means the plan adopted by the state of Arizona which provides for implementation, maintenance, and enforcement of such primary and secondary ambient air quality standards as are adopted by the Administrator, pursuant to the Act.
111. "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.
112. "Stationary source" means any building, structure, facility or installation subject to regulation pursuant to A.R.S. § 49-426(A) which emits or may emit any air pollutant. "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."
113. "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.
114. "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project operated for five years or less, and that complies with the SIP and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after the project is terminated.
115. "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.
116. "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.

117. "Total suspended particulate" (TSP) means particulate matter as measured by the reference method described in 40 CFR 50, Appendix B, plus any particulate matter from fugitive emissions quantified by methods approved by the Director.
118. "Trivial activities" means activities and emissions units, such as the following, that may be omitted from a Class I or Class II permit application. Certain of the following listed activities include qualifying statements intended to exclude similar activities:
    a. Combustion emissions from propulsion of mobile sources;
    b. Air-conditioning units used for human comfort that do not have applicable requirements under title VI of the Act;
    c. Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing, industrial or commercial process;
    d. Non-commercial food preparation;
    e. Janitorial services and consumer use of janitorial products;
    f. Internal combustion engines used for landscaping purposes;
    g. Laundry activities, except for dry-cleaning and steam boilers;
    h. Bathroom and toilet vent emissions;
    i. Emergency or backup electrical generators at residential locations;
    j. Tobacco smoking rooms and areas;
    k. Blacksmith forges;
    l. Plant 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 (HAP) control requirements;
    m. 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;
    n. 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;
    o. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning, or machining wood, metal, or plastic;
    p. 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;
    q. Air compressors and pneumatically operated equipment, including hand tools;
    r. Batteries and battery charging stations, except at battery manufacturing plants;
    s. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP;
    t. 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;
    u. Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
    v. Drop hammers or hydraulic presses for forging or metalworking;
    w. 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;
    x. Vents from continuous emissions monitors and other analyzers;
    y. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities;
    z Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation;
    aa. Equipment used for surface coating, painting, dipping, or spraying operations, except those that will emit VOC or HAP;
    bb. CO(2) lasers used only on metals and other materials that do not emit HAP in the process;
    cc. 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;
    dd. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants;
    ee. Laser trimmers using dust collection to prevent fugitive emissions;
    ff. Bench-scale laboratory equipment used for physical or chemical analysis, but not laboratory fume hoods or vents;
    gg. Routine calibration and maintenance of laboratory equipment or other analytical instruments;
    hh. Equipment used for quality control, quality assurance, or inspection purposes, including sampling equipment used to withdraw materials for analysis;
    ii. Hydraulic and hydrostatic testing equipment;
    jj. Environmental chambers not using HAP gases;
    kk. Shock chambers;
    ll. Humidity chambers;
    mm. Solar simulators;
    nn. Fugitive emissions related to movement of passenger vehicles, if the emissions are not counted for applicability purposes under R18-2-101(64)(c) and any required fugitive dust control plan or its equivalent is submitted with the application;
    oo. Process water filtration systems and demineralizers;
    pp. Demineralized water tanks and demineralizer vents;
    qq. Oxygen scavenging or de-aeration of water;
    rr. Ozone generators;
    ss. Fire suppression systems;
    tt. Emergency road flares;
    uu. Steam vents and safety relief valves;

ww. Steam leaks; and
xx. Steam cleaning operations and steam sterilizers

119. "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.
120. "Uncombined water" means condensed water containing analytical trace amounts of other chemical elements or compounds.
121. "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.
122. "Vacant lot" means a subdivided residential or commercial lot which contains no buildings or structures of a temporary or permanent nature.
123. "Vapor" means the gaseous form of a substance normally occurring in a liquid or solid state.
124. "Visibility impairment" means any humanly perceptible change in visibility (light extinction, visual range, contrast, coloration) from that which would have existed under natural conditions.
125. "Visible emissions" means any emissions which are visually detectable without the aid of instruments and which contain particulate matter.
126. "Volatile organic compounds (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-134a);
    n. 1,1-dichloro 1-fluoroethane (HCFC-141b);
    o. 1-chloro 1,1-difluoroethane (HCFC-142b);
    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-143a);
    t. 1,1-difluoroethane (HFC-152a);
    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-225ca);
    z. 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb);
    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-236fa);
    ee. 1,1,2,2,3-pentafluoropropane (HFC-245ca);
    ff. 1,1,2,3,3-pentafluoropropane (HFC-245ea);
    gg. 1,1,1,2,3-pentafluoropropane (HFC-245eb);
    hh. 1,1,1,3,3-pentafluoropropane (HFC-245fa);
    ii. 1,1,1,2,3,3-hexafluoropropane (HFC-236ea);
    jj. 1,1,1,3,3-pentafluorobutane (HFC-365mfc);
    kk. Chlorofluoromethane (HCFC-31);
    ll. 1 chloro-1-fluoroethane (HCFC-151a);
    mm. 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a);
    nn. 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane ($C_4F_9OCH_3$);
    oo. 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$);
    pp. 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$);
    qq. 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OC_2H_5$;
    rr. Methyl acetate; and
    ss. Perfluorocarbon compounds that fall into these classes:
        i. Cyclic, branched, or linear, completely fluorinated alkanes.
        ii. Cyclic, branched, or linear, completely fluornated 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.
127. "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).

R18-2-102. Incorporated Materials

The following documents are incorporated by reference and are on file with the Office of the Secretary of State and the Department:

1. 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).

R18-2-103. Applicable Implementation Plan; Savings

No rule adopted in this Chapter shall preempt or nullify any applicable requirement or emission standard in an applicable implementation plan unless the Director revises the applicable implementation plan in conformance with the requirements of 40 CFR 51, Subpart F, and the Administrator approves the revision.

Historical Note

Adopted effective September 26, 1990 (Supp. 90-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

ARTICLE 2. AMBIENT AIR QUALITY STANDARDS; AREA DESIGNATIONS; CLASSIFICATIONS

R18-2-201. Particulate matter

A. The primary ambient air quality standards for particulate matter are:
1. 50 micrograms per cubic meter of PM_{10} -- annual arithmetic mean concentration.
2. 150 micrograms per cubic meter of PM_{10} -- 24-hour average concentration.

B. The secondary ambient air quality standards for particulate matter are:
1. 50 micrograms per cubic meter of PM_{10} -- annual arithmetic mean concentration.
2. 150 micrograms per cubic meter of PM_{10} -- 24-hour average concentration.

C. The primary and secondary annual ambient air quality standards for PM_{10} shall be considered attained when the expected annual arithmetic mean concentration, as determined in accordance with 40 CFR 50, Appendix K, is less than or equal to 50 micrograms per cubic meter.

D. The primary and secondary 24-hour ambient air quality standards for PM_{10} shall be considered attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter, as determined in accordance with 40 CFR 50, Appendix K, is less than or equal to 1.

Historical Note

Amended effective December 22, 1976 (Supp. 76-5). Former Section R9-3-201 repealed, new Section R9-3-201 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Editorial correction, subsection (E) (Supp. 80-2). Amended effective August 29, 1980 (Supp. 80-4). Amended subsection(B)(1) and deleted subsections (C) through (E) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-201 renumbered without change as Section R18-2-201 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3).

R18-2-202. Sulfur oxides (sulfur dioxide)

A. The primary ambient air quality standards for sulfur oxides, measured as sulfur dioxide, are:
1. 80 micrograms per cubic meter (0.03 ppm) -- annual arithmetic mean.
2. 365 micrograms per cubic meter (0.14 ppm) -- maximum 24-hour concentration not to be exceeded more than once per year.

B. The secondary ambient air quality standard for sulfur oxides, measured as sulfur dioxide, is 1300 micrograms per cubic meter (0.5 ppm) -- maximum three-hour concentration not to be exceeded more than once per year.

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).

R18-2-203. Ozone

A. The primary ambient air quality standard for ozone is 0.12 ppm (235 micrograms per cubic meter).

B. The secondary ambient air quality standard for ozone is 0.12 ppm (235 micrograms per cubic meter).

C. The 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, as determined by 40 CFR 50, Appendix H.

Historical Note

Amended effective December 22, 1976 (Supp. 76-5). Former Section R9-3-204 repealed, new Section R9-3-204 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 R9-3-204 renumbered without change as Section R18-2-204 (Supp. 87-3). Section R18-2-103 renumbered from R18-2-204 and amended effective September 26, 1990 (Supp. 90-3).

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 avail-

able, 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 dioxide

A. The primary ambient air quality standard for nitrogen dioxide is 0.053 parts per million (100 micrograms per cubic meter) -- annual arithmetic mean.

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 standards are 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 last 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).

R18-2-206. Lead

A. The primary ambient air quality standard for lead and its compounds, measured as elemental lead, is 1.5 micrograms per cubic meter -- maximum arithmetic mean averaged over a calendar quarter.

B. The secondary ambient air quality standard for lead and its compounds, measured as elemental lead, is 1.5 micrograms per cubic meter -- maximum arithmetic mean averaged over a calendar quarter.

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).

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, 2001 (and no future editions) is incorporated by reference and is on file with the Department of Environmental Quality and the Office of Secretary of State.

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).

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

A. Unless otherwise specified, interpretation of all ambient air quality standards contained in this Article shall be in accordance with 40 CFR 50.

B. The evaluation of air quality data in terms of procedure, methodology, and concept is to be consistent with methods described in Appendix 10 to 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).

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.
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 concentration permitted under the classification of any area;
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 materials shall be made available for public inspection prior to a public hearing.
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.

H. Lands within the exterior boundaries of Indian reservations may be redesignated only by the appropriate Indian governing body.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Editorial correction, subsection (A), paragraph (5), subparagraph (d) (Supp. 80-2). Amended effective May 28, 1982 (Supp. 82-3). Former Section R9-3-217 renumbered without change as Section R18-2-217 (Supp. 87-3). Amended and subsection (B) renumbered to Section R18-2-218 effective September 26, 1990 (Supp. 90-3). Amended effective November 15, 1993 (Supp. 93-4).

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_{10}	
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

CLASS II

Particulate matter: PM_{10}	
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

CLASS III

Particulate matter: PM_{10}	
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

B. The baseline concentration shall be 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 particulate matter; and
   b. February 8, 1988, for nitrogen dioxide.
2. The minor source baseline date shall be the earliest date after August 7, 1977, for sulfur dioxide and particulate matter, and February 8, 1988, for nitrogen dioxide, that either:
   a. A major source as defined in R18-2-401 or a major modification submits a complete permit application to the Administrator under 40 CFR 52.21; or
   b. A major source as defined in R18-2-401 or a major modification submits a complete permit application to the Director under R18-2-304(E)(2) or R18-2-406.
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 for the pollutant on the date of its complete application under either subsection (B)(2)(a) or (b); 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, in which the major source as defined in R18-2-401 or a major modification establishing the minor source baseline date would construct or would have an air quality impact equal to or greater than 1 ug/m3 (annual average) of the pollutant for which the minor source baseline date is established. Area redesignations under R18-2-217 that would redesignate a baseline area cannot 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:

1. Establishes a minor source baseline date; or
2. Is subject to either 40 CFR 52.21 or R18-2-406 and would be constructed in Arizona.

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 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_{10} attributable to the increase in emissions from construction or other temporary 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, or PM_{10} from major sources as defined in R18-2-401 when the following conditions are met:
   a. The operating permit issued to such sources specifies the time period during which the temporary emissions increase of sulfur dioxide, nitrogen oxides, or PM_{10} 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:

i. Impact any portion of any Class I area or any portion of any other area where an applicable incremental ambient standard is known to be violated in that portion; or

ii. Cause or contribute to the violation of a state 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 with respect to increment consumption under subsections (F)(1) and (2) 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.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Editorial correction, subsection (A), paragraph (5), subparagraph (d) (Supp. 80-2). Amended effective May 28, 1982 (Supp. 82-3). Former Section R9-3-217 renumbered without change as Section R18-2-217 (Supp. 87-3). Former Section R18-2-218 renumbered to R18-2-219, new Section R18-2-218 renumbered from R18-2- 217(B) and amended effective September 26, 1990 (Supp. 90-3). Amended effective November 15, 1993 (Supp. 93-4). Amended effective February 28, 1995 (Supp. 95-1).

R18-2-219. Violations

A. One exceedance per year of the ambient air quality standards prescribed in this Article shall be allowed for each pollutant at each monitoring site.

B. Each additional exceedance at each site shall constitute a violation of ambient air quality standards.

C. The provisions of subsection (A) shall not apply to any of the following:

1. The annual and quarterly standards.
2. The standards for ozone prescribed in R18-2-203.
3. The primary and secondary 24-hour PM_{10} standards prescribed in R18-2-201.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-218 repealed, new Section R9-3-218 adopted effective September 22, 1983 (Supp. 83-5). Former Section R9-3-218 renumbered without change as Section R18-2-218 (Supp. 87-3). Former Section R18-2-219 renumbered to R18-2-220, new Section R18-2-219 renumbered from R18-2-218 and amended effective September 26, 1990 (Supp. 90-3).

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). 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 edition), 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 subsection (B)(4) 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 subsection (B)(2).
2. A Stage II air pollution warning shall be declared when any of the warning level concentrations listed in subsection (B)(4) 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 subsection (B)(4) 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 (ug/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
PM_{10} (ug/m^3)	24-hr	350	420	500	600
Sulfur dioxide (ug/m^3)	24-hr	800	1,600	2,100	2,620

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Editorial correction, subsection (B), paragraph (2) (Supp. 80-1). Editorial correction, subsection (A) (Supp. 80-2). Former Section R9-3-219 repealed, new Section R9-3-219 adopted effective May 28, 1982 (Supp. 82-3). Former Section R9-3-219 renumbered without change as Section R18-2-219 (Supp. 87-3). Section R18-2-220 renumbered from R18-2-219 and amended effective September 26, 1990 (Supp. 90-3).

ARTICLE 3. PERMITS AND PERMIT REVISIONS

R18-2-301. Definitions

The following definitions, and the definitions contained in Article 1 of this Chapter and A.R.S. § 49-401.01 apply to this Article unless the context otherwise requires:

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, 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 Director from requesting or accepting any additional information.
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 R18-2-101(64).
12. "NAICS" means the 5- or 6-digit North American Industry Classification System-United States, 1997, number for industries used by the U.S. Department of Commerce.
13. "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.

14. "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.
15. "Reasonably available control technology" (RACT) means, for facilities subject to an existing source performance standard, the emissions limitation of the existing source performance standard.
16. "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.
17. "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:
        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.
18. "Small source" means a source with a potential to emit, without controls, less than the rate defined as significant in R18-2-101, but required to obtain a permit solely because it is subject to a standard under 40 CFR 63.
19. "Startup" means the setting in operation of a source for any purpose.
20. "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).

R18-2-302. Applicability; Classes of Permits

A. Except as otherwise provided in this Article, no person shall commence construction of, operate, or make a modification to any source subject to regulation under this Article, without obtaining a permit or permit revision from the Director.

B. There shall be two classes of permits as follows:
1. A Class I permit shall be required for a person to commence 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 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 commence construction of or operate any of the following:
        i. Any source, including an area source, subject to a standard, limitation, or other requirement under Section 111 of the Act;
        ii. Any source, including an area source, subject to a standard or other requirement under Section 112 of the Act, except that a source is not required to obtain a permit solely because it is subject to regulations or requirements under Section 112 (r) of the Act;
        iii. Any source that emits or has the potential to emit, without controls, significant quantities of regulated air pollutants;
        iv. Stationary rotating machinery of greater than 325 brake horsepower; or
        v. Fuel-burning equipment which, at a location or property other than a one or two family resisdence, is fired at a sustained rate of more than 1 million Btu per hour for more than an eight-hour period.
    b. A person to modify a source which would cause it to emit, or have the potential to emit, quantities of regulated air pollutants greater than or equal to those specified in subsection (B)(2)(a)(iii).

C. Notwithstanding subsections (A) and (B), the following sources do not require a permit unless the source is a major source, or unless operation without a permit would result in a violation of the Act:
1. Sources subject to 40 CFR 60, Subpart AAA, Standards of Performance for New Residential Wood Heaters;
2. Sources and source categories that would be required to obtain a permit solely because they are subject to 40 CFR 61.145; and
3. Agricultural equipment used in normal farm operations. "Agricultural equipment used in normal farm operations" 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 or 61.

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.

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).

R18-2-302.01. Repealed

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).

R18-2-303. Transition from Installation and Operating Permit Program to Unitary Permit Program

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 either of the following occurs:
1. The installation or operating permit is terminated.
2. The Director issues or denies a Class I or Class II permit to the source.

B. Sources requiring Class I permits that are in existence on the date this Section becomes effective shall submit permit applications on or before the following dates:
1. Kraft pulp mills: 5/1/94
2. Metallic mineral processing plants: 5/1/94
3. Portland cement plants: 8/1/94
4. Non-metallic mineral processing plants: 8/1/94
5. Lumber mills: 8/1/94
6. Primary copper smelters: 11/1/94
7. Lime manufacturing plants: 11/1/94
8. Nitric acid plants: 11/1/94
9. Petroleum refineries: 11/1/94
10. Electric utility steam generating units: 2/1/95
11. Combined cycle gas turbines: 2/1/95
12. Fossil-fuel fired industrial and commercial equipment: 2/1/95
13. Stationary gas turbines: 5/1/95
14. Any other source requiring a Class I permit: 5/1/95

C. Except as provided in subsection (D), sources requiring Class II permits that are in existence on the date this Section becomes effective may submit permit applications at any time after this Section is effective and shall submit applications within 180 days of receipt of written notice from the Director that an application is required.

D. All sources requiring a Class II permit under R18-2-302(B)(2)(b)(i) and (ii) shall submit complete permit applications no later than May 1, 1998.

E. Any application for an operating permit or an installation permit that is determined to be complete prior to the effective date of this Section but for which no permit has been issued shall be considered complete for the purposes of this Section. In issuing a permit pursuant to such an application, the Director shall include in the permit all elements addressed in the application and a schedule of compliance for submitting an application for a permit revision to address the elements required to be in the permit that were not included in the operating permit or installation permit application. No later than six months after the effective date of this Section, the Director shall take final action on an operating permit application or an installation permit application determined to be complete prior to the effective date of this Section.

F. Unless otherwise provided, R18-2-317 through R18-2-323 shall apply to sources with permits issued before the effective date of this Section.

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 November 15, 1993 (Supp. 93-4).

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 any permit in this Chapter, applicants shall complete the "Standard Permit Application Form" and supply all information required by the "Filing Instructions" as shown in Appendix 1. 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;
4. A proposed emission limitation, control, or other requirement that meets the requirements of R18-2-306.01.

C. Unless otherwise required by R18-2-303(B) through (D), a timely application is:

1. For a source, other than a major source, applying for a permit for the first time, 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. For initial phase II acid rain permits under Title IV of the Act and regulations incorporated pursuant to R18-2-333, one that is submitted to the Director by January 1, 1996, for sulfur dioxide, and by January 1, 1998, for nitrogen oxides.
4. Any source under R18-2-326(B)(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.

D. 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.

E. 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 (H) (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 a permit revision shall contain an assessment of the applicability of the requirements established pursuant to A.R.S. §§ 49-426.03 and 49-426.06. If the applicant determines that the proposed new source permit or permit revision is subject to the requirements of A.R.S. § 49-426.03 or § 49-426.06, the application shall comply with all applicable requirements promulgated under those sections.
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, delivered by certified mail, 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 this Article, 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. If the Director notifies an applicant that its application is not complete under subsection (E)(4), the application may not be deemed automatically complete until an additional 60 days after receipt of the next submittal by the applicant. The Director may, after one submittal by the applicant pursuant to this subsection, reject an application that is determined to be still incomplete and shall notify the applicant of the decision by certified mail. After a rejection under this subsection, the Director may deny the permit or revoke an existing permit, as applicable.
7. The completeness determination shall not apply to revisions processed through the minor permit revision process.
8. Activities which are insignificant pursuant to R18-2-101(57) shall be listed in the application. 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 R18-2-101(57), 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.

F. 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.

G. 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.

H. 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.

I. 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 (E).
   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.
   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. Except as provided in R18-2-303 and R18-2-402, regulations promulgated under Title IV or V of the Act, or the permitting of affected sources under the acid rain program pursuant to R18-2-333, the Director shall take final action on each permit application (and request for revision or renewal) within 18 months after receiving a complete application.
6. 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.
7. A proposed permit decision shall be published within nine months of receipt of a complete application and any additional information requested pursuant to subsection (E)(6) to process the application. The Director shall provide notice of the decision as provided in R18-2-330 and any public hearing shall be scheduled as expeditiously as possible.

J. 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(B)(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.

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 R9-3-304 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).

R18-2-305. Public Records; Confidentiality

A. The Director shall make all permits, including all elements required to be in the permit pursuant to R18-2-306, available to the public. No permit shall be issued unless the information required by R18-2-306 is present in the permit.

B. A notice of confidentiality pursuant to A.R.S. § 49-432(C) shall:

1. Precisely identify the information in the documents submitted which is considered confidential.
2. Contain sufficient supporting information to allow the Director to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, is likely to cause substantial harm to the person's competitive position.

C. Within 30 days of receipt of a notice of confidentiality that complies with subsection (B) above, the Director shall make a determination as to whether the information satisfies the requirements for trade secret or competitive position pursuant to A.R.S. § 49-432(C)(1) and so notify the applicant in writing. If the Director agrees with the applicant that the information covered by the notice of confidentiality satisfies the statutory requirements, the Director shall include a notice in the file for the permit or permit application that certain information has been considered confidential.

D. If the Director takes action pursuant to A.R.S. § 49-432(D) and obtains a final order authorizing disclosure, the Director shall place the information in the public file and shall notify any person who has requested disclosure. If the court determines that the information is not subject to disclosure, the Director shall provide the notice specified in subsection (C) above.

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). Former Section R9-3-306 renumbered as Section R9-3-305 effective August 6, 1976. References changed to conform (Supp. 76-4). Amended effective April 12, 1977 (Supp. 77-2). Amended effective March 24, 1978 (Supp. 78-2). Former Section R9-3-305 repealed, new Section R9-3-305 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Former Section R9-3-305 repealed, new Section R9-3-305 adopted effective May 28, 1982 (Supp. 82-3). Former Section R9-3-305 renumbered without change as R18-2-305 (Supp. 87-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

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(D) 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 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 at least every six months. 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(H) and R18-2-309(A)(5).
   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. Notice that complies with subsection (E)(3)(d) shall be considered prompt for the purposes of this subsection (A)(5)(b).
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.
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 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.

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).

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 federal 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 permit does not waive, or make less stringent, any limitations or requirements contained in or issued pursuant to an applicable implementation plan, or that are otherwise federally enforceable.
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(D).

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).

R18-2-306.02. Establishment of an Emissions Cap

A. An applicant may, in its application for a new permit, renewal of an existing permit, or as a significant permit revision, request an emissions cap for a particular pollutant expressed in tons per year as determined on a 12-month rolling average, or any shorter averaging time necessary to enforce any applicable requirement, for any emissions unit, combination of emissions units, or an entire source to allow operating flexibility including emissions trading for the purpose of complying with the cap. This Section shall not apply to sources that hold an authority to operate under a general permit pursuant to Article 5 of this Chapter.

B. An emissions cap for a Class II source that limits the emissions of a particular pollutant for the entire source shall not exceed any of the following:

1. The applicable requirement for the pollutant if expressed in tons per year;
2. The source's actual emissions plus the applicable significance level for the pollutant established in R18-2-101(104);
3. The applicable major source threshold for the pollutant; or
4. A sourcewide emission limitation for the pollutant voluntarily agreed to by the source under R18-2-306.01.

C. In order to incorporate an emissions cap in a permit the applicant must demonstrate to the Director that terms and conditions in the permit will:

1. Ensure compliance with all applicable requirements for the pollutant;
2. Contain replicable procedures to ensure that the emissions cap is enforceable as a practical matter and emissions trading conducted under it is quantifiable and enforceable as a practical matter. For the purposes of this Section, "enforceable as a practical matter" shall include the following criteria:
   a. The permit conditions are permanent and quantifiable;
   b. The permit includes a legally enforceable obligation to comply;
   c. The limits impose an objective and quantifiable operational or production limit or require the use of in-place air pollution control equipment;
   d. The permit limits have short-term averaging times consistent with the averaging times of the applicable requirement;
   e. The permit conditions are enforceable and are independent of any other applicable limitations; and
   f. The permit conditions for monitoring, recordkeeping, and reporting requirements are sufficient to comply with R18-2-306(A)(3),(4), and (5).
3. For a Class I permit, include all terms required under R18-2-306(A) and R18-2-309.

D. Class I sources shall log an increase or decrease in actual emissions authorized as a trade under an emissions cap unless an applicable requirement requires notice to the Director. The log shall contain the information required by the permit including, at a minimum, when the proposed emissions increase or decrease occurred, a description of the physical change or change in method of operation that produced the increase or decrease, the change in emissions from the physical change or change in method of operation, and how the increase or decrease in emissions complies with the permit. Class II sources shall comply with R18-2-317.02(B)(5).

E. The Director shall not include in an emissions cap or emissions trading allowed under a cap any emissions unit for which the emissions are not quantifiable or for which there are no replicable procedures or practical means to enforce emissions trades.

Historical Note

New Section adopted by final rulemaking at 5 A.A.R. 4074, effective September 22, 1999 (Supp. 99-3).

R18-2-307. Permit Review by the EPA and Affected States

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 other information required by R18-2-304(E) at the time of submittal of the application to the Director.
2. The Director shall provide the proposed final permit after public and affected state review.
3. The Director shall provide the final permit at the time of issuance.

B. The Director shall keep all records associated with all permits for a minimum of five years from issuance.

C. No permit for which an application is required to be submitted to the Administrator under subsection (A) shall be issued if the Administrator properly objects to its issuance in writing within

45 days of receipt of the proposed final permit from the Department and all necessary supporting information.

D. Review by Affected States.

1. For each Class I permit, the Director shall provide notice of each proposed permit to any affected state on or before the time that the Director provides this notice to the public as required under R18-2-330 except to the extent R18-2-319 requires the timing of the notice to be different.
2. If the Director refuses to accept a recommendation of any affected state submitted during the public or affected state review period, the Director shall notify the Administrator and the affected state in writing. The notification shall include the Director's reasons for not accepting any such recommendation and shall be provided to the Administrator as part of the submittal of the proposed final permit. The Director shall not be required to accept recommendations that are not based on federal applicable requirements or requirements of state law.

E. Any person who petitions the Administrator pursuant to 40 CFR 70.8(d) shall notify the Department by certified mail of such petition as soon as possible, but in no case more than 10 days following such petition. Such notice shall include the grounds for objection and whether such objections were raised during the public comment period. If the Administrator objects to the permit as a result of a petition filed under this subsection, the Director shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day administrative review period and prior to the Administrator's objection.

F. If the Director has issued a permit prior to receipt of the Administrator's objection under subsection (E), and the Administrator indicates that it should be revised, terminated, or revoked and reissued, the Director shall reopen the permit in accordance with R18-2-321 and may thereafter issue only a revised permit that satisfies the Administrator's objection. In any case, the source shall not be in violation of the requirement to have submitted a timely and complete application.

G. Prohibition on Default Issuance.

1. No Class I permit including a permit renewal or revision shall be issued until affected states and the Administrator have had an opportunity to review the proposed permit.
2. No permit or renewal shall be issued unless the Director has acted on the application.

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 (Supp. 76-4). New Section R9-3-307 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Former Section R9-3-307 repealed, new Section R9-3-307 adopted effective May 28, 1982 (Supp. 82-3). Amended subsection (B)(4)(b) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-307 renumbered without change as R18-2-307 (Supp. 87-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

R18-2-308. Emission Standards and Limitations

Wherever applicable requirements apply different standards or limitations to a source for the same item, all applicable requirements shall be included in the permit.

Historical Note

Adopted effective August 7, 1975 (Supp. 75-1). Former Section R9-3-308 repealed, new Section R9-3-308 adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-308 renumbered without change as R18-2-308 (Supp. 87-3). Amended effective December 1, 1988 (Supp. 88-4). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

R18-2-309. Compliance Plan; Certification

All permits shall contain the following elements with respect to compliance:

1. The elements required by R18-2-306(A)(3), (4), and (5).
2. Requirements for certifications of compliance with terms and conditions contained in the permit, including emissions limitations, standards, and work practices. Permits shall include each of the following:
   a. The frequency of submissions of compliance certifications, which shall not be less than annually;
   b. The means to monitor the compliance of the source with its emissions limitations, standards, and work practices;
   c. A requirement that the compliance certification include all of the following (the identification of applicable information may cross-reference the permit or previous reports, as applicable):
      i. The identification of each term or condition of the permit that is the basis of the certification;
      ii. The identification of the methods or other means used by the owner or operator for determining the compliance status with each term and condition during the certification period. The methods and other means shall include, at a minimum, the methods and means required under R18-2-306(A)(3). If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;
      iii. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in subsection (2)(c)(ii). The certification shall identify each deviation and take it into account in the compliance certification. For emission units subject to 40 CFR 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR 64 occurred; and
      iv. Other facts the Director may require to determine the compliance status of the source.
   d. A requirement that permittees submit all compliance certifications to the Director. Class I permittees shall also submit compliance certifications to the Administrator.
   e. Additional requirements specified in sections 114(a)(3) and 504(b) of the Act or pursuant to R18-2-306.01.
3. A requirement for any document required to be submitted by a permittee, including reports, to contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this Section 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. Inspection and entry provisions that require that upon presentation of proper credentials, the permittee shall allow the Director to:
   a. Enter upon the permittee's premises where a source is located, emissions-related activity is conducted, or records are required to be kept under the conditions of the permit;
   b. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
   d. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
   e. Record any inspection by use of written, electronic, magnetic, or photographic media.
5. A compliance plan that contains all 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 the requirements;
      ii. For applicable requirements that will become effective during the permit term, a statement that the source will meet the requirements on a timely basis; and
      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;
   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 the 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. The schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirement 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. The schedule of compliance shall supplement, and shall not sanction noncompliance with, the applicable requirements on which it is based.
   d. A schedule for submission of certified progress reports no less frequently than every six months for sources required to have a schedule of compliance to remedy a violation. The progress reports shall contain:
      i. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones, or compliance were achieved; and
      ii. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
6. The compliance plan content requirements specified in subsection (5) 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, and incorporated under R18-2-333 with regard to the schedule and each method the source will use to achieve compliance with the acid rain emissions limitations.
7. If there is a Federal Implementation Plan (FIP) applicable to the source, a provision that compliance with the FIP is required.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amendment filed September 18, 1979, effective following the adoption of Article 7. Nonferrous Smelter Orders. Amended effective October 2, 1979 (Supp. 79-5). Article 7. Nonferrous Smelter Orders adopted effective January 8, 1980. Amendment filed September 18, 1979 effective January 8, 1980 (Supp. 80-2). Amended effective September 28, 1984 (Supp. 84-5). Former Section R9-3-309 renumbered without change as R18-2-309 (Supp. 87-3). 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). Amended by final rulemaking at 6 A.A.R. 343, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 10 A.A.R. 2833, effective June 17, 2004 (Supp. 04-2).

R18-2-310. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown

A. Applicability.

This rule establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

1. Promulgated pursuant to Sections 111 or 112 of the Act,
2. Promulgated pursuant to Titles IV or VI of the Clean Air Act,
3. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. E.P.A.,
4. Contained in R18-2-715(F), or
5. Included in a permit to meet the requirements of R18-2-406(A)(5).

B. Affirmative Defense for Malfunctions.

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner or operator of the source has

complied with the reporting requirements of R18-2-310.01 and has demonstrated all of the following:

1. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the operator;
2. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
3. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the owner or operator satisfactorily demonstrated that the measures were impracticable;
4. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
5. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
6. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
7. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Article 2 of this Chapter that could be attributed to the emitting source;
8. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
9. All emissions monitoring systems were kept in operation if at all practicable; and
10. The owner or operator's actions in response to the excess emissions were documented by contemporaneous records.

C. Affirmative Defense for Startup and Shutdown.

1. Except as provided in subsection (C)(2), and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. The owner or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner or operator of the source has complied with the reporting requirements of R18-2-310.01 and has demonstrated all of the following:
   a. The excess emissions could not have been prevented through careful and prudent planning and design;
   b. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
   c. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
   d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
   e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
   f. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Article 2 of this Chapter that could be attributed to the emitting source;
   g. All emissions monitoring systems were kept in operation if at all practicable; and
   h. The owner or operator's actions in response to the excess emissions were documented by contemporaneous records.
2. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to subsection (B).

D. Affirmative Defense for Malfunctions During Scheduled Maintenance.

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to subsection (B).

E. Demonstration of Reasonable and Practicable Measures.

For an affirmative defense under subsection (B) or (C), the owner or operator of the source shall demonstrate, through submission of the data and information required by this Section and R18-2-310.01, that all reasonable and practicable measures within the owner or operator's control were implemented to prevent the occurrence of the excess emissions.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective June 19, 1981 (Supp. 81-3). Amended Arizona Testing Manual for Air Pollutant Emissions, effective September 22, 1983 (Supp. 83-5). Amended Arizona Testing Manual for Air Pollutant Emissions, as of September 15, 1984, effective August 9, 1985 (Supp. 85-4). Amended effective September 28, 1984 (Supp. 84-5). Former Section R9-3-310 renumbered without change as R18-2-310 (Supp. 87-3). Amended effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Section repealed; new Section adopted by final rulemaking at 7 A.A.R. 1164, effective February 15, 2001 (Supp. 01-1).

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 two 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).

Historical Note

New Section adopted by final rulemaking at 7 A.A.R. 1164, effective February 15, 2001 (Supp. 01-1).

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 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 date 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:

$$\left[\frac{20.9}{29.9(1 - B(wa)) - \%O(2ws)}\right]$$

      iii. When measurements are on a dry basis, the following conversation 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:

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 x 10^{-5} M g/dscm per ppm (2.64 x 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 x 10^{-5} M lb/wscm per ppm) (2.59 x 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 caloric 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(w)a by on-site instrumental measurement provided that the absolute accuracy of the measurement technique can be demonstrated to be within ± 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 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).

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

A. A facility with a Class I permit may make changes 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(17);
   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); and
   5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including

test methods), recordkeeping, reporting, or compliance certification requirements.

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. 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, do not satisfy subsection (A).

I. 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).

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 triggers a new applicable requirement or violates an existing applicable requirement.
2. Establishment of, or change in, an emissions cap;
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; and
10. A change that relaxes monitoring, recordkeeping, or reporting requirements, except when the change results:
    a. From removing equipment that results in a permanent decrease in actual emissions, if the source keeps on-site 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.

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).

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 R18-2-101(57)(a) through (i) 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 subsections (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).

R18-2-318. Administrative Permit Amendments

A. Except for provisions pursuant to Title IV of the Act, an administrative permit amendment is a permit revision that does any of the following:

1. Corrects typographical errors;
2. Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
3. Requires more frequent monitoring or reporting by the permittee;
4. Allows for a change in ownership or operational control of a source as approved under R18-2-323 where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility coverage, and liability between the current and new permittee has been submitted to the Director;

B. Administrative permit amendments to Title IV provisions of the permit shall be governed by regulations promulgated by the Administrator under Title IV of the Act.

C. The Director shall take no more than 60 days from receipt of a request for an administrative permit amendment to take final action on such request, and for Class I permits may incorporate such changes without providing notice to the public or affected states provided that it designates any such permit revisions as having been made pursuant to this Section.

D. The Director shall submit a copy of Class I permits revised under this Section to the Administrator.

E. Except for administrative permit amendments involving a transfer under R18-2-323, the source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-318 renumbered without change as R18-2-318 (Supp. 87-3). Amended subsection (A) effective December 1, 1988 (Supp. 88-4). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4).

R18-2-318.01. Annual Summary Permit Amendments for Class II Permits

The Director may amend any Class II permit annually without following R18-2-321 in order to incorporate changes reflected in logs or notices filed under R18-2-317.02. The amendment shall be effective to the anniversary date of the permit. The Director shall make available to the public for any source:

1. A complete record of logs and notices sent to the Department under R18-2-317.02; and
2. Any amendments or revisions to the source's permit.

Historical Note

New Section adopted by final rulemaking at 5 A.A.R. 4074, effective September 22, 1999 (Supp. 99-3).

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 a visibility or increment analysis;
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. The increase in the source's potential to emit any regulated air pollutant is not significant as defined in R18-2-101; and
8. Are not required to be processed as a significant 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. For emissions units not subject to an emissions cap, the net emissions increase is less than the significant level defined in R18-2-101(111);
   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. Increasing operating hours or rates of production 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 contained in Appendix 1 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;
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. The Director shall follow the following timetable for action on an application for a minor permit revision:

1. 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:
   a. Issue the permit revision as proposed,
   b. Deny the permit revision application,
   c. Determine that the proposed permit revision does not meet the minor permit revision criteria and should be reviewed under the significant revision procedures, or
   d. Revise the proposed permit revision and transmit to the Administrator the new proposed permit revision as required in R18-2-307.
2. Within 60 days of the Director's receipt of an application for a revision of a Class II permit under this Section, the Director shall do one or more of the following:
   a. Issue the permit revision as proposed;
   b. Deny the permit revision application;
   c. Determine that the permit revision does not meet the minor permit revision criteria and should be

reviewed under the significant revision procedures; or

d. Revise and issue the proposed permit revision.

G. The source may make the change proposed in its minor permit revision application immediately after it files the application. After the source makes the 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 source need not comply with the existing permit terms and conditions it seeks to modify. However, if the 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.

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).

R18-2-320. Significant 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 to or addition of an emissions unit not subject to an emissions cap that will result in a net emission increase of a pollutant greater than the significance level in R18-2-101(104);
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 on-site 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 a visibility or increment analysis; 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.

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

F. The Director shall process the majority of significant permit revision applications received each calendar year within nine months of receipt of a complete permit application but in no case longer than 18 months. Applications for which the Director undertakes accelerated processing under R18-2-326(N) shall not be included in this requirement. This subsection does not change any time-frame requirements in Chapter 1.

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).

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 (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 issued pursuant to this Chapter if:

1. The Director has reasonable cause to believe that the permit was obtained by fraud or misrepresentation.

2. The person applying for the permit failed to disclose a material fact required by the permit application form or the regulation applicable to the permit, 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 have been or are being violated.

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).

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;

c. A brief description of any action for the enforcement of any federal or state law, rule, or regulation, 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 hearing board in writing for a public hearing; and
2. The appeal process for a permit shall be followed.

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).

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.

B. A portable source which has a county permit but proposes to operate outside the county shall obtain a permit from the Director. Upon issuance of a permit by the Director, the county shall terminate the county permit for that source. Before commencing operation in the new county, the source shall notify the Director and the control officer who has jurisdiction over the geographic area 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).

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).

R18-2-326. Fees Related to Individual Permits

A. Source Categories. The owner or operator of a source required to have an air quality permit from the Director shall pay the fees described in this Section unless authorized to operate under a general permit issued under Article 5. The fees are based on a source being classified in one of the following three categories:
1. Class I Title V sources are those required or that elect to have a permit under R18-2-302(B)(1).
2. Class II Title V sources are those required to have a permit under R18-2-302(B)(2) and for which either R18-2-302(B)(2)(a)(i) or (ii) applies.
3. Class II Non-Title V sources are those required to have a permit under R18-2-302(B)(2) and for which neither R18-2-302(B)(2)(a)(i) nor (ii) applies.

B. Fees for Permit Actions. The owner or operator of a Class I Title V source, Class II Title V source, or Class II Non-Title V source shall pay to the Director $66 per hour, adjusted annually under subsection (H), for all permit processing time required for a billable permit action. Upon completion of permit processing activities other than issuance or denial of the permit or permit revision, the Director shall send notice of the decision to the applicant along with a final itemized bill. The maximum fee for any billable permit action for a non-Title V

source is $25,000. Except as provided in subsection (G), the Director shall not issue a permit or permit revision until the final bill is paid in full.

C. Class I Title V Fees. The owner or operator of a Class I Title V source that has undergone initial startup by January 1 shall annually pay to the Director an administrative fee plus an emissions-based fee as follows:

1. The applicable administrative fee from the table below, as adjusted annually under subsection (H). The fee is due by March 31 or 60 days after the Director mails the invoice under subsection (F), whichever is later.

Class I Title V Source Category	Administrative Fee
Aerospace	$12,900
Cement Plants	$39,500
Combustion/Boilers	$9,600
Compressor Stations	$7,900
Electronics	$12,700
Expandable Foam	$9,100
Foundries	$12,100
Landfills	$9,900
Lime Plants	$37,000
Copper & Nickel Mines	$9,300
Gold Mines	$9,300
Mobile Home Manufacturing	$9,200
Paper Mills	$12,700
Paper Coaters	$9,600
Petroleum Products Terminal Facilities	$14,100
Polymeric Fabric Coaters	$12,700
Reinforced Plastics	$9,600
Semiconductor Fabrication	$16,700
Copper Smelters	$39,500
Utilities - Natural Gas	$10,200
Utilities - Fossil Fuel Except Natural Gas	$20,200
Vitamin/Pharmaceutical Manufacturing	$9,800
Wood Furniture	$9,600
Others	$9,900
Others with Continuous Emissions Monitoring	$12,700

2. An emissions-based fee of $11.75 per ton of actual emissions of all regulated pollutants emitted during the previous calendar year ending 12 months earlier. The fee is adjusted annually under subsection (d) and due by March 31 or 60 days after the Director mails the invoice under subsection (F), whichever is later.
   a. For purposes of this Section, "actual emissions" means the quantity of all regulated pollutants emitted during the calendar year, as determined by the annual emissions inventory under R18-2-327.
   b. For purposes of this Section, regulated pollutants consist of the following:
      i. Nitrogen oxides and any volatile organic compounds;
      ii. Conventional air pollutants, except carbon monoxide and ozone;
      iii. Any pollutant that is subject to any standard promulgated under Section 111 of the Act, including fluorides, sulfuric acid mist, hydrogen sulfide, total reduced sulfur, and reduced sulfur compounds; and
      iv. Any federally listed hazardous air pollutant.
   c. For purposes of this Section, the following emissions of regulated pollutants are excluded from a source's actual emissions:
      i. Emissions of any regulated pollutant from the source in excess of 4,000 tons per year;
      ii. Emissions of any regulated pollutant already included in the actual emissions for the source, such as a federally listed hazardous air pollutant that is already accounted for as a VOC or as PM_{10};
      iii. Emissions from insignificant activities listed in the permit application for the source under R18-2-304(E)(8);
      iv. Fugitive emissions of PM_{10} from activities other than crushing, belt transfers, screening, or stacking; and
      v. Fugitive emissions of VOC from solution-extraction units.
   d. The Director shall adjust the rate for emission-based fees every January 1, beginning on January 1, 2003, by multiplying $11.75 by the Consumer Price Index (CPI) for the most recent year, and then dividing by the CPI for the year 2001. The Consumer Price Index for any year is the average of the Consumer Price Index for all-urban consumers published by the United States Department of Labor, as of the close of the 12-month period ending on August 31 of that year.

D. Class II Title V Fees. The owner or operator of a Class II Title V source that has undergone initial startup by January 1 shall pay the applicable administrative fee from the table below, adjusted under subsection (H), for that calendar year, and annually thereafter. The fee is due by March 31 or 60 days after the Director mails the invoice under subsection (F), whichever is later.

CLASS II Title V Source Category	Administrative Fee
Synthetic minor sources, except portable sources	Administrative fee from Class I Title V table for category
Stationary	$5,000
Portables	$5,000
Small Source	$500

E. Class II Non-Title V Fees. The owner or operator of a Class II Non-Title V source that has undergone initial startup by January 1 shall pay the applicable inspection fee from the table below, adjusted under subsection (H), for that calendar year, and annually thereafter. The fee is due by March 31 or 60 days after the Director mails the invoice under subsection (F), whichever is later.

Class II Non-Title V Source Category	Inspection Fee
Stationary	$3,250
Portables	$3,250
Gasoline Service Stations	$500

F. The Director shall mail the owner or operator of each source an invoice for all fees due under subsections (C), (D), or (E) by January 31.

G. Any person who receives a final itemized bill from the Director under this Section for a billable permit action may request an informal review of the hours billed and may pay the bill

under protest. If the bill is paid under protest, the Director shall take final action on the permit or permit revision.

1. The request shall be made in writing, and received by the Director within 30 days of the date of the final bill. Unless the Director and person agree otherwise, the informal review shall take place within 30 days after the Director's receipt of the request. The Director shall arrange the date and location of the informal review with the person at least 10 business days before the informal review. The Director shall review whether the amounts of time billed are correct and reasonable for the tasks involved. The Director shall mail his or her decision on the informal review to the person within 10 business days after the informal review date.
2. The Director's decision after informal review shall become final unless, within 30 days after person's receipt of the informal review decision, the person requests a hearing under R18-1-202.

H. The Director shall adjust the hourly rate every January 1, to the nearest ten cents per hour, beginning on January 1, 2003, by multiplying $66 by the Consumer Price Index (CPI) for the most recent year, and then dividing by the CPI for the year 2001. The Director shall adjust the administrative or inspection fees listed in subsections (C), (D), and (E) every January 1, to the nearest $10, beginning on January 1, 2003, by multiplying the administrative or inspection fee by the Consumer Price Index (CPI) for the most recent year, and then dividing by the CPI for the year 2001. The Consumer Price Index for any year is the average of the Consumer Price Index for all-urban consumers published by the United States Department of Labor, as of the close of the 12-month period ending on August 31 of that year.

I. An applicant for a Class I or Class II permit or permit revision may request that the Director provide accelerated processing of the application by providing the Director written notice 60 days before filing the application. The request shall be accompanied by an initial fee of $15,000. The fee is non-refundable to the extent of the Director's costs for accelerating the processing if the Director undertakes the accelerated processing described below:

1. If an applicant requests accelerated permit processing, the Director may, to the extent practicable, undertake to process the permit or permit revision in accordance with the following schedule:
   a. For applications for initial Class I and II permits under R18-2-302 or significant permit revisions under R18-2-320, the Director shall issue or deny the proposed permit or permit revision within 120 days after the Director determines that the application is complete.
   b. For minor permit revisions under R18-2-319, the Director shall issue or deny the permit revision within 60 days after receiving a complete application.
2. At any time after an applicant requests accelerated permit processing, the Director may require additional advance payments based on the most recent estimate of additional costs.
3. Upon completion of permit processing activities but before issuance or denial of the permit or permit revision, the Director shall send notice of the decision to the applicant along with a final bill. The maximum fee for any billable permit action for a non-Title V source is $25,000. The final bill shall include all regular permit processing and other fees due, and, in addition, the difference between the cost of accelerating the permit application, including any costs incurred by the Director in contracting for, hiring, or supervising the work of outside consultants, and all advance payments submitted for accelerated processing. In the event all payments made exceed actual accelerated permit costs, the Director shall refund the excess advance payments. Nothing in this subsection affects the public participation requirements of R18-2-330, or EPA and affected state review as required under R18-2-307 or R18-2-319.

J. Inactive Sources. The owner or operator of a permitted source that has undergone initial startup but was shut down for the entire preceding calendar year shall pay 50% of the administrative or inspection fee required under subsection (C), (D), or (E). The owner or operator of a source claiming inactive status under this subsection shall submit a letter to the Director by December 15 of the year prior to the billing year. Termination of a permit does not relieve a source of any past fees due.

K. Transition.

1. Subsections (A) through (J) of this Section are effective January 1, 2002. The first administrative or inspection fees are due on March 31, 2002.
2. Except as provided in subsection (b), all fees incurred after January 1, 2002, are payable in accordance with the rates contained in this Section.
   a. Emission-based fees for calendar year 2000 shall be billed at $11.75 per ton and be due March 31, 2002.
   b. The hourly rates and maximum fees for a new permit or permit revision are those in effect when the application for the permit or revision is determined to be complete.
   c. Fees accrued but not yet paid before the effective date of this Section remain as obligations to be paid to the Department.

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 by final rulemaking at 7 A.A.R. 5670, effective January 1, 2002 (Supp. 01-4).

R18-2-327. Annual Emissions Inventory Questionnaire

A. Every source subject to a permit requirement under this Chapter shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or 90 days after the Director makes the inventory form available, whichever occurs later, and shall include emission information for the previous calendar year. These requirements apply whether or not a permit has been issued and whether or not a permit application has been filed.

B. The questionnaire shall be on a form provided by the Director and shall include the following information:

1. 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.
2. Process information for the source, including design capacity, operations schedule, and emissions control devices, their description and efficiencies.
3. 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:

a. Any single regulated air pollutant in a quantity greater than 1 ton or the amount listed for the pollutant in subsection (a) of the definition of "significant" in R18-2-101, whichever is less.
b. Any combination of regulated air pollutants in a quantity greater than 2 1/2 tons.

C. Actual quantities of emissions shall be determined using the following emission factors or data:
1. 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.
2. When sufficient data pursuant to subsection (C)(1) 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.
3. When sufficient data pursuant to subsection (C)(1) or (C)(2) 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 (and no future editions) which is incorporated by reference and is on file with the Department of Environmental Quality and the Office of Secretary of State. AP-42 can be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, telephone (202) 783-3238, or by downloading the document from the EPA Technology Transfer Network, computer modem number (919) 541-5742, setting 8-N-1, VT100, or ANSI.
4. When sufficient data pursuant to subsections (C)(1) through (C)(3) is not available, emissions estimates shall be calculated from material balance using engineering knowledge of process.
5. When sufficient data pursuant to subsections (C)(1) through (C)(4) 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 the applicable method in subsections (C)(1) through (4).

D. 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.

E. An amendment to an annual emission inventory questionnaire, containing the documentation required by subsection (B)(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 questionnaire. 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 due to reasonable cause and not wilful neglect.

F. 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.

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).

R18-2-328. Conditional Orders

A. The Director may grant to any person a conditional order for each air pollution source which allows such person to vary from any provision of A.R.S. Title 49, Chapter 3, Article 2, or this Chapter, for any non-federally enforceable requirement of a permit issued pursuant to this Chapter if the Director makes each of the following findings:
1. Issuance of the conditional order will not endanger public health or the environment, impede attainment or maintenance of the national ambient air quality standards, or constitute a violation of the Act; and
2. Either of the following is true:
   a. There has been a breakdown of equipment or upset of operations beyond the control of the petitioner which causes the source to be out of compliance with the requirements of this Chapter; the source was in compliance with the requirements of this Chapter before the breakdown or upset, and the breakdown or upset may be corrected within a reasonable time;
   b. There is no reasonable relationship between the economic and social cost of, and benefits to be obtained from, achieving compliance.

B. The following procedures shall apply to a person seeking a conditional order:
1. The person shall file a petition for a conditional order with the Director. The petition shall contain at a minimum:
   a. A description of the breakdown or upset;
   b. A description of corrective action being undertaken to bring the source back into compliance;
   c. An estimate of emissions related to the breakdown or upset;
   d. A compliance schedule with a date of final compliance and interim dates as appropriate;
   e. A detailed analysis of the economic and social costs and benefits of achieving compliance with the requirement for which the variance is sought, if the petition is based on subsection (A)(2)(b).
2. If the issuance of the conditional order requires a public hearing pursuant to R18-2-330, the Director shall set the hearing date within 30 days after the filing of the petition and the hearing shall be held within 60 days after the filing of the petition.
3. Notice of the filing of a petition for a conditional order and of the hearing date on said petition shall be published in the manner provided in A.R.S. § 49-444 and R18-2-330.

C. Decisions on petitions for a conditional order shall be made as follows:
1. For any conditional order that requires a revision to the SIP, the Director shall comply with the requirements contained in 40 CFR 51, Subpart F.

2. For any other conditional order, the Director shall grant or deny the petition with such terms and conditions as are listed in subsection (E)(2) within 30 days after the conclusion of any required hearing, or, if no hearing is held, within 60 days after the filing of the petition.

D. A fee to cover the costs of processing conditional orders may be charged by the Director prior to issuance consistent with R18-2-326(I) or (J). The fee shall be deposited in the permit administration fund established in A.R.S. § 49-455.

E. The terms of a conditional order or its renewal shall conform to the following:

1. A conditional order issued by the Director shall be valid for such period as the Director prescribes but in no event for more than one year in the case of a source that is required to obtain a permit pursuant to this Chapter and Title V of the Act, and three years in the case of any other source that is required to obtain a permit pursuant to this Chapter.
2. The terms and conditions which are imposed as a condition to the granting or the continued existence of a conditional order shall include:
   a. A detailed plan for completion of corrective steps needed to conform to the provisions of A.R.S. Title 49, Chapter 3, Article 2, this Chapter, and the requirements of any permit issued pursuant to this Chapter;
   b. A requirement that necessary construction shall begin as expeditiously as practicable and proceed as specified in the compliance schedule;
   c. Written reports, at least quarterly, of the status of the source and construction progress;
   d. The right of the Director to make periodic inspection of the facilities for which the conditional order is granted;
   e. Such additional terms and conditions as the Director finds necessary to meet the requirements of this Section and A.R.S. § 49-437.
3. A holder of a conditional order may petition the Director to renew the order. The total term of the initial period and all renewals shall not exceed three years from the date of initial issuance of the order. Petitions for renewal may be filed at any time not more than 60 days nor less than 30 days prior to the expiration of the order. The Director, within 30 days of receipt of a petition, shall renew the conditional order for one year if the petitioner is in compliance and conforming with the terms and conditions imposed. The Director may refuse to renew the conditional order if, after a public hearing held within 30 days of receipt of a petition, the Director finds that the petitioner is not in compliance and conforming with the terms and conditions of the conditional order. If, after a period of three years from the date of original issuance, the petitioner is not in compliance and conforming with the terms and conditions, the Director may renew a conditional order for a total term of two additional years only if the Director finds that failure to comply and conform is due to conditions beyond the control of such petitioner.
4. If the Director amends or adopts any rule imposing conditions on the operation of an air pollution source which have become effective as to the source by reason of the action of the Director or otherwise, and which require the implementation of control strategies necessitating the installation of additional or different air pollution control equipment, the Director may renew a conditional order for an additional term. The term of the renewal shall be governed by the preceding subsections of this Section, except that the total term of the renewal shall not exceed two years.
5. A conditional order issued by the Director shall be effective when issued unless:
   a. The conditional order varies from the requirements of the applicable implementation plan, in which case the conditional order shall be submitted to the Administrator as a revision to the applicable implementation plan pursuant to Section 110(l) of the Act and shall become effective upon approval by the Administrator.
   b. The conditional order varies from the requirements of a permit issued for a facility that is required to obtain a permit pursuant to Title V of the Act, in which case the conditional order shall be submitted to the Administrator if required by Section 505 of the Act and shall be effective at the end of the review period specified in such section, unless objected to within such period by the Administrator.

F. Violation of the terms and conditions of the conditional order shall subject the source to suspension or revocation of the conditional order in accordance with A.R.S. § 49-441.

Historical Note

Adopted effective November 15, 1993 (Supp. 93-4).

R18-2-329. Permits Containing the Terms and Conditions of Federal Delayed Compliance Orders (DCO) or Consent Decrees

A. The terms and conditions of either a delayed compliance order (DCO) or consent decree shall be incorporated into a permit through a permit revision. In the event the permit expires prior to the expiration of the DCO or consent decree, the DCO or consent decree shall be incorporated into any permit renewal.

B. The owner or operator of a source subject to a DCO or consent decree shall submit to the Director a quarterly report of the status of the source and construction progress and copies of any reports to the Administrator required under the order or decree. The Director may require additional reporting requirements and conditions in permits issued under this Article.

C. For the purpose of this Chapter, sources subject to a consent decree issued by a federal court shall meet the same requirements as those subject to a DCO.

Historical Note

Adopted effective November 15, 1993 (Supp. 93-4).

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,
2. A significant permit revision,
3. Revocation and reissuance or reopening of a permit,
4. Any conditional orders pursuant to R18-2-328,
5. Granting a variance from a general permit pursuant to A.R.S. § 49-426.06(E) and R18-2-507.

B. The Director shall provide public notice of receipt of complete applications for permits to construct or make a major modification to major sources 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.

D. The notice required by subsection (C) shall include the following:
1. Identification of the affected facility;
2. Name and address of the permittee or applicant;
3. Name and address of the permitting authority processing the permit action;
4. The activity or activities involved in the permit action;
5. The emissions change involved in any permit revisions;
6. The air contaminants to be emitted;
7. If applicable, that a notice of confidentiality has been filed under R18-2-305;
8. If applicable, that the source has submitted a risk management analysis pursuant to A.R.S. § 49-426.06;
9. 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;
10. The name, address, and telephone number of a person from the Department from whom additional information may be obtained;
11. 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 may be reviewed, including the closest Department office, and the times at which they shall be available for public inspection.

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) 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. 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 decision is made, the record and copies of the Director's responses shall be made available to the applicant and all commenters.

Historical Note

Adopted effective November 15, 1993 (Supp. 93-4).

R18-2-331. Material Permit Conditions

A. For the purposes of A.R.S. §§ 49-464(G) and 49-514(G), a "material permit condition" shall mean a condition which satisfies all of the following:
1. The condition is in a permit or permit revision issued by the Director or a control officer after November 15, 1993.
2. The condition is identified within the permit as a material permit condition.
3. The condition is one of the following:
   a. An enforceable emission standard imposed to avoid classification as a major modification or major source or to avoid triggering any other applicable requirement;
   b. A requirement to install, operate, or maintain a maximum achievable control technology or hazardous air pollutant reasonably available control technology required pursuant to A.R.S. § 49-426.06;
   c. A requirement for the installation or certification of a monitoring device;
   d. A requirement for the installation of air pollution control equipment;
   e. A requirement for the operation of air pollution control equipment;
   f. An opacity standard required by Section 111 or Title I, Part C or D of the Act.
4. Violation of the condition is not covered by A.R.S. § 49-464(A) through (F), or (H) through (J) or A.R.S. § 49-514(A) through (F), or (H) through (J).

B. For the purposes of subsections (A)(3)(c), (d), and (e), a permit condition shall not be material where the failure to comply resulted from circumstances which were outside the control of the source. As used in this Section, "circumstances outside the control of the source" shall mean circumstances where the violation resulted from a sudden and unavoidable breakdown of the process or the control equipment, resulted from unavoidable conditions during a start up or shut down or resulted from upset of operations.

C. For purposes of this Section, the term "emission standard" shall have the meaning specified in A.R.S. §§ 49-464(U) and 49-514(T).

Historical Note

Adopted effective November 15, 1993 (Supp. 93-4).
Amended effective June 4, 1998 (Supp. 98-2).

R18-2-332. Stack Height Limitation

A. The limitations set forth herein 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. Begun, or caused to begin, a continuous program of physical on-site construction of the stack;
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; or
3. Coal-fired steam electric generating units, subject to the provisions of Section 118 of the Act which commenced operation before July 1, 1975, with stacks constructed under a construction contract awarded before February 8, 1974.

B. GEP stack height is calculated as the greater of the following four numbers in subsections (1) through (4):
1. 213.25 feet (65 meters);
2. 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, $Hg = 2.5H$;
3. For all other stacks, $Hg = H + 1.5L$, where
   Hg = 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 stack height for the source; or

4. 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;
5. For a specific structure or terrain feature, "nearby" shall be:
   a. For purposes of applying the formulae in subsections (B)(2) and (3), 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), 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+) of the feature, not to exceed 2 miles if such feature achieved a height (H+) 0.8 km from the stack. The height shall be at least 40% of the GEP stack height determined by the formula provided in subsection (B)(3), or 85 feet (26 meters), whichever is greater, as measured from the ground-level elevation at the base of the stack.
6. "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), 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. For sources subject to the requirements for permits or permit revisions under Article 4 of this Chapter, 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) 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), 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), except that emission rate specified by any applicable SIP 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), where the Director requires the use of a field study or fluid model to verify GEP 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), 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 to a source based on a good engineering practice stack height that exceeds the height allowed by subsection (B), 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 R18-1-402.

Historical Note

Adopted effective November 15, 1993 (Supp. 93-4).

R18-2-333. Acid Rain

A. 40 CFR 72, 74, 75, and 76 and all accompanying appendices, as of July 1, 2001, (and no future editions or amendments) are incorporated by reference. These standards are on file with the Office of the Secretary of State and the Department and shall be applied by the Department.

B. When used in 40 CFR 72, 74, 75, or 76, "Permitting Authority" means the Arizona Department of Environmental Quality and "Administrator" means the Administrator of the United States Environmental Protection Agency.

C. If the provisions or requirements of the regulations incorporated in this Section conflict with any of the remaining portions of this Title, the regulations incorporated in this Section shall apply and take precedence.

Historical Note

Adopted effective October 7, 1994 (Supp. 94-4). Amended effective December 7, 1995 (Supp. 95-4). Amended effective December 4, 1997 (Supp. 97-4). Amended by final rulemaking at 5 A.A.R. 3221, effective August 12, 1999 (Supp. 99-3). Amended by final rulemaking at 6 A.A.R. 4170, effective October 11, 2000 (Supp. 00-4). Amended by final rulemaking at 8 A.A.R. 2543, effective May 24, 2002 (Supp. 02-2).

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

R18-2-401. Definitions

In addition to the definitions contained in Article 1 of this Chapter and A.R.S. § 49-401.01, 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 Class I area, as determined according to R18-2-410.
2. "Categorical sources" means the following classes of sources:
   a. Coal cleaning plants with thermal dryers;
   b. Kraft pulp mills;
   c. Portland cement plants;
   d. Primary zinc smelters;
   e. Iron and steel mills;
   f. Primary aluminum ore reduction plants;
   g. Primary copper smelters;
   h. Municipal incinerators capable of charging more than 50 tons of refuse per day;
   i. Hydrofluoric, sulfuric, or nitric acid plants;
   j. Petroleum refineries;
   k. Lime plants;
   l. Phosphate rock processing plants;
   m. Coke oven batteries;
   n. Sulfur recovery plants;
   o. Carbon black plants using the furnace process;
   p. Primary lead smelters;
   q. Fuel conversion plants;
   r. Sintering plants;
   s. Secondary metal production plants;
   t. Chemical process plants;
   u. Fossil-fuel boilers, combinations thereof, totaling more than 250 million Btu's per hour heat input;
   v. Petroleum storage and transfer units with a total storage capacity more than 300,000 barrels;
   w. Taconite preprocessing 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 Btu's per hour heat input.
3. "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.
4. "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 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 the merged gas streams;
         (2) 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
      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.
5. "High terrain" means any area having an elevation of 900 feet or more above the base of the stack of a source.
6. "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.
7. "Low terrain" means any area other than high terrain.
8. "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 the SIP of any state for the class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that the limitations are 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. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under applicable

standards of performance in Articles 9 and 11 of this Chapter.

9. "Major source" means:
   a. Any stationary source located in a nonattainment area that emits, or has the potential to emit, 100 tons per year or more of any conventional air pollutant, except as follows:

Pollutant Emitted	Nonattainment Pollutant and Classification	Quantity Threshold tons/year or more
Carbon Monoxide (CO)	CO, Serious, with stationary sources as more than 25% of source inventory	50
Volatile Organic Compounds (VOC)	Ozone, Serious	50
VOC	Ozone, Severe	25
PM_{10}	PM_{10}, Serious	70
NOx	Ozone, Serious	50
NOx	Ozone, Severe	25
or		

   b. 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 conventional air pollutant if the source is classified as a Categorical Source, or 250 tons per year or more of any pollutant subject to regulation under the Act if the source is not classified as a Categorical Source;
   c. Any change to a minor source, except for VOC or NOx emission increases at minor sources in serious or severe ozone nonattainment areas, that would increase its emissions to the qualifying levels in subsections (a) or (b);
   d. Any change in VOC or NOx at a minor source in serious or severe ozone nonattainment areas that would be "significant" under R18-2-405(B) and that would increase its emissions to the qualifying levels in subsection (a);
   e. Any stationary source that emits, or has the potential to emit, five or more tons of lead per year;
   f. Any source classified as major undergoing modification that meets the definition of reconstruction;
   g. A major source that is major for VOC shall be considered major for ozone; or
   h. A major source that is major for oxides of nitrogen shall be considered major for ozone in nonattainment areas classified as marginal, moderate, serious, or severe.
10. "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).
11. "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.
12. "Significance levels" means the following ambient concentrations for the enumerated pollutants:

	Averaging Time				
Pollutant	**Annual**	**24-Hour**	**8-Hour**	**3-Hour**	**1-Hour**
SO_2	1 μg/m^3	5 μg/m^3		25 μg/m^3	
NO_2	1 μg/m^3				
CO			0.5 mg/m^3		2 μg/m^3
PM_{10}	1 μg/m^3	5 μg/m^3			

Except for the annual pollutant concentrations, exceedance of significance levels shall be deemed to occur 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 for the pollutant are not violated, the significance level does not apply.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Former Section R9-3-401 renumbered without change as Section R18-2-401 (Supp. 87-3). Section R18-2-401 renumbered to R18-2-601. New Section R18-2-401 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). Typographical error corrected in R18-2-401(9)(a) (Supp. 00-4).

R18-2-402. General

A. No person shall commence construction of a new major source or the major modification of a source without first obtaining a permit or a permit revision from the Director.

B. An application for a permit or permit revision under this Article shall not be considered complete unless the application demonstrates that:
1. The requirements in subsection (C) 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.

C. Except for assessing air quality impacts within 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.

D. Unless the requirement has been satisfied pursuant to Article 3 of this Chapter, the Director shall comply with following requirements:

1. Within 60 days after receipt of an application for a permit or permit revision subject to this Article, or any addition to such application, the Director shall advise the applicant of any deficiency. The date of receipt of the application shall be, for the purpose of this Section, the date on which the Director received all required information. The permit application shall not be deemed complete if the Director fails to meet the requirements of this subsection.
2. A copy of any notice required by R18-2-330 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.
4. The Director shall terminate a permit or permit revision issued under this Article if the proposed construction or major modification is not begun within 18 months of issuance or, if during the construction or major modification, work is suspended for more than 18 months.

Historical Note

Amended effective August 6, 1976 (Supp. 76-4). Former Section R9-3-402 repealed, new Section R9-3-402 adopted effective May 14, 1979 (Supp. 79-1). Amended and adopted by reference Open Burning Guidelines for Air Pollution Control effective September 22, 1983 (Supp. 83-5). Former Section R9-3-402 renumbered without change as Section R18-2-402 (Supp. 87-3). Section R18-2-402 renumbered to R18-2-602, new Section R18-2-402 adopted effective November 15, 1993 (Supp. 93-4).

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 to a source located in any nonattainment area for the pollutant(s) for which the source is classified as a major source or the modification is classified as a major modification 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 specific pollutant(s). In determining lowest achievable emission rate for a reconstructed stationary source, the provisions of 40 CFR 60.15(f)(4) shall be taken into account in assessing whether a new source performance standard is applicable to such stationary source.
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 and net air quality benefit requirements of R18-2-404.

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 stationary 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 conditions specified in subsections (A)(1) and (2) are met for reasonably quantifiable secondary emissions caused by the new source or modification.

E. A permit to construct a new source or 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 is not either a categorical source or belongs to the category of sources for which New Source Performance Standards under 40 CFR 60 or National Emission Standards for Hazardous Air Pollutants under 40 CFR 61 were promulgated by the Administrator prior to August 7, 1980.

F. The requirements of subsection (A)(3) shall not apply to temporary emission sources, such as pilot plants and portable sources, which are only temporarily located in the nonattainment area, are otherwise regulated by a permit, 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. Within 30 days of the issuance of any permit under this Section, the Director shall submit control technology information from the permit to the Administrator for the purposes listed in Section 173(d) of the Act.

Historical Note

Former Section R9-3-403 repealed, new Section R9-3-403 adopted effective May 14, 1979 (Supp. 79-1). Former Section R9-3-403 renumbered without change as Section R18-2-403 (Supp. 87-3). Section R18-2-403 renumbered to R18-2-603, new Section R18-2-403 adopted effective November 15, 1993 (Supp. 93-4).

R18-2-404. Offset and Net Air Quality Benefit Standards

A. Increased emissions by a major source or major modification subject to this Article shall be offset by reductions in the emissions of each pollutant for which the area has been designated as nonattainment and for which the source or modification is classified as major. The offset may be obtained by reductions in emissions from the source or modification or from any other source in the allowable offset area. Credit for an emissions offset can be used only if it has not been relied upon in demonstrating attainment or reasonable further progress and if it has not been relied upon previously in issuing a permit or permit revision under this Article under R18-2-402 and R18-2-403 or is not otherwise required under this Chapter or under any provision of the SIP.

B. An offset shall not be sufficient unless reductions of total emissions for the particular pollutant for which the offset is required will be:

1. Obtained from sources within the allowable offset area;
2. Contemporaneous with the operation of the new major source or major modification;
3. Less than the baseline of the total emissions for that pollutant, except in ozone nonattainment areas classified as moderate, serious, or severe; and
4. Sufficient to demonstrate that emissions from the new major source or major modification, together with the offset, will result in reasonable further progress for that pollutant.

C. 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.

D. Only intrapollutant emission offsets shall be allowed. Intrapollutant emission offsets for VOC shall only include offset reductions in emissions of VOC. Intrapollutant emission offsets for oxides of nitrogen shall only include offset reductions in emissions of oxides of nitrogen.

E. For purposes of this Section, "reasonable further progress" means compliance with the schedule of annual incremental reductions in emissions of the applicable air pollutant prescribed by the Director based on air quality modeling under R18-2-409, to provide for attainment of the applicable air quality standards by the deadlines set under Part D of Title I of the Act, or in an applicable implementation plan.

F. For purposes of this Article, "net air quality benefit" means that, during similar time periods, either subsection (F)(1) or (2) below is applicable:

1. A reduction in the number of violations of the applicable Arizona ambient air quality standard within the allowable offset area has occurred and the following mathematical expression is satisfied:

$$\sum_{i=1}^{N} \frac{x_i - C}{N} \leq \sum_{j=1}^{K} \frac{x_j - C}{K}$$

when:

C = The applicable Arizona ambient air quality standard.

x_i = The concentration level of the violation at the ith receptor for the pollutant after offsets.

N = The number of violations for the pollutant after offsets ($N \leq K$).

x_j = The concentration level of the violation at the jth receptor for the pollutant before offsets.

K = The number of violations for the pollutant before offsets.

2. The average of the ambient concentrations within the allowable offset area after the implementation of the contemplated offsets will be less than the average of the ambient concentrations within the allowable offset area without the offsets.

G. Baseline further defined:

1. For the purpose of this Section, the baseline of total emissions from any sources in existence or sources that have obtained a permit or permit revision under this Article (regardless of whether or not the sources are in actual operation at the time of application for the permit or per-

mit revision) shall be the total actual emissions at the time the application is filed. In addition, the baseline of total emissions shall consist of all emission limitations included as conditions on federally enforceable permits except that the offset baseline shall be the actual emissions of the source from which offset credit is obtained if:

a. No emission limitations are applicable to a source from which offsets are being sought; or

b. 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.

2. If the emission limitations for a particular pollutant allow greater emissions than the potential emission rate of the source for that pollutant, the baseline shall be the potential emission rate at the time application for the permit or permit revision under this Article is filed, and emissions offset credit shall be allowed only for control below the potential emission rate.

H. For an existing fuel combustion source, offset credit shall be based on the allowable emissions under the regulations or permit conditions applicable to the source for the type of fuel being burned at the time the application for the permit or permit revision under this Article is filed. If an existing source commits to switch to a cleaner fuel at some future date, emissions offset credit based on the actual emissions for the fuels involved shall not be acceptable unless:

1. The permit or permit revision under this Article for the source specifically requires the use of a specified alternative control measure that would achieve the same degree of emissions reduction if the source switches back to a dirtier fuel at some later date; and

2. The source demonstrates to the Director that it has secured an adequate long-term supply of the cleaner fuel.

I. Offsets shall be made on either a pounds-per-hour, pounds-per-day, or tons-per-year basis, whichever is applicable, when all facilities involved in the emission offset calculations are operating at their maximum expected or allowed production rate and, except as otherwise provided in subsection (H), utilizing the type of fuel burned at the time the application for the permit or permit revision under this Article is filed. A tons-per-year basis shall not be used if the new or modified source or the source offsets is not expected to operate throughout the entire year. No emissions credit may be allowed for replacing one VOC with another VOC of lesser reactivity.

J. Emissions reductions achieved by shutting down an existing source or permanently curtailing production or operating hours below baseline levels may be credited, if the work force to be affected has been notified of the proposed shutdown or curtailment. No offset credit for shutdowns or curtailments shall be provided for emissions reductions that are necessary to bring a source into compliance with RACT or any other standard under an applicable implementation plan.

K. The allowable offset area shall be the geographical area in which the sources are located whose emissions are being sought to offset emissions from a new major source or major modification. For the pollutants sulfur dioxide, PM_{10}, and carbon monoxide, the allowable offset area shall be determined by atmospheric dispersion modeling. If the emission offsets are obtained from a source on the same premises or in the immediate vicinity of the new major source or major modification, and the pollutants disperse from substantially the same effective stack height, atmospheric dispersion modeling shall not be required. The allowable offset area for all other pollutants shall be the nonattainment areas for those pollutants within which the new major source or major modification is to be located.

L. An emission reduction may only be used to offset emissions if the reduced level of emissions will continue for the life of the new source or modification and if the reduced level of emissions is federally and legally enforceable at the time of permit issuance. It shall be considered legally enforceable if the following conditions are met:

1. The emission reduction is included as a condition in the permit of the source relied upon to offset the emissions from the new major source or major modification, or in the case of reductions from sources controlled by the applicant, is included as a condition of the permit or permit revision under this Article for the new major source or major modification;

2. The emission reduction is adopted as a part of this Chapter or comparable rules of any other governmental entity or is contractually enforceable by the Department and is in effect at the time the permit is issued.

Historical Note

Former Section R9-3-404 repealed, new Section R9-3-404 adopted effective May 14, 1979 (Supp. 79-1). Amended by adding subsection (C) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-404 renumbered without change as Section R18-2-404 (Supp. 87-3). Amended subsection (C) effective December 1, 1988 (Supp. 88-4). Section R18-2-404 renumbered to R18-2-604, new Section R18-2-404 adopted effective November 15, 1993 (Supp. 93-4). Amended effective February 28, 1995 (Supp. 95-1). 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. 1815, effective March 18, 2002 (Supp. 02-1).

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

A. Applicability. The provisions of this Section only apply to stationary sources of VOC or oxides of nitrogen 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 source of VOC or oxides of nitrogen, or for determining whether an otherwise minor source is major under R18-2-401(9)(d), 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. For the purposes of this subsection, a physical change or change in the method of operation that results in an increase of less than one ton per year of VOC or oxides of nitrogen before netting does not trigger a five-year aggregation exercise.

C. For any major source that emits or has the potential to emit less than 100 tons VOC or oxides of nitrogen per year, a significant increase in VOC or oxides of nitrogen, respectively, shall constitute a major modification except that the increase in emissions from any discrete emissions unit, operation, or other pollutant emitting activity that is offset from other units, operations, or activities at the source at a ratio of 1.3 to 1 for the increase in VOC or oxides of nitrogen, respectively, from the unit, operation, or activity shall not be considered part of the major modification. BACT shall be substituted for LAER for all major modifications under this subsection. Net emis-

sions increases in VOC or oxides of nitrogen above the internal offset described herein shall be subject to the offset requirements in subsections (E) and (F).

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, any significant increase in VOC or oxides of nitrogen, respectively, shall constitute a major modification. If the increase in emissions from the modification at any discrete emissions unit, operation, or other pollutant emitting activity is offset from other units, operations, or activities at the source at a ratio of 1.3 to 1 for the increase in VOC or oxides of nitrogen, respectively, from the unit, operation, or activity, BACT shall be substituted for LAER at the unit, operation, or activity. Net emissions increases in VOC or oxides of nitrogen above the internal offset described herein shall be subject to the offset requirements in subsections (E) and (F).

E. For any new major source or major modification that is classified as major because of emissions or potential to emit VOC or oxides of nitrogen 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 oxides of nitrogen 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. If the SIP requires all existing major sources of these pollutants in the nonattainment area to apply BACT, then the offset ratio shall be 1.2 to 1. These offsets shall be made in accordance with the provisions of R18-2-404.

Historical Note

Former R9-3-405, Other industries, renumbered R9-3-406, new Section adopted effective September 17, 1975 (Supp. 75-1). Former Section R9-3-405 repealed, new Section R9-3-405 adopted effective May 14,1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Former Section R9-3-405 renumbered without change as Section R18-2-405 (Supp. 87-3). Section R18-2-405 renumbered to R18-2-605, new Section R18-2-405 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).

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

A. Except as provided in subsections (B) through (G) below 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 pollutant unless the source or modification meets the following conditions:

1. A new major source shall apply best available control technology (BACT) for each pollutant listed in R18-2-101(104)(a) for which the potential to emit is significant.
2. A major modification shall apply BACT for each pollutant listed in R18-2-101(104)(a) for which the modification 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 best available control technology for the source.
4. BACT shall be determined on a case-by-case basis and may constitute application of production processes or 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 under Articles 9 and 11 of this Chapter. 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 such 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, for all pollutants listed in R18-2-218(A), and including minor and mobile source emissions of oxides of nitrogen and PM_{10}:
   a. Would not cause or contribute to an increase in concentrations of any pollutant by an amount in excess of any applicable maximum allowable increase over the baseline concentration in R18-2-218 for any attainment or unclassified area; or
   b. Would not contribute to an increase in ambient concentrations for a pollutant by an amount in excess of the significance level for such pollutant in any adjacent area in which Arizona primary or secondary ambient air quality standards for that pollutant are being violated. A new major source of volatile organic compounds or oxides of nitrogen, or a major modification to a major source of volatile organic compounds or oxides of nitrogen shall be presumed to contribute to violations of the Arizona ambient air quality standards for ozone if it will be located within 50 kilometers of a nonattainment area for ozone. The presumption may be rebutted for a new major source or major modification if it can be satisfactorily demonstrated to the Director that emissions of volatile organic compounds or oxides of nitrogen from the new major source or major modification will not contribute to violations of the Arizona ambient air quality standards for ozone in adjacent nonattainment areas for ozone. Such a demonstration shall include a showing that topographical, meteorological, or other physical factors in the vicinity of the

new major source or major modification are such that transport of volatile organic compounds emitted from the source are not expected to contribute to violations of the ozone standards in the adjacent nonattainment areas.

6. Air quality models:
   a. All estimates of ambient concentrations required under this Section shall be based on the applicable air quality models, data basis, and other requirements specified in the "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986), and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents shall be referred to hereinafter as "Guideline" and are adopted by reference and on file with the Secretary of State and 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. Written approval of the EPA Administrator shall be obtained for any modification or substitution.

B. The requirements of this Section 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.

C. The requirements of this Section shall not apply to a new major source or major modification of a source if such 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 is not either among the Categorical Sources listed in R18-2-101 or belongs to the category of sources for which New Source Performance Standards under 40 CFR 60 or National Emission Standards for Hazardous Air Pollutants under 40 CFR 61 promulgated by the Administrator prior to August 7, 1980.

D. The requirements of this Section shall not apply to a new major source or major modification to a source when the owner of such source is a nonprofit health or educational institution.

E. The requirements of this Section shall not apply to a portable source which would otherwise be a new major source or major modification to an existing source if such portable source is temporary, is under a permit or permit revision under this Article, is in compliance with the conditions of that permit or permit revision under this Article, the emissions from the source will not impact a Class I area nor an area where an applicable increment is known to be violated, and 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. Such notice shall be given to the Director not less than 10 calendar days in advance of the proposed relocation unless a different time duration is previously approved by the Director.

F. Special rules applicable to Federal Land Managers:
1. Notwithstanding any other provision of this Section, a Federal Land Manager may present to the Director a demonstration that the emissions attributed to such new major source or major modification to a source will have significant adverse impact on visibility or other specifically defined air quality related values of any Federal Mandatory area designated in R18-2-217(B) regardless of the fact that the change in air quality resulting from emissions attributable to such new major source or major modification to a source in existence will not cause or contribute to concentrations which exceed the maximum allowable increases for a Class I area. If the Director concurs with such demonstrations, the permit or permit revision under this Article shall be denied.
2. If the owner or operator of a proposed new major source or a source for which major modification is proposed demonstrates to the Federal Land Manager that the emissions attributable to such major source or major modification will have no significant adverse impact on the visibility or other specifically defined air quality-related values of such areas and the Federal Land Manager so certifies to the Director, the Director may issue a permit or permit revision under this Article, notwithstanding the fact that the change in air quality resulting from emissions attributable to such new major source or major modification will cause or contribute to concentrations which exceed the maximum allowable increases for a Class I area. Such a permit or permit revision under this Article shall require that such new major source or major modification comply with such emission limitations as may be necessary to assure that emissions will not cause increases in ambient concentrations greater than the following maximum allowable increases over baseline concentrations for such pollutants:

	Maximum Allowable Increase (Micrograms per cubic meter)
Sulfur Oxide	
Period of exposure	
Low terrain areas:	
24-hour maximum	36
3-hour maximum	130
High terrain areas:	
24-hour maximum	62
3-hour maximum	221

G. 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.

H. 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).

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

A. Any application for a permit or permit revision under this Article 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 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:
   Carbon Monoxide - 575 $\mu g/m^3$, eight-hour average;
   Nitrogen dioxide - 14 $\mu g/m^3$, annual average:
   PM_{10} - 10 $\mu g/m^3$, 24-hour average;
   Sulfur dioxide - 13 $\mu g/m^3$, 24-hour average;
   Lead - 0.1 $\mu g/m^3$, 24-hour average;
   Fluorides - 0.25 $\mu g/m^3$, 24-hour average;
   Total reduced sulfur - 10 $\mu g/m^3$, one-hour average;
   Hydrogen sulfide - 0.04 $\mu g/m^3$, one-hour average;
   Reduced sulfur compounds - 10 $\mu g/m^3$, one-hour average;
   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).

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) 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 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(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.

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. Special Rule for Non-operating Sources of Sulfur Dioxide in Sulfur Dioxide Nonattainment Areas

A. If an emissions unit that is a major source of sulfur dioxide located in a sulfur dioxide nonattainment area has not operated for more than 24 consecutive calendar months, it may only be restarted if the owner or operator of such source does all of the following:

1. Demonstrates, according to the air quality impact analysis requirements of R18-2-406(A)(5) and (6) that emissions from that unit, including fugitive emissions, will not cause or contribute to a violation of the ambient standard for sulfur dioxide in R18-2-202;
2. Demonstrates that startup of that unit will not require reconstruction; and
3. Submits a startup plan that includes a source testing plan.

B. The demonstrations and plan shall be submitted to the Director at least 180 days prior to the expected day when the restarting of the non-operating unit will commence. The Director may request additional information, as necessary, to evaluate the submittals. The unit shall not be restarted unless the Director approves the submittal.

C. If the Director disapproves a demonstration or plan required in subsection (A), or such demonstration or plan, including additional information requested by the Director, is not submitted in a timely manner, the source shall be required to obtain a permit pursuant to the requirements for a new major source or major modification as contained in this Article.

D. The conduct of performance tests that comply with the requirements of R18-2-312 and demonstrate compliance with emission limits prescribed in a permit for that source or an applicable rule shall constitute operation of an emissions unit for the purposes of this Section.

Historical Note

Adopted effective November 15, 1993 (Supp. 93-4).

ARTICLE 5. GENERAL PERMITS

R18-2-501. Applicability

A. The Director may issue general permits for a facility class that contains 10 or more facilities that are similar in nature, have substantially similar emissions, and would be subject to the same or substantially similar requirements governing operations, emissions, monitoring, reporting, or recordkeeping. "Similar in nature" refers to facility size, processes, and operating conditions.

B. The Director may issue general permits, in accordance with subsection (A), with emission limitations, controls, or other requirements that meet the requirements of R18-2-306.01. A source that seeks to vary from such a general permit, and obtain an emission limitation, control, or other requirement not contained in that general permit, shall apply for a permit pursuant to Article 3 of this Chapter.

C. General permits shall not be issued for affected sources except as provided in regulations promulgated by the Administrator under Title IV of the Act.

D. Unless otherwise stated, the provisions of Article 3 shall apply to general permits.

Historical Note

Former Section R18-2-501 renumbered to R18-2-502, new Section R18-2-501 adopted effective September 26, 1990 (Supp. 90-3). Former Section R18-2-501 renumbered to R18-2-701; new Section adopted effective November 15, 1993 (Supp. 93-4). Amended effective August 1, 1995 (Supp. 95-3).

R18-2-502. General Permit Development

A. The Director may issue a general permit on the Director's own initiative or in response to a petition.

B. Any person may submit a petition to the Director requesting the issuance of a general permit for a defined class of facilities. The petition shall propose a particular class of facilities, and list the approximate number of facilities in the proposed class along with their size, processes, and operating conditions, and demonstrate how the class meets the criteria for a general permit as specified in R18-2-501 and A.R.S. § 49-426(H). The Director shall provide a written response to the petition within 120 days of receipt.

C. General permits shall be issued or denied for classes of facilities using the same engineering principles that applies to permits for individual sources and following the public notice requirements of R18-2-504.

D. General permits shall include all of the following:

1. All elements contained in R18-2-306(A) except (2)(b) and (6).
2. The process for individual sources to apply for coverage under the general permit.

Historical Note

Former Section R9-3-501 repealed, new Section R9-3-501 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 (D) effective June 19, 1981 (Supp. 81-3). Amended subsections (C) and (D) effective February 2, 1982 (Supp. 82-1). Amended subsection (D) effective May 25, 1982 (Supp. 82-3). Former Section R9-3-501 renumbered without change as Section R18-2-501 (Supp. 87-3). Former Section R18-2-502 repealed, new Section R18-2-502 renumbered from R18-2-501 and amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-502 renumbered to R18-2-702; new Section R18-2-502 adopted effective November 15, 1993 (Supp. 93-4).

R18-2-503. Application for Coverage under General Permit

A. Once the Director has issued a general permit, any source which is a member of the class of facilities covered by the general permit may apply to the Director for authority to operate under the general permit. At the time the Director issues a general permit, the Director may also establish a specific application form with filing instructions for sources in the category covered by the general permit. Applicants shall complete the specific application form or, if none has been adopted, the standard application form contained in Appendix 1 to this Chapter. The specific application form shall, at a minimum, require the applicant to submit the following information:

1. Information identifying and describing the source, its processes, and operating conditions in sufficient detail to allow the Director to determine qualification for, and to assure compliance with, the general permit.
2. A compliance plan that meets the requirements of R18-2-309.

B. For sources required to obtain a permit under Title V of the Act, the Director shall provide the Administrator with a permit application summary form and any relevant portion of the per-

mit application and compliance plan. To the extent possible, this information shall be provided in computer-readable format compatible with the Administrator's national database management system.

C. The Director shall act on the application for coverage under the general permit as expeditiously as possible, but a final decision shall be reached within 180 days. The source may operate under the terms of its application during that time. If the application for coverage is denied, the Director shall notify the source that it shall apply for an individual permit within 180 days of receipt of notice. The Director may defer acting on an application under this subsection if the Director has provided notice of intent to renew or not renew the permit.

D. The Director shall deny an application for coverage from any Class I source that is subject to case-by-case standards or requirements.

Historical Note

Former Section R9-3-503 repealed, new Section R9-3-503 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 (C), paragraph (6) effective June 19, 1981 (Supp. 81-3). Amended subsection (C) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-503 renumbered without change as Section R18-2-503 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-503 renumbered to R18-2-703; new Section R18-2-503 adopted effective November 15, 1993 (Supp. 93-4).

R18-2-504. Public Notice

A. This Section applies to issuance, revision, or renewal of a general permit.

B. The Director shall provide public notice for any proposed new general permit, for any revision of an existing general permit, and for renewal of an existing general permit.

C. The Director shall publish notice of the proposed general permit once each week for two consecutive weeks in a newspaper of general circulation in each county and shall provide at least 30 days from the date of the first notice for public comment. The notice shall describe the following:

1. The proposed permit;
2. The category of sources that would be affected;
3. The air contaminants which the Director expects to be emitted by a typical facility in the class and the class as a whole;
4. The Director's proposed actions and effective date for the actions;
5. Locations where documents relevant to the proposed permit will be available during normal business hours;
6. The name, address, and telephone number of a person within the Department who may be contacted for further information;
7. The address where any person may submit comments or request a public hearing and the date and time by which comments or a public hearing request are required to be received;
8. The process by which sources may obtain authorization to operate under the general permit.

D. For general permits under which operation may be authorized in lieu of Class I permits, the Director shall give notice of the proposed general permit to each affected state at the same time that the proposed general permit goes out for public notice. The Director shall provide the proposed final permit to the Administrator after public and affected state review. No Class I permit shall be issued if the Administrator properly objects to its issuance in writing within 45 days from receipt of the proposed final permit and any necessary supporting information from the Director.

E. Written comments to the Director shall include the name of the person and the person's agent or attorney and shall clearly set forth reasons why the general permit should or should not be issued pursuant to the criteria for issuance in A.R.S. §§ 49-426 and 49-427 and this Chapter.

F. At the time a general permit is issued, the Director shall make available a response to all relevant comments on the proposed permit raised during the public comment period and during any requested public hearing. The response shall specify which provisions, if any, of the proposed permit have been changed and the reason for the changes. The Director shall also notify in writing any petitioner and each person who has submitted written comments on the proposed general permit or requested notice of the final permit decision.

Historical Note

Former Section R9-3-504 repealed, new Section R9-3-504 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-504 renumbered without change as Section R18-2-504 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-504 renumbered to R18-2-704; new Section R18-2-504 adopted effective November 15, 1993 (Supp. 93-4).

R18-2-505. General Permit Renewal

The Director shall review and may renew general permits every five years. A source's authorization to operate under a general permit shall coincide with the term of the general permit regardless of when the authorization began during the five-year period, except as provided in R18-2-510(C). In addition to the public notice required to issue a proposed permit under R18-2-504, the Director shall notify in writing all sources who have been granted, or who have applications pending for, authorization to operate under the permit. The written notice shall describe the source's duty to reapply and may include requests for information required under the proposed permit.

Historical Note

Former Section R9-3-1007 renumbered effective January 13, 1976 (Supp. 76-1). Former Section R9-3-505 repealed, new Section R9-3-505 adopted effective May 14, 1979 (Supp. 79-1). Editorial corrections, subsection (B), paragraph (5), and subsection (D), paragraph (1), subparagraph (d) (Supp. 80-2). Amended effective July 9, 1980 (Supp. 80-4). Amended subsection (B) effective May 28, 1982 (Supp. 82-3). Amended subsection (B) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-505 renumbered without change as Section R18-2-505 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-505 renumbered to R18-2-705; new Section R18-2-505 adopted effective November 15, 1993 (Supp. 93-4).

R18-2-506. Relationship to Individual Permits

Any source covered under a general permit may request to be excluded from coverage by applying for an individual source permit. Coverage under the general permit shall terminate on the date the individual permit is issued.

Historical Note

Former Section R9-3-1008 renumbered effective January 13, 1976 (Supp. 76-1). Former Section R9-3-506 repealed, new Section R9-3-506 adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980

(Supp. 80-4). Amended subsection (C), paragraph (1) effective June 19, 1981 (Supp. 81-3). Former Section R9-3-506 renumbered without change as Section R18-2-506 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-506 renumbered to R18-2-706; new Section R18-2-506 adopted effective November 15, 1993 (Supp. 93-4).

R18-2-507. General Permit Variances

A. Where MACT (maximum achievable control technology) or HAPRACT (hazardous air pollutant reasonably available control technology) has been established in a general permit for a source category designated pursuant to A.R.S. § 49-426.05(A), the owner or operator of a source within that source category may apply for a variance from the standard by demonstrating compliance with A.R.S. § 49-426.06(D) at the time the source applies for coverage under the general permit.

B. If the owner or operator makes the showing required by A.R.S. § 49-426.06(D) and otherwise qualifies for the general permit, the Director shall, in accordance with the procedures established pursuant to this Article, approve the application and authorize operation under a variance from the standard of the general permit.

C. Except as modified by the variance, the source shall comply with all conditions of the general permit.

D. A proposed variance to a standard in a general permit shall be subject to the public notice requirements of R18-2-330.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-507 renumbered without change as Section R18-2-507 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-507 renumbered to R18-2-707; new Section R18-2-507 adopted effective November 15, 1993 (Supp. 93-4).

R18-2-508. General Permit Shield

Each general permit issued under this Article 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, as of the date authority to operate for a source is granted, compliance with the conditions of the permit shall be deemed compliance with any applicable requirement in effect on the date of permit issuance. Any permit under this Article that does not expressly state that a permit shield exists shall be presumed not to provide such a shield. Notwithstanding the above provisions, the source shall be subject to enforcement action for operation without a permit if the source is later determined not to qualify for the conditions and terms of the general permit. A permit shield provided for a general permit shall meet all the requirements of R18-2-325.

Historical Note

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 (B) effective May 28, 1982 (Supp. 82-3). Amended subsection (B) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-508 renumbered without change as Section R18-2-508 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-508 renumbered to R18-2-708; new Section R18-2-508 adopted effective November 15, 1993 (Supp. 93-4).

R18-2-509. General Permit Appeals

Any person who filed a comment on a proposed general permit as provided in R18-2-504 may appeal the terms and conditions of the general permit, as they apply to the facility class covered under a general permit, by filing an appeal with the hearing board within 30 days of issuance of the general permit.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-509 renumbered without change as Section R18-2-509 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-509 renumbered to R18-2-709; new Section R18-2-509 adopted effective November 15, 1993 (Supp. 93-4).

R18-2-510. Terminations of General Permits and Revocations of Authority to Operate under a General Permit

A. The Director may terminate a general permit at any time if:

1. The Director has determined that the emissions from the sources in the facility class cause or contribute to ambient air quality standard violations which are not adequately addressed by the requirements in the general permit, or
2. The Director has determined that the terms and conditions of the general permit no longer meet the requirements of A.R.S. §§ 49-426 and 49-427.

B. The Director shall provide written notice to all sources operating under a general permit prior to termination of a general permit. Such notice shall include an explanation of the basis for the proposed action. Within 180 days of receipt of the notice of the expiration, termination or cancellation of any general permit, sources notified shall submit an application to the Director for an individual permit.

C. The Director may require a source authorized to operate under a general permit to apply for and obtain an individual source permit at any time if the source is not in compliance with the terms and conditions of the general permit.

D. If the Director revokes a source's authority to operate under a general permit pursuant to subsection (C), the Director shall notify the permittee by certified mail, return receipt requested. The notice shall include a statement detailing the grounds for the revocation of authority and a statement that the permittee is entitled to a hearing. A source previously authorized to operate under a general permit may operate under the terms of the general permit until the earlier of the date it submits a complete application for an individual permit, at which time it may operate under that application, or 180 days after receipt of the notice of revocation of authority to operate under the general permit.

Historical Note

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 subsections (E)(3) and (E)(4) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-510 renumbered without change as Section R18-2-510 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Former Section R18-2-510 renumbered to R18-2-710; new Section R18-2-510 adopted effective November 15, 1993 (Supp. 93-4).

R18-2-511. Fees Related to General Permits

A. Permit Processing Fee. The owner or operator of a source that applies for authority to operate under a general permit shall pay to the Director $500 with the submittal of the application. This fee applies to the owner or operator of any source who intends to continue operating under the authority of a general permit that has been proposed for renewal.

B. Administrative or Inspection Fee. The owner or operator of a source with authority to operate under a general permit shall pay, for each calendar year, the applicable administrative or

inspection fee from the table below, by March 31 or 60 days after the Director mails the invoice, whichever is later.

General Permit Source Category	**Administrative Fee**
Class I Title V General Permits	Administrative fee for category from R18-2-326(C)
Class II Title V Small Source	$500
Other Class II Title V General Permits	$3,000
	Inspection Fee
Class II Non-Title V Gasoline Service Stations	$500
Class II Non-Title V Crematories	$1,000
Other Class II Non-Title V General Permits	$2,000

Historical Note

Former Section R18-2-511 renumbered to R18-2-711; new Section R18-2-511 adopted effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 7 A.A.R. 5670, effective January 1, 2002 (Supp. 01-4).

R18-2-512. Renumbered

Historical Note

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 September 22, 1983 (Supp. 83-5). Former Section R9-3-512 renumbered without change as Section R18-2-512 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-712 effective November 15, 1993 (Supp. 93-4).

R18-2-513. Renumbered

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Editorial correction, subsection (A), paragraph (2) (Supp. 80-2). 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 R9-3-513 renumbered without change as Section R18-2-513 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-713 effective November 15, 1993 (Supp. 93-4).

R18-2-514. Renumbered

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-514 renumbered without change as Section R18-2-514 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-714 effective November 14, 1993 (Supp. 93-4).

R18-2-515. Renumbered

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Section R9-3-515 will be repealed and new Section R9-3-515 adopted effective following the adoption of Article 7. Nonferrous Smelter Orders, filed September 18, 1979 for public hearing (Supp. 79-5). Section R9-3-515 adopted effective May 14, 1979, amended effective October 2, 1979 (Supp. 79-5). Article 7. Nonferrous Smelter Orders adopted effective January 8, 1980. Section R9-3-515 filed September 18, 1979 for public hearing and effective following the adoption of Article 7 now amended and effective January 8, 1980 (Supp. 80-1). Amended as an emergency effective March 6, 1980, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 80-2). Emergency adoption effective March 6, 1980 now adopted and amended effective July 9, 1980. Amended subsection (C), paragraph (1) effective August 29, 1980 (Supp. 80-4). Amended as an emergency effective October 9, 1980, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 80-5). Former emergency adoption effective October 9, 1980, now adopted and amended effective June 19, 1981 (Supp. 81-3). Amended subsection (B), paragraph (1) effective February 2, 1982 (Supp. 82-1). Amended effective May 25, 1982 (Supp. 82-3). Amended subsections ((C)(3) and (C)(5) effective September 22, 1983 (Supp. 83-5). Former Section R9-3-515 renumbered without change as Section R18-2-515 (Supp. 87-3). Section amended and subsections (C)(1)(h) through (C)(7) renumbered to R18-2-515.01 and subsections (C)(8) through (C)(9) renumbered to R18-2-515.02 effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-715 effective November 15, 1993 (Supp. 93-4).

R18-2-515.01. Renumbered

Historical Note

Section R18-2-515.01 renumbered from R18-2-515(C)(1)(h) through (C)(7) and amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-715.01 effective November 15, 1993 (Supp. 93-4).

R18-2-515.02. Renumbered

Historical Note

R18-2-515.02 renumbered from R18-2-515(C)(8) through (C)(9) and amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-715.02 effective November 15, 1993 (Supp. 93-4).

R18-2-516. Renumbered

Historical Note

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 22, 1983 (Supp. 83-4). Former Section R9-3-516 renumbered without change as Section R18-2-516 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-716 effective November 15, 1993 (Supp. 93-4).

R18-2-517. Renumbered

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Editorial correction, subsection (C), paragraph (1) (Supp. 80-1). 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 R9-3-517 renumbered without change as Section R18-2-517 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-2). Renumbered to R18-2-717 effective November 15, 1993 (Supp. 93-4).

R18-2-518. Renumbered

Historical Note

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 effective September 22, 1983 (Supp. 83-4). Former Section R9-3-518 renumbered without change as Section R18-2-518 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-718 effective November 15, 1993 (Supp. 93-4).

R18-2-519. Renumbered

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Editorial correction, subsection (A), paragraph (1) (Supp. 80-1). Amended effective July 9, 1980 (Supp. 80-4). Former Section R9-3-519 renumbered without change as Section R18-2-519 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-719 effective November 15, 1993 (Supp. 93-4).

R18-2-520. Renumbered

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Editorial correction, subsection (A), paragraph (1) (Supp. 80-2). 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 R9-3-520 renumbered without change as Section R18-2-520 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-720 effective November 15, 1993 (Supp. 93-4).

R18-2-521. Renumbered

Historical Note

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 22, 1983 (Supp. 83-5). Former Section R9-3-521 renumbered without change as Section R18-2-521 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Renumbered to R18-2-721 effective November 15, 1993 (Supp. 93-4).

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 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 multiple family residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas, but does not include construction debris, landscaping rubble, or demolition debris.
11. "Independent authority to permit fires" means the authority of a county to permit fires by a rule adopted under Arizona Revised Statutes, Title 49, Chapter 3, Article 3, and includes only Maricopa, Pima, and Pinal counties.
12. "Open outdoor fire or open burning" means the combustion of material of any type, outdoors and in the open, where the products of combustion are not directed through a flue. Open outdoor fires include agricultural, residential, prescribed, and construction burning, and fires using air curtain destructors.
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

(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.

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, or permit construction of 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).

R18-2-609. Agricultural Practices

A person shall not cause, suffer, allow, or permit the performance of agricultural practices outside the Phoenix planning area, 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).

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 noncropland.
3. "Artificial wind barrier" means a physical barrier to the wind.
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_{10} emissions from a regulated agricultural activity.
5. "Chemical irrigation" means applying a fertilizer, pesticide, or other agricultural chemical to cropland through an irrigation system.
6. "Combining tractor operations" means performing two or more tillage, cultivation, planting, or harvesting operations with a single tractor or harvester pass.
7. "Commercial farm" means 10 or more contiguous acres of land used for agricultural purposes within the boundary of the Maricopa PM_{10} nonattainment area.
8. "Commercial farmer" means an individual, entity, or joint operation in general control of a commercial farm.
9. "Committee" means the Governor's Agricultural Best Management Practices Committee.
10. "Cover crop" means plants or a green manure crop grown for seasonal soil protection or soil improvement.
11. "Critical area planting" means using trees, shrubs, vines, grasses, or other vegetative cover on noncropland.
12. "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.
13. "Cross-wind ridges" means soil ridges formed by a tillage operation.
14. "Cross-wind strip-cropping" means planting strips of alternating crops within the same field.
15. "Cross-wind vegetative strips" means herbaceous cover established in one or more strips within the same field.
16. "Equipment modification" means modifying agricultural equipment to prevent or reduce particulate matter generation from cropland.
17. "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.
18. "Manure application" means applying animal waste or biosolids to a soil surface.
19. "Maricopa PM_{10} nonattainment area" means the Phoenix planning area as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210.
20. "Mulching" means applying plant residue or other material that is not produced onsite to a soil surface.
21. "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.
22. "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.
23. "Permanent cover" means a perennial vegetative cover on cropland.
24. "Planting based on soil moisture" means applying water to soil before performing planting operations.

25. "Reduce vehicle speed" means operating farm vehicles or farm equipment on unpaved private farm roads at speeds not to exceed 20 mph.
26. "Reduced harvest activity" means reducing the number of harvest passes using a mechanized method to cut and remove crops from a field.
27. "Reduced tillage system" means reducing the number of tillage operations used to produce a crop.
28. "Regulated agricultural activity" means a commercial farming practice that may produce PM_{10} within the Maricopa PM_{10} nonattainment area.
29. "Residue management" means managing the amount and distribution of crop and other plant residues on a soil surface.
30. "Sequential cropping" means growing crops in a sequence that minimizes the amount of time bare soil is exposed on a field.
31. "Surface roughening" means manipulating a soil surface to produce or maintain clods.
32. "Synthetic particulate suppressant" means a manufactured product such as lignosulfate, calcium chloride, magnesium chloride, an emulsion of a petroleum product, an enzyme product, and polyacrylamide that is used to control particulate matter.
33. "Tillage and harvest" means any mechanical practice that physically disturbs cropland or crops on a commercial farm.
34. "Tillage based on soil moisture" means applying water to soil before or during tillage, or delaying tillage to coincide with precipitation.
35. "Timing of a tillage operation" means performing tillage operations at a time that will minimize the soil's susceptibility to generate PM_{10}.
36. "Track-out control system" means a device to remove mud or soil from a vehicle before the vehicle enters a paved public road.
37. "Tree, shrub, or windbreak planting" means providing a woody vegetative barrier to the wind.
38. "Watering" means applying water to noncropland.

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).

R18-2-611. Agricultural PM_{10} 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 one 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 one best management practice for one 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 one of the following best management practices to reduce PM_{10} 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 one of the following best management practices to reduce PM_{10} 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 one of the following best management practices to reduce PM_{10} 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 PM_{10}. 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 two 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 PM_{10} 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).

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 2009, effective May 12, 2000 (Supp. 00-2).

R18-2-612. Evaluation of Nonpoint Source Emissions

Opacity of an emission from any nonpoint source shall not be greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9. Open fires permitted under R18-2-602 and R18-2-603 are exempt from this requirement.

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).

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. "Calcine" means the solid materials produced by a lime plant.
6. "Concentrate" means enriched copper ore recovered from the froth flotation process.
7. "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.
8. "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.
9. "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.
10. "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.
11. "Converter" means any vessel to which copper matte is charged and oxidized to copper.
12. "Facility" means an identifiable piece of stationary process equipment along with all associated air pollution equipment.
13. "Fugitive dust" means fugitive emissions of particulate matter.
14. "High sulfur oil" means fuel oil containing 0.90% or more by weight of sulfur.
15. "Lime kiln" means a unit used to calcinate lime rock or kraft pulp mill lime mud, which consists primarily of calcium carbonate, into quicklime, which is calcium oxide.
16. "Low sulfur oil" means fuel oil containing less than 0.90% by weight of sulfur.
17. "Matte" means a metallic sulfide made by smelting copper sulfide ore concentrate or the roasted product of copper sulfide ores.
18. "Miscellaneous metal parts and products" for purposes of industrial coating include all of the following:
    a. Large farm machinery, such as harvesting, fertilizing and planting machines, tractors, and combines;
    b. "Small farm machinery, such as lawn and garden tractors, lawn mowers, and rototillers;
    c. Small appliances, such as fans, mixers, blenders, crock pots, dehumidifiers, and vacuum cleaners;
    d. Commercial machinery, such as office equipment, computers and auxiliary equipment, typewriters, calculators, and vending machines;
    e. Industrial machinery, such as pumps, compressors, conveyor components, fans, blowers, and transformers;
    f. Fabricated metal products, such as metal-covered doors and frames;
    g. Any other industrial category which coats metal parts or products under the Code in the "Standard Industrial Classification Manual, 1987" of Major Group 33 (primary metal industries), Major Group 34 (fabricated metal products), Major Group 35 (non-electric machinery), Major Group 36 (electrical machinery), Major Group 37 (transportation equipment), Major Group 38 (miscellaneous instruments), and Major Group 39 (miscellaneous manufacturing industries), except all of the following:
       i. Automobiles and light-duty trucks;
       ii. Metal cans;
       iii. Flat metal sheets and strips in the form of rolls or coils;
       iv. Magnet wire for use in electrical machinery;
       v. Metal furniture;
       vi. Large appliances;
       vii. Exterior of airplanes;
       viii. Automobile refinishing;
       ix. Customized top coating of automobiles and trucks, if production is less than 35 vehicles per day;
       x. Exterior of marine vessels.
19. "Multiple-effect evaporator system" means the multiple-effect evaporators and associated condenser and hotwell used to concentrate the spent cooking liquid that is separated from the pulp.
20. "Neutral sulfite semichemical pulping" means any operation in which pulp is produced from wood by cooking or digesting wood chips in a solution of sodium sulfite and sodium bicarbonate, followed by mechanical defibrating or grinding.
21. "Petroleum liquids" means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not mean 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-975-90 (Specification for Diesel Fuel Oils).

22. "Process source" means the last operation or process which produces an air contaminant resulting from either:
    a. The separation of the air contaminants from the process material, or
    b. The conversion of constituents of the process materials into air contaminants which is not an air pollution abatement operation.
23. "Process weight" means the total weight of all materials introduced into a process source, including fuels, where these contribute to pollution generated by the process.
24. "Process weight rate" means a rate established pursuant to R18-2-702(E).
25. "Recovery furnace" means the unit, including the direct-contact evaporator for a conventional furnace, used for burning black liquor to recover chemicals consisting primarily of sodium carbonate and sodium sulfide.
26. "Reid vapor pressure" means the absolute vapor pressure of volatile crude oil and volatile non-viscous petroleum liquids, except liquified petroleum gases, as determined by ASTM D-323-90 (Test Method for Vapor Pressure of Petroleum Products) (Reid Method).
27. "Reverbatory smelting furnace" means any vessel in which the smelting of copper sulfide ore concentrates or calcines is performed and in which the heat necessary for smelting is provided primarily by combustion of a fossil fuel.
28. "Rotary lime kiln" means a unit with an included rotary drum which is used to produce a lime product from limestone by calcination.
29. "Slag" means fused and vitrified matter separated during the reduction of a metal from its ore.
30. "Smelt dissolving tank" means a vessel used for dissolving the smelt collected from the kraft mill recovery furnace.
31. "Smelter feed" means all materials utilized in the operation of a copper smelter, including metals or concentrates, fuels and chemical reagents, calculated as the aggregate sulfur content of all fuels and other feed materials whose products of combustion and gaseous by-products are emitted to the atmosphere.
32. "Smelting" means processing techniques for the smelting of a copper sulfide ore concentrate or calcine charge leading to the formation of separate layers of molten slag, molten copper, or copper matte.
33. "Smelting furnace" means any vessel in which the smelting of copper sulfide ore concentrates or calcines is performed and in which the heat necessary for smelting is provided by an electric current, rapid oxidation of a portion of the sulfur contained in the concentrate as it passes through an oxidizing atmosphere, or the combustion of a fossil fuel.
34. "Standard conditions" means a temperature of 293K (68° F or 20° C) and a pressure of 101.3 kilopascals (29.92 in. Hg or 1013.25 mb).
35. "Supplementary control system" (SCS) means a system by which sulfur dioxide emissions are curtailed during periods when meteorological conditions conducive to ground-level concentrations in excess of ambient air quality standards for sulfur dioxide either exist or are anticipated.
36. "Vapor pressure" means the pressure exerted by the gaseous form of a substance in equilibrium with its liquid or solid form.

Historical Note

Former Section R18-2-701 repealed effective September 26, 1990 (Supp. 90-3). New Section R18-2-701 renumbered from R18-2-501 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-702. General Provisions

A. The provisions of this Article shall only apply to a source that is all of the following:
1. An existing source, as defined in R18-2-101;
2. A point source. For the purposes of this Section, "point source" means a source of air contaminants that has an identifiable plume or emissions point; and
3. A stationary source, as defined in R18-2-101.

B. Except as otherwise provided in this Chapter relating to specific types of sources, the opacity of any plume or effluent, from a source described in subsection (A), as determined by Reference Method 9 in 40 CFR 60, Appendix A, shall not be:
1. Greater than 20% in an area that is nonattainment or maintenance for any particulate matter standard, unless an alternative opacity limit is approved by the Director and the Administrator as provided in subsections (D) and (E), after February 2, 2004;
2. Greater than 40% in an area that is attainment or unclassifiable for each particulate matter standard; and
3. After April 23, 2006, greater than 20% in any area that is attainment or unclassifiable for each particulate matter standard except as provided in subsections (D) and (E).

C. If the presence of uncombined water is the only reason for an exceedance of any visible emissions requirement in this Article, the exceedance shall not constitute a violation of the applicable opacity limit.

D. A person owning or operating a source may petition the Director for an alternative applicable opacity limit. The petition shall be submitted to ADEQ by May 15, 2004.
1. The petition shall contain:
    a. Documentation that the affected facility and any associated air pollution control equipment are incapable of being adjusted or operated to meet the applicable opacity standard. This includes:
        i. Relevant information on the process operating conditions and the control devices operating conditions during the opacity or stack tests;
        ii. A detailed statement or report demonstrating that the source investigated all practicable means of reducing opacity and utilized control technology that is reasonably available considering technical and economic feasibility; and
        iii. An explanation why the source cannot meet the present opacity limit although it is in compliance with the applicable particulate mass emission rule.
    b. If there is an opacity monitor, any certification and audit reports required by all applicable subparts in 40 CFR 60 and in Appendix B, Performance Specification 1.
    c. A verification by a responsible official of the source of the truth, accuracy, and completeness of the petition. 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.
2. If the unit for which the alternative opacity standard is being applied is subject to a stack test, the petition shall also include:
    a. Documentation that the source conducted concurrent EPA Reference Method stack testing and visible emissions readings or is utilizing a continuous opacity monitor. The particulate mass emission test results shall clearly demonstrate compliance with

the applicable particulate mass emission limitation by being at least 10% below that limit. For multiple units that are normally operated together and whose emissions vent through a single stack, the source shall conduct simultaneous particulate testing of each unit. Each control device shall be in good operating condition and operated consistent with good practices for minimizing emissions.

b. Evidence that the source conducted the stack tests according to R18-2-312, and that they were witnessed by the Director or the Director's agent or representative.

c. Evidence that the affected facility and any associated air pollution control equipment were operated and maintained to the maximum extent practicable to minimize the opacity of emissions during the stack tests.

3. If the source for which the alternative opacity standard is being applied is located in a nonattainment area, the petitioner shall include all the information listed in subsections (D)(1) and (D)(2), and in addition:

a. In subsection (D)(1)(a)(ii), the detailed statement or report shall demonstrate that the alternative opacity limit fulfills the Clean Air Act requirement for reasonably available control technology; and

b. In subsection (D)(2)(b), the stack tests shall be conducted with an opportunity for the Administrator or the Administrator's agent or representative to be present.

E. If the Director receives a petition under subsection (D) the Director shall approve or deny the petition as provided below by October 15, 2004:

1. If the petition is approved under subsection (D)(1) or (D)(2), the Director shall include an alternative opacity limit in a proposed significant permit revision for the source under R18-2-320 and R18-2-330. The proposed alternative opacity limit shall be set at a value that has been demonstrated during, and not extrapolated from, testing, except that an alternative opacity limit under this Section shall not be greater than 40%. For multiple units that are normally operated together and whose emissions vent through a single stack, any new alternative opacity limit shall reflect the opacity level at the common stack exit, and not individual in-duct opacity levels.

2. If the petition is approved under subsection (D)(3), the Director shall include an alternative opacity limit in a proposed revision to the applicable implementation plan, and submit the proposed revision to EPA for review and approval. The proposed alternative opacity limit shall be set at a value that has been demonstrated during, and not extrapolated from, testing, except that the alternative opacity limit shall not be greater than 40%.

3. If the petition is denied, the source shall either comply with the 20% opacity limit or apply for a significant permit revision to incorporate a compliance schedule under R18-2-309(5)(c)(iii) by April 23, 2006.

4. A source does not have to petition for an alternative opacity limit under subsection (D) to enter into a revised compliance schedule under R18-2-309(5)(c).

F. The Director, Administrator, source owner or operator, inspector or other interested party shall determine the process weight rate, as used in this Article, as follows:

1. For continuous or long run, steady-state process sources, the process weight rate is the total process weight for the entire period of continuous operation, or for a typical portion of that period, divided by the number of hours of the period, or portion of hours of that period.

2. For cyclical or batch process sources, the process weight rate is the total process weight for a period which covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during the period.

Historical Note

Former Section R18-2-702 repealed effective September 26, 1990 (Supp. 90-3). New Section R18-2-702 renumbered from R18-2-502 and amended effective November 15, 1993 (Supp. 93-4). Amended by exempt rulemaking at 9 A.A.R. 5550, effective February 3, 2004 (Supp. 03-4).

R18-2-703. Standards of Performance for Existing Fossil-fuel Fired Steam Generators and General Fuel-burning Equipment

A. This Section applies to the following:

1. Installations in which fuel is burned for the primary purpose of producing power, steam, hot water, hot air or other liquids, gases or solids and in the course of doing so the products of combustion do not come into direct contact with process materials. When any products or by-products of a manufacturing process are burned for the same purpose or in conjunction with any fuel, the same maximum emission limitation shall apply, except for wood waste burners as regulated under R18-2-704.

2. All fossil-fuel fired steam generating units or general fuel burning equipment which are greater than or equal to 73 megawatts capacity.

B. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat content of solid fuel shall be determined in accordance with R18-2-311. Compliance tests shall be conducted during operation at the nominal rated capacity of each unit.

C. No person shall cause, allow or permit the emission of particulate matter in excess of the amounts calculated by one of the following equations:

1. For equipment having a heat input rate of 4200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation:

$E = 1.02Q^{0.769}$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.

2. For equipment having a heat input rate greater than 4200 million Btu/hr, the maximum allowable emissions shall be determined by the following equation:

$E = 17.0Q^{0.432}$

where "E" and "Q" have the same meaning as in subsection (C)(1).

D. For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

E. When low sulfur oil is fired:

1. Existing fuel-burning equipment or steam-power generating installations which commenced construction or a major modification prior to May 30, 1972, shall not emit more than 1.0 pounds sulfur dioxide maximum three-hour average, per million Btu (430 nanograms per joule) heat input.

2. Existing fuel-burning equipment or steam-power generating installations which commenced construction or a major modification after May 30, 1972, shall not emit more than 0.80 pounds of sulfur dioxide maximum three-hour average per million Btu (340 nanograms per joule) heat input.

F. When high sulfur oil is fired, all existing steam-power generating and general fuel-burning installations which are subject to the provisions of this Section shall not emit more than 2.2 pounds of sulfur dioxide maximum three-hour average per million Btu (946 nanograms per joule) heat input.

G. When solid fuel is fired:

1. Existing general fuel-burning equipment and steam-power generating installations which commenced construction or a major modification prior to May 30, 1972, shall not emit more than 1.0 pounds of sulfur dioxide maximum three-hour average, per million Btu (430 nanograms per joule) heat input.
2. Existing general fuel-burning equipment and steam-power generating installations which commenced construction or a major modification after May 30, 1972, shall not emit more than 0.80 pounds, maximum three-hour average, per million Btu (340 nanograms per joule) heat input.

H. Any permit issued for the operation of an existing source, or any renewal or modification of such a permit, shall include a condition prohibiting the use of high sulfur oil by the permittee, unless the applicant demonstrates to the satisfaction of the Director that sufficient quantities of low sulfur oil are not available for use by the source and that it has adequate facilities and contingency plans to ensure that the sulfur dioxide ambient air quality standards set forth in R18-2-202 will not be violated.

1. The terms of the permit may authorize the use of high sulfur oil under such conditions as are justified.
2. In cases where the permittee is authorized to use high sulfur oil, it shall submit to the Department monthly reports detailing its efforts to obtain low sulfur oil.
3. When the conditions justifying the use of high sulfur oil no longer exists, the permit shall be modified accordingly.
4. Nothing in this Section shall be construed as allowing the use of a supplementary control system or other form of dispersion technology.

I. Existing steam-power generating installations which commenced construction or a major modification after May 30, 1972, shall not emit nitrogen oxides in excess of the following amounts:

1. 0.20 pounds of nitrogen oxides, maximum three-hour average, calculated as nitrogen dioxide, per million Btu heat input when gaseous fossil fuel is fired.
2. 0.30 pounds of nitrogen oxides, maximum three-hour average, calculated as nitrogen dioxide, per million Btu heat input when liquid fossil fuel is fired.
3. 0.70 pounds of nitrogen oxides, maximum three-hour average, calculated as nitrogen dioxide, per million Btu heat input when solid fossil fuel is fired.

J. Emission and fuel monitoring systems, where deemed necessary by the Director for sources subject to the provisions of this Section shall, conform to the requirements of R18-2-313.

K. The applicable reference methods given in the Appendices to 40 CFR 60 shall be used to determine compliance with the standards as prescribed in subsections (C) through (G) and (I). All tests shall be run at the heat input calculated under subsection (B).

Historical Note

Former Section R18-2-703 repealed effective September 26, 1990 (Supp. 90-3). New Section R18-2-703 renumbered from R18-2-503 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-704. Standards of Performance for Incinerators

A. No person shall cause, allow or permit to be emitted into the atmosphere, from any type of incinerator, smoke, fumes, gases, particulate matter or other gas-borne material which exceeds 20% opacity except during the times specified in subsection (D).

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any incinerator, in excess of the following limits:

1. For multiple chamber incinerators, controlled atmosphere incinerators, fume incinerators, afterburners or other unspecified types of incinerators, emissions shall not exceed 0.1 grain per cubic foot, based on dry flue gas at standard conditions, corrected to 12% carbon dioxide.
2. For wood waste burners other than air curtain destructors, emissions discharged from the stack or burner top opening shall not exceed 0.2 grain per cubic foot, based on dry flue gas at standard conditions, corrected to 12% carbon dioxide.

C. Air curtain destructors shall not be used within 500 feet of the dearest dwelling.

D. Incinerators shall be exempt from the opacity and emission requirements described in subsections (A) and (B) as follows:

1. For multiple chamber incinerators, controlled atmosphere incinerators, fume incinerators, afterburners or other unspecified types of incinerators, such exemption shall be for not more than 30 seconds in any 60-minute period.
2. Wood waste burners shall be exempt both:
   a. For a period once each day for the purpose of building a new fire but not to exceed 60 minutes, and
   b. For an upset of operations not to exceed three minutes in any 60-minute period.

E. The owner or operator of any incinerator subject to the provisions of this Section shall record the daily charging rates and hours of operation.

F. The test methods and procedures required by this Section are as follows:

1. The reference methods in 40 CFR 60, Appendix A, shall be used to determine compliance with the standards prescribed in subsection (B) as follows:
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis and calculation of excess air, using the integrated sampling technique.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the minimum sample volume shall be 0.85 dscm (30.0 dscf) except that smaller sampling times or sample volumes, when necessitated by process variables or other factors, may be approved by the Director.

Historical Note

Former Section R18-2-704 repealed effective September 26, 1990 (Supp. 90-3). New Section R18-2-704 renumbered from R18-2-504 effective November 15, 1993 (Supp. 93-4).

R18-2-705. Standards of Performance for Existing Portland Cement Plants

A. The provisions of this Section are applicable to the following affected facilities in portland cement plants: kiln, clinker cooler, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading and unloading systems.

B. No person shall cause, allow or permit the discharge of particulate matter from any identifiable process source within any existing cement plant subject to the provisions of this Section which exceeds the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.

2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (B)(1).

C. No process source within any portland cement plant shall exceed 20% opacity.

D. No person shall cause, allow or permit discharge into the atmosphere of an amount in excess of 6 pounds of sulfur oxides, calculated as sulfur dioxide, per ton cement kiln feed from cement plants subject to the provisions of this Section.

E. The owner or operator of any portland cement plant subject to the provisions of this Section shall record the daily production rates and the kiln feed rates.

F. The test methods and procedures required by this Section are as follows:

1. The reference methods in 40 CFR 60, Appendix A, except as provided for in R18-2-312 shall be used to determine compliance with the standards prescribed in subsection (B) as follows:
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the minimum sampling time and minimum sample volume for each run except when process variables or other factors justifying otherwise to the satisfaction of the Director, shall be as follows:
   a. 60 minutes and 0.85 dscm (30.0 dscf) for the kiln,
   b. 60 minutes and 1.15 dscm (40.6 dscf) for the clinker cooler.
3. Total kiln feed rate, except fuels, expressed in metric tons per hour on a dry basis, shall be both:
   a. Determined during each testing period by suitable methods; and
   b. Confirmed by a material balance over the production system.
4. For each run, particulate matter emissions, expressed in g/metric ton of kiln feed, shall be determined by dividing the emission rate in g/hr by the kiln feed rate. The emission rate shall be determined by the equation, g/hr = Qs x c, where Qs = volumetric flow rate of the total effluent in dscm/hr as determined in accordance with subsection (F)(1)(c), and c = particulate concentration in g/dscm as determined in accordance with subsection (F)(1)(a).

Historical Note

Former Section R18-2-705 repealed effective September 26, 1990 (Supp. 90-3). New Section R18-2-705 renumbered from R18-2-505 effective November 15, 1993 (Supp. 93-4).

R18-2-706. Standards of Performance for Existing Nitric Acid Plants

A. No person shall cause, allow or permit discharge from any nitric acid plant producing weak nitric acid, which is either:

1. 30 to 70% in strength by either the increased pressure or atmospheric pressure process, or
2. More than 1.5 kg of total oxides of nitrogen per metric ton (3.0 lbs/ton) of acid produced expressed as nitrogen dioxide.

B. The opacity of any plume subject to the provisions of this Section shall not exceed 10%.

C. A continuous monitoring system for the measurement of nitrogen oxides shall be installed, calibrated, maintained and operated by the owner or operator, in accordance with Section R18-2-313.

D. The test methods and procedures required by this Section are as follows:

1. The reference methods in 40 CFR 60, Appendix A shall be used to determine compliance with the standard prescribed in subsection (A) as follows:
   a. Method 7 for the concentration of NOx;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 7, the sample site shall be selected according to Method 1 and the sampling point shall be the centroid of the stack or duct or at a point no closer to the walls than 1 m (3.28 ft.). Each run shall consist of at least four grab samples taken at approximately 15-minute intervals. The arithmetic mean of the samples shall constitute the run value. A velocity traverse shall be performed once per run.
3. Acid production rate, expressed in metric tons per hour of 100% nitric acid, shall be both:
   a. Determined during each testing period by suitable methods, and
   b. Confirmed by a material balance over the production system.
4. For each run, nitrogen oxides, expressed in g/metric ton of 100% nitric acid, shall be determined by dividing the emission rate in g/hr by the acid production rate. The emission rate shall be determined by the equation:

   $g/hr = Q_s \times c$

   where Q_s = volumetric flow rate of the effluent in dscm/hr, as determined in accordance with subsection (D)(1)(c), and c = NOx concentration in g/dscm, as determined in accordance with subsection (D)(1)(a).

Historical Note

Former Section R18-2-706 repealed effective September 26, 1990 (Supp. 90-3). New Section R18-2-706 renumbered from R18-2-506 effective November 15, 1993 (Supp. 93-4).

R18-2-707. Standards of Performance for Existing Sulfuric Acid Plants

A. Facilities that produce sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfide and mercaptans or acid sludge shall not discharge into the atmosphere:
1. Greater than 2 kg of sulfur dioxide per metric ton (4 lbs/ton) of sulfuric acid produced (calculated as 100% H_2SO_4), or
2. Greater than 0.075 kg of sulfuric acid mist per metric ton (0.15 lbs/ton) or sulfuric acid produced (calculated as 100% H_2SO_4).

B. This Section shall not apply to metallurgical plants or other facilities where conversion to sulfuric acid is utilized as a means of controlling emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

C. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained and operated by the owner or operator, in accordance with R18-2-313.

D. The test methods and procedures required by this Section are as follows:
1. The reference methods in 40 CFR 60, Appendix A shall be used to determine compliance with standards prescribed in subsection (A) as follows:
   a. Method 8 for concentration of SO_2 and acid mist;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. The moisture content can be considered to be zero. For Method 8 the sampling time for each run shall be at least 60 minutes and the minimum sample volume shall be 1.15 dscm (40.6 dscf) except that smaller sampling times or sample volumes, when necessitated by process variables or other factors, may be approved by the Director.
3. Acid production rate, expressed in metric tons per hour of 100% H_2SO_4, shall be both:
   a. Determined during each testing period by suitable methods, and
   b. Confirmed by a material balance over the production system.
4. Acid mist and sulfur dioxide emissions, expressed in g/metric ton of 100% H_2SO_4, shall be determined by dividing the emission rate in g/hr by the acid production rate. The emission rate shall be determined by the equation, g/hr-Q_s x c, where Q_s = volumetric flow rate of the effluent in dscm/hr as determined in accordance with subsection (D)(1)(c), and c = acid mist and SO_2 concentrations in g/dscm as determined in accordance with subsection (D)(1)(a).

Historical Note

Former Section R18-2-707 repealed effective September 26, 1990 (Supp. 90-3). New Section R18-2-707 renumbered from R18-2-507 effective November 15, 1993 (Supp. 93-4).

R18-2-708. Standards of Performance for Existing Asphalt Concrete Plants

A. Fixed asphalt concrete plants and portable asphalt concrete plants shall meet the standards set forth in this Section.

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing asphalt concrete plant in total quantities in excess of the amounts calculated by one of the following equations:
1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:
   $E = 4.10P^{0.67}$
   where:
   E = the maximum allowable particulate emission rate in pounds-mass per hour.
   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:
   $E = 55.0P^{0.11}-40$
   where "E" and "P" are defined as indicated in subsection (B)(1).

C. For reference purposes only, the equations given above are plotted in Figure 2, Appendix 11. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

E. Liquid fuel containing greater than 0.9% sulfur by weight shall not be utilized for asphalt concrete plants subject to this Section.

F. Solid fuel containing greater than 0.5% sulfur by weight shall not be utilized for asphalt concrete plants subject to this Section.

G. The test methods and procedures required under this Section are:
1. The referenced methods given in 40 CFR 60, Appendix A shall be used to determine compliance with the standards prescribed in subsection (B).
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.9 dscm/hr (0.53 dscf/min) except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director.
3. Percent sulfur in liquid fuel shall be determined by ASTM method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method), and the percent sulfur in solid fuel shall be determined by ASTM method D-3177-89 (Test Method for Total Sulfur in the Analysis Sample of Coal and Coke).

Historical Note

Former Section R18-2-708 repealed effective September 26, 1990 (Supp. 90-3). New Section R18-2-708 renumbered from R18-2-508 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-709. Standards of Performance for Existing Petroleum Refineries

A. The provisions of this Section are applicable to the following affected facilities in petroleum refineries: fluid catalytic cracking unit catalyst regenerators, fluid catalytic cracking unit incinerator-waste heat boilers, and fuel gas combustion devices.

B. Except as provided in subsection (G), all petroleum refineries subject to this Section are also subject to the provisions of R18-2-901(12).

C. The owner or operator of a petroleum refinery complex subject to this Section shall develop and conduct a leak monitoring program in accordance with Appendix H of the EPA Petroleum Refinery Enforcement Manual (EPA 340/1-80-008), amended as of March 1980 (and no future editions), which is incorporated herein by reference and on file with the Office of the Secretary of State.

D. Upon detection of a leaking component, which has a volatile organic compound concentration exceeding 10,000 ppm when tested in the manner described in 40 CFR 60, Appendix A, the owner shall both:

1. Include the leaking component on a written list of scheduled repairs within 24 hours; and
2. Repair and retest the component within 15 days.

E. Except for safety pressure relief valves, no owner or operator of a petroleum refinery shall install a valve at the end of a pipe or line containing volatile organic compounds unless the pipe or line is sealed with a second valve, a blind flange, a plug, or a cap. The sealing device may be removed only when the line is in use, as when a sample is being taken.

F. No owner or operator of a petroleum refinery shall operate a pipeline valve or pressure relief valve in gaseous volatile organic compound service unless it is marked in some manner that is clearly visible.

G. Existing petroleum refineries of a capacity of 7,000 barrels per day or less shall be exempt from the emissions monitoring requirements of 40 CFR 60.105 provided the owner or operator of such a refinery complies with all of the following:

1. All process gases or fuel gases shall be treated in an afterburner, flare or other combustion device to ensure complete combustion of carbon monoxide, hydrogen sulfide, and unburned hydrocarbons.
2. Ambient concentrations of SO_2 in the vicinity of the refinery shall be calculated using a suitable model approved by the Director and shall not exceed the Class II maximum allowable increases given in R18-2-218.
3. A continuous SO_2 ambient air monitor approved by the Director shall be placed in a location selected by the Director and shall be maintained in accordance with R18-2-215, and SO_2 concentrations shall not exceed Class II maximum allowable increases.

Historical Note

Former Section R18-2-709 repealed effective September 26, 1990 (Supp. 90-3). New Section R18-2-709 renumbered from R18-2-509 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-710. Standards of Performance for Existing Storage Vessels for Petroleum Liquids

A. No person shall place, store or hold in any reservoir, stationary tank or other container having a capacity of 40,000 (151,400 liters) or more gallons any petroleum liquid having a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is equipped with one of the following vapor loss control devices, properly installed, in good working order and in operation:

1. A floating roof consisting of a pontoon type double-deck type roof resting on the surface of the liquid contents and equipped with a closure seal to close the space between the roof eave and tank wall and a vapor balloon or vapor dome, designed in accordance with accepted standards of the petroleum industry. The control equipment shall not be used if the petroleum liquid has a vapor pressure of 12 pounds per square inch absolute or greater under actual storage conditions.
   a. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
   b. There shall be no visible holes, tears, or other openings in the seal or any seal fabric. Where applicable, all openings except drains shall be equipped with a cover, seal, or lid. The cover, seal, or lid shall be in a closed position at all times, except when the device is in actual use.
   c. Automatic bleeder vents shall be closed at all times, except when the roof is floated off or landed on the roof leg supports.
   d. Rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports, or at the manufacturer's recommended setting.
2. Other equipment proven to be of equal efficiency for preventing discharge of hydrocarbon gases and vapors to the atmosphere.

B. Any other petroleum liquid storage tank shall be equipped with a submerged filling device, or acceptable equivalent, for the control of hydrocarbon emissions.

C. All facilities for dock loading of petroleum products, having a vapor pressure of 1.5 pounds per square inch absolute or greater at loading pressure, shall provide for submerged filling or acceptable equivalent for control of hydrocarbon emissions.

D. All pumps and compressors which handle volatile organic compounds shall be equipped with mechanical seals or other equipment of equal efficiency to prevent the release of organic contaminants into the atmosphere.

E. The monitoring of operations required by this Section is as follows:

1. The owner or operator of any petroleum liquid storage vessel to which this Section applies shall for each such storage vessel maintain a file of each type of petroleum liquid stored, of the typical Reid vapor pressure of each type of petroleum liquid stored and of dates of storage. Dates on which the storage vessel is empty shall be shown.
2. The owner or operator of any petroleum liquid storage vessel to which this Section applies shall for such storage vessel determine and record the average monthly storage temperature and true vapor pressure of the petroleum liquid stored at such temperature if either:
   a. The petroleum liquid has a true vapor pressure, as stored, greater than 26 mm Hg (0.5 psia) but less than 78 mm Hg (1.5 psia) and is stored in a storage vessel other than one equipped with a floating roof, a vapor recovery system or their equivalents; or
   b. The petroleum liquid has a true vapor pressure, as stored, greater than 470 mm Hg (9.1 psia) and is stored in a storage vessel other than one equipped with a vapor recovery system or its equivalent.
3. The average monthly storage temperature shall be an arithmetic average calculated for each calendar month, or portion thereof, if storage is for less than a month, from bulk liquid storage temperatures determined at least once every seven days.
4. The true vapor pressure shall be determined by the procedures in American Petroleum Institute Bulletin 2517, amended as of February 1980 (and no future editions), which is incorporated herein by reference and on file with

the Office of the Secretary of State. This procedure is dependent upon determination of the storage temperature and the Reid vapor pressure, which requires sampling of the petroleum liquids in the storage vessels. Unless the Director requires in specific cases that the stored petroleum liquid be sampled, the true vapor pressure may be determined by using the average monthly storage temperature and the typical Reid vapor pressure. For those liquids for which certified specifications limiting the Reid vapor pressure exist, the Reid vapor pressure may be used. For other liquids, supporting analytical data must be made available upon request to the Director when typical Reid vapor pressure is used.

Historical Note

Section R18-2-710 renumbered from R18-2-510 effective November 15, 1993 (Supp. 93-4).

R18-2-711. Standards of Performance for Existing Secondary Lead Smelters

A. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing secondary lead smelter in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where:

   E = the maximum, allowable emission rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (A)(1).

B. For reference purposes only, the equations in subsection (A) are plotted in Figure 2, Appendix 11. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

C. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

D. The opacity of emissions subject to the provisions of this Section shall not exceed 20%.

E. The test methods and procedures required by this Section are as follows:

1. The reference methods set forth in 40 CFR 60, Appendix A shall be used to determine compliance with the standards prescribed in subsection (A) as follows:
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.9 dscm/hr (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director. Particulate sampling shall be conducted during representative periods of furnace operation including charging and tapping.

Historical Note

Section R18-2-711 renumbered from R18-2-511 effective November 15, 1993 (Supp. 93-4).

R18-2-712. Standards of Performance for Existing Secondary Brass and Bronze Ingot Production Plants

A. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any secondary brass or bronze ingot production plant in total quantities in excess of the amount calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (A)(1).

B. For reference purposes only, the equations in subsection (A) are plotted in Figure 2, Appendix 11. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

C. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

D. The opacity of emissions subject to the provisions of this Section shall not exceed 20%.

E. The test methods and procedures required by this Section are as follows:

1. The reference methods set forth in 40 CFR 60, Appendix A shall be used to determine compliance with the standards prescribed in subsection (A) as follows:
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least 120 minutes and the sampling rate shall be at least 0.9 dscm/hr (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director. Particulate matter sampling shall be conducted during representative periods of charging and refining but not during pouring of the heat.

Historical Note

Section R18-2-712 renumbered from R18-2-512 effective November 15, 1993 (Supp. 93-4).

R18-2-713. Standards of Performance for Existing Iron and Steel Plants

A. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any basic oxygen process furnace in total quantities in excess of the amount calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.

2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (A)(1).

B. For reference purposes only, the equations in subsection (A) are plotted in Figure 2, Appendix 11. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

C. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

D. The opacity of emissions subject to the provisions of this Section shall not exceed 20%.

E. Monitoring of operations under this Section is as follows:

1. The owner or operator of an affected facility shall maintain daily records of the time and duration of each steel production cycle.
2. The owner or operator of any affected facility that uses Venturi scrubber emission control equipment shall install, calibrate, maintain and continuously operate the following monitoring devices:
   a. A monitoring device for the continuous measurement of the pressure loss through the Venturi constriction of the control equipment. The monitoring device shall be certified by the manufacturer to be accurate within ± 250 pascals (±1 inch water).
   b. A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5% of the design water supply pressure. The pressure sensor or tap shall be located close to the water discharge point.
3. All monitoring devices required in subsection (F)(2) shall be recalibrated annually and at other times as the Director may require, in accordance with the procedures in Appendix 9.

F. The test methods and procedures required under this Section are as follows:

1. The reference methods set forth in 40 CFR 60, Appendix A shall be used to determine compliance with the standards prescribed in subsection (A) as follows:
   a. Method 5 for concentration of particulate matter and associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling for each run shall continue for an integral number of cycles with total duration of at least 60 minutes. The sampling rate shall be at least 0.9 dscm/hr (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director. A cycle shall start at the beginning of either the scrap preheat or the oxygen blow and shall terminate immediately prior to tapping.

Historical Note

Section R18-2-713 renumbered from R18-2-513 effective November 15, 1993 (Supp. 93-4).

R18-2-714. Standards of Performance for Existing Sewage Treatment Plants

A. No person shall cause, allow or permit to be emitted into the atmosphere, from any municipal sewage treatment plant sludge incinerator:

1. Smoke, fumes, gases, particulate matter or other gas-borne material which exceeds 20% opacity for more than 30 seconds in any 60-minute period.
2. Particulate matter in concentrations in excess of 0.1 grain per cubic foot, based on dry flue gas at standard conditions, corrected to 12% carbon dioxide.

B. The owner or operator of any sludge incinerator subject to the provisions of this Section shall monitor operations by doing all of the following:

1. Install, calibrate, maintain and operate a flow measuring device which can be used to determine either the mass or volume of sludge charged to the incinerator. The flow measuring device shall have an accuracy of ± 5% over its operating range.
2. Provide access to the sludge charged so that a well-mixed representative grab sample of the sludge can be obtained.
3. Install, calibrate, maintain and operate a weighing device for determining the mass of any municipal solid waste charged to the incinerator when sewage sludge and municipal solid wastes are incinerated together. The weighing device shall have an accuracy of ± 5% over its operating range.

C. The test methods and procedures required by this Section are as follows:

1. The reference methods set forth in 40 CFR 60, Appendix A shall be used to determine compliance with the standards prescribed in subsection (A) as follows:
   a. Method 5 for concentration of particulate matter and associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for volumetric flow rate; and
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.015 dscm/min (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director.

Historical Note

Section R18-2-714 renumbered from R18-2-514 effective November 15, 1993 (Supp. 93-4).

R18-2-715. Standards of Performance for Existing Primary Copper Smelters; Site-specific Requirements

A. No owner or operator of a primary copper smelter shall cause, allow or permit the discharge of particulate matter into the

atmosphere from any process in total quantities in excess of the amount calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (A)(1).

B. For reference purposes only, the equations in subsection (A) are plotted in Figure 2, Appendix 11. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

C. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter for that process.

D. The opacity of emissions subject to the provisions of this Section shall not exceed 20%.

E. The reference methods set forth in the Arizona Testing Manual and 40 CFR 60, Appendix A shall be used to determine compliance with the standards prescribed in this Section as follows:

1. Method A1 or Reference Method 5 for concentration of particulate matter and associated moisture content;
2. Reference Method 1 for sample and velocity traverses;
3. Reference Method 2 for volumetric flow rate;
4. Reference Method 3 for gas analysis.

F. Except as provided in a consent decree or a delayed compliance order, the owner or operator of any primary copper smelter shall not discharge or cause the discharge of sulfur dioxide into the atmosphere from any stack required to be monitored by R18-2-715.01(K) in excess of the following:

1. For the copper smelter located near San Manuel, Arizona at latitude 32°36'58"N and longitude 110°37'19"W:
   a. Annual average emissions, as calculated under R18-2-715.01(C), shall not exceed 1,742 pounds per hour.
   b. The number of three-hour average emissions, as calculated under R18-2-715.01(C), shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(J):

n, Cumulative Occurrences	E, (lb/hr)
0	9803
1	8253
2	7619
4	6072
7	5660
12	4922
20	4515
32	4272
48	3945
68	3727
94	3568
130	3419
180	3253
245	3101
330	2958
435	2831
560	2712
710	2615
890	2525
1100	2440
1340	2366
1610	2290
1910	2216
2240	2142

2. For the copper smelter located near Hayden, Arizona at latitude 33°0'29"N and longitude 110°47'17" W:
   a. Annual average emissions, as calculated under R18-2-715.01(C), shall not exceed 6,882 pounds per hour.
   b. The number of three-hour average emissions, as calculated under R18-2-715.01(C), shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(J):

n, Cumulative Occurrences	E, (lb/hr)
0	24,641
1	22,971
2	21,705
4	20,322
7	19,387
12	18,739
20	17,656
32	16,988
48	16,358
68	15,808
94	15,090
130	14,423
180	13,777
245	13,212
330	12,664
435	12,129
560	11,621
710	11,165
890	10,660
1100	10,205
1340	9,748
1610	9,319
1910	8,953
2240	8,556

3. For the copper smelter located near Miami, Arizona at latitude 33°24'50"N and longitude 110°51'25"W:

a. Annual average emissions, as calculated under R18-2-715.01(C), shall not exceed 604 pounds per hour.
b. The number of three-hour average emissions, as calculated under R18-2-715.01(C), shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(J):

n, Cumulative Occurrences	E, (lb/hr)
0	8678
1	7158
2	5903
4	4575
7	4074
12	3479
20	3017
32	2573
48	2111
68	1703
94	1461
130	1274
180	1145
245	1064
330	1015
435	968
560	933
710	896
890	862
1100	828
1340	797
1610	765
1910	739
2240	712

G. Except as provided in a consent decree or a delayed compliance order, the owner or operator of the copper smelters listed below shall not discharge or cause the discharge of fugitive sulfur dioxide into the atmosphere in excess of the following:
1. For the copper smelter located near San Manuel, Arizona at latitude 32°36’58”N and longitude 110°37’19”W:
   a. Annual average emissions calculated under R18-2-715.01(R) shall not exceed 715 pounds per hour for converter roof fugitive emissions; and
   b. The number of three-hour average emissions for converter roof fugitive emissions, calculated under R18-2-715.01(R) shall not exceed n cumulative occurrences in excess of E_f, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(R)(8):

n, Cumulative Occurrences	E_f, (lb/hr)
0	4462
1	4299
2	4222
4	4017
7	3867
12	3460
20	3179
32	3000
48	2827
68	2649
94	2523
130	2361
180	2218
245	2072
330	1923
435	1785
560	1644
710	1517
890	1402
1100	1300
1340	1208
1610	1121
1910	1039
2240	957

2. For the copper smelter located near Hayden, Arizona at latitude 33°0’29”N and longitude 110°47’17”W, annual average fugitive emissions calculated under R18-2-715.01(T) shall not exceed 295 pounds per hour.

H. In addition to the limits in subsection (F)(3), except as provided in a consent decree or a delayed compliance order, the owner or operator of the copper smelter located near Miami, Arizona at latitude 33°24’50”N and longitude 110°51’25”W shall not discharge or cause the discharge of sulfur dioxide into the atmosphere from combined stack and fugitive emissions units in excess of the 2420 pounds per hour annual average calculated under R18-2-715.01(U).

Historical Note

Section R18-2-715 renumbered from R18-2-515 and amended effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 8 A.A.R. 575, effective January 15, 2002 (Supp. 02-1). Amended by final rulemaking at 8 A.A.R. 3365, effective July 18, 2002 (Supp. 02-3).

R18-2-715.01. Standards of Performance for Existing Primary Copper Smelters; Compliance and Monitoring

A. The cumulative occurrence and emission limits in R18-2-715(F) apply to the total of sulfur dioxide emissions from the smelter processing units and sulfur dioxide control and removal equipment, but not uncaptured fugitive emissions or emissions due solely to the use of fuel for space heating or steam generation.

B. The owner or operator shall include periods of malfunction, startup, shutdown or other upset conditions when determining compliance with the cumulative occurrence or annual average emission limits in R18-2-715(F), (G), or (H).

C. The owner or operator shall determine compliance with the cumulative occurrence and emission limits contained in R18-2-715(F) as follows:
1. The owner or operator shall calculate annual average emissions at the end of each day by averaging the emissions for all hours measured during the compliance period defined in subsection (J) ending on that day. An annual emissions average in excess of the allowable annual average emission limit is a violation of R18-2-715(F) if either:

a. The annual average is greater than the annual average computed for the preceding day; or
b. The annual averages computed for the five preceding days all exceed the allowable annual average emission limit.

2. The owner or operator shall calculate a three-hour emissions average at the end of each clock hour by averaging the hourly emissions for the preceding three consecutive hours provided each hour was measured according to the requirements in subsection (K).

D. For purposes of this Section, the compliance date, unless otherwise provided in a consent decree or a delayed compliance order, shall be January 14, 1986, except that:

1. The compliance date for the cumulative occurrence and emissions limits in R18-2-715(F)(1) and R18-2-715(G)(1) is January 15, 2002, and
2. The compliance date for the cumulative occurrence and emissions limits in R18-2-715(F)(2), (F)(3), (G)(2), and (H) is the effective date of this rule.

E. For purposes of subsection (C), a three-hour emissions average in excess of an emission level E violates the associated cumulative occurrence limit n listed in R18-2-715(F) if:

1. The number of all three-hour emissions averages calculated during the compliance period in excess of that emission level exceeds the cumulative occurrence limit associated with the emission level; and
2. The average is calculated during the last operating day of the compliance period being reported.

F. A three-hour emissions average only violates the cumulative occurrence limit n of an emission level E on the day containing the last hour in the average.

G. Multiple violations of the same cumulative occurrence limit on the same day and violations of different cumulative occurrence limits on the same day constitute a single violation of R18-2-715(F).

H. The violation of any cumulative occurrence limit and an annual average emission limit on the same day constitutes only a single violation of the requirements of R18-2-715(F).

I. Multiple violations of a cumulative occurrence limit by different three-hour emissions averages containing any common hour constitutes a single violation of R18-2-715(F).

J. To determine compliance with subsections (C) through (I), the compliance period consists of the 365 calendar days immediately preceding the end of each day of the month being reported unless that period includes less than 300 operating days, in which case the number of days preceding the last day of the compliance period shall be increased until the compliance period contains 300 operating days. For purposes of this Section, an operating day is any day on which sulfur-containing feed is introduced into the smelting process.

K. To determine compliance with R18-2-715(F) or (H), the owner or operator of any smelter subject to R18-2-715(F) or (H) shall install, calibrate, maintain, and operate a measurement system for continuously monitoring sulfur dioxide concentrations and stack gas volumetric flow rates in each stack that could emit five percent or more of the allowable annual average sulfur dioxide emissions from the smelter.

1. The owner or operator shall continuously monitor sulfur dioxide concentrations and stack gas volumetric flow rates in the outlet of each piece of sulfur dioxide control equipment.
2. The owner or operator shall continuously monitor captured fugitive emissions for sulfur dioxide concentrations and stack gas volumetric flow rates and include these emissions as part of total plant emissions when determining compliance with the cumulative occurrence and emission limits in R18-2-715(F) and (H).
3. If the owner or operator demonstrates to the Director that measurement of stack gas volumetric flow in the outlet of any particular piece of sulfur dioxide control equipment would yield inaccurate results once operational or would be technologically infeasible, then the Director may allow measurement of the flow rate at an alternative sampling point.
4. For purposes of this subsection, continuous monitoring means the taking and recording of at least one measurement of sulfur dioxide concentration and stack gas flow rate reading from the effluent of each affected stack, outlet, or other approved measurement location in each 15-minute period. Fifteen-minute periods start at the beginning of each clock hour, and run consecutively. An hour of smelter emissions is considered continuously monitored if the emissions from all monitored stacks, outlets, or other approved measurement locations are measured for at least 45 minutes of any hour according to the requirements of this subsection.
5. The owner or operator shall demonstrate that the continuous monitoring system meets all of the following requirements:
   a. The sulfur dioxide continuous emission monitoring system installed and operated under this Section meets the requirements of 40 CFR 60, Appendix B, Performance Specification 6.
   b. The sulfur dioxide continuous emission monitoring system installed and operated under this Section meets the quality assurance requirements of 40 CFR 60, Appendix F.
   c. The owner or operator shall notify the Director in writing at least 30 days in advance of the start of relative accuracy test audit (RATA) procedures performed on the continuous monitoring system.
   d. The Director shall approve the location of all sampling points for monitoring sulfur dioxide concentrations and stack gas volumetric flow rates in writing before installation and operation of measurement instruments.
   e. The measurement system installed and used under this subsection is subject to the manufacturer's recommended zero adjustment and calibration procedures at least once per 24-hour operating period unless the manufacturer specifies or recommends calibration at shorter intervals, in which case specifications or recommendations shall be followed. The owner or operator shall make available a record of these procedures that clearly shows instrument readings before and after zero adjustment and calibration.

L. The owner or operator of a smelter subject to this Section shall measure at least 95 percent of the hours during which emissions occurred in any month.

M. Failure of the owner or operator of a smelter subject to this Section to measure any 12 consecutive hours of emissions according to the requirements of subsection (K) or (S) is a violation of this Section.

N. The owner or operator of any smelter subject to this Section shall maintain on hand and ready for immediate installation sufficient spare parts or duplicate systems for the continuous monitoring equipment required by this Section to allow for the replacement within six hours of any monitoring equipment part that fails or malfunctions during operation.

O. To determine total overall emissions, the owner or operator of any smelter subject to this Section shall perform material balances for sulfur according to the procedures prescribed by Appendix 8 of this Chapter.

P. The owner or operator of any smelter subject to this Section shall maintain a record of all average hourly emissions measurements and all calculated average monthly emissions required by this Section. The record of the emissions shall be retained for at least five years following the date of measurement or calculation. The owner or operator shall record the measurement or calculation results as pounds per hour of sulfur dioxide. The owner or operator shall summarize the following data monthly and submit the summary to the Director within 20 days after the end of each month:

1. For all periods described in subsection (C) and (R), the annual average emissions as calculated at the end of each day of the month;
2. The total number of hourly periods during the month in which measurements were not taken and the reason for loss of measurement for each period;
3. The number of three-hour emissions averages that exceeded each of the applicable emissions levels listed in R18-2-715(F) and (G)(1)(b) for the compliance periods ending on each day of the month being reported;
4. The date on which a cumulative occurrence limit listed in R18-2-715(F) or (G)(1)(b) was exceeded if the exceedance occurred during the month being reported; and
5. For all periods described in subsection (T) and (U), the annual average emissions as calculated at the end of the last day of each month.

Q. An owner or operator shall install instrumentation to monitor each point in the smelter facility where a means exists to bypass the sulfur removal equipment, to detect and record all periods that the bypass is in operation. An owner or operator of a copper smelter shall report to the Director, not later than the 15th day of each month, the recorded information required by this Section, including an explanation for the necessity of the use of the bypass.

R. The owner or operator shall determine compliance with the cumulative occurrence and fugitive emission limits contained in R18-2-715(G)(1) as follows:

1. The owner or operator shall calculate annual average emissions at the end of each day by averaging the emissions for all hours measured during the compliance period, as defined in subsection (R)(8), ending on that day. An annual emissions average in excess of the allowable annual average emission limit is a violation of R18-2-715(G)(1)(a) if either:
   a. The annual average is greater than the annual average computed for the preceding day; or
   b. The annual averages computed for the five preceding days all exceed the allowable annual average emission limit.
2. The owner or operator shall calculate a three-hour emissions average at the end of each clock hour by averaging the hourly emissions for the preceding three consecutive hours provided each hour was measured according to the requirements contained in subsection (S).
3. For purposes of subsection (R)(2), a three-hour emissions average in excess of an emission level E_f violates the associated cumulative occurrence limit n listed in R18-2-715(G)(1)(b) if:
   a. The number of all three-hour emissions averages calculated during the compliance period in excess of that emission level exceeds the cumulative occurrence limit associated with the emission level; and
   b. The average is calculated during the last operating day of the compliance period being reported.
4. A three-hour emissions average only violates the cumulative occurrence limit n of an emission level E_f on the day containing the last hour in the average.
5. Multiple violations of the same cumulative occurrence limit on the same day and violations of different cumulative occurrence limits on the same day constitute a single violation of R18-2-715(G)(1)(b).
6. The violation of any cumulative occurrence limit and an annual average emission limit on the same day constitutes only a single violation of the requirements of R18-2-715(G)(1).
7. Multiple violations of a cumulative occurrence limit by different three-hour emissions averages containing any common hour constitutes a single violation of R18-2-715(G)(1)(b).
8. To determine compliance with subsections (R)(1) through (7), the compliance period consists of the 365 calendar days immediately preceding the end of each day of the month being reported unless that period includes less than 300 operating days, in which case the number of days preceding the last day of the compliance period shall be increased until the compliance period contains 300 operating days. For purposes of this Section, an operating day is any day on which sulfur-containing feed is introduced into the smelting process.

S. To determine compliance with R18-2-715(G)(1), the owner or operator of the smelter subject to R18-2-715(G)(1) shall install, calibrate, maintain, and operate a measurement system for continuously monitoring sulfur dioxide concentrations of the converter roof fugitive emissions.

1. For purposes of this subsection, continuous monitoring means the taking and recording of at least one measurement of sulfur dioxide concentration from an approved measurement location in each 15-minute period. Fifteen-minute periods start at the beginning of each clock hour, and run consecutively. An hour of smelter emissions is considered continuously monitored if the emissions from all approved measurement locations are measured for at least 45 minutes of any hour according to the requirements of this subsection.
2. The owner or operator of a smelter subject to the requirements of this subsection shall conduct quality assurance procedures on the continuous monitoring system according to the methods in 40 CFR 60, Appendix F, except that an annual relative accuracy test audit (RATA) is not required.

T. The emission limit in R18-2-715(G)(2) applies to the total of uncaptured fugitive sulfur dioxide emissions from the smelter processing units and sulfur dioxide control and removal equipment, but not emissions due solely to the use of fuel for space heating or steam generation. The owner or operator shall determine compliance with the emission limit contained in R18-2-715(G)(2) as follows:

1. The owner or operator shall calculate annual average fugitive emissions at the end of the last day of each month by averaging the monthly emissions for the previous 12-month period ending on that day. To determine monthly fugitive emissions, the owner or operator shall perform material balances for sulfur according to the sulfur balance procedures prescribed in Appendix 8 of this Chapter.
2. An annual emissions average in excess of the allowable annual average emission limit violates R18-2-715(G)(2) if the fugitive annual average computed at the end of each

month exceeds the allowable annual average emission limit.

U. The emission limit in R18-2-715(H) applies to the total of stack and uncaptured fugitive sulfur dioxide emissions from the smelter processing units and sulfur dioxide control and removal equipment, but not emissions due solely to the use of fuel for space heating or steam generation. The owner or operator shall determine compliance with the emission limit contained in R18-2-715(H) as follows:

1. The owner or operator shall calculate annual average stack emissions at the end of the last day of each month by averaging the emissions for all hours measured during the previous 12-month period ending on that day according to the requirements contained in subsection (K).
2. The owner or operator shall calculate annual average fugitive emissions at the end of the last day of each month by averaging the monthly emissions for the previous 12-month period ending on that day. To determine monthly fugitive emissions, the owner or operator shall perform material balances for sulfur according to the sulfur balance procedures prescribed in Appendix 8 of this Chapter.
3. An annual emissions average in excess of the allowable annual average emission limit violates R18-2-715(H) if the total of the stack and fugitive annual averages computed at the end of each month exceeds the allowable annual average emission limit.

Historical Note

Section R18-2-715.01 renumbered from R18-2-515.01 and amended effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 8 A.A.R. 575, effective January 15, 2002 (Supp. 02-1). Amended by final rulemaking at 8 A.A.R. 3365, effective July 18, 2002 (Supp. 02-3).

R18-2-715.02. Standards of Performance for Existing Primary Copper Smelters; Fugitive Emissions

A. For purposes of this Section, the compliance date, unless otherwise provided in a consent decree or a delayed compliance order, shall be January 14, 1986.

B. No later than 24 months before the compliance date, the owner or operator of a smelter subject to R18-2-715 shall submit to the Director the results of an evaluation of the fugitive emissions from the smelter. The evaluation results shall contain all of the following information:

1. A measurement or accurate estimate of total fugitive emissions from the smelter during typical operations, including planned start-up and shutdown. The measurement or estimate shall contain the amount of both average short-term (24 hours) and average long-term (monthly) fugitive emissions from the smelter. The evaluation plan shall be approved in advance by the Department and shall specify the method used to determine the fugitive emission amounts, including the conditions determined to be "typical operations" for the smelter.
2. A measurement or accurate estimate of the relative proportion, expressed as a percentage, of total fugitive emissions during typical operations, including planned start-up and shutdown, produced by any of the following smelter processes:
   a. Roaster or dryer operation;
   b. Calcine or dried concentrate transfer;
   c. Reverberatory furnace operations, including feeding, slag return, matte and slag tapping;
   d. Matte transfer; and
   e. Converter operations.
3. The measurement technique or method of estimation used to fulfill the requirement in subsection (B)(2) shall be approved in advance by the Department.
4. The results of at least a six-month fugitive emission impact analysis conducted during that part of the year when fugitive emissions are expected to have the greatest ambient air quality impact. The study shall utilize sufficient measurements of fugitive emissions, meteorological conditions and ambient sulfur dioxide concentrations to associate fugitive emissions with specific measured ambient concentrations of sulfur dioxide. The study shall describe in detail the techniques used to make the required determinations. The design of the study shall be approved in advance by the Department.

C. On the basis of the results of the evaluation as well as other data and information contained in the records of the Department, the Director shall determine whether fugitive emissions from a particular smelter have the potential to cause or significantly contribute to violations of the ambient sulfur dioxide standards in the vicinity of the smelter. If the Director finds that fugitive emissions from a particular smelter have the potential to cause or significantly contribute to violations of ambient sulfur dioxide standards in the vicinity of a smelter, then the Director shall adopt rules specifying the emission limits and undertake other appropriate measures necessary to maintain ambient sulfur dioxide standards.

D. The requirements of subsection (B) shall not apply to a smelter subject to this Section if the owner or operator of that smelter can demonstrate to the Director both that:

1. Compliance with the applicable cumulative occurrence and emission limits listed in R18-2-715(F) will require the smelter to undergo major modifications to its physical configuration or work practices prior to the compliance date, and
2. That the modification will reduce fugitive emissions to such an extent that such emissions will not cause or significantly contribute to violations of ambient sulfur dioxide standards in the vicinity of the smelter.

E. In order to assess the sufficiency of the cumulative occurrence and emission limits contained in R18-2-715(F) to maintain the ambient air quality standards for sulfur dioxide set forth in R18-2-202, an owner or operator of a smelter subject to this Section shall continue to calibrate, maintain and operate any ambient sulfur dioxide monitoring equipment owned by the smelter owner or operator and in operation within the area of the smelter enclosed by a circle with 10-mile radius as calculated from a center point which shall be the point of the smelter's greatest sulfur dioxide emissions, for a period of at least three years after the compliance date.

1. Such monitors shall be operated and maintained in accordance with 40 CFR 50 and 58 and such other conditions as the Director deems necessary.
2. The location of ambient sulfur dioxide monitors and length of time such monitors remain at a location shall be determined by the Director.

Historical Note

Section R18-2-715.02 renumbered from R18-2-515.02 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-716. Standards of Performance for Existing Coal Preparation Plants

A. The provisions of this Section are applicable to any of the following affected facilities in coal preparation plants: thermal dryers, pneumatic coal-cleaning equipment, coal processing and conveying equipment including breakers and crushers, coal storage systems, and coal transfer and loading systems.

For purposes of this Section, the definitions contained in 40 CFR 60.251 are adopted by reference and incorporated herein.

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing coal preparation plant in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.

2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (B)(1).

C. For reference purposes only, the equations in subsection (B) are plotted in Figure 2, Appendix 11. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

E. Fugitive emissions from coal preparation plants shall be controlled in accordance with R18-2-604 through R18-2-607.

F. The test methods and procedures required by this Section are as follows:

1. The reference methods in the 40 CFR 60, Appendix A are used to determine compliance with standards prescribed in subsection (B) as follows:
   a. Method 5 for the concentration of particulate matter and associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the minimum sample volume is 0.85 dscm (30 dscf) except that short sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Director. Sampling shall not be started until 30 minutes after start-up and shall be terminated before shutdown procedures commence. The owner or operator of the affected facility shall eliminate cyclonic flow during performance tests in a manner acceptable to the Director.
3. The owner or operator shall construct the facility so that particulate emissions from thermal dryers or pneumatic coal cleaning equipment can be accurately determined by applicable test methods and procedures under subsection (F)(1).

Historical Note

Section R18-2-716 renumbered from R18-2-516 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-717. Standards of Performance for Steel Plants: Existing Electric Arc Furnaces (EAF)

A. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from electric arc furnaces or dust-handling equipment which are affected facilities in any steel plant in total quantities in excess of the amount calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.

2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (A)(1).

B. For reference purposes only, the equations given above are plotted in Appendix 11, Figure 2. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

C. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

D. An opacity standard of 40% shall not be exceeded by existing steel plant electric arc furnaces and their appurtenances for more than an aggregate of three minutes in any 45-minute period.

E. A continuous monitoring system for the measurement of the opacity of emissions discharged into the atmosphere from the control device shall be installed, calibrated, maintained, and operated by the owner or operator subject to the provisions of this Section.

F. The test methods and procedures required under this Section are as follows:

1. Reference methods in 40 CFR 60, Appendix A shall be used to determine compliance with the standards prescribed under subsection (A) as follows:
   a. Method 5 for concentration of particulate matter and associated moisture content.
   b. Method 1 for sample and velocity and volumetric flow rate;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least four hours. When a single EAF is sampled, the sampling time for each run shall also include an integral number of heats. Shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director. The minimum sample volume shall be 4.5 dscm (160 dscf).

Historical Note

Section R18-2-717 renumbered from R18-2-517 effective November 15, 1993 (Supp. 93-4).

R18-2-718. Standards of Performance for Existing Kraft Pulp Mills

A. The provisions of this Section are applicable to the following affected facilities in kraft pulp mills: digester system, brown stock washer system, multiple-effect evaporator system, black liquor oxidation system, recovery furnace, smelt dissolving tank, lime kiln, and condensate stripper system. In pulp mills in which kraft pulping is combined with neutral sulfite semi-chemical pulping, the provisions of this Section are applicable when any portion of the material charged to an affected facility is produced by the kraft pulping operation.

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any kraft pulp mill process source in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.

2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (B)(1).

C. For reference purposes only, the equations set forth in subsection (B) are plotted in Appendix 11, Figure 2. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

E. No person shall cause, allow or permit the discharge of total reduced sulfur measured as hydrogen sulfide (H_2S) in excess of the following amounts:

1. From any recovery furnace, any gases which contain H_2S in excess of 20 ppm by volume corrected to 8% oxygen.
2. From any lime kiln, any gases which contain H_2S in excess of 40 ppm by volume corrected to 10% oxygen.

F. Any owner or operator subject to the provisions of this Section shall install, calibrate, maintain, and operate the following continuous monitoring systems:

1. A continuous monitoring system to monitor and record the opacity of the gases discharged into the atmosphere from any recovery furnace. The span of this system shall be set at 70% opacity.
2. A continuous monitoring system, to monitor and record the concentration of H_2S emissions discharged into the atmosphere from any recovery furnace or lime kiln. The span shall be set at H_2S concentration of 50 ppm.
3. A continuous monitoring system to monitor and record the percent of oxygen by volume in the gases discharged from any recovery furnace or lime kiln. The continuous monitoring system shall be located downstream of the control device for the recovery furnace or lime kiln, and all measurements shall be made on a dry basis. The span of this system shall be set at 20% oxygen.
4. For any lime kiln or smelter dissolving tank using a scrubber emission control device:
   a. A monitoring device for the continuous measurement of the pressure loss of the gas stream through the control equipment. The monitoring device shall be certified to the manufacturer to be accurate within a gage pressure of ±500 pascals (ca. ±2 inches of water gage pressure).
   b. A monitoring device for the continuous measurement of the scrubbing liquid supply pressure to the control equipment. The monitoring device shall be certified by the manufacturer to be accurate within ±15% of design scrubbing liquid supply pressure. The pressure sensor or tap shall be located close to the scrubber liquid discharge point, although the Director may be consulted for approval of alternative locations.

G. The test methods and procedures required by this Section are as follows:

1. Reference methods in 40 CFR 60, Appendix A except as provided under R18-2-312 shall be used to determine compliance with this Section as follows:
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 3 for gas analysis;
   d. Method 9 for visible emissions;
   e. Method 11 for total reduced sulfur as hydrogen sulfide.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.85 dscm/hr (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director. Water shall be used as the cleanup solvent instead of acetone in the sample recovery procedure outlined in Method 5. For determination of compliance with this Section, particulate measurements shall at least be made on the recovery furnace, smelt dissolving tank, and lime kiln. All concentrations of particulate matter from the lime kiln and recovery furnace shall be corrected to 10 volume percent oxygen and 8 volume percent oxygen, respectively, when the oxygen concentrations exceed these values.

Historical Note

Section R18-2-718 renumbered from R18-2-518 effective November 15, 1993 (Supp. 93-4).

R18-2-719. Standards of Performance for Existing Stationary Rotating Machinery

A. The provisions of this Section are applicable to the following affected facilities: all stationary gas turbines, oil-fired turbines, or internal combustion engines. This Section also applies to an installation operated for the purpose of producing electric or mechanical power with a resulting discharge of sulfur dioxide in the installation's effluent gases.

B. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. Compliance tests shall be conducted during operation at the normal rated capacity of each unit. The total heat input of all operating fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

C. No person shall cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any stationary

rotating machinery in excess of the amounts calculated by one of the following equations:

1. For equipment having a heat input rate of 4200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 1.02Q^{0.769}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   Q = the heat input in million Btu per hour.
2. For equipment having a heat input rate greater than 4200 million Btu/hr., the maximum allowable emissions shall be determined by the following equation:

   $E = 17.0Q^{0.432}$

   where "E" and "Q" have the same meaning as in subsection (C)(1).

D. For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

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

F. When low sulfur oil is fires, stationary rotating machinery installations shall burn fuel which limits the emission of sulfur dioxide to 1.0 pound per million Btu heat input.

G. When high sulfur oil is fired, stationary rotating machinery installations shall not emit more than 2.2 pounds of sulfur dioxide per million Btu heat input.

H. Any permit issued for the operation of an existing source, or any renewal or modification of such a permit, shall include a condition prohibiting the use of high sulfur oil by the permittee. This condition may not be included in the permit if the applicant demonstrates to the satisfaction of the Director both that sufficient quantities of low sulfur oil are not available for use by the source and that it has adequate facilities and contingency plans to ensure that the sulfur dioxide ambient air quality standards set forth in R18-2-202 will not be violated.

1. The terms of the permit may authorize the use of high sulfur oil under such conditions as are justified.
2. In cases where the permittee is authorized to use high sulfur oil, it shall submit to the Department monthly reports detailing its efforts to obtain low sulfur oil.
3. When the conditions justifying the use of high sulfur oil no longer exist, the permit shall be modified accordingly.
4. Nothing in this Section shall be construed as allowing the use of a supplementary control system or other form of dispersion technology.

I. The owner or operator of any stationary rotating machinery subject to the provisions of this Section shall record daily the sulfur content and lower heating value of the fuel being fired in the machine.

J. The owner or operator of any stationary rotating machinery subject to the provisions of this Section shall report to the Director any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8%.

K. The test methods and procedures required by this Section are as follows:

1. To determine compliance with the standards prescribed in subsections (C) through (H), the following reference methods shall be used:
   a. Reference Method 20 in 40 CFR 60, Appendix A for the concentration of sulfur dioxide and oxygen.
   b. ASTM Method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method) for the sulfur content of liquid fuels.
   c. ASTM Method D-1072-90 (Test Method for Total Sulfur in Fuel Gases for the sulfur content of gaseous fuels.
2. To determine compliance with the standards prescribed in subsection (J), the following reference methods in the Arizona Testing Manual shall be used:
   a. ASTM Method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method) for the sulfur content of liquid fuels.
   b. ASTM Method D-1072-90 (Test Method for Total Sulfur in Fuel Gases) for the sulfur content of gaseous fuels.

Historical Note

Section R18-2-719 renumbered from R18-2-519 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-720. Standards of Performance for Existing Lime Manufacturing Plants

A. The provisions of this Section are applicable to the following affected facilities used in the manufacture of lime: rotary lime kilns, vertical lime kilns, lime hydrators, and limestone crushing facilities. This Section is also applicable to limestone crushing equipment which exists apart from other lime manufacturing facilities.

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any lime manufacturing or limestone crushing facility in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (B)(1).

C. For reference purposes only, the equations in subsection (B) are plotted in Appendix 11, Figure 2. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

E. Fugitive emissions from lime plants shall be controlled in accordance with R18-2-604 through R18-2-607.

F. The owner or operator subject to the provisions of this Section shall install, calibrate, maintain, and operate a continuous monitoring system, except as provided in subsection (G), to monitor and record the opacity of the gases discharged into the

atmosphere from any rotary lime kiln. The span of this system shall be set at 70% opacity.

G. The owner or operator of any rotary lime kiln using a wet scrubbing emission control device subject to the provisions of this Section shall not be required to monitor the opacity of the gases discharged as required in subsection (F).

H. The test methods and procedures required by this Section are as follows:

1. The reference methods in 40 CFR 60, Appendix A shall be used to determine compliance with this Section as follows:
   a. Method 5 for the measurement of particulate matter;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis;
   e. Method 4 for stack gas moisture;
   f. Method 9 for visible emissions.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.85 dscm/hr (0.53 dscf/min), except that shorter sampling times, when necessitated by process variables or other factors, may be approved by the Director.
3. Because of the high moisture content of the exhaust gases from the hydrators, in the range of 40 to 85% by volume, the Method 5 sample train may be modified to include a calibrated orifice immediately following the sample nozzle when testing lime hydrators. In this configuration, the sampling rate necessary for maintaining isokinetic conditions can be directly related to exhaust gas velocity without a correction for moisture content.

Historical Note

Section R18-2-720 renumbered from R18-2-520 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-721. Standards of Performance for Existing Nonferrous Metals Industry Sources

A. The provisions of this Section are applicable to the following affected facilities: mines, mills, concentrators, crushers, screens, material handling facilities, fine ore storage, dryers, roasters, and loaders.

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any process source subject to the provisions of this Section in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.
2. For process sources having a process weight greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (B)(1).

C. For reference purposes only, the equations in subsection (B) are plotted in Appendix 11, Figure 2. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

E. No person shall cause, allow or permit to be discharged into the atmosphere from any dryer or roaster the operating temperature of which exceeds 700° F, reduced sulfur in excess of 10% of the sulfur entering the process as feed. Reduced sulfur includes sulfur equivalent from all sulfur emissions including sulfur dioxide, sulfur trioxide, and sulfuric acid.

F. The owner or operator of any mining property subject to the provisions of this Section shall record the daily process rates and hours of operation of all material handling facilities.

G. A continuous monitoring system for measuring sulfur dioxide emissions shall be installed, calibrated, maintained and operated by the owner or operator where dryers or roasters are not expected to achieve compliance with the standard under subsection (E).

H. The test methods and procedures required by this Section are as follows:

1. The reference methods in 40 CFR 60, Appendix A shall be used to determine compliance with the standard prescribed in this Section as follows:
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis and calculation of excess air, using the integrated sample technique;
   e. Method 6 for concentration of SO_2.
2. For Method 5, Method 1 shall be used to select the sampling site and the number of traverse sampling points. The sampling time for each run shall be at least 60 minutes and the minimum sampling volume shall be 0.85 dscm (30 dscf), except that smaller sampling times or volumes, when necessitated by process variables or other factors, may be approved by the Director. The probe and filter holder heating systems in the sampling train shall be set to provide a gas temperature no greater than 160°C. (320°F.).
3. For Method 6, the sampling site shall be the same as that selected for Method 5. The sampling point in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft.). For Method 6, the sample shall be extracted at a rate proportional to the gas velocity at the sampling point.
4. For Method 6, the minimum sampling time shall be 20 minutes and the minimum sampling volume 0.02 dscm (0.71 dscf) for each sample. The arithmetic mean of two samples shall constitute one run. Samples shall be taken at approximately 30-minute intervals.

Historical Note

Section R18-2-721 renumbered from R18-2-521 effective November 15, 1993 (Supp. 93-4).

R18-2-722. Standards of Performance for Existing Gravel or Crushed Stone Processing Plants

A. The provisions of this Section are applicable to the following affected facilities: primary rock crushers, secondary rock crushers, tertiary rock crushers, screens, conveyors and conveyor transfer points, stackers, reclaimers, and all gravel or crushed stone processing plants and rock storage piles.

B. No person shall cause, allow or permit the discharge of particulate matter into the atmosphere except as fugitive emissions

in any one hour from any gravel or crushed stone processing plant in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.

2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (B)(1).

C. For reference purposes only, the equations in subsection (B) are plotted in Appendix 11, Figure 2. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. Spray bar pollution controls shall be utilized in accordance with "EPA Control of Air Emissions From Process Operations In The Rock Crushing Industry" (EPA 340/1-79-002), "Wet Suppression System" (pages 15-34, amended as of January 1979 (and no future amendments or editions)), as incorporated herein by reference and on file with the Office of the Secretary of State, with placement of spray bars and nozzles as required by the Director to minimize air pollution.

E. Fugitive emissions from gravel or crushed stone processing plants shall be controlled in accordance with R18-2-604 through R18-2-607.

F. The owner or operator of any affected facility subject to the provisions of this Section shall install, calibrate, maintain, and operate monitoring devices which can be used to determine daily the process weight of gravel or crushed stone produced. The weighing devices shall have an accuracy of ± 5% over their operating range.

G. The owner or operator of any affected facility shall maintain a record of daily production rates of gravel or crushed stone produced.

H. The test methods and procedures required by this Section are as follows:

1. The reference methods in 40 CFR 60, Appendix A shall be used to determine compliance with the standards prescribed in this Section as follows:
   a. Method 5 for concentration of particulate matter and moisture content;
   b. Method 1 for sample and velocity traverses;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the minimum sample volume is 0.85 dscm (30 dscf), except that shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Director. Sampling shall not be started until 30 minutes after start-up and shall be terminated before shutdown procedures commence. The owner or operator of the affected facility shall eliminate cyclonic flow during performance tests in a manner acceptable to the Director.

Historical Note

Section R18-2-722 renumbered from R18-2-522 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-723. Standards of Performance for Existing Concrete Batch Plants

Fugitive dust emitted from concrete batch plants shall be controlled in accordance with R18-2-604 through R18-2-607.

Historical Note

Section R18-2-723 renumbered from R18-2-523 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-724. Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment

A. This Section applies to industrial and commercial installations which are less than 73 megawatts capacity (250 million British thermal units per hour), but in the aggregate on any premises are rated at greater than 500,000 British thermal units per hour (0.146 megawatts), and in which fuel is burned for the primary purpose of producing steam, hot water, hot air or other liquids, gases or solids and in the course of doing so the products of combustion do not come into direct contact with process materials. When any products or by-products of a manufacturing process are burned for the same purpose or in conjunction with any fuel, the same maximum emission limitations shall apply.

B. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat content of solid fuel shall be determined in accordance with R18-2-311. Compliance tests shall be conducted during operation at the nominal rated capacity of each unit. The total heat input of all fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

C. No person shall cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel-burning operation in excess of the amounts calculated by one of the following equations:

1. For equipment having a heat input rate of 4200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 1.02Q^{0.769}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   Q = the heat input in million Btu per hour.

2. For equipment having a heat input rate greater than 4200 million Btu/hr, the maximum allowable emissions shall be determined by the following equation:

   $E = 17.0Q^{0.432}$

   where "E" and "Q" have the same meanings as in subsection (C)(1).

D. For reference purposes only, the two equations in subsection (C) are plotted in Appendix 11, Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

E. Fossil-fuel fired industrial and commercial equipment installations shall not emit more than 1.0 pounds of sulfur dioxide per million Btu heat input when low sulfur oil is fired.

F. Fossil-fuel fired industrial and commercial equipment installations shall not emit more than 2.2 pounds of sulfur dioxide per million Btu heat input when high sulfur oil is fired.

G. Any permit issued for the operation of an existing source, or any renewal or modification of such a permit, shall include a condition prohibiting the use of high sulfur oil by the permit-

tee. This condition may be omitted from the permit if the applicant demonstrates to the satisfaction of the Director both that sufficient quantities of low sulfur oil are not available for use by the source and that it has adequate facilities and contingency plans to ensure that the sulfur dioxide ambient air quality standards set forth in R18-2-202 will not be violated.

1. The terms of the permit may authorize the use of high sulfur oil under such conditions as are justified.
2. In cases where the permittee is authorized to use high sulfur oil, it shall submit to the Department monthly reports detailing its efforts to obtain low sulfur oil.
3. When the conditions justifying the use of high sulfur oil no longer exist, the permit shall be modified accordingly.
4. Nothing in this Section shall be construed as allowing the use of a supplementary control system or other form of dispersion technology.

H. When coal is fired, fossil-fuel fired industrial and commercial equipment installations shall not emit more than 1.0 pounds of sulfur dioxide per million Btu heat input.

I. The owner or operator subject to the provisions of this Section shall install, calibrate, maintain and operate a continuous monitoring system for measurement of the opacity of emissions discharged into the atmosphere from the control device.

J. For the purpose of reports required under excess emissions reporting required by R18-2-310.01, the owner or operator shall report all six-minute periods in which the opacity of any plume or effluent exceeds 15%.

K. The test methods and procedures required by this Section are as follows:

1. The reference methods in 40 CFR 60, Appendix A shall be used to determine compliance with the standards as prescribed in this Section.
   a. Method 1 for selection of sampling site and sample traverses;
   b. Method 3 for gas analysis to be used when applying Reference Methods 5 and 6;
   c. Method 5 for concentration of particulate matter and the associated moisture content;
   d. Method 6 for concentration of SO_2.
2. For Method 5, Method 1 shall be used to select the sampling site and the number of traverse sampling points. The sampling time for each run shall be at least 60 minutes and the minimum sampling volume shall be 0.85 dscm (30 dscf), except that smaller sampling times or volumes, when necessitated by process variables or other factors, may be approved by the Director. The probe and filter holder heating systems in the sampling train shall be set to provide a gas temperature no greater than 160°C. (320°F.).
3. For Method 6, the sampling site shall be the same as that selected for Method 5. The sampling point in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). For Method 6, the sample shall be extracted at a rate proportional to the gas velocity at the sampling point.
4. For Method 6, the minimum sampling time shall be 20 minutes and the minimum sampling volume 0.02 dscm (0.71 dscf) for each sample. The arithmetic mean of two samples shall constitute one run. Samples shall be taken at approximately 30-minute intervals.
5. Gross calorific value shall be determined in accordance with the applicable ASTM methods: D-2015-91 (Test for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter) for solid fuels; D-240-87 (Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter) for liquid fuels; and D-1826-88 (Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter) for gaseous fuels. The rate of fuels burned during each testing period shall be determined by suitable methods and shall be confirmed by a material balance over the fossil-fuel fired system.

Historical Note

Section R18-2-724 renumbered from R18-2-524 and amended effective November 15, 1993 (Supp. 93-4). Amended by final rulemaking at 7 A.A.R. 1164, effective February 15, 2001 (Supp. 01-1).

R18-2-725. Standards of Performance for Existing Dry Cleaning Plants

A. No person shall conduct any dry cleaning operation using chlorinated synthetic solvents without minimizing organic solvent emissions by good modern practices including but not limited to the use of an adequately sized and properly maintained activated carbon absorber or other equally effective control device.

B. No person shall operate any dry cleaning establishment using petroleum solvents other than non-photochemically reactive solvents without reducing solvent emissions by at least 90%. For purposes of this subsection, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20% of its total volume composed of the chemical compounds classified in subsections (B)(1) through (3), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

1. A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation -- hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5%.
2. A combination of aromatic compounds with 8 or more carbon atoms to the molecule except ethylbenzene: 8%.
3. A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichlorethylene or toluene: 20%.

C. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the owner or operator thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to the adjoining property.

Historical Note

Section R18-2-725 renumbered from R18-2-525 effective November 15, 1993 (Supp. 93-4).

R18-2-726. Standards of Performance for Sandblasting Operations

No person shall cause or permit sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Examples of good modern practices include wet blasting and the use of effective enclosures with necessary dust collecting equipment.

Historical Note

Section R18-2-726 renumbered from R18-2-526 effective November 15, 1993 (Supp. 93-4).

R18-2-727. Standards of Performance for Spray Painting Operations

A. No person shall conduct any spray paint operation without minimizing organic solvent emissions. Such operations other than architectural coating and spot painting, shall be con-

ducted in an enclosed area equipped with controls containing no less than 96% of the overspray.

B. No person shall either:

1. Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
2. Thin or dilute any architectural coating with a photochemically reactive solvent.

C. For purposes of subsection (B), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20% of its total volume composed of the chemical compounds classified in subsections (1) through (3), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

1. A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation -- hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5%.
2. A combination of aromatic compounds with 8 or more carbon atoms to the molecule except ethylbenzene: 8%.
3. A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichlorethylene or toluene: 20%.

D. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups or organic compounds described in subsection (C)(1) through (3), it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

Historical Note

Section R18-2-727 renumbered from R18-2-527 effective November 15, 1993 (Supp. 93-4).

R18-2-728. Standards of Performance for Existing Ammonium Sulfide Manufacturing Plants

A. The provisions of this Section are applicable to the following affected facilities in ammonium sulfide manufacturing plants: sulfide unloading facilities, reactor-absorbers, bubble cap scrubbers, and fume incinerators.

B. No person shall cause, allow or permit to be emitted into the atmosphere, from any type of incinerator or other outlet smoke, fumes, gases, particulate matter or other gas-borne material, the opacity of which exceeds 20%.

C. No person shall cause, allow or permit to be emitted into the atmosphere from any emission point from any incinerator, or to pass a convenient measuring point near such emission point, particulate matter of concentrations in excess of 0.1 grain per cubic foot, based on dry flue gas at standard conditions, corrected to 12% carbon dioxide.

D. No person shall allow hydrogen sulfide to be emitted from any location in such manner and amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume for any averaging period of 30 minutes or more.

E. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution are discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the owner or operator thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.

F. The owner or operator of any ammonium sulfide tailgas incinerator subject to the provisions of this Section shall do both of the following:

1. Install, calibrate, maintain, and operate a flow measuring device which can be used to determine either the mass or volume of tailgas charged to the incinerator. The flow measuring device shall have an accuracy of ± 5% over its operating range.
2. Provide access to the tailgas charged so that a well-mixed representative grab sample can be obtained.

G. The test methods and procedures required by this Section are as follows:

1. The reference methods in 40 CFR 60, Appendix A shall be used to determine compliance with the standards prescribed in this Section as follows:
   a. Method 5 for the concentration of particulate matter and the associated moisture content;
   b. Method 1 for sample and velocity traverse;
   c. Method 2 for velocity and volumetric flow rate;
   d. Method 3 for gas analysis and calculation of excess air, using the integrated sample technique;
   e. Method 11 shall be used to determine the concentration of H_2S and Method 6 shall be used to determine the concentration of SO_2.
2. For Method 5, the sampling time for each run shall be at least 60 minutes and the minimum sample volume shall be 0.85 dscm (30.0 dscf) except that shorter sampling times and smaller sample volumes, when necessitated by process variables or other factors, may be approved by the Director.
3. Particulate matter emissions, expressed in g/dscm, shall be corrected to 12% CO_2 by using the following formula:

   $$C_{12} = \frac{12c}{\%CO_2}$$

   where:

   C_{12} = the concentration of particulate matter corrected to 12% CO_2,

   c = the concentration of particulate matter as measured by Method 5, and

   $\%CO_2$= the percentage of CO_2 as measured by Method 3, or, when applicable, the adjusted outlet CO_2 percentage.
4. If Method 11 is used, the gases sampled shall be introduced into the sampling train at approximately atmospheric pressure. Where fuel gas lines are operating at pressures substantially above atmosphere, this may be accomplished with a flow control valve. If the line pressure is high enough to operate the sampling train without a vacuum pump, the pump may be eliminated from the sampling train. The sample shall be drawn from a point near the centroid of the fuel gas line. The minimum sampling time shall be 10 minutes and the minimum sampling volume 0.01 dscm (0.35 dscf) for each sample. The arithmetic average of two samples of equal sampling time shall constitute one run. Samples shall be taken at approximately one-hour intervals. For most fuel gases, sample times exceeding 20 minutes may result in depletion of the collecting solution, although fuel gases containing low concentrations of hydrogen sulfide may necessitate sampling for longer periods of time.
5. If Method 5 is used, Method 1 shall be used for velocity traverses and Method 2 for determining velocity and volumetric flow rate. The sampling site for determining CO_2 concentration by Method 3 shall be the same as for determining volumetric flow rate by Method 2. The sampling point in the duct for determining SO_2 concentration by Method 3 shall be at the centroid of the cross section if the cross sectional area is less than 5 m^2 (54 ft^2) or at a point no closer to the walls than 1 m (3.28 feet) if the

cross sectional area is 5 m^2 or more and the centroid is more than 1 meter from the wall. The sample shall be extracted at a rate proportional to the gas velocity at the sampling point. The minimum sampling time shall be 10 minutes and the minimum sampling volume 0.01 dscm (0.36 dscf) for each sample. The arithmetic average of two samples of equal sampling time shall constitute one run. Samples shall be taken at approximately one-hour intervals.

Historical Note

Section R18-2-728 renumbered from R18-2-528 effective November 15, 1993 (Supp. 93-4).

R18-2-729. Standards of Performance for Cotton Gins

A. Fugitive dust, lint, bolls, cotton seed or other material emitted from a cotton gin or lying loose in a yard shall be collected and disposed of in an efficient manner or shall be treated in accordance with R18-2-604 through R18-2-607.

B. An opacity of 40% or less shall exempt the source from mass emissions testing. In the event that the cotton gin does not comply with the 40% opacity standard, the owner or operator may request the permission of the Director to perform a mass emissions test observed by a representative of the Department. Successful completion of this test will result in an adjustment to the simultaneous opacity standard in accordance with Section R18-2-702(D).

C. No person shall cause, allow, or permit the discharge of particulate matter into the atmosphere in any one hour from any cotton gin in total quantities in excess of the amounts calculated by one of the following equations:

1. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

   $E = 4.10P^{0.67}$

   where:

   E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   P = the process weight rate in tons-mass per hour.

2. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

   $E = 55.0P^{0.11}-40$

   where "E" and "P" are defined as indicated in subsection (C)(1).

D. The test methods and procedures required by this Section are as follows:

1. The reference methods in the Arizona Testing Manual and 40 CFR 60, Appendix A shall be used to determine compliance with this Section as follows:
   a. Method A-2 for the measurement of particulate matter,
   b. Method 1 for sample and velocity traverses,
   c. Method 2 for velocity and volumetric flow rate,
   d. Method 3 for gas analysis,
   e. Method 9 for visible emissions.
2. For Method A-2, the sampling time for each run shall be at least 60 minutes and the sampling rate shall be at least 0.85 dry standard cubic meters per hour (0.53 dry standard cubic feet per minute), except that shorter sampling times, when necessitated by progress variables or other factors, may be approved by the Director.

Historical Note

Section R18-2-729 renumbered from R18-2-529 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-730. Standards of Performance for Unclassified Sources

A. No existing source which is not otherwise subject to standards of performance under this Article or Article 9 or 11 shall cause or permit the emission of pollutants at rates greater than the following:

1. For particulate matter discharged into the atmosphere in any one hour from any unclassified process source in total quantities in excess of the amounts calculated by one of the following equations:
   a. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

      $E = 4.10P^{0.67}$

      where:

      E = the maximum allowable particulate emissions rate in pounds-mass per hour.

      P = the process weight rate in tons-mass per hour.

   b. For process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

      $E = 55.0P^{0.11}-40$

      where "E" and "P" are defined as indicated in subsection (A)(1)(a).
2. Sulfur dioxide -- 600 parts per million.
3. Nitrogen oxides expressed as NO_2 -- 500 parts per million.

B. For purposes of this Section, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

C. For reference purposes only, the two equations in subsection (A)(1) are plotted in Appendix 11, Figure 2. The emission values obtained from the graph are approximately correct for the process weight rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

D. No person shall emit gaseous or odorous materials from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

E. No person shall operate or use any machine, equipment, or other contrivance for the treatment or processing of animal or vegetable matter, separately or in combination, unless all gaseous vapors and gas entrained effluents from such operations, equipment, or contrivance have been either:

1. Incinerated to destruction, as indicated by a temperature measuring device, at not less than 1,200 degrees Fahrenheit if constructed or reconstructed prior to January 1, 1989, or 1,600 degrees Fahrenheit with a minimum residence time of 0.5 seconds if constructed or reconstructed thereafter; or
2. Passed through such other device which is designed, installed and maintained to prevent the emission of odors or other air contaminants and which is approved by the Director.

F. Materials including solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizers and manure shall be processed, stored, used and transported in such a manner and by such means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evapo-

ration, leakage or discharge, the installation and use of such control methods, devices, or equipment shall be mandatory.

G. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the owner or operator thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.

H. No person shall allow hydrogen sulfide to be emitted from any location in such manner and amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume for any averaging period of 30 minutes or more.

I. No person shall cause, allow or permit discharge from any stationary source carbon monoxide emissions without the use of complete secondary combustion of waste gases generated by any process source.

J. No person shall allow hydrogen cyanide to be emitted from any location in such manner and amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.3 parts per million by volume for any averaging period of eight hours.

K. No person shall allow sodium cyanide dust or dust from any other solid cyanide to be emitted from any location in such manner and amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 140 micrograms per cubic meter for any averaging period of eight hours.

L. No owner or operator of a facility engaged in the surface coating of miscellaneous metal parts and products may operate a coating application system subject to this Section that emits volatile organic compounds in excess of any of the following:

1. 4.3 pounds per gallon (0.5 kilograms per liter) of coating, excluding water, delivered to a coating applicator that applies clear coatings.
2. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to 194°F (90°C).
3. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water, delivered to a coating applicator that applies extreme performance coatings.
4. 3.0 pounds per gallon (0.36 kilograms per liter) of coating, excluding water, delivered to a coating applicator for all other coatings and application systems.

M. If more than one emission limitation in subsection (L) applies to a specific coating, then the least stringent emission limitation shall be applied.

N. All VOC emissions from solvent washings shall be considered in the emission limitations in subsection (L), unless the solvent is directed into containers that prevent evaporation into the atmosphere.

Historical Note

Renumbered from R18-2-530 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-731. Standards of Performance for Existing Municipal Solid Waste Landfills

A. This Section applies to each municipal solid waste landfill (MSW landfill) at which:

1. Construction, reconstruction, or modification began before May 30, 1991; and
2. Waste was accepted at any time since November 8, 1987, or additional design capacity is available for future waste deposition.

B. For the purposes of this Section, "Municipal solid waste landfill or MSW landfill" means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA (Resource Conservation and Recovery Act) Subtitle D wastes such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned.

C. MSW landfills covered by this Section shall comply with 40 CFR 60, Subpart WWW, as modified by this subsection. 40 CFR 60, Subpart WWW, "Standards of Performance for Municipal Solid Waste Landfills," is incorporated by reference in R18-2-901.

1. Definitions. In addition to the definitions in 40 CFR 60.751, "Administrator" means the Director of the Department of Environmental Quality.
2. Reporting. Each MSW landfill shall comply with the reporting requirements of 40 CFR 60.757. The initial design capacity report and initial NMOC emission rate report shall be due 90 days after the effective date of this rule.
3. Design plan. An MSW landfill that is required to install a collection and control system shall submit a design plan for the system to the Director with a Standard Permit Application Form not later than 12 months after it submitted or should have submitted a NMOC emission rate report indicating emissions greater than 50 Mg per year. The design plan shall be prepared by a professional engineer registered in Arizona. The Director shall not approve the design plan if it does not meet the requirements of 40 CFR 60.752(b)(2)(ii).
4. System installation. An MSW landfill that is required to install a collection and control system shall complete installation of the system not later than 30 months after the effective date of this rule.
5. An MSW landfill that first becomes subject to the collection and control system requirement after the effective date of this rule shall submit a design plan for the system to the Director not later than 12 months after it submitted or should have submitted an NMOC emission rate report indicating emissions greater than 50 Mg per year.

Historical Note

Adopted effective April 4, 1997; filed with the Office of the Secretary of State March 14, 1997 (Supp. 97-1).

R18-2-732. Standards of Performance for Existing Hospital/Medical/Infectious Waste Incinerators

A. This Section applies to any hospital/medical/infectious waste incinerator (HMIWI) for which construction was commenced on or before June 20, 1996. All federal regulations cited within this Section are incorporated by reference in R18-2-901. An incinerator subject to this Section is not subject to R18-2-704. The following types of incinerators are not subject to this Section:

1. An incinerator during periods when only pathological waste, low-level radioactive waste, or chemotherapeutic waste is burned, if the owner or operator of the incinerator does both of the following:
   a. Notifies the Director of an exemption claim.
   b. Keeps records on a calendar quarter basis of the periods of time when only pathological waste,

low-level radioactive waste, or chemotherapeutic waste is burned.

2. Any co-fired incinerator if the owner or operator of the incinerator does all of the following:
   a. Notifies the Director of an exemption claim.
   b. Provides an estimate of the relative weight of hospital waste, medical/infectious waste, and other fuels or wastes to be burned.
   c. Keeps records on a calendar quarter basis of the weight of hospital waste and medical/infectious waste burned, and the weight of all other fuels and wastes burned at the co-fired incinerator.
3. Any incinerator required to have a permit under Section 3005 of the Solid Waste Disposal Act.
4. Any incinerator subject to 40 CFR 60, Subparts Cb, Ea, or Eb (standards or guidelines for certain municipal waste incinerators).
5. Any pyrolysis unit, as defined in 40 CFR 60.51c.
6. Cement kilns firing hospital waste or medical/infectious waste.

B. A physical or operational change made to an existing HMIWI unit solely for the purpose of complying with emission limitations under this Section is not considered a modification and does not result in an existing HMIWI unit becoming subject to the provisions of R18-2-901(9).

C. In addition to the definitions provided in 40 CFR 60.51c, the following definitions apply to this Section:
1. "Rural HMIWI" means any small HMIWI that is located more than 50 miles from the boundary of the nearest Standard Metropolitan Statistical Area and that burns less than 2,000 pounds per week of hospital waste and medical/infectious waste. The 2,000 pounds per week limitation does not apply during performance tests.
2. "Standard Metropolitan Statistical Area" or "SMSA" means any area listed in Office of Management and Budget (OMB) Bulletin 93-17 entitled "Revised Statistical Definitions for Metropolitan Areas" dated June 30, 1993 which is incorporated by reference. This incorporation by reference does not include any later amendments or editions. A copy of the bulletin is on file with the Office of the Secretary of State and the Department.
3. "State Plan" means the plan that 40 CFR 60 subpart Ce requires states to develop to regulate existing HMIWI built on or before June 20, 1996.

D. Beginning September 15, 2000, an HMIWI shall operate under a Class I permit.

E. An owner or operator of an HMIWI shall comply with the following emissions limitations:
1. The emissions limitations in Table 1 unless the HMIWI is a rural HMIWI.
2. The emissions limitations in Table 2, if the HMIWI is a rural HMIWI.
3. An owner or operator of an HMIWI shall not cause to be discharged into the atmosphere from the stack of that HMIWI any gases that exhibit greater than 10% opacity (6-minute block average).
4. An owner or operator of a large existing HMIWI shall comply with the opacity requirements in 40 CFR 60.52c (c), (d), and (e).

F. An owner or operator of an HMIWI shall comply with the operator training requirements found in 40 CFR 60.53c within one year following approval of the State Plan.

G. An owner or operator of an HMIWI shall comply with the waste management requirements found in 40 CFR 60.55c.

H. An owner or operator of a rural HMIWI shall comply with the following inspection requirements:
1. The owner or operator shall conduct or hire another party to conduct an initial equipment inspection within one year following approval of the State Plan.
2. At a minimum, an inspection shall include the following:
   a. Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot flame sensor, as necessary.
   b. Inspect adjustment of primary and secondary chamber combustion air, and adjust as necessary.
   c. Inspect hinges and door latches, and lubricate as necessary.
   d. Inspect dampers, fans, and blowers for proper operation.
   e. Inspect HMIWI door and door gaskets for proper sealing.
   f. Inspect motors for proper operation.
   g. Inspect primary chamber refractory lining. Clean and repair or replace lining as necessary.
   h. Inspect incinerator shell for corrosion and hot spots.
   i. Inspect secondary/tertiary chamber and stack, clean as necessary.
   j. Inspect mechanical loader, including limit switches, for proper operation, if applicable.
   k. Visually inspect waste bed (grates), and repair or seal, as appropriate.
   l. For the burn cycle that follows the inspection, document that the incinerator is operating properly and make any necessary adjustments.
   m. Inspect each air pollution control device for proper operation, if applicable.
   n. Inspect waste heat boiler systems to ensure proper operation, if applicable.
   o. Inspect bypass stack components.
   p. Ensure proper calibration of thermocouples, sorbent feed systems and any other monitoring equipment.
   q. Generally observe that the equipment is maintained in good operating condition.
3. Within 10 operating days following an equipment inspection, the owner or operator shall complete all necessary repairs unless the owner or operator obtains written approval from the Director establishing a date by which all necessary repairs of the facility shall be completed.
4. The owner or operator of any rural HMIWI shall conduct or hire another party to conduct an equipment inspection annually (no more than 12 months following the previous annual equipment inspection), as outlined in subsections (2) and (3).

I. An owner or operator of an HMIWI shall comply with the following compliance, performance testing, and monitoring requirements:
1. Except as provided in subsection (2), an existing HMIWI shall meet the requirements for compliance and performance testing in 40 CFR 60.56c, excluding the fugitive emissions testing requirements under 40 CFR 60.56c(b)(12) and (c)(3).
2. A rural HMIWI shall meet the following compliance and performance testing requirements:
   a. Conduct the performance testing requirements in 40 CFR 60.56c(a), (b)(1) through (b)(9), (b)(11) (Hg only), and (c)(1). The 2,000 lb/week limitation under 40 CFR 60.33e(b) does not apply during performance tests.
   b. Establish maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to

determine compliance with applicable emission limitations.

c. Ensure that the facility does not operate above the maximum charge rate or below the minimum secondary chamber temperature measured as three-hour rolling averages (calculated each hour as the average of the previous three operating hours) at all times except during periods of startup, shutdown, and malfunction. Operating parameter limits do not apply during performance tests. Operation above the maximum charge rate or below the minimum secondary chamber temperature is a violation of the established operating parameter.

d. Except as provided in subsection (I)(2)(e), operating the facility above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a three-hour rolling average) simultaneously is a violation of the PM, CO, and dioxin/furan emission limitations.

e. The owner or operator may conduct a repeat performance test within 30 days after violation of any applicable operating parameter to demonstrate that the facility is not in violation of any applicable emission limit. Repeat performance tests conducted under this subsection shall be conducted using the identical operating parameters that indicated a violation under subsection (I)(2)(d).

3. The owner or operator shall comply with the monitoring requirements listed in 40 CFR 60.57c of subpart Ec, except as provided in subsection (I)(4).

4. A rural HMIWI shall meet the following monitoring requirements:

a. Install, calibrate (to manufacturer's specifications), maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum, once every minute throughout operation.

b. Install, calibrate (to manufacturer's specifications), maintain, and operate a device that automatically measures and records the date, time, and weight of each charge fed into the HMIWI.

c. Obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75% of the operating hours per day and for 90% of the operating hours per calendar quarter that the facility is incinerating hospital waste or medical/infectious waste.

J. An owner or operator of an HMIWI shall comply with the following reporting and recordkeeping requirements:

1. An owner or operator of each HMIWI shall comply with the requirements listed in 40 CFR 60.58c(b), (c), (d), (e), and (f), excluding 40 CFR 60.58c(b)(2)(ii) (fugitive emissions) and (b)(7) (siting).

2. An owner or operator of each rural HMIWI shall perform all the following:

a. Maintain records of the annual equipment inspections, any required maintenance, and any repairs not completed within 10 days after an inspection or the time-frame established by the Director.

b. Submit an annual report to ADEQ, Air Quality Division, (T5109B), 3003 North Central Avenue, Phoenix, Arizona 85012. The report shall contain information recorded under subsection (2)(a) and be submitted no later than 60 days following the year in which data were collected. The owner or operator shall send subsequent reports no later than 12 calendar months following the previous report (after receiving a Class I permit, the owner or operator shall submit these reports semiannually). The facility's manager shall sign the report.

Historical Note

New Section adopted by final rulemaking at 5 A.A.R. 3058, effective August 10, 1999 (Supp. 99-3).

Table 1. Emission Limitations for Small, Medium, and Large HMIWI

Pollutant	Units (7% oxygen, dry basis)	Emission Limitation		
		Small HMIWI	Medium HMIWI	Large HMIWI
Particulate matter	Milligrams per dry standard cubic meter (grains per dry standard cubic foot).	115 (0.05)	69 (0.03)	34 (0.015)
Carbon monoxide	Parts per million by volume	40	40	40
Dioxin/furans	Nanograms per dry standard cubic meter total dioxin/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter toxic equivalent quantity (grains per billion dry standard cubic feet).	125 (55) or 2.3 (1.0)	125 (55) 2.3 (1.0)	125 (55) or 2.3 (1.0)
Hydrogen chloride	Parts per million by volume or percent reduction.	100 or 93%	100 or 93%	100 or 93%
Sulfur dioxide	Parts per million by volume	55	55	55
Nitrogen oxides	Parts per million by volume	250	250	250
Lead	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	1.2 (0.52) or 70%	1.2 (0.52) or 70%	1.2 (0.52) or 70%
Cadmium	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	0.16 (0.07) or 65%	0.16 (0.07) or 65%	0.16 (0.07) or 65%
Mercury	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	0.55 (0.24) or 85%	0.55 (0.24) or 85%	0.55 (0.24) or 85%

Historical Note

Table 1 adopted by final rulemaking at 5 A.A.R. 3058, effective August 10, 1999 (Supp. 99-3).

Table 2. Emissions Limitations for Rural HMIWI

Pollutant	Units (7% oxygen, dry basis)	Emission Limitation
Particulate matter	Milligrams per dry standard cubic meter (grains per dry standard cubic foot)	197 (0.086)
Carbon monoxide	Parts per million by volume	40
Dioxin/furans	Nanograms per dry standard cubic meter total dioxin/ furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter toxic equivalent quantity (grains per billion dry standard cubic feet)	800 (350) or 15 (6.6)
	Parts per million by volume	3100 (1.0)
Hydrogen chloride	Parts per million by volume	55
Sulfur dioxide	Parts per million by volume	250
Nitrogen oxides	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	10 (4.4)
Lead	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	4 (1.7)
Cadmium	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet)	7.5 (3.3)
Mercury		

Historical Note

Table 2 adopted by final rulemaking at 5 A.A.R. 3058, effective August 10, 1999 (Supp. 99-3).

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

R18-2-801. Classification of Mobile Sources

A. This Article is applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations.

B. Unless otherwise specified, no mobile source shall emit smoke or dust the opacity of which exceeds 40%.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1).
Amended effective September 26, 1990 (Supp. 90-3).
Amended effective February 3, 1993 (Supp. 93-1).
Former Section R18-2-801 renumbered to Section R18-2-901, new Section R18-2-801 renumbered from R18-2-601 effective November 15, 1993 (Supp. 93-4).

R18-2-802. Off-road Machinery

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

B. Off-road machinery shall include trucks, graders, scrapers, rollers, locomotives and other construction and mining machinery not normally driven on a completed public roadway.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1).
Amended effective September 26, 1990 (Supp. 90-3).
Former Section R18-2-802 renumbered to Section R18-2-902, new Section R18-2-802 renumbered from R18-2-602 effective November 15, 1993 (Supp. 93-4).

R18-2-803. Heater-planer Units

No person shall cause, allow or permit to be emitted into the atmosphere from any heater-planer operated for the purpose of reconstructing asphalt pavements smoke the opacity of which exceeds 20%. However three minutes' upset time in any one hour shall not constitute a violation of this Section.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1).
Amended effective September 26, 1990 (Supp. 90-3).
Former Section R18-2-803 renumbered to Section R18-2-903, new Section R18-2-803 renumbered from R18-2-603 effective November 15, 1993 (Supp. 93-4).

R18-2-804. Roadway and Site Cleaning Machinery

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

B. In addition to complying with subsection (A), no person shall cause, allow or permit the cleaning of any site, roadway, or alley without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions may include applying dust suppressants. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1).
Amended effective September 26, 1990 (Supp. 90-3).
Amended effective February 3, 1993 (Supp. 93-1).
Former Section R18-2-804 renumbered to Section R18-2-904, new Section R18-2-804 renumbered from R18-2-604 effective November 15, 1993 (Supp. 93-4).

R18-2-805. Asphalt or Tar Kettles

A. No person shall cause, allow or permit to be emitted into the atmosphere from any asphalt or tar kettle smoke for any period greater than 10 consecutive seconds, the opacity of which exceeds 40%.

B. In addition to complying with subsection (A), no person shall cause, allow or permit the operation of an asphalt or tar kettle without minimizing air contaminant emissions by utilizing all of the following control measures:

1. The control of temperature recommended by the asphalt or tar manufacturer;
2. The operation of the kettle with lid closed except when charging;
3. The pumping of asphalt from the kettle or the drawing of asphalt through cocks with no dipping;
4. The dipping of tar in an approved manner;
5. The maintaining of the kettle in clean, properly adjusted, and good operating condition;
6. The firing of the kettle with liquid petroleum gas or other fuels acceptable to the Director.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1).
Amended effective September 26, 1990 (Supp. 90-3).
Former Section R18-2-805 renumbered to Section R18-2-905, new Section R18-2-805 renumbered from R18-2-605 effective November 15, 1993 (Supp. 93-4).

ARTICLE 9. NEW SOURCE PERFORMANCE STANDARDS

R18-2-901. Standards of Performance for New Stationary Sources

Except as provided in R18-2-902 through R18-2-905, the following subparts of 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS), and all accompanying appendices, adopted as of July 1, 2001, and no future editions or amendments, are incorporated by reference. These standards are on file with the Office of the Secretary of State and the Department and shall be applied by the Department.

1. Subpart A - General Provisions.
2. Subpart D - Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971.
3. Subpart Da - Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978.
4. Subpart Db - Industrial-Commercial-Institutional Steam Generating Units.
5. Subpart Dc - Small Industrial-Commercial-Institutional Steam Generating Units.
6. Subpart E - Incinerators.
7. Subpart Ea - Municipal Waste Combustors for Which Construction is Commenced after December 20, 1989 and on or Before September 20, 1994.
8. Subpart Eb - Large Municipal Waste Combustors for Which Construction is Commenced after September 20, 1994 or for Which Modification or Reconstruction is Commenced After June 19, 1996.

   is Commenced after June 20, 1996.
10. Subpart F - Portland Cement Plants.

11. Subpart G - Nitric Acid Plants.
12. Subpart H - Sulfuric Acid Plants.
13. Subpart I - Hot Mix Asphalt Facilities.
14. Subpart J - Petroleum Refineries.
15. Subpart K - Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.
16. Subpart Ka - Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984.
17. Subpart Kb - Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.
18. Subpart L - Secondary Lead Smelters.
19. Subpart M - Secondary Brass and Bronze Production Plants.
20. Subpart N - Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973.
21. Subpart Na - Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983.
22. Subpart O - Sewage Treatment Plants.
23. Subpart P - Primary Copper Smelters.
24. Subpart Q - Primary Zinc Smelters.
25. Subpart R - Primary Lead Smelters.
26. Subpart S - Primary Aluminum Reduction Plants.
27. Subpart T - Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants.
28. Subpart U - Phosphate Fertilizer Industry: Superphosphoric Acid Plants.
29. Subpart V - Phosphate Fertilizer Industry: Diammonium Phosphate Plants.
30. Subpart W - Phosphate Fertilizer Industry: Triple Superphosphate Plants.
31. Subpart X - Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities.
32. Subpart Y - Coal Preparation Plants.
33. Subpart Z - Ferroalloy Production Facilities.
34. Subpart AA - Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974, and On or Before August 17, 1983.
35. Subpart AAa - Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983.
36. Subpart BB - Kraft Pulp Mills.
37. Subpart CC - Glass Manufacturing Plants.
38. Subpart DD - Grain Elevators.
39. Subpart EE - Surface Coating of Metal Furniture.
40. Subpart GG - Stationary Gas Turbines.
41. Subpart HH - Lime Manufacturing Plants.
42. Subpart KK - Lead-Acid Battery Manufacturing Plants.
43. Subpart LL - Metallic Mineral Processing Plants.
44. Subpart MM - Automobile and Light Duty Truck Surface Coating Operations.
45. Subpart NN - Phosphate Rock Plants.
46. Subpart PP - Ammonium Sulfate Manufacture.
47. Subpart QQ - Graphic Arts Industry: Publication Rotogravure Printing.
48. Subpart RR - Pressure Sensitive Tape and Label Surface Coating Operations.
49. Subpart SS - Industrial Surface Coating: Large Appliances.
50. Subpart TT - Metal Coil Surface Coating.
51. Subpart UU - Asphalt Processing and Asphalt Roofing Manufacture.
52. Subpart VV - Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.
53. Subpart WW - Beverage Can Surface Coating Industry.
54. Subpart XX - Bulk Gasoline Terminals.
55. Subpart AAA - New Residential Wood Heaters
56. Subpart BBB - Rubber Tire Manufacturing Industry.
57. Subpart DDD - Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry.
58. Subpart FFF - Flexible Vinyl and Urethane Coating and Printing.
59. Subpart GGG - Equipment Leaks of VOC in Petroleum Refineries.
60. Subpart HHH - Synthetic Fiber Production Facilities.
61. Subpart III - Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes.
62. Subpart JJJ - Petroleum Dry Cleaners.
63. Subpart KKK - Equipment Leaks of VOC from Onshore Natural Gas Processing Plants.
64. Subpart LLL - Onshore Natural Gas Processing; SO_2 Emissions.
65. Subpart NNN - Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.
66. Subpart OOO - Nonmetallic Mineral Processing Plants.
67. Subpart PPP - Wool Fiberglass Insulation Manufacturing Plants.
68. Subpart QQQ - VOC Emissions From Petroleum Refinery Wastewater Systems.
69. Subpart RRR - Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.
70. Subpart SSS - Magnetic Tape Coating Facilities.
71. Subpart TTT - Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines.
72. Subpart UUU - Calciners and Dryers in Mineral Industries.
73. Subpart VVV - Polymeric Coating of Supporting Substrates Facilities.
74. Subpart WWW - Municipal Solid Waste Landfills.
75. Subpart AAAA - Small Municipal Waste Combustion Units for Which Construction Is Commenced after August 30, 1999, or for Which Modification or Reconstruction Is Commenced after June 6, 2001.
76. Subpart CCCC - Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced after November 30, 1999, or for Which Modification or Reconstruction Is Commenced on or after June 1, 2001.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Amended effective February 3, 1993 (Supp. 93-1). Section R18-2-901 renumbered to R18-2-1101, new Section R18-2-901 renumbered from R18-2-801 and 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 effective May 9, 1996 (Supp. 96-2). Amended effective April 4, 1997; filed with the Office of the Secretary of State March 14, 1997 (Supp. 97-1). Amended effective December 4, 1997 (Supp. 97-4). Amended by final rulemaking at 5 A.A.R. 3058, effective August 10, 1999, and at 5

A.A.R. 3221, effective August 12, 1999 (Supp. 99-3). Amended by final rulemaking at 6 A.A.R. 4170, effective October 11, 2000 (Supp. 00-4). Amended by final rulemaking at 8 A.A.R. 2543, effective May 24, 2002 (Supp. 02-2).

R18-2-902. General Provisions

A. As used in 40 CFR 60: "Administrator" means the Director of the Arizona Department of Environmental Quality, except that the Director shall not be authorized to approve alternate or equivalent test methods or alternative standards or work practices.

B. From the general standards identified in R18-2-901, delete the following:

1. 40 CFR 60.4. All requests, reports, applications, submittals, and other communications to the Director pursuant to this Article shall be submitted to the Arizona Department of Environmental Quality, Air Quality Division, 3033 North Central Avenue, Phoenix, Arizona 85012.
2. 40 CFR 60.5 and 60.6.

C. The Director shall not be delegated authority to deal with equivalency determinations or innovative technology waivers as covered in Sections 111(h)(3) and 111(j) of the Act.

Historical Note

Adopted effective February 26, 1988 (Supp. 88-1). Amended effective September 26, 1990 (Supp. 90-3). Section R18-2-902 renumbered to R18-2-1102, new Section R18-2-902 renumbered from R18-2-802 and amended effective November 15, 1993 (Supp. 93-4). Amended effective June 10, 1994 (Supp. 94-2).

R18-2-903. Standards of Performance for Fossil-fuel Fired Steam Generators

As exceptions to 40 CFR 60.40 through 60.47:

1. In place of 40 CFR 60.43(a)(2), the following language shall be substituted: 340 nanograms per joule heat input (0.8 pounds per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue.
2. Delete 40 CFR 60.43(b).
3. For those persons who obtained an installation permit prior to May 14, 1979, for two or more fuel burning equipment or steam power generating installations, which permitted such persons to comply with the sulfur dioxide emission standards specified in R18-2-901 and this Section as if such equipment or installations constituted one emission discharge point:
   a. Those persons shall comply with the applicable sulfur dioxide emission standards in the manner specified in their installation permit.
   b. The Department shall incorporate such emission standards into each person's operating permit as an enforceable permit condition.
   c. In no event shall any one fuel burning equipment or steam power generating installation emit sulfur dioxide in excess of:
      i. 520 nanograms per joule heat input (1.2 pounds per million BTU) for solid fossil fuel or solid fossil fuel and wood residue.
      ii. 340 nanograms per joule heat input (0.8 pounds per million BTU) for liquid fossil fuel or liquid fossil fuel and wood residue.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective May 28, 1982 (Supp. 82-3). Former Section R9-3-903 renumbered without change as Section R18-2-903 (Supp. 87-3). Repealed effective February 26, 1988 (Supp. 88-1). New Section R18-2-903 renumbered from R18-2-803 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-904. Standards of Performance for Incinerators

A. Incinerators with a charging rate of more than 45 metric tons or 49.6 tons per day shall conform to the requirements of 40 CFR 60.50 through 60.54.

B. Incinerators with a charging rate of 45 metric tons or 49.6 tons per day or less that commence construction or modification after May 14, 1979, shall conform to the requirements of 40 CFR 60.52 through 60.54 and of R18-2-704(A).

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective May 28, 1982 (Supp. 82-3). Former Section R9-3-904 renumbered without change as Section R18-2-904 (Supp. 87-3). Repealed effective February 26, 1988 (Supp. 88-1). New Section R18-2-904 renumbered from R18-2-804 and amended effective November 15, 1993 (Supp. 93-4).

R18-2-905. Standards of Performance for Storage Vessels for Petroleum Liquids

In addition to 40 CFR 60.110 - 60.113:

1. Any petroleum liquid storage tank of less than 40,000 gallons (151,412 liters) capacity shall be equipped with a submerged filling device or acceptable equivalent as determined by the Director for the control of hydrocarbon emissions.
2. All facilities for dock loading of petroleum products having a vapor pressure of 2.0 pounds per square inch absolute, or greater, at loading pressure shall provide for submerged filling or other acceptable equivalent for control of hydrocarbon emissions.
3. All pumps and compressors which handle volatile organic compounds shall be equipped with mechanical seals or other equipment of equal efficiency to prevent the release of organic contaminants into the atmosphere.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective May 28, 1982 (Supp. 82-3). Former Section R9-3-905 renumbered without change as Section R18-2-905 (Supp. 87-3). Repealed effective February 26, 1988 (Supp. 88-1). New Section R18-2-905 renumbered from R18-2-805 effective November 15, 1993 (Supp. 93-4).

R18-2-906. Repealed

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective May 28, 1982 (Supp. 82-3). Former Section R9-3-906 renumbered without change as Section R18-2-906 (Supp. 87-3). Repealed effective February 26, 1988 (Supp. 88-1).

R18-2-907. Reserved

R18-2-908. Reserved

R18-2-909. Reserved

R18-2-910. Repealed

Historical Note

Adopted effective August 9, 1985 (Supp. 85-4). Former Section R9-3-910 renumbered without change as Section R18-2-910 (Supp. 87-3). Repealed effective February 26, 1988 (Supp. 88-1).

R18-2-911. Reserved

R18-2-912. Reserved

R18-2-913. Repealed

Historical Note

Adopted effective August 9, 1985 (Supp. 85-4). Former Section R9-3-913 renumbered without change as Section R18-2-913 (Supp. 87-3). Repealed effective February 26, 1988 (Supp. 88-1).

R18-2-914. Reserved

R18-2-915. Reserved

R18-2-916. Reserved

R18-2-917. Reserved

R18-2-918. Reserved

R18-2-919. Reserved

R18-2-920. Reserved

R18-2-921. Reserved

R18-2-922. Repealed

Historical Note

Adopted effective August 9, 1985 (Supp. 85-4). Former Section R9-3-922 renumbered without change as Section R18-2-922 (Supp. 87-3). Repealed effective February 26, 1988 (Supp. 88-1).

ARTICLE 10. MOTOR VEHICLES; INSPECTIONS AND MAINTENANCE

R18-2-1001. Definitions

In this Article, unless the context otherwise requires:

1. Abbreviations and symbols are as follows:
   a. "A/F" means air/fuel,
   b. "CO" means carbon monoxide.
   c. "CO_2" means carbon dioxide.
   d. "EGR" means exhaust gas recirculation.
   e. "GVWR" means gross vehicle weight rating.
   f. "HC" means hydrocarbon.
   g. "HP" means horsepower.
   h. "LNG" means liquefied natural gas.
   i. "LPG" means liquid petroleum gas.
   j. "MIL" means Malfunction Indicator Lamp.
   k. "MPH" means miles per hour.
   l. "MVD" means the Motor Vehicle Division of the Arizona Department of Transportation.
   m. "NDIR" means nondispersive infrared.
   n. "NOx" means the sum of nitrogen oxide and nitrogen dioxide.
   o. "%" means percent.
   p. "OEM" means original equipment manufacturer.
   q. "OBD" means On-Board Diagnostics.
   r. "PCV" means positive crankcase ventilation.
   s. "PPM" means parts per million by volume.
   t. "RPM" means revolutions per minute.
   u. "VIN" means vehicle identification number.
2. "Annual test" means any vehicle emissions test that is not a biennial test.
3. "Apportioned vehicle" means a vehicle that is subject to the proportional registration provisions of A.R.S. § 28-2233.
4. "Area A" has the meaning in A.R.S. § 49-541.
5. "Area A vehicle" means a motor vehicle subject to emissions inspection and that is:
   a. Registered or to be registered within area A;
   b. Owned by or leased to a person having a valid fleet permit and customarily kept in area A;
   c. A government vehicle customarily kept in area A;
   d. Used to commute to the driver's principal place of employment located in area A; or
   e. Parked, will be parked, or is the subject of a parking permit application at an institution located in area A and subject to the requirements of A.R.S. §§ 15-1444(C) or 15-1627(G).
6. "Area B" has the meaning in A.R.S. § 49-541.
7. "Area B vehicle" means a motor vehicle subject to emissions inspection and that is:
   a. Registered or to be registered within area B;
   b. Owned by or leased to a person having a valid fleet permit and customarily kept in area B;
   c. A government vehicle customarily kept in area B;
   d. Used to commute to the driver's principal place of employment located in area B; or
   e. Parked, will be parked, or is the subject of a parking permit application at an institution located in area B and subject to the requirements of A.R.S. §§ 15-1444(C) or 15-1627(G).
8. "Biennial test" means the transient loaded emissions test and evaporative system tests required under R18-2-1006(E)(2), or the OBD test for area A vehicles under R18-1006(E)(3).
9. "Calibration gas" means a gas with assigned concentrations of CO, hexane, or CO_2 that is used by a state inspector to check the accuracy of emissions analyzers.
10. "Certificate of compliance" means a serially numbered document issued by a state station at the time of a vehicle inspection indicating that the vehicle has met the emissions standards.
11. "Certificate of exemption" means a serially numbered document issued by the Director exempting a vehicle from inspection that is not available within the state for an inspection during the 90 days before the emissions compliance expiration date.
12. "Certificate of inspection" means a serially numbered document issued by the Director indicating that a vehicle has been inspected under A.R.S. § 49-546 and has passed inspection.
13. "Certificate of waiver" means a serially numbered document issued by the Department or a fleet inspector other than an auto dealer licensed to sell used motor vehicles under A.R.S. Title 28, indicating that the requirement of passing reinspection has been waived for a vehicle under A.R.S. § 49-542.
14. "Conditioning mode" means either a fast idle condition or a loaded condition as defined in this Section.
15. "Constant 4-wheel drive vehicle" means any 4-wheel drive vehicle that cannot be converted to 2-wheel drive except by disconnecting one of the vehicle's drive shafts.
16. "Constant volume sampler" means a system that dilutes engine exhaust to be sampled with ambient air so that the total combined flow rate of exhaust and dilution air mix is nearly constant for all engine operating conditions.
17. "Contractor" means a person, business, firm, partnership, or corporation with whom the Director has a contract that provides for the operation of one or more official emissions inspection stations.
18. "Curb idle test" means an exhaust emissions test conducted with the engine of the vehicle running at the manufacturer's idle speed ± 100 RPM but without pressure exerted on the accelerator.

19. "Curb weight" means a vehicle's unloaded weight without fuel and oil plus 300 pounds.
20. "Dealer" means a person or organization licensed by the Arizona Department of Transportation as a new motor vehicle dealer, used motor vehicle dealer, or motorcycle dealer.
21. "Department" means the Department of Environmental Quality.
22. "Director" means the Director of the Department of Environmental Quality.
23. "Director's certificate" means a serially numbered document issued by the Director in certain circumstances for the vehicle to show evidence of meeting the minimum standards for registration or reregistration under R18-2-1019 or R18-2-1022.
24. "Electrically-powered vehicle" means a vehicle that uses electricity as the means of propulsion and does not require the combustion of fossil fuel within the confines of the vehicle to generate electricity.
25. "Emissions compliance expiration date" means:
    a. Each registration expiration date for a vehicle subject to an annual test; and
    b. The registration expiration date in the second year after the initial biennial test required under this Article or R18-2-1005(B) for a vehicle subject to a biennial test.
26. "Emissions inspection station permit" means a certificate issued by the Director authorizing the holder to perform vehicle emissions inspections under this Article.
27. "Exhaust emissions" means products of combustion emitted into the atmosphere from any opening in the exhaust system downstream of the exhaust ports of a motor vehicle engine.
28. "Exhaust pipe" means the pipe that attaches to the muffler and exits the vehicle.
29. "Fast idle condition" means to operate a vehicle by running the engine at 2,500 RPM, ± 300 RPM, for up to 30 seconds, with the transmission in neutral, to prepare the vehicle for a subsequent curb idle test.
30. "Fast pass or fast fail algorithm" means a procedure in a vehicle emissions testing system that logically determines whether a vehicle will pass or fail the transient loaded emissions test under R18-2-1006(E)(2) before the test is over.
31. "Fleet emissions inspection station" or "fleet station" means any vehicle emissions inspection facility operated under a permit issued under A.R.S. § 49-546.
32. "Fuel" means any material that is burned within the confines of a vehicle to propel the vehicle.
33. "Four-stroke vehicle" means a vehicle equipped with an engine that requires two revolutions of the crankshaft for each piston power stroke.
34. "Golf cart" means a motor vehicle that has not less than three wheels in contact with the ground, has an unladen weight less than 1,300 pounds, is designed to be and is operated at not more than 15 MPH, and is designed to carry golf equipment and persons.
35. "Government vehicle" means a registered motor vehicle exempt from the payment of a registration fee, or a federally owned or leased vehicle.
36. "Gross vehicle weight rating" (GVWR) means the maximum vehicle weight that a vehicle is designed for as established by the manufacturer.
37. "Inspection" means the mandatory vehicle emissions inspection including the tampering inspection.
38. "Inspection sticker" means a self-adhesive, serially numbered rectangular sticker indicating a government vehicle has met Arizona emissions inspection requirements.
39. "Loaded condition" means to condition a vehicle by running the vehicle on a chassis dynamometer at a specified speed and load for no more than 30 seconds to prepare the vehicle for a subsequent curb idle test.
40. "Loaded cruise test" means an exhaust emissions test conducted on a chassis dynamometer under R18-2-1006(E)(1)(a) and (F)(2)(a).
41. "Mass emissions measurement" means measurement of a vehicle's exhaust in mass units such as grams.
42. "Model year" means the date of manufacture of the original vehicle within the annual production period of the vehicle as designated by the manufacturer or, if a reconstructed vehicle, the first year of titling.
43. "MOL percent" means the percent, by volume, that a particular gas occupies in a mixture of gases at a uniform temperature.
44. "Motorcycle" means a motor vehicle, other than a tractor, having a seat or saddle for use of the rider and designed to travel on not more than three wheels in contact with the ground.
45. "Motorhome" means a vehicle built on a truck or bus chassis and equipped as a self-contained traveling home.
46. "New aftermarket catalytic converter" or "new aftermarket converter" means a catalytic converter, except for an OEM, that meets the standards under 40 CFR 86.
47. "Official emissions inspection station" means an inspection facility, other than a fleet emissions inspection station, whether placed in a permanent structure or in a mobile unit for conveyance to various locations within the state, for the purpose of conducting inspections under A.R.S. § 49-542.
48. "On-board diagnostics test" means a method of emissions testing using the on-board computer systems of a 1996 or newer vehicle, to diagnose and report on the status of the engine's emissions systems by connecting a scan tool to the vehicle's data link connector.
49. "Opacity" means the degree of absorption of transmitted light.
50. "Operational air pump" means an air injection system to supply additional air into the exhaust system to promote further oxidation of HC and CO gases and to assist in catalytic reaction.
51. "Person" means the federal government, state, or any federal or state agency or institution, any municipality, political subdivision, public or private corporation, individual, partnership, association, or other entity, and includes any officer or governing or managing body of any municipality, political subdivision, or public or private corporation.
52. "Reconditioned OEM catalytic converter" or "reconditioned OEM converter" means a used OEM reconditioned equivalent or an OEM converter that has had the pellets replaced with new or used OEM equivalent pellets and that also meets the standards under 40 CFR 86.
53. "Recognized repair facility" means a business with an Arizona transaction privilege tax license whose primary purpose is vehicle repair, and who has at least one employee with a nationally recognized certification for emissions-related diagnosis and repair.
54. "Reconstructed vehicle" means:
    a. A reconstructed special as identified by the code letters "SP" on the section of the vehicle's Arizona registration card or Arizona certificate of title reserved for identification of the vehicle's style; or

b. A vehicle in which the vehicle style is not shown on the Arizona registration card or certificate of title, and the original manufacturer of the complete vehicle cannot be identified from the body.

55. "Standard gases" means gases maintained as a primary standard for determining the composition of working gases, calibration gases, or the accuracy of an emissions analyzer.
56. "State inspector" means an employee of the Department designated to perform quality assurance or waiver functions under this Article.
57. "State station" means an official emissions inspection station operated by a contractor.
58. "Tampering" means removing, defeating, or altering an emissions control device that was installed on a vehicle at the time the vehicle was manufactured. For the purposes of this Article, defeating includes failure to repair any malfunctioning emission control system or device.
59. "Two-stroke vehicle" means a vehicle equipped with an engine that requires one revolution of the crankshaft for each power stroke.
60. "Unloaded fast idle test" means an exhaust emissions test conducted with the engine of the vehicle running at 2,500 RPM.
61. "Vehicle" means any automobile, truck, truck tractor, motor bus, or self-propelled or motor-driven vehicle registered or to be registered in this state and used upon the public highways of this state for the purpose of transporting persons or property, except implements of husbandry, roadrollers, or road machinery temporarily operated upon the highway.
62. "Vehicle emissions inspector" means an individual who is licensed by the Director to perform vehicle emissions inspections under this Article.
63. "Working gases" means gases maintained to perform periodic calibration of an emissions analyzer.

Historical Note

Former Section R9-3-1001 repealed, new Section R9-3-1001 adopted effective January 13, 1976 (Supp. 76-1). Former Section R9-3-1001 repealed, former Section R9-3-1002 renumbered and amended as Section R9-3-1001 effective January 1, 1986 (Supp. 85-6). Amended effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1001 renumbered as Section R18-2-1001 and amended effective August 1, 1988 (Supp. 88-3). Amended effective September 19, 1990 (Supp. 90-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1002. Reserved

R18-2-1003. Vehicles to be Inspected by the Mandatory Vehicle Emissions Inspection Program

A. The following vehicles shall be inspected according to this Article at a state station or a fleet station unless exempted by subsection (B):

1. A vehicle to be registered or reregistered within area A or area B for highway use. For the purposes of this Article, registration or reregistration within area A or area B shall be determined by the vehicle owner's permanent and actual residence. The permanent address in the MVD database shall be presumed to be the owner's permanent and actual residence. A post office box address listed on a title or registration document under A.R.S. § 28-2051(C) is not evidence of the owner's permanent and actual residence;
2. Each vehicle delivered to a retail purchaser by a dealer licensed to sell used motor vehicles for highway use under A.R.S. Title 28 and whose place of business is located in area A or area B;
3. Each vehicle registered outside area A and area B but used to commute to the driver's principal place of employment located within area A or area B;
4. Each vehicle owned by a person who is subject to A.R.S. §§ 15-1444(C) or 15-1627(G); and
5. An area A or area B vehicle located out-of-state for more than 90 days before vehicle registration expiration shall be emissions tested at an official emissions inspection testing center in the area where it is located. If no official emissions testing program is available in the area for that vehicle, the vehicle shall meet the testing requirements under this Article within 15 calendar days of returning to Arizona.

B. The following vehicles are exempt from the inspection requirements of this Article:

1. A vehicle manufactured in or before the 1966 model year;
2. A vehicle leased to a person residing outside area A and area B by a leasing company whose place of business is in area A or area B, except as provided in subsection (A)(3);
3. A vehicle sold between motor vehicle dealers;
4. An electrically-powered vehicle;
5. An apportioned vehicle;
6. A golf cart;
7. A vehicle with an engine displacement of less than 90 cubic centimeters;
8. A vehicle registered at the time of change of name of ownership except when:
   a. The change in registration is accompanied by the required fee for the year following expiration of the prior registration, or
   b. The change results from the sale by a dealership whose place of business is located in area A or area B;
9. A vehicle for which a current certificate of exemption or Director's certificate is issued;
10. A vehicle of a model year the same as, or newer than, the current calendar year and a vehicle of the prior four model years, except:
    a. A reconstructed vehicle;
    b. An alternative fuel vehicle, as defined in A.R.S. § 43-1086, and
    c. A vehicle failing an emissions inspection the owner chooses to have under A.R.S. § 49-543.
11. A vehicle designed to operate exclusively on hydrogen, as defined in A.R.S. § 1-215.

C. Government vehicles operated in area A or area B and not exempted by this Article shall be emissions inspected according to R18-2-1017.

Historical Note

Former Section R9-3-1003 repealed, new Section R9-3-1003 adopted effective January 13, 1976; Amended as an emergency effective January 19, 1976 (Supp. 76-1). Amended effective January 3, 1977 (Supp. 77-1). Amended effective January 3, 1979 (Supp. 79-1). Amended as an emergency effective January 2, 1981, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1003 as amended effective January 3, 1979 and amended as an emergency effective January 2, 1981 now amended effective April

15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended subsection (A) effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1003 renumbered as Section R18-2-1003 and amended effective August 1, 1988 (Supp. 88-3). Amended effective September 19, 1990 (Supp. 90-3). Amended effective November 14, 1994 (Supp. 94-4). Amended effective October 15, 1998 (Supp. 98-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 6 A.A.R. 2722, effective June 28, 2000 (Supp. 00-2). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1004. Repealed

Historical Note

Former Section R9-3-1004 repealed, new Section R9-3-1004 adopted effective January 13, 1976 (Supp. 76-1). Amended effective January 3, 1977 (Supp. 77-1). Former Section R9-3-1004 renumbered as Section R18-2-1004 and amended effective August 1, 1988 (Supp. 88-3). Section repealed by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4).

R18-2-1005. Time of Inspection

A. Area A vehicles subject to an annual test, all area B vehicles, and vehicles sold or offered for sale by dealers required to be inspected under R18-2-1003, shall be inspected at the following times:
1. For a vehicle not covered by a fleet station permit, within 90 days before each registration expiration date;
2. For a vehicle sold by a dealer licensed to sell used motor vehicles under A.R.S. Title 28, whose place of business is located in area A or area B, before delivery of the vehicle to the retail purchaser;
3. For a consignment vehicle offered for sale by a dealer licensed to sell used motor vehicles under A.R.S. Title 28 whose place of business is located in area A or area B, before delivery of the vehicle to the retail purchaser. The consignment vehicle shall be inspected at a state station according to R18-2-1006;
4. For government vehicles:
   a. For a vehicle not exempt under R18-2-1003(B)(10), within 12 months after acquisition by the operating entity and then annually on or before the anniversary date of the previous inspection;
   b. For a vehicle exempt under R18-2-1003(B)(10), within 90 days after the vehicle becomes subject to testing, and then annually on or before the anniversary date of the previous inspection and;
   c. A vehicle is subject to testing on the anniversary of its date of acquisition;
5. For a vehicle owned by or leased to a person having a valid fleet station permit, at least once within each 12-month period following any original registration or reregistration;
6. For a vehicle to be registered in area A or area B under conditions not specified in subsection (1) through (5), within 90 days before registration;
7. For a vehicle registered outside area A and area B and used to commute to the driver's principal place of work located in area A or area B, upon vehicle registration or reregistration;
8. For a vehicle owned by a person subject to A.R.S. §§ 15-1444(C) or 15-1627(G), within 30 calendar days following the date of initial registration at the institution located in area A or area B and annually thereafter; and
9. For a vehicle issued a certificate of exemption under R18-2-1023, within 15 calendar days after returning to Arizona, unless an official emissions inspection document from the out-of-state emissions inspection station is submitted with the request for exemption.

B. An area A vehicle subject to a biennial test shall be inspected at the following times:
1. For a vehicle not covered by a fleet station permit, within 90 days before the vehicle's emissions compliance expiration date.
2. For a government vehicle;
   a. For a vehicle not exempt under R18-2-1003(B)(10), within 12 months after acquisition by the operating entity, and biennially thereafter, on or before the anniversary date of the previous inspection;
   b. For a vehicle exempt under R18-2-1003(B)(10), within 90 days after the vehicle becomes subject to testing, and biennially thereafter, on or before the anniversary date of the previous inspection; and
   c. The vehicle becomes subject to testing on the anniversary of its date of acquisition;
3. For a vehicle owned by or leased to a person having a valid fleet station permit, at least once within each successive 24-month period following original registration;
4. For a vehicle registered outside area A but used to commute to the driver's principal place of work located in area A, upon vehicle registration and biennially thereafter;
5. For a vehicle owned by a person subject to A.R.S. §§ 15-1444(C) or 15-1627(G), within 30 days following the date of initial registration at the institution located in area A and biennially thereafter;
6. For a vehicle to be registered as area A vehicles under conditions not specified in subsections (1) through (5), upon initial registration and within 90 days before the vehicle's emissions compliance expiration date thereafter and;
7. For a vehicle issued a certificate of exemption under R18-2-1023, within 15 calendar days after returning to Arizona, unless an official emissions inspection document indicating compliance with the emissions requirements from the out-of-state emissions inspection station is submitted with the request for exemption.

C. A used vehicle not registered as an area A or area B vehicle shall be inspected according to this Article before registration as an area A or area B vehicle unless exempted by R18-2-1003(B).

D. An area B vehicle being registered in area A is subject to the appropriate annual or biennial test from area A before registration even if the emissions compliance period for area B has not yet expired.

E. A new vehicle that is exempt from emissions testing under R18-2-1003(B)(10), and subject to either an annual or biennial test, shall be tested before registration in the calendar year that exceeds the vehicle's model year by five years.

F. Nothing in this Section shall be construed to waive a late registration fee because of failure to meet inspection requirements by the registration deadline, except that a motor vehicle that fails the initial or subsequent test shall not be subject to a penalty fee for late registration renewal if:
1. The initial test is accomplished before the emissions compliance expiration date, and
2. The registration renewal is received by MVD within 30 days of the initial test.

G. An owner of a vehicle subject to subsection (A)(1), (A)(6), (B)(1), or (B)(6) may submit the vehicle for emissions inspec-

tion more than 90 days before the emissions compliance expiration date but the inspection does not satisfy the registration or reregistration testing requirement under R18-2-1003.

Historical Note

Former Section R9-3-1005 repealed, new Section R9-3-1005 adopted effective January 31, 1976 (Supp. 76-1). Amended effective January 3, 1977 (Supp. 77-1). Amended effective March 2, 1978 (Supp. 78-2). Amended effective January 3, 1979 (Supp. 79-1). Amended effective February 20, 1980 (Supp. 80-1). Amended as an emergency effective January 2, 1981 pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-2). Former Section R9-3-1005 as amended effective February 20, 1980 and amended as an emergency effective January 2, 1981, now amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1005 renumbered as Section R18-2-1005 and subsections (A) and (C) amended effective August 1, 1988 (Supp. 88-3). Amended effective September 19, 1990 (Supp. 90-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1006. Emissions Test Procedures

A. Each vehicle inspected at a state station shall be visually inspected before the emissions test for the following unsafe or untestable conditions:
1. A fuel leak that causes wetness or pooling of fuel;
2. A continuous engine or transmission oil leak onto the floor;
3. A continuous engine coolant leak onto the floor such that the engine is overheating or may overheat within a short time;
4. A vehicle with a tire on a driving wheel with less than 2/32-inch tread, with metal protuberances, unmatched tire size, with obviously low tire pressure as determined by visual inspection, or any other condition that precludes a loaded test for reasons of personnel, equipment, or vehicle safety;
5. An exhaust pipe that does not exit the rear or side of the vehicle to allow for safe exhaust probe insertion;
6. An exhaust pipe on a diesel-powered vehicle that does not allow for safe exhaust probe insertion and attachment of opacity meter sensor units;
7. Improperly operating brakes;
8. Any vehicle modification or mechanical condition that prevents dynamometer operation; and
9. Any other condition deemed unsafe or untestable by the inspector, including loud internal engine noise or an obvious exhaust leak.

B. A vehicle emissions inspection shall not be performed by an official emissions inspection station on any vehicle towing a heavily loaded trailer, carrying a heavy load, loaded with explosives, or loaded with any hazardous material not used as fuel for the vehicle.

C. Any vehicle unsafe or otherwise untestable as determined by the visual inspection shall be rejected without an emissions test. The inspector shall notify the vehicle owner or operator of all unsafe conditions found on rejected vehicles. The state station shall not charge a fee if the vehicle is rejected. The contractor shall not conduct an emissions test on a vehicle rejected for a safety reason or any other untestable condition until the cause for rejection is repaired.

D. When conducting the emissions test required by this Section, the vehicle emissions inspector shall meet all of the following requirements:
1. The vehicle shall be tested in the condition presented, unless rejected under subsection (A), (B), or (C). The vehicle's engine shall be operating at normal temperature and not be overheating as indicated by a gauge, warning light, or boiling radiator. All of the vehicle's accessories shall be turned off during testing.
2. A vehicle designed to operate with more than one fuel shall be tested on the fuel in use when the vehicle is presented for inspection, except alternative fuel vehicles, as defined in A.R.S. § 43-1086. The inspector shall test the alternative fuel vehicle on each fuel for which it is intended to operate, using the appropriate emissions test procedure and standards for that vehicle. The alternative fuel vehicle shall:
   a. Be operated a minimum of 30 seconds before testing, after switching fuels;
   b. Be rejected if it is not able to operate on both fuels; and
   c. Be rejected if the vehicle operator cannot switch fuels.
3. A vehicle operated exclusively on propane or natural gas, as defined in A.R.S. § 1-215, shall be exempt from the gas cap and evaporative pressure testing described in subsection (E)(5)(b)(ii), (E)(6)(a), and (F)(6)(a).

E. In area A, the inspection test procedures for a vehicle other than a diesel-powered vehicle or a vehicle held for resale by a fleet-licensed motor vehicle dealer shall consist of the following:
1. A vehicle manufactured with a model year of 1967 through 1980, a nonexempt vehicle with a GVWR greater than 8,500 pounds, and a reconstructed vehicle, except a motorcycle and a constant 4-wheel drive vehicle, is required to annually take and pass a loaded cruise test and a curb idle test, as follows:
   a. Loaded cruise test. The vehicle's drive wheels shall be placed on a dynamometer and the vehicle shall be operated according to Table 1 of this Article, in drive for automatic transmission or second or higher gear for manual transmission. Overdrive shall not be used for testing. All vehicles shall be driven by the inspector during testing. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized, or at the end of 90 seconds, whichever occurs first. After exhaust emissions are recorded, engine speed shall be returned to idle for a curb idle test.
   b. Curb idle test. The test shall be performed with the vehicle in neutral for 1981 and newer vehicles. For 1980 and older vehicles, the test shall be performed in neutral, except that if the vehicle has an automatic transmission, drive shall be used. Engine RPM shall be within ± 100 RPM of the manufacturer's specified idle RPM. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized, or at the end of 90 seconds, whichever occurs first. A CO_2 plus CO reading of 6% or greater shall be registered to establish test validity. A CO_2 plus CO reading of less than 6% shall be proof of exhaust sample dilution and the vehicle shall be rejected from further emissions inspection until

repaired, except when tested at a fleet emissions inspection station.

c. Exhaust sampling for a vehicle required to take an annual emissions test under subsection (E)(1) shall comply with subsection (F)(7).

2. A vehicle with a 1981 or newer model year and a GVWR of 8,500 pounds or less, except a motorcycle, a reconstructed vehicle, a 1996 or newer OBD-equipped vehicle or a constant 4-wheel drive vehicle, is required to biennially take and pass a transient loaded emissions test and an evaporative system pressure test as follows:

a. The transient loaded emissions test shall consist of 147 seconds of mass emissions measurement using a constant volume sampler while the vehicle is driven by an inspector through a computer-monitored driving cycle on a dynamometer with inertial weight settings appropriate for the weight of the vehicle. The driving cycle shall include the acceleration, deceleration, and idle operating modes described in Table 4. The 147 second sequence may be ended earlier using a fast pass or fast fail algorithm. A retest algorithm shall be used to determine if a test failure is due to insufficient vehicle preconditioning. As determined by the retest algorithm, up to two additional tests may be performed on a failing vehicle. Drive shall be used for automatic transmissions and first gear shall be used to begin for manual transmissions. Exhaust emissions concentrations in grams per mile for HC, CO, NOx and CO_2 shall be recorded continuously beginning with the first second. The inspector shall reject a vehicle with an audible or visible exhaust leak from emissions testing.

b. The evaporative system pressure test shall consist of the following steps in sequence:

i. Connect the test equipment to either the fuel tank vent hose at the canister or the fuel tank filler neck. The gas cap shall be checked to determine that cap leakage does not exceed 60 cubic centimeters of air per minute at a pressure of 30 inches of water gauge;

ii. Pressurize the system to 14 ± 0.5 inches of water without exceeding 26 inches of water system pressure;

iii. Close off the pressure source, seal the evaporative system, and monitor pressure decay for no more than two minutes.

c. For a vehicle requiring a transient loaded emissions test under subsection (a), all testing and test equipment shall conform to "IM240 & Evap Technical Guidance," EPA420-R-98-010, EPA, August 1998, incorporated by reference, and no future editions or amendments, except that the transient driving cycle in Table 4 of this Article shall be used. A copy of the incorporated material is on file with the Department and the Secretary of State, and may be obtained at EPA's National Vehicle and Fuel Emissions Laboratory, 2565 Plymouth Road, Ann Arbor, MI 48105-2498.

3. A vehicle with a 1996 or newer model year and a GVWR of 8500 pounds or less, except a motorcycle or a reconstructed vehicle, is required to biennially take and pass an OBD test and a functional gas cap test as follows:

a. The OBD test shall consist of:

i. A visual inspection of the MIL function; and

ii. An electronic examination of the OBD computer by connecting a scan tool to the data link connector and interrogating the OBD system to determine vehicle readiness status, MIL status, and presence of diagnostic trouble codes.

b. The OBD test and test equipment shall conform to "Performing Onboard Diagnostic System Checks as Part of a Vehicle Inspection and Maintenance Program," EPA420-R-01-015, EPA, June 2001, incorporated by reference, and no future editions or amendments. A copy of this incorporated material is on file with the Department and the Secretary of State, and may be obtained at the EPA's National Vehicle and Fuel Emissions Laboratory, 2565 Plymouth Road, Ann Arbor, MI, 48105-2498; and

c. The functional gas cap test shall comply with subsection (E)(6)(a).

4. A motorcycle, or a constant 4-wheel drive vehicle except one requiring an OBD emissions test under subsection (E)(3), shall take and pass only a curb idle test according to subsection (F)(1). An all-terrain vehicle (ATV), as defined in A.R.S. § 28-101, shall be tested as a motorcycle.

5. The emissions pass-fail determination for a vehicle tested under subsection (E) shall be made as follows:

a. A vehicle tested under subsection (E)(1), that does not exceed the loaded cruise mode or curb idle mode HC and CO emissions standards listed in Table 2 for the vehicle, comply complies with the emissions standards in Table 2. The loaded cruise test standards in Table 2 apply to a fleet vehicle tested with the 2,500 RPM unloaded fast idle test under R18-2-1019(E).

b. A vehicle tested under subsection (E)(2) shall meet the standards in Table 3 and pass the evaporative system pressure test as follows:

i. Table 3 Standards. A vehicle shall meet either the composite standard for the whole test or the phase 2 standard for seconds 65 to 146. The Department may implement a testing algorithm for fast pass, fast fail, or both, provided that the algorithm is reliable in accurately predicting the final outcome of the entire cycle. A vehicle not meeting either the composite or phase 2 standard shall fail the emissions test.

ii. Evaporative System Pressure Test. A vehicle fails the emissions test if the evaporative system cannot maintain a system pressure above eight inches of water for at least two minutes after being pressurized to 14 ± 0.5 inches of water. Additionally, a vehicle fails the evaporative test if the canister is missing or damaged, if a hose or electrical connection is missing, routed incorrectly, or disconnected, according to the vehicle emissions control information label, or if the gas cap is missing.

c. A vehicle that operates on natural gas complies with HC emissions standards if the HC emissions value does not exceed the applicable standard in subsection (E)(5)(a) or (b), if:

i. Multiplied by 0.19, when using an analyzer with a flame ionization detector, or

ii. Multiplied by 0.61, when using an NDIR analyzer.

d. A motorcycle or a constant 4-wheel drive vehicle, except one requiring an OBD emissions test under subsection (E)(3), that does not exceed the curb idle mode HC and CO emissions standards listed in

Table 2 on either the first curb idle test or the second curb idle test passes the emissions test.

e. A vehicle tested under subsection (E)(3) shall:
   i. Fail if the data link connector is missing, tampered, or otherwise inoperable during any OBD test;
   ii. Fail if the MIL does not illuminate at all when the ignition key is turned to the key on, engine off position, or does not illuminate briefly during engine start during any OBD test;
   iii. Fail if the MIL illuminates continuously or flashes after the engine has been started during any OBD test;
   iv. Fail if a diagnostic trouble code is present and the MIL status, as indicated by the scan tool, is commanded on during any OBD test.
   v. Be rejected from an initial OBD test and required to take and pass a transient loaded test under subsection (E)(2) if the number of unset readiness indicators, excluding continuous indicators, is three or more for a model year 1996-2000 vehicle, or two or more for a model year 2001 and newer vehicle.
   vi. Be rejected from an OBD retest if the number of unset readiness indicators, excluding continuous indicators, exceeds the number allowed in subsection (v).
   vii. Fail the functional gas cap test if the gas cap does not comply with subsection (E)(6)(a).

f. A vehicle that exceeds the applicable emissions standards for the tests described in subsections (E)(1) and (E)(2)(a), or fails the OBD test described in subsection (E)(3), fails the emissions test and shall not be reinspected until a low-emissions tune-up is performed as described in R18-2-1010. A vehicle that fails the evaporative system pressure test described in subsection (E)(2)(b) shall not be reinspected until repaired as required in R18-2-1010(D)(1) and (2). A vehicle that fails the functional gas cap test described in subsection (E)(6)(a) shall not be reinspected until repaired as required in R18-2-1009(B).

6. A vehicle required to take an annual emissions test in area A shall, at the time of the test, undergo a tampering inspection based on the original configuration of the vehicle as manufactured. The applicable emissions system requirements shall be verified by the "VEHICLE EMISSION CONTROL INFORMATION" label. A vehicle that fails any portion of the tampering inspection shall be repaired according to R18-2-1009 before reinspection unless the owner provides the written statement required in R18-2-1008(B). "Original configuration" for a foreign-manufactured vehicle means the design and construction of a vehicle produced by the manufacturer for original entry and sale in the United States. The tampering inspection shall consist of the following:
   a. Any vehicle emissions tested, except one with a vented fuel system, shall have a functional test of the gas cap to determine that cap leakage does not exceed 60 cubic centimeters of air per minute at a pressure of 30 inches of water gauge. A vehicle with a vented fuel system shall be checked for the presence of a properly fitting fuel cap.
   b. For a 1975 and newer model year vehicle:
      i. A visual inspection to determine the presence and proper installation of each required catalytic converter, if applicable;
      ii. An examination to determine the presence of an operational air pump, if applicable; and
      iii. A visual inspection to determine the presence of an operational positive crankcase ventilation system and evaporative control system, if applicable.

F. In area B, the inspection test procedures for a vehicle other than a diesel-powered vehicle shall consist of the following:
1. An area B vehicle with a model year of 1967 through 1980 shall take and pass only a curb idle test. The curb idle test shall be performed with the vehicle in drive for automatic transmissions or in neutral for manual transmissions. Engine RPM shall be within ± 100 RPM of the manufacturer's specified idle RPM. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized, or at the end of 30 seconds, whichever occurs first. A CO_2 plus CO reading of 6% or greater shall be registered to establish test validity. A CO_2 plus CO reading less than 6% shall be proof of exhaust sample dilution and the vehicle shall be rejected from further emissions inspection until repaired, except when tested at a fleet emissions inspection station. If the vehicle fails the curb idle test, and if permitted by the vehicle operator, the vehicle shall be conditioned according to one of the following conditioning procedures:
   a. Fast-idle conditioning procedure. The vehicle shall be conditioned by increasing engine speed to 2,500, ± 300 RPM, for up to 30 seconds with the transmission in neutral. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized, or at the end of 30 seconds, whichever occurs first. The conditioning procedure standards in Table 2 are for diagnostic and advisory information only. After exhaust emissions are recorded, the engine speed shall be returned to curb idle for a second idle test. The fast-idle conditioning procedure may be used on a vehicle at a state station instead of the loaded conditioning procedure if any of the following occurs:
      i. The vehicle has a tire on a driving wheel with less than 2/32-inch tread, with metal protuberances, with visibly low tire pressure as determined by visual inspection, or any other condition that precludes loaded conditioning for reasons of personnel, equipment, or vehicle safety;
      ii. The vehicle is driven by a person who, because of physical incapacity, is unable to yield the driver's seat to the vehicle emissions inspector;
      iii. The driver refuses to yield the driver's seat to the vehicle emissions inspector; or
      iv. The vehicle cannot be tested according to Table 1 because of the vehicle's inability to attain the speeds specified.
   b. Loaded conditioning procedure. For a vehicle other than a motorcycle or a constant 4-wheel drive vehicle, the vehicle's drive wheels shall be placed on a dynamometer and the vehicle shall be operated according to Table 1, in drive for automatic transmission, or second or higher gear for manual transmission. All front wheel drive vehicles shall be driven by the inspector. HC and CO exhaust emissions concentrations shall be recorded after readings

have stabilized, or at the end of 30 seconds, whichever occurs first. The conditioning procedure standards in Table 2 are for diagnostic and advisory information only. After exhaust emissions are recorded, engine speed shall be returned to curb idle for a second idle test.

c. Following one of the conditioning procedures in subsection (a) or (b), the vehicle shall be retested according to the curb idle test procedure in subsection (1).

2. An area B vehicle with a 1981 or newer model year, except a motorcycle, a constant 4-wheel drive vehicle, or a 1996 and newer vehicle equipped with OBD, shall take and pass a loaded cruise test and curb idle test, as follows:
   a. Loaded Cruise Test. The vehicle's drive wheels shall be placed on a dynamometer and the vehicle shall be operated according to Table 1, in drive for automatic transmission or second or higher gear for manual transmission. Overdrive shall not be used. All front wheel drive vehicles shall be driven by the inspector. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized, or at the end of 90 seconds, whichever occurs first. After exhaust emissions are recorded, engine speed shall be returned to idle for a curb idle test.
   b. Curb Idle Test. The test shall be performed with the vehicle in neutral. Engine RPM shall be within ± 100 RPM of the manufacturer's specified idle RPM. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized, or at the end of 90 seconds, whichever occurs first. A CO_2 plus CO reading of 6% or greater shall be registered to establish test validity, except when tested at a fleet inspection station. A CO_2 plus CO reading less than 6% shall be proof of exhaust sample dilution and the vehicle shall be rejected from further emissions inspection until repaired.
3. A vehicle with a model year of 1996 or newer and a GVWR of 8500 pounds or less, except a motorcycle or a reconstructed vehicle, is required to annually take and pass an OBD test and a functional gas cap test as follows:
   a. The OBD test shall consist of:
      i. A visual inspection of the MIL function; and
      ii. An electronic examination of the OBD computer by connecting a scan tool to the data link connector and interrogating the OBD system to determine vehicle readiness status, MIL status, and presence of diagnostic trouble codes;
   b. The OBD test and test equipment shall conform to "Performing Onboard Diagnostic System Checks as Part of a Vehicle Inspection and Maintenance Program," EPA420-R-01-015, EPA, June 2001, incorporated by reference, and no future editions or amendments. A copy of this incorporated material is on file with the Department and the Secretary of State and may be obtained at the EPA's National Vehicle and Fuel Emissions Laboratory, 2565 Plymouth Road, Ann Arbor, MI, 48105-2498; and
   c. The functional gas cap test shall comply with subsection (F)(6)(a).
4. A motorcycle or a constant 4-wheel drive vehicle, except one requiring an OBD emissions test under subsection (F)(3), shall take and pass only a curb idle test according to subsection (1). An all-terrain vehicle (ATV), as defined in A.R.S. § 28-101, shall be tested as a motorcycle. If the vehicle fails the curb idle test, and if permitted by the vehicle operator, the vehicle shall be conditioned according to the fast idle conditioning procedure required in subsection (1)(a). Following conditioning, the vehicle shall be retested according to the curb idle test procedure in subsection (1).
5. The emissions pass-fail determination shall be made as follows:
   a. A vehicle with a model year of 1967 through 1980, except a motorcycle or a constant 4-wheel drive vehicle, that does not exceed the curb idle mode HC and CO emissions standards in Table 2 on either the first or second curb idle test, complies with the minimum emissions standards contained in Table 2.
   b. A vehicle with a 1981 or newer model year, except a motorcycle or a constant 4-wheel drive vehicle, that does not exceed the loaded cruise mode or curb idle mode HC and CO emissions standards listed in Table 2, complies with the minimum emissions standards in Table 2. The loaded cruise test standards specified in Table 2 shall apply to fleet vehicles tested with the 2,500 RPM unloaded fast idle test.
   c. A vehicle that operates on natural gas complies with HC emissions standards if the HC emissions value, as determined by an NDIR analyzer, multiplied by 0.61 does not exceed the applicable standard in subsection (F)(5)(a) or (b).
   d. A motorcycle or a constant 4-wheel drive vehicle, except one requiring an OBD emissions test under subsection (F)(3), that does not exceed the curb idle mode HC and CO emissions standards in Table 2 on either the first or second curb idle test complies with the minimum emissions standards in Table 2.
   e. A vehicle that exceeds the applicable emissions standards, or fails the OBD test described in subsection (F)(3), fails the emissions test and shall have a low emissions tune-up as described in R18-2-1010 before reinspection. A vehicle that fails the functional gas cap test described in subsection (F)(3)(c) shall not be reinspected until repaired as required in R18-2-1009(B).
   f. A vehicle tested under subsection (F)(3) shall:
      i. Fail if the data link connector is missing, tampered, or otherwise inoperable during any OBD test;
      ii. Fail if the MIL does not illuminate at all when the ignition key is turned to the key on, engine off position, or does not illuminate briefly during engine start during any OBD test;
      iii. Fail if the MIL illuminates continuously or flashes after the engine has been started during any OBD test;
      iv. Fail if a diagnostic trouble code is present and the MIL status, as indicated by the scan tool, is commanded on during any OBD test;
      v. Be rejected from an initial OBD test and required to take and pass a loaded cruise test and curb idle test under subsection (F)(2) if the number of unset readiness indicators, excluding continuous indicators, is three or more for a model year 1996-2000 vehicle, or two or more for a model year 2001 and newer vehicle;
      vi. Be rejected from an OBD retest if the number of unset readiness indicators, excluding continuous indicators, exceeds the number allowed in subsection (v); and

vii. Fail the functional gas cap test if the gas cap does not comply with subsection (F)(6)(a).

6. A vehicle required to take an emissions test in area B, except a vehicle required to take an OBD test as described in subsection (F)(3), shall at the time of the test, undergo a tampering inspection based on the original configuration of the vehicle as manufactured The applicable emissions system requirements shall be verified by the "VEHICLE EMISSION CONTROL INFORMATION" label. A vehicle that fails any portion of the tampering inspection shall be repaired according to R18-2-1009 before reinspection unless the owner provides the written statement required in R18-2-1008(B). "Original configuration" for a foreign manufactured vehicle means the design and construction of a vehicle produced by the manufacturer for original entry and sale in the United States. The tampering inspection shall consist of the following:
   a. Any vehicle emissions tested, except one with a vented fuel system, shall have a functional test of the gas cap to determine that cap leakage does not exceed 60 cubic centimeters of air per minute at a pressure of 30 inches of water gauge. A vehicle with a non-sealing gas cap shall be checked for the presence of a properly fitting gas cap.
   b. For a 1975 or newer model year vehicle:
      i. A visual inspection to determine the presence and proper installation of each required catalytic converter, if applicable; and
      ii. An examination to determine the presence of an operational air pump, if applicable.
7. Exhaust sampling in area B shall comply with the following:
   a. All CO and HC emissions analyzers shall have water traps incorporated in the sampling lines. Sampling probes shall be capable of taking undiluted exhaust samples from a vehicle exhaust system.
   b. A vehicle, other than a diesel-powered vehicle, shall be inspected with a NDIR analyzer capable of determining concentrations of CO and HC within the ranges and tolerances specified in Table 5.
   c. A vehicle with multiple exhaust pipes shall be inspected by collecting and averaging samples by one of the following methods:
      i. Collect separate samples from each exhaust pipe and use the average concentration to determine the test result;
      ii. Use manifold exhaust probes to simultaneously sample approximately equal volumes from each pipe; or
      iii. Use manifold exhaust pipe adapters to collect approximately equal volume samples from each pipe.

G. The following apply to all testing under subsection (E) or (F):
1. A rotary piston engine shall be inspected as a 4-stroke engine with four cylinders or less;
2. A turbine engine shall be inspected as a 4-stroke engine with more than four cylinders; and
3. A vehicle in which a diesel engine has been replaced with a gas engine shall be inspected as a gas-powered vehicle of the same vehicle model year. The vehicle shall not pass the inspection unless each catalytic converter, air pump, gas cap, and other emissions control device applicable to the vehicle model year and the same or more recent year engine configuration is properly installed and in operating condition.

H. In area A, the inspection test procedure for a diesel-powered vehicle is as follows:
1. A diesel-powered vehicle with a GVWR greater than 8,500 pounds shall be tested with a procedure that conforms to Society of Automotive Engineers standard J1667, February 1996, incorporated by reference and on file with the Department and the Secretary of State. This incorporation by reference contains no future editions or amendments. A copy of this referenced material may be obtained at Society of Automotive Engineers, 400 Commonwealth Dr., Warrendale, PA 15096-0001. The procedure shall utilize the corrections for ambient test conditions in Appendix B of J1667 for all tests. The test results shall be reported as the percentage of smoke opacity. Emissions pass-fail determinations are as follows:
   a. A vehicle powered by a 1991 or later model year diesel engine fails if the J1667 final test result is greater than 40%, unless the engine family is exempted from the 40% standard under subsection (e);
   b. A vehicle powered by a pre-1991 model year diesel engine fails if the J1667 final test result is greater than 55%, unless the engine family is exempted from the 55% standard under subsection (e);
   c. The engine model year is determined by the emission control label. If the emission control label is missing, illegible, or incorrect, the test standard shall be 40%, unless a correct, legible, emission control label replacement is attached to the vehicle within 30 days of the inspection;
   d. A vehicle that exceeds the opacity standard in subsection (a) or (b) fails the emissions test. Before reinspection, the vehicle shall have a low emissions tune-up as described in R18-2-1010(G);
   e. The Director shall exempt any engine family from the standards in subsections (a) or (b) if the engine manufacturer demonstrates either of the following:
      i. The engine family exhibits smoke opacity greater than the standard when in good operating condition and adjusted to the manufacturer's specifications. The Director shall identify a technologically appropriate less stringent standard based on a review of data obtained from engines in good operating condition and adjusted to manufacturer's specifications; or
      ii. The engine family is exempted from an equivalent standard based on J1667 by the executive officer of the California Air Resources Board (CARB). The Director shall allow the engine family to comply with any technologically appropriate less stringent standard identified by the executive officer of CARB; and
   f. A demonstration under subsection (e)(i) shall be based on data from at least three vehicles. Data from official inspections under subsection (H)(1) showing that vehicles in the engine family meet the standard may be used to rebut the demonstration. The Director shall implement any new standard resulting from each exemption as soon as practicable for all subsequent tests and provide notice at all affected test stations and fleets.
2. A diesel-powered vehicle with a GVWR greater than 4,000 pounds and less than or equal to 8,500 pounds shall be tested by a loaded dynamometer test by applying a single load of 30 HP, ± 2 HP, while operated at 50 MPH. A

diesel-powered vehicle with a GVWR of 4,000 pounds or less shall be tested by a loaded dynamometer test by applying a single load of between 6.4 - 8.4 HP while operated at 30 MPH. For all diesel-powered vehicles with a GVWR less than or equal to 8,500 pounds:

a. The emissions pass-fail determination shall be made as follows:

i. The opacity reading for a period of ten consecutive seconds with the engine under applicable loading shall be compared to the opacity standard in R18-2-1030(B). A vehicle that does not exceed the applicable opacity standard in R18-2-1030(B) complies with the minimum emissions standards.

ii. A vehicle that exceeds the applicable opacity standard fails the emissions test. Before reinspection, the vehicle shall have a low emissions tune-up as described in R18-2-1010.

b. Exhaust sampling shall comply with the following:

i. For a diesel-powered vehicle equipped with multiple pipes, separate measurements shall be made on each exhaust pipe. The reading taken from the exhaust pipe that has the highest opacity reading shall be used for comparison with the applicable emissions standard.

ii. A vehicle shall be inspected with either a full-flow or sampling-type opacity meter. The opacity meter shall be a direct reading, continuous reading light extinction-type using a collimated light source and photo-electric cell, accurate to a value within ± 5% of filter value.

I. In area B, the inspection test procedure for a diesel-powered vehicle is as follows:

1. A diesel-powered vehicle with a GVWR greater than 26,000 pounds or having tandem axles shall be tested according to one of the following methods:

a. The vehicle shall be tested on a chassis dynamometer beginning with no power absorption by selecting a gear ratio that produces a maximum vehicle speed of 30-35 MPH at governed or maximum rated RPM. If the vehicle has a manual transmission or an automatic transmission with individual gear selection, the engine shall be operated at governed or maximum rated engine RPM, at normal operating temperature under a power absorption load applied to the dynamometer until the loading reduces the engine RPM to 80% of the governed speed at wide-open throttle position. If the vehicle has an automatic transmission and automatic gear kickdown, the engine shall be loaded to a speed just above the kickdown speed or 80% of the governed speed, whichever is greater. If the chassis dynamometer does not have enough horsepower absorption capability to lug the engine down to these speeds, the vehicle's brakes may be used to assist the dynamometer.

b. If a chassis dynamometer is not available, the vehicle shall be tested by being lugged by its own brakes by selecting a gear ratio that produces a maximum speed of 10-15 MPH at governed engine RPM or maximum rated RPM and then loading the engine by applying the brakes until the engine RPM is lugged down to 80% of the governed or maximum rated RPM at wide-open throttle position. If the vehicle does not have a tachometer, the vehicle may be loaded to 80% of governed or maximum rated speed.

2. A diesel-powered vehicle without tandem axles and having a GVWR greater than 10,500 pounds and less than or equal to 26,000 pounds shall be tested according to one of the following methods:

a. The vehicle shall be tested on a chassis dynamometer beginning with no power absorption by selecting a gear ratio that produces a maximum vehicle speed of 30-35 MPH at governed or maximum rated RPM. If the vehicle has a manual transmission or an automatic transmission with individual gear selection, the engine shall be operated at governed or maximum rated engine RPM, at normal operating temperature under a power absorption load applied to the dynamometer until such loading reduces the engine RPM to 80% of the governed speed at wide-open throttle position. If the vehicle has an automatic transmission and automatic gear kickdown, the engine shall be loaded to a speed just above the kickdown speed or 80% of governed speed, whichever is greater. If the chassis dynamometer does not have enough horsepower absorption capability to lug the engine down to these speeds, the vehicle's brakes may be used to assist the dynamometer;

b. The vehicle shall be tested by applying a single load of 30 HP, ± 2 HP, while operated at 50 MPH; or

c. The vehicle shall be tested by being lugged by its own brakes by selecting a gear ratio that produces a maximum speed of 10-15 MPH at governed engine RPM or maximum rated RPM and then loading the engine by applying the brakes until the engine RPM is lugged down to 80% of the governed or maximum rated RPM at wide-open throttle position. If the vehicle does not have a tachometer, the vehicle may be loaded to 80% of governed or maximum rated speed.

3. A diesel-powered vehicle with a GVWR of greater than 4,000 pounds and less than or equal to 10,500 pounds shall be tested by a loaded dynamometer test by applying a single load of 30 HP, ± 2 HP, while operated at 50 MPH.

4. A diesel-powered vehicle with a GVWR of 4,000 pounds or less shall be tested by a loaded dynamometer test by applying a single load of between 6.4 - 8.4 HP while operated at 30 MPH.

5. The emissions pass-fail determination shall be performed:

a. The opacity reading during a period of ten consecutive seconds with the engine under applicable loading specified in subsections (1) through (4) shall be compared to the opacity standard specified in R18-2-1030(B). A vehicle that does not exceed the opacity standard in R18-2-1030(B) complies with the minimum emissions standards.

b. A vehicle that exceeds the standard in R18-2-1030(B) fails the emissions test. Before reinspection, the vehicle shall have a low emissions tune-up as described in R18-2-1010.

6. Exhaust sampling shall comply with the following:

a. For a diesel-powered vehicle equipped with multiple exhaust pipes, separate measurements shall be made on each exhaust pipe. The reading taken from the exhaust pipe that has the highest opacity reading shall be used for comparison with the standard in R18-2-1030(B).

b. A vehicle shall be inspected with either a full-flow or sampling-type opacity meter. The opacity meter shall be a direct reading, continuous reading light extinction-type using a collimated light source and photo-electric cell, accurate to a value within ± 5% of filter value.

J. All diesel-powered vehicles shall undergo a tampering inspection under subsection (E)(6).

Historical Note

Former Section R9-3-1006 repealed, new Section R9-3-1006 adopted effective January 13, 1976 (Supp. 76-1). Amended effective November 1, 1976 (Supp. 76-5). Amended effective March 2, 1978 (Supp. 78-2). Amended effective January 3, 1979 (Supp. 79-1). Amended effective February 20, 1980 (Supp. 80-1). Former Section R9-3-1006 repealed, new Section R9-3-1006 adopted as an emergency effective January 2, 1981 pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1006 as amended effective February 20, 1980 repealed and a new Section R9-3-1006 adopted as an emergency effective January 2, 1981 now adopted and amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1006 renumbered as Section R18-2-1006 and subsections (A), (C) and (D) amended effective August 1, 1988 (Supp. 88-3). Amended effective September 19, 1990 (Supp. 90-3). Amended effective November 14, 1994 (Supp. 94-4). Amended effective October 15, 1998 (Supp. 98-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 6 A.A.R. 2722, effective June 28, 2000 (Supp. 00-2). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1007. Evidence of Meeting State Inspection Requirements

A. Vehicles required to be inspected under this Article shall pass inspection before registration by meeting the requirements of R18-2-1006, unless waived under R18-2-1008.

B. The MVD or its agent may use the MVD motor vehicles emissions database, if available, as evidence that a vehicle complies with the requirements of this Article.

C. If the MVD motor vehicles emissions database is not available, the MVD or its agent shall accept any of the following documents, when complete, unaltered, and dated no more than 90 days before registration expiration date, as evidence that a vehicle complies with the requirements of this Article unless the MVD or its agent has reason to believe it is false. Documents accompanying a late registration may be dated subsequent to the registration expiration date:

1. Certificate of compliance,
2. Certificate of waiver (except from auto dealers licensed to sell used motor vehicles under Title 28),
3. Certificate of exemption, or
4. Director's certificate,
5. The upper section of the vehicle inspection report with "PASS" in the final results block.

D. A complete certificate of inspection dated within 12 months of registration for an annually tested vehicle and 24 months for a biennially tested vehicle shall be accepted by the MVD or its agent as evidence that a vehicle is in compliance with the requirements of this Article unless the MVD or its agent has reason to believe it is false. A certificate corrected according to R18-2-1019(F)(1)(a) shall be accepted by the MVD or its agent.

E. Documents listed in subsection (C) and originating in area B are not acceptable for meeting the inspection requirements in area A.

F. Government vehicles for which only weight fees are paid shall be registered without evidence of inspection.

Historical Note

Former Section R9-3-1007 repealed, new Section R9-3-1007 adopted effective January 13, 1976 (Supp. 76-1). Former Section R9-3-1007 repealed, new Section R9-3-1007 adopted effective January 3, 1977 (Supp. 77-1). Amended effective February 20, 1980 (Supp. 80-1). Amended effective January 1, 1986 (Supp. 85-6). Former Section R9-3-1007 renumbered without change as Section R18-2-1007 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1008. Procedure for Issuing Certificates of Waiver

A. Unless prohibited under subsection (C), (D), or (E), a certificate of waiver shall be issued subsequent to reinspection by a state inspector at a state or Department station to a vehicle that failed the emissions inspection or the emissions and tampering inspections when it is determined by repair receipts, emissions test results, evidence of repairs performed, underhood verification, or similar evidence that the requirements of R18-2-1009 and R18-2-1010 have been met, or for emissions failures only, any further repairs within the repair cost limit would be ineffective. A waiver may be denied if a waiver request is based upon repair estimates and the state inspector demonstrates that a recognized repair facility can repair or improve the vehicle's test readings within the repair cost limit.

B. A certificate of waiver may be issued to a vehicle failing the tampering inspection if the vehicle owner provides to the Director a written statement from an automobile parts or repair business that an emission control device necessary to repair the tampering is not available and cannot be obtained from any usual source of supply, and if all requirements of R18-2-1008(A) have been met. All written statements are subject to verification for authenticity and accuracy by the Department. The Department may deny a certificate of waiver if the state inspector has any reason to believe the written statement is false or a usual source of supply exists and the device necessary to repair the tampering is available. Certificates of waiver for tampered vehicles may be issued conditionally for a specified period, not to exceed 90 days, that allows sufficient time for the procurement and installation of a proper emissions control device. A receipt or bill from a vehicle repair facility or automobile parts store shall be an acceptable proof of purchase. Before the end of the specified time period, the vehicle owner shall present to the Director proof of purchase and installation of the device. The Department shall track all issued conditional certificates of waiver and if no proof of purchase and installation is received before the end of the specified time period, the Director shall forward to the Department of Motor Vehicles an order to cancel the vehicle's registration.

C. The Director shall not issue a waiver to a vehicle that has failed the emissions test due to the catalytic converter system. A vehicle shall have failed the emissions test due to the catalytic converter system if:

1. The converter's oxidation efficiency, as measured by the Catalyst Efficiency Test Procedure in R18-2-1031(A), is less than 75%; and

2. No engine or fuel system malfunctions exist that would prevent the proper operation of a catalytic converter.

D. The Director shall not issue a waiver to a vehicle failing the emission test with an HC, CO, NOx, or opacity emission level greater than two times the pass-fail standard in R18-2-1006, unless the vehicle is repaired so that each emission level is less than two times the pass-fail standard.

E. After January 1, 1997, the Director shall not issue a certificate of waiver to the same vehicle more than once.

F. The fee for a certificate of waiver under this Section shall be fixed by the Director according to A.R.S. § 49-543, and shall be based upon the Director's estimated costs to the state for administering and enforcing the provisions of this Article for issuance of certificates of waiver under this Section. The fee shall be payable directly to the Department of Environmental Quality at the time the certificate of waiver is issued.

Historical Note

Former Section R9-3-1008 repealed, new Section R9-3-1008 adopted effective January 13, 1976 (Supp. 76-1). Former R9-3-1008 repealed, new Section R9-3-1008 adopted effective January 3, 1977 (Supp. 77-1). Amended effective March 2, 1978 (Supp. 78-2). Amended effective January 3, 1979 (Supp. 79-1). Amended as an emergency effective January 2, 1981, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1008 as amended effective January 3, 1979, and amended as an emergency effective January 2, 1981, now amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended subsection (A) and added subsection (D) effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1008 renumbered as Section R18-2-1008 and amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4).

R18-2-1009. Tampering Repair Requirements

A. If a vehicle fails the visual inspection for properly installed catalytic converters, the converters shall be replaced with new or reconditioned OEM converters or equivalent new aftermarket converters. The Department shall provide names of acceptable aftermarket converters at the time of inspection on the repair requirement list.

B. If a vehicle fails the functional gas cap pressure test described in R18-2-1006(E)(6)(a) or (F)(6)(a), the gas cap shall be replaced with one that meets those specifications. If a vehicle designed with a vented system fails a visual inspection for the presence of a gas cap, a properly fitting gas cap shall be installed on the vehicle.

C. If a vehicle fails the visual inspection for the presence of an operational air pump, a new, used, or reconditioned, operational air pump shall be properly installed on the vehicle.

D. If a vehicle fails the visual inspection for the presence or malfunction of the positive crankcase ventilation system, the system shall be repaired or replaced with OEM or equivalent aftermarket parts.

E. If a vehicle fails the visual inspection for the presence or malfunction of the evaporative control system, the system shall be repaired or replaced with OEM or equivalent aftermarket parts.

Historical Note

Adopted effective January 13, 1976 (Supp. 76-1). Repealed effective January 3, 1977 (Supp. 77-1). New Section R9-3-1009 adopted effective January 1, 1986 (Supp. 85-6). Amended effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1009 renumbered without change as Section R18-2-1009 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1010. Low Emissions Tune-up, Emissions and Evaporative System Repair

A. A low emissions tune-up on a nondiesel-powered vehicle consists of the following procedures:

1. Emissions Failure Diagnosis. For a computer-controlled vehicle, the on-board-diagnostics shall be accessed and any stored trouble codes recorded. For a model year 1996 or newer vehicle equipped with an OBD system, a compatible scan tool shall be used to access and record diagnostic trouble codes. The following instruments or equipment are required to complete a low emissions tune-up:
   a. Tachometer;
   b. Timing light;
   c. Engine analyzer or oscilloscope, and
   d. A HC/CO NDIR analyzer to make final A/F adjustments, if specified by the manufacturer,
2. Adjustment. All adjustments shall be made according to the manufacturer's specifications and procedures. Final adjustment shall be made on the vehicle engine only after the engine is at normal operating temperature.
3. Inspection of Air Cleaner, Choke, and Air Intake System. A dirty or plugged air cleaner, stuck choke, or restricted air intake system shall be replaced or repaired as required.
4. Dwell and Basic Timing Check. Dwell and basic engine timing shall be checked and adjusted, if necessary, according to manufacturer's specifications.
5. Inspection of PCV Valve. The PCV valve shall be checked to ensure that it is the type recommended by the manufacturer and is correctly operating. Free flow through the PCV system passages and hoses shall be verified. Repair or replace as required.
6. Inspection of Vacuum Hoses. The vacuum hoses shall be inspected for leaks, obstruction, and proper routing and connection. Repair or replace as required.
7. Perform a visual inspection for leaking fuel lines or system components. Repair or replace as required.
8. Idle Speed and A/F Mixture Check. The idle speed and A/F mixture shall be checked and adjusted according to manufacturer's specifications and procedures. If the vehicle is equipped with a fuel injection system or an alternate fuel (LPG or LNG), the manufacturer's recommended adjustment procedure shall be followed.

B. A vehicle that fails reinspection does not qualify for a waiver unless a low emissions tune-up and diagnosis is performed on the vehicle.

C. If the maximum required repair cost in subsection (E) or (F) is not exceeded after a low emissions tune-up described in subsection (A), then the following procedures apply:

1. CO failure.
   a. If a vehicle fails CO only, the vehicle shall be checked for:
      i. Proper canister purge system operation,
      ii. High float setting,
      iii. Leaky power valve, and
      iv. Faulty or worn needles, seats, jets or improper jet size.
   b. If applicable, the following shall also be checked:

i. Computer,
ii. Engine and computer sensors,
iii. Engine solenoids,
iv. Engine thermostats,
v. Engine switches,
vi. Coolant switches,
vii. Throttle body or port fuel injection system,
viii. Fuel injectors,
ix. Fuel line routing and integrity,
x. Air in fuel system including line and pump,
xi. Fuel return system,
xii. Injection pump,
xiii. Fuel injection timing,
xiv. Routing of vacuum hoses, and
xv. Electrical connections.

c. The items in subsections (a) and (b) shall be repaired or replaced as required.

2. HC, or HC and CO failure.
   a. If a vehicle fails HC, or HC and CO, the vehicle shall be checked for:
      i. Faulty spark plugs and faulty, open, crossed, or disconnected plug wires;
      ii. Distributor module;
      iii. Vacuum hose routing and electrical connections;
      iv. Distributor component malfunctions including vacuum advance;
      v. Faulty points or condenser;
      vi. Distributor cap crossfire;
      vii. Catalytic converter efficiency air supply;
      viii. Vacuum leaks at intake manifold, carburetor base gasket, EGR, and vacuum-operated components.
   b. The items in subsection (a) shall be repaired or replaced as required.
3. NOx failure.
   a. If a vehicle fails NOx, the vehicle shall be checked for:
      i. Removed, plugged, or malfunctioning EGR valve, exhaust gas ports, lines, and passages;
      ii. EGR valve electrical and vacuum control circuitry, components, and computer control, as applicable;
      iii. Above normal engine operating temperature;
      iv. Proper air management;
      v. Lean A/F mixture;
      vi. Catalytic converter efficiency; and
      vii. Over-advanced off-idle timing.
   b. The items in subsection (a) shall be repaired or replaced as required.
4. OBD failure. If the vehicle fails the OBD test, the vehicle shall be repaired for the items indicated on the Vehicle Emissions Report as causing the failure. If the failure results from Diagnostic Trouble Codes (DTCs) that caused the Malfunction Indicator Lamp (MIL) to be illuminated, the components or systems causing the DTCs shall be repaired or replaced. After repair of a DTC failure, and before reinspection, the vehicle shall be operated under conditions recommended by the vehicle manufacturer for the OBD computer to evaluate the repaired system.

D. For Evaporative System Failures, the following procedures apply:
1. If a vehicle fails the evaporative system pressure test, the vehicle shall be checked for leaking or disconnected vapor hoses, line, gas cap, and fuel tank.
2. If a vehicle fails a visual inspection of the evaporative system, the vehicle shall be checked for a missing or damaged canister, canister electrical and vacuum control circuits and components, disconnected, damaged, misrouted or plugged hoses, and damaged or missing purge valves. Repair or replace as necessary.

E. The maximum required repair cost for a vehicle in area A, not including cost to repair the vehicle for failing an evaporative system pressure test due to tampering, or other tampering repair cost, is:
1. For a diesel-powered vehicle with a GVWR greater than 26,000 pounds or a diesel-powered vehicle with tandem axles, $500; and
2. For a vehicle that is not a diesel-powered vehicle with a GVWR greater than 26,000 pounds and is not a diesel-powered vehicle with tandem axles:
   a. Two hundred dollars for a vehicle manufactured in or before the 1974 model year;
   b. Three hundred dollars for a vehicle manufactured in the 1975 through 1979 model years; and
   c. Four hundred fifty dollars for a vehicle manufactured in or after the 1980 model year.

Subsection (E) does not prevent a vehicle owner from authorizing or performing more than the required repairs. A vehicle operator who has a vehicle reinspected shall have the repair receipts available when requesting a certificate of waiver.

F. The maximum required repair cost for vehicles in area B, not including tampering repair cost, is:
1. For a diesel-powered vehicle with a GVWR greater than 26,000 pounds or a diesel-powered vehicle with tandem axles, $300; and
2. For a vehicle that is not a diesel-powered vehicle with a GVWR greater than 26,000 pounds and is not a diesel-powered vehicle with tandem axles:
   a. Fifty dollars for a vehicle manufactured in or before the 1974 model year;
   b. Two hundred dollars for a vehicle manufactured in the 1975 through 1979 model years; and
   c. Three hundred dollars for a vehicle manufactured in or after the 1980 model year.

Subsection (F) does not prevent a vehicle owner from authorizing or performing more than the required repairs. A vehicle operator who has a vehicle reinspected shall have the repair receipts available when requesting a certificate of waiver.

G. A low emissions tune-up on a diesel-powered vehicle consists of the following procedures:
1. Inspect for dirty or plugged air cleaner, or restricted air intake system. Repair or replace as required.
2. Check fuel injection system timing according to manufacturer's specifications. Adjust as required.
3. Check for fuel injector fouling, leaking, or mismatch. Repair or replace as required.
4. Check fuel pump and A/F ratio control according to manufacturer's specifications. Adjust as required.
5. If the vehicle fails the J1667 procedure, check smoke-limiting devices, if any, including the aneroid valve and puff limiter. Repair or replace as required.

H. Any available warranty coverage for a vehicle shall be used to obtain needed repairs before an expenditure can be counted toward the cost limits in subsection (E) and (F). If the operator of a vehicle within the age and mileage coverage of section 207(b) of the Clean Air Act presents a written denial of warranty coverage from the manufacturer or authorized dealer,

warranty coverage is not considered available under this subsection.

Historical Note

Adopted effective January 13, 1976 (Supp. 76-1). Former Section R9-3-1010 repealed, new Section R9-3-1010 adopted effective January 3, 1977 (Supp. 77-1). Amended effective March 2, 1978 (Supp. 78-2). Amended effective January 3, 1979 (Supp. 79-1). Amended effective February 20, 1980 (Supp. 80-1). Amended as an emergency effective January 2, 1981, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1010 as amended effective February 20, 1980, and amended as an emergency effective January 2, 1981, now amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1010 renumbered as Section R18-2-1010 and subsection (D) amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended effective October 15, 1998 (Supp. 98-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1011. Vehicle Inspection Report

A. A vehicle inspected at a state station shall be provided a uniquely numbered vehicle inspection report of a design approved by the Director that contains, at a minimum, the following information:
1. License plate number;
2. Vehicle identification number;
3. Model year of vehicle;
4. Make of vehicle;
5. Style of vehicle;
6. Type of fuel;
7. Odometer reading to the nearest 1000 miles, truncated;
8. Emissions standards for idle and loaded cruise modes, if applicable;
9. Emissions measurements during idle and loaded cruise modes, if applicable;
10. Opacity measurements and standards, if applicable;
11. Emissions standards and measurements for the transient loaded test, and the evaporative system pressure test, if applicable;
12. Results of OBD test including all diagnostic trouble codes that commanded the illumination of the malfunction indicator lamp;
13. Tampering inspection results;
14. Repair requirements;
15. Final test results;
16. Repairs performed;
17. Cost of emissions-related repairs;
18. Cost of tampering-related repairs;
19. Name, address, and telephone number of the business or person making repairs;
20. Signature and certification number of person certifying repairs;
21. Date of inspection;
22. Test results of the previous inspection if the inspection is a reinspection;
23. Inspection station, lane locators; and
24. Test number and time of test.

B. A vehicle failing the initial inspection shall receive an inspection report supplement approved by the Department containing, at a minimum, the following:
1. Diagnostic and tampering information including acceptable replacement units, and
2. Applicable maximum repair costs.

C. The inspection report shall provide a 3-inch by 5-inch tear-out section that may be used as a certificate of compliance for vehicles passing the inspection or as a certificate of waiver, if applicable.
1. The tear-out section shall be a certificate of compliance when the word "compliance" appears in the appropriate location on the printout.
2. The tear-out section shall be a certificate of waiver when the word "waiver" appears in the appropriate location on the printout.
3. The tear-out section shall contain all of the following information:
   a. License plate number,
   b. Vehicle identification number,
   c. Final results,
   d. Serial number of the inspection report,
   e. Date of inspection,
   f. Model year,
   g. Make,
   h. Date of initial inspection, and
   i. Inspection fee.

D. At the time of registration or reregistration, the certificate of compliance or certificate of waiver may be submitted to the Arizona Department of Transportation Motor Vehicle Division as evidence of meeting the requirements of this Article.

Historical Note

Adopted effective January 13, 1976 (Supp. 76-1). Former Section R9-3-1011 repealed, new Section R9-3-1011 adopted effective January 3, 1977 (Supp. 77-1). Amended effective January 3, 1979 (Supp. 79-1). Amended as an emergency effective January 2, 1981, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1011 as amended effective January 3, 1979, and as amended as an emergency effective January 2, 1981 now amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended subsections (A) and (B) effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1011 renumbered as Section R18-2-1011 and amended by removing subsection (E) effective August 1, 1988 (Supp. 88-3). Amended effective September 19, 1990 (Supp. 90-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1012. Inspection Procedures and Fee

A. A vehicle that is inspected by a state station must be accompanied by a document such as a registration renewal notice, registration, certificate of title, or bill of sale that identifies the vehicle by make, model year, identification number, and license plate if applicable.

B. If the vehicle inspection report from the previous test is used, it shall be retained by the test lane inspector.

C. The fees for emissions inspections at a state station shall be specified in the contract between the contractor and the state of Arizona according to A.R.S. § 49-543, and shall include the full cost of the vehicle emissions inspection program including administration, implementation, and enforcement. Each fee is

payable directly to the contractor at the time and place of inspection in cash or by check approved by the contractor. The amount collected by the contractor to defray the cost of the inspection shall be retained by the contractor. The amount collected to defray the cost of the administration, implementation, and enforcement of the vehicle emissions inspection program shall be remitted to the Department. Amounts collected shall be recorded and reported to the Department monthly. The contractor shall submit to the state of Arizona on a monthly basis, by the 10th day of each month, a report showing the number of inspections performed and the amount of fees collected.

D. Each subsequent inspection, if needed, shall be treated by the state and the contractor in the same manner as an initial inspection and reinspection, providing for a free reinspection according to R18-2-1013, if needed, following a paid inspection. The fee for each paid reinspection shall be the full fee as provided for in the contract with the contractor.

E. A state station emissions inspector shall not recommend repairs or repair facilities.

Historical Note

Adopted effective January 13, 1976 (Supp. 76-1). Former Section R9-3-1012 repealed, new Section R9-3-1012 adopted effective January 3, 1977 (Supp. 77-1). Amended effective January 3, 1979 (Supp. 79-1). Amended as an emergency effective January 2, 1981, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1012 as amended effective January 3, 1979, and amended as an emergency effective January 2, 1981, now amended effective April 15, 1981 (Supp. 81-2). Amended subsections (A) and (D) effective November 9, 1982 (Supp. 82-6). Amended effective January 1, 1986 (Supp. 85-6). Former Section R9-3-1012 renumbered as Section R18-2-1012 and amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1013. Reinspections

A. A vehicle failing the initial inspection or any subsequent paid inspection is entitled to one reinspection at no additional charge under the following conditions:

1. The vehicle is presented for inspection within 60 calendar days of the initial or any subsequent paid inspection, if the vehicle operator presents the vehicle inspection report from the previous inspection, indicating the itemization of the repairs performed.
2. Emissions-related repairs or adjustments and any tampering repairs have been made.
3. The vehicle is accompanied by the entire vehicle inspection report from the initial or subsequent inspection with the following information filled in on the reverse side:
   a. Emissions-related and tampering-related repairs made;
   b. Cost of emissions related and tampering related repairs as reflected by receipts or bills;
   c. Name, address, telephone number, and type of facility making repairs;
   d. Signature of person certifying the repairs;
   e. Date of repairs; and
   f. The state certification number of the technician making repairs, if applicable.

B. A vehicle shall be retested after repair for any portion of the inspection the vehicle failed on the previous test to determine if the repairs are effective. To the extent that repair to correct a previous failure could cause failure of another portion of the test, that portion shall also be retested. Evaporative system repairs shall trigger an exhaust emissions retest.

C. A vehicle failing the reinspection shall be provided a vehicle inspection report and a vehicle inspection report supplement.

Historical Note

Adopted effective January 13, 1976 (Supp. 76-1). Former Section R9-3-1013 repealed, new Section R9-3-1013 adopted effective January 3, 1977 (Supp. 77-1). Amended as an emergency effective January 2, 1981, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1013 adopted effective January 3, 1977, and amended as an emergency effective January 2, 1981, now amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended effective January 1, 1987, filed December 31, 1986 (Supp 86-6). Former Section R9-3-1013 renumbered as Section R18-2-1013 and amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4).

R18-2-1014. Repealed

Historical Note

Adopted effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Section repealed by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1015. Repealed

Historical Note

Adopted effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Section repealed by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1016. Licensing of Inspectors

A. The Department shall license a person as a vehicle emissions inspector if the applicant passes a practical and a written examination with a score equal to or greater than 80% in the following areas:

1. For nondiesel-powered fleet vehicle emissions inspectors:
   a. Equipment used in the inspection and the control of emissions;
   b. Types of emission inspection failures;
   c. Corrective procedures for excessive HC emissions;
   d. Corrective procedures for excessive CO emissions;
   e. Corrective procedures for excessive NOx emissions, for inspectors in area A;
   f. Proper fuel system adjustment procedures;
   g. Computerized engine control systems; and
   h. Regulations governing fleet stations;
2. For diesel-powered fleet vehicle emissions inspectors:
   a. Equipment used in the inspection and the control of opacity and emissions;
   b. Corrective procedures for excessive opacity;
   c. Proper fuel injection system adjustment procedures;
   d. Proper use of tools required by the vehicle manufacturer for field setting of fuel injectors, inlet and exhaust valve clearance, governors, and throttle controls;
   e. Computerized engine control systems; and
   f. Regulations governing fleet stations;

3. For state station vehicle emission inspectors:
   a. Air pollution causes and effects;
   b. Purpose, function, and goals of the inspection program;
   c. State inspection regulations;
   d. Test procedures and rationale for their design;
   e. Emission control devices, configuration, and inspection;
   f. Test equipment operation, calibration, and maintenance;
   g. Proficiency in driving the transient test cycle in Table 4;
   h. Quality control procedures;
   i. Public relations; and
   j. Safety and health issues related to the inspection process.
4. For the practical portion of the examination an applicant shall demonstrate the ability to conduct a proper emissions inspection, including proper use of equipment and procedures, to pass. If an inspector fails to demonstrate such ability in an audit, either covert or overt, the inspector's license shall be suspended. The suspended licensee shall demonstrate to the Department the skills required by this subsection within 30 days of suspension or such license shall be revoked.

B. If an applicant for a nondiesel-powered vehicle emissions inspector license fails the written examination, the applicant shall successfully complete the vehicle emissions inspector state training program before reexamination for licensure.

C. Applications may be obtained from the Department. The application shall contain the following:
1. The type of license requested;
2. The applicant's name;
3. The applicant's home address;
4. The applicant's phone number;
5. The name of the applicant's employer;
6. The phone number of the applicant's employer;
7. The applicant's signature; and
8. The date of the license request.

D. All completed applications shall be returned to the Department.

E. Licenses issued to vehicle emissions inspectors shall be renewed annually on or before the expiration date. An inspector whose license has expired may not inspect vehicles.

F. Applications for renewal of vehicle emissions fleet inspector's licenses shall be submitted within 30 days before the current license expiration date.

G. The Department may suspend, revoke, or refuse to renew a license if the licensee has violated any provision of A.R.S. Title 49, Chapter 3, Article 5 or any provision of this Article or fails to continue to demonstrate proficiency to the Department as required in subsection (A).

H. A vehicle emissions inspector shall notify the Department of any change in employment status, due to retirement, resignation or termination, within seven days of the change. The notification shall include the name and license number of the emissions inspector, a statement declaring the employment change, and the effective date of the employment change.

I. The Department shall assign a single, unique, nontransferable inspector's number to each vehicle emissions inspector.

Historical Note

Adopted effective January 13, 1976 (Supp. 76-1). Amended effective January 3, 1977 (Supp. 77-1). Amended effective March 2, 1978 (Supp. 78-2). Amended as an emergency effective January 2, 1981, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1016 as amended effective March 2, 1978, and amended as an emergency effective January 2, 1981, now amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1016 renumbered as Section R18-2-1016 and subsection (G) amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1017. Inspection of Government Vehicles

A. Inspection of government vehicles operated in areas A and B shall be conducted as follows:
1. At a licensed fleet station operated by the government entity;
2. At a state station upon payment of the fee;
3. At a state station upon payment of the contracted fee, either singly or in combination with other government fleet operators.

B. A government vehicle except a federally owned vehicle that is excluded from the definition of motor vehicle under 40 CFR 85.1703, shall be inspected according to this Article and shall have a Government Vehicle Certificate of Inspection affixed to the vehicle if in compliance with state inspection requirements.
1. The vehicle emissions inspector performing the inspection shall punch out the appropriate year and month on the Government Vehicle Certificate of Inspection to designate date of the vehicle's next annual or biennial inspection. The vehicle emissions inspector, at the time of inspection, shall record the serial number of the Government Vehicle Certificate of Inspection on the vehicle inspection report. If the vehicle emissions inspection is performed at a fleet station, the emissions inspector, at the time of inspection, shall record the serial number in the block labeled "Certificate of Inspection No." on the "Fleet Vehicle Inspection Report/Monthly Summary." Each Government Vehicle Certificate of Inspection shall be used in serial number order. Presence of a current Government Vehicle Certificate of Inspection indicates a government vehicle has met the state of Arizona emissions inspection requirements.
2. A government vehicle, with the exception of a motorcycle or an undercover law enforcement vehicle, shall have the Government Vehicle Certificate of Inspection affixed to the lower left side of the rear window as determined from a position facing the window, from outside the vehicle. If a vehicle does not have a rear window, the Government Vehicle Certificate of Inspection shall be affixed to the lower left corner of the windshield as determined from the driver's position.
3. A government motorcycle shall have the Government Vehicle Certificate of Inspection affixed to the lower left-hand corner of the windscreen as determined from the driver's position. If the Government Vehicle Certificate of Inspection cannot be affixed to the lower left-hand corner of the windscreen, the Government Vehicle Certificate of Inspection may be affixed to a visible position on the front or left side of the left front fork of the motorcycle. The fork shall be determined from the driver's position.

C. The Government Vehicle Certificate of Inspection shall be purchased from the Department in lots of 25.

1. The fee for a certificate of inspection shall be fixed by the Director according to A.R.S. § 49-543, and shall be based upon the Director's estimated costs to the state of administering and enforcing the provisions of this Article as they apply to issuance of certificates of inspections. Payment for certificates shall be included with an application for certificates. Checks shall be made payable to the Department of Environmental Quality.
2. Only the Department may sell or otherwise transfer certificates of inspection.

D. All Government Vehicle Certificates of Inspection shall be designed, issued, and administered to ensure compliance with this Article. The Department shall be the only source of supply for Government Vehicle Certificates of Inspection.

E. Government entity fleet stations shall inspect the fleet vehicles according to R18-2-1019 except that a government vehicle certificate of inspection shall only be used for government vehicles.

F. A government entity fleet station shall send a quarterly statement identifying vehicles and test results to the Department within 10 business days following the end of the quarter.

Historical Note

Adopted effective January 13, 1976 (Supp. 76-1). Amended effective January 3, 1977 (Supp. 77-1). Amended effective January 3, 1979 (Supp. 79-1). Amended effective January 1, 1986 (Supp. 85-6). Former Section R9-3-1017 renumbered as Section R18-2-1017 and subsection (E) amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1018. Certificate of Inspection

A. A fleet station other than a government entity fleet station shall use completed certificates of inspection as evidence that its vehicles meet the requirements of this Article unless inspection data is electronically transmitted to MVD under A.R.S. § 49-542(Q). If a fleet vehicle is inspected at a state station, the vehicle inspection report provided under R18-2-1011 shall be used.

B. A certificate of inspection shall contain the following information:

1. VIN,
2. Model year,
3. License number,
4. If applicable, a statement that the inspection meets area A requirements,
5. Owner of vehicle,
6. Date of expiration, according to R18-2-1019(F)(1)(b),
7. Fleet station permit number, and
8. Inspector's signature and license number.

C. A certificate of inspection issued to a fleet vehicle is transferable to an auctioneer licensed as a used motor vehicle dealer to sell the vehicle. The certificate of inspection is valid for a period not to exceed 180 days after the transfer unless the vehicle is reregistered with a new owner, in which case the vehicle shall be inspected according to this Article before the reregistration.

D. A certificate of inspection, complete or incomplete, is not transferable except as provided in subsection (C) or except when submitted to MVD for the purpose of vehicle registration.

E. Only a person who meets the requirements of R18-2-1019(D)(4) is authorized to purchase certificates of inspection, certificates of waiver, or Government Vehicle Certificates of Inspection.

Historical Note

Adopted effective January 13, 1976 (Supp. 76-1). Amended effective January 3, 1977 (Supp. 77-1). Amended effective March 2, 1978 (Supp. 78-2). Amended subsection (A) effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1018 renumbered as Section R18-2-1018 and amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1019. Fleet Station Procedures and Permits

A. The following requirements apply to issuance of fleet station permits:

1. An owner or lessee of a fleet of 25 or more nonexempt vehicles whose place of business is located in area A or B may apply to the Director for a permit to establish a fleet station. A dealer's business inventory of vehicles held for resale, counted cumulatively over the previous 12 months at the time of application review by the Department shall be used to determine compliance with this subsection. A newly established dealer shall certify that it will comply with the 25 nonexempt vehicles requirement.
2. An application form for a fleet station permit shall be obtained from the Department. All completed applications shall be submitted to the Department. An application shall be considered administratively complete when:
   a. The Department receives a completed application form and fleet agent designation form;
   b. The applicant or designated employee successfully completes the fleet agent examination; and
   c. The Department conducts a site inspection.
3. Before an application for a fleet station permit may be approved, a state inspector shall inspect the premises to determine compliance with subsections (B) and (C).
4. A fleet station permit shall not expire.
5. A fleet station permit shall only be applicable to the fleet's inspection facility located at the address shown on the fleet station permit. If a fleet owner or lessee requests a permit for inspection facilities at more than one address, the fleet owner or lessee shall apply for a permit for each facility.
6. A fleet station permit issued by the Director is non-transferable.
7. If the name or address of the permitted fleet facility changes and the name or address change does not involve a change of ownership, the permit shall be returned to the Department for cancellation and a new permit application shall be submitted. The Director shall cancel the returned permit and issue a new permit.
8. In the event of loss, destruction, or mutilation of the permit, the person to whom it was issued may obtain a duplicate upon furnishing satisfactory proof of loss, destruction, or mutilation. If a fleet owner or lessee obtains a duplicate permit and then finds the original, the fleet owner or lessee shall immediately surrender the original permit to the Department.

B. A fleet station permit applicant or fleet station permit holder, or its employees, shall own or lease the following equipment for testing and repair of a fleet vehicle, and maintain the equipment in good working condition:

1. If the permit is for the inspection of a vehicle required to take an idle only, or an idle plus 2500 RPM unloaded test:
   a. An NDIR CO and HC emissions analyzer that complies with the requirements of R18-2-1006(F)(7) to conduct the emissions inspection;
   b. Pressure test equipment for the functional gas cap test that complies with the requirements of R18-2-1006(E)(6)(a); and
   c. An ignition-operated tachometer.
2. If the permit is for the inspection of a vehicle required to take a steady-state loaded test:
   a. An NDIR CO and HC emissions analyzer that complies with the requirements of R18-2-1006(F)(7) to conduct the emissions inspection;
   b. Pressure test equipment for the functional gas cap test that complies with the requirements of R18-2-1006(E)(6)(a);
   c. A dynamometer to operate the vehicle under load; and
   d. An ignition-operated tachometer.
3. If the permit is for the inspection of a vehicle required to take a transient loaded test:
   a. Equipment to perform a transient loaded emissions test as required in R18-2-1006(E)(2);
   b. Equipment to perform the evaporative system pressure test as required in R18-2-1006(E)(2)(b);
   c. Equipment to perform the maintenance and quality control requirements of R18-2-1006(E)(2) and "IM240 and Evap Technical Guidance;" and
   d. Pressure test equipment for the functional gas cap test that complies with the requirements of R18-2-1006(E)(6)(a).
4. If the permit is for the inspection of a vehicle required to take an OBD test:
   a. A scan tool used to perform the OBD test that complies with the Society of Automotive Engineers Recommended Practice J1979, September 1997, incorporated by reference and no future editions or amendments. A copy of this referenced material is on file with the Department and the Secretary of State and may be obtained at Society of Automotive Engineers, 400 Commonwealth Dr., Warrendale, PA 15096-0001; and
   b. Pressure test equipment for the functional gas cap test that complies with the requirements of R18-2-1006(E)(6)(a).
5. If the permit is for the inspection of a vehicle required to take a diesel test:
   a. Opacity meter: A meter used in area A shall comply with the requirements of R18-2-1006(H) for the applicable test procedure. A meter used in area B shall comply with the requirements of R18-2-1006(I)(6)(b); and
   b. A dynamometer for testing any light-duty diesel vehicle in area A or for testing any diesel vehicle in area B.

C. A fleet's inspection facility shall comply with the following requirements:
1. The facility shall include space devoted principally to maintaining or repairing the fleet's motor vehicles. The space shall be large enough to conduct maintenance or repair of at least one fleet motor vehicle.
2. The facility shall be exclusively rented, leased, or owned by the permit applicant or permit holder.

D. A fleet owner or lessee shall employ the following personnel:
1. If the facility is for the repair of nondiesel-powered vehicles, at least one person to perform tune-ups of engines and replacement or repair of fuel system and ignition components.
2. If the facility is for the repair of diesel-powered vehicles, at least one person to perform tune-ups and replacement or repair of diesel fuel systems in the vehicle fleet.
3. A licensed vehicle emissions inspector who will perform the necessary inspections. This inspector may be the same person required by subsection (1) or (2).
4. A fleet agent, who shall be in charge of the day-to-day operation of the fleet and who demonstrates proficiency by passing a Department-administered examination annually, with a score equal to or greater than 80%, on the statutes and rules governing the operation and administration of a fleet emissions inspection station. The fleet owner or lessee shall designate the fleet agent on a form obtained from the Department.

E. Unless inspected at a state station, a vehicle owned by or leased to a holder of a fleet emissions inspection station permit shall be inspected according to R18-2-1006(D) through (I), except as follows:
1. A dealer fleet vehicle in area A held for resale and an area B fleet vehicle, with a model year of 1981 or newer, and other than diesel-powered, shall be required to take and pass both the curb idle test specified in R18-2-1006(F)(2)(b) and a 2,500 RPM unloaded fast idle test as follows:
   a. The vehicle's engine shall be operated at 2,500, ± 300 RPM, for no more than 30 seconds with the transmission in neutral.
   b. HC and CO exhaust emissions concentrations shall be recorded after readings have stabilized or at the end of 30 seconds, whichever occurs first, and compared to the loaded cruise standards in Table 2. The curb idle test standards in Table 2 shall apply for the idle test.
2. A dealer fleet vehicle in area A held for resale, and an area B vehicle, with a model year of 1980 or older and other than diesel-powered, shall be required to take and pass a curb idle test as specified in R18-2-1006(F)(1). The curb idle test standards in Table 2 shall apply.
3. A dealer fleet vehicle in area A held for resale with a model year of 1975 or newer and other than diesel-powered, shall be required to take and pass a tampering inspection as specified in R18-2-1006(E)(6).
4. A dealer fleet vehicle in area B held for resale with a model year of 1975 or newer and other than diesel-powered, shall be required to take and pass a tampering inspection as specified in R18-2-1006(F)(6).
5. A consignment vehicle shall be tested at a state inspection station according to R18-2-1005(A)(3).

F. The vehicle emissions inspector shall complete and process the forms for vehicle inspection as follows, except a government entity fleet shall issue and process each government vehicle certificate of inspection under R18-2-1017:
1. A certificate of inspection shall be processed as follows:
   a. A certificate of inspection shall be completed and signed by the vehicle emissions inspector performing the inspection at the time the vehicle passes inspection. The vehicle emissions inspector who performed the inspection may correct a certificate by drawing a single line through the mistake, writing the correct information directly above the mistake, and initialing and dating the correction. Each certificate shall be issued in numerical order;

b. For an inspection that does not include a biennial test, the expiration date shall be one year from the date the vehicle passes the mandatory vehicle emissions inspection. For a vehicle required to pass a biennial test, the expiration date shall be two years after the pass date;
c. All copies of a certificate of inspection shall be legible;
d. Unless inspection data is electronically transmitted under A.R.S. § 49-542(Q), the original completed certificate shall be presented to MVD for processing the vehicle's application for title and registration or the Arizona registration card. MVD may accept a signed certificate of inspection as evidence that the vehicle is a fleet-inspected vehicle and meets the inspection requirements of this Article;
e. The vehicle emissions inspector shall forward the second copy of each completed certificate of inspection, along with the second copy of the "Fleet Vehicle Inspection Report/Monthly Summary," to the Department monthly, not later than two weeks after the last day of the month in which the inspection is conducted;
f. The third copy of each completed certificate of inspection, along with the original "Fleet Vehicle Inspection Report/Monthly Summary," shall be retained for two years from the date of inspection;
g. Vehicle emissions certificates shall be purchased from the Department in lots of 25. Excess certificates may be returned to the Department for refund or may be used in subsequent years;
h. The fee for a certificate of inspection shall be fixed by the Director according to A.R.S. § 49-543, and shall be based upon the Director's estimated costs to the state of administering and enforcing the provisions of this Article as they apply to issuance of a certificate of inspection. Payment for certificates shall be included with an application for certificates. Checks shall be made payable to the Department of Environmental Quality.
i. Only the Department shall sell or otherwise transfer a certificate of inspection. This subsection does not apply to the submission of a certificate of inspection to MVD for the purpose of vehicle registration;
j. The fleet station owner shall be responsible for the security and accountability of the fleet's certificates and fleet vehicle emissions inspection records. Certificates and fleet vehicle emissions inspection records shall be maintained at the fleet station and shall be made available for review by a state inspector during normal business hours of the fleet station;
k. If any certificate is discovered lost or stolen, the fleet station owner shall notify the Department in writing within 24 hours, indicating the number of certificates lost or stolen and each serial number. The Department may revoke a fleet station permit for refusal or failure to report a lost or stolen certificate within 24 hours;
l. In the event of loss, destruction, or mutilation of an original completed certificate of inspection, a Director's certificate may be obtained from the Department by hand-delivery of the following:
   i. The second or third copy of the lost, destroyed, or mutilated certificate of inspection;
   ii. The original of the "Fleet Vehicle Inspection Report/Monthly Summary;"
   iii. A cover letter from the fleet agent explaining the situation that caused the loss, destruction, or mutilation of the original certificate of inspection; and
   iv. Payment of a fee to cover the cost of issuance of the Director's certificate. The fee for a Director's certificate shall be fixed by the Director according to A.R.S. § 49-543, and shall be based upon the Director's estimated cost to the state of administering and enforcing the provisions of this Article as they apply to issuance of a Director's certificate. Checks shall be made payable to the Department of Environmental Quality; and
m. If an original certificate of inspection is voided by a fleet station, the original of the voided certificate shall be matched to the corresponding third copy of the certificate and retained at the fleet station for two years from the date of inspection.

2. The fleet agent or vehicle emissions inspector shall obtain the "Fleet Vehicle Inspection Report/Monthly Summary" form from the Department. The vehicle emissions inspector performing the inspection shall record the following information on the form at the time of inspection:
   a. The VIN of the vehicle passing inspection;
   b. The vehicle's license number, if applicable;
   c. The HC content of the undiluted exhaust recorded at idle, if applicable;
   d. The CO content of the undiluted exhaust recorded at idle, if applicable;
   e. The HC content of the undiluted exhaust recorded at 2,500 rpm, if applicable;
   f. The CO content of the undiluted exhaust recorded at 2,500 rpm, if applicable;
   g. Results of a tampering check, if applicable;
   h. The vehicle model year;
   i. The vehicle make;
   j. The GVWR for a vehicle certified under federal truck standards;
   k. The date of inspection;
   l. The license number of the vehicle emissions inspector conducting the inspection;
   m. The signature of the inspector making the entry;
   n. The serial number of the certificate of inspection, recorded in numerical order;
   o. For a vehicle required to take the transient loaded emissions test, the inspector shall record the total HC, CO, CO_2 and NOx measured in grams/mile, and the evaporative system pressure test result, if applicable;
   p. The registration number of the registered analyzer or opacity meter used to perform the inspection;
   q. For a light-duty diesel vehicle, the inspector shall record opacity rather than undiluted HC and CO;
   r. For a heavy-duty diesel vehicle, instead of undiluted HC and CO:
      i. The time of the inspection;
      ii. The ambient temperature;
      iii. The corrected barometric pressure;
      iv. The relative humidity at the time of inspection;
      v. The engine year and cubic inch or liter displacement;
      vi. The GVWR;
      vii. The diameter of the exhaust stack; and
      viii. The corrected opacity reading.

s. For a vehicle required to take an OBD test, the inspector shall record the OBD results rather than HC, CO, and NOx.

3. A certificate of waiver may be issued by a fleet vehicle emissions inspector unless the fleet owner or lessee is an auto dealer licensed to sell used motor vehicles under Title 28 of the Arizona Revised Statutes. The certificate of waiver may be issued according to the following procedure if the requirements of R18-2-1008(A), R18-2-1009, and R18-2-1010 are met:
   a. A certificate of waiver shall be completed and signed by the vehicle emissions inspector performing the inspection after completion of a fleet inspection waiver report. The report shall be forwarded to the Department within three business days from the date of issuance of the certificate of waiver. A fleet inspection waiver report shall be provided by the Department with the purchase of each certificate of waiver. The report shall contain a description of the vehicle, test results, and repairs performed.
   b. The expiration date of the certificate of waiver shall be two years from the date that the waiver is issued for a vehicle required to take the transient loaded emissions test, and one year for all other vehicles.
   c. All information required on the certificate of waiver shall be legible.
   d. The vehicle emissions inspector issuing the certificate of waiver shall initial all corrections.
   e. Only the vehicle emissions inspector performing the inspection may sign or initial a certificate of waiver.
   f. Unless inspection data is electronically transmitted under A.R.S. § 49-542(Q), the original completed certificate shall be presented to MVD for processing of either the vehicle's application for title and registration or the Arizona registration card. MVD may accept the signed certificate of waiver as evidence that the vehicle is a fleet inspected vehicle and meets the inspection requirements of this Article if the certificate is complete and the expiration date has not passed.
   g. The second copy of each completed certificate of waiver shall accompany the completed fleet inspection waiver report.
   h. The third copy of each completed certificate of waiver, along with a copy of the fleet inspection waiver report, shall be retained by the fleet station owner for two years from the date of inspection.
   i. The fee for a certificate of waiver shall be fixed by the Director according to A.R.S. § 49-543, and shall be based upon the Director's estimated cost to the state of administering and enforcing the provisions of this Article as they apply to issuance of a certificate of waiver. Payment for certificates shall be included with an application for certificates. Checks shall be made payable to the Department of Environmental Quality.
   j. Only the Department shall sell or otherwise transfer a certificate of waiver. This subsection does not apply to the submission of a certificate of waiver to MVD for the purpose of vehicle registration.
   k. The fleet station owner shall be responsible for the security and accountability of the fleet's certificates.
   l. If a certificate is discovered lost or stolen, the fleet station owner shall notify the Department in writing within 24 hours and indicate the number of certificates lost or stolen and each serial number. The Department may revoke a fleet station permit for refusal or failure to report a lost or stolen certificate within 24 hours of discovery.
   m. In the event of loss, destruction, or mutilation of an original completed certificate of waiver, a Director's certificate may be obtained from the Department by hand delivery of the following:
      i. The second or third copy of the lost, destroyed, or mutilated certificate of waiver;
      ii. The original of the "Fleet Vehicle Inspection Report/Monthly Summary;"
      iii. A cover letter from the fleet agent explaining the situation that caused the loss, destruction, or mutilation of the original certificate of waiver; and
      iv. Payment of a fee to cover the cost of issuance of the Director's certificate. The fee for a Director's certificate shall be fixed by the Director according to A.R.S. § 49-543, and shall be based upon the Director's estimated cost to the state of administering and enforcing the provisions of this Article as they apply to issuance of a Director's certificate. Checks shall be made payable to the Department of Environmental Quality.
   n. In the event an original certificate of waiver is voided by a fleet station, the original of the voided certificate shall be matched to the corresponding third copy of the certificate and retained by the fleet for two years from the date of inspection.
4. Upon request, a state inspector shall be allowed access to and shall be permitted to photocopy, on or off the premises, any original "Fleet Vehicle Inspection Report/Monthly Summary," the second copy of a certificate of inspection, and any other related documents.

G. The fleet shall comply with the following general operating requirements:
1. The fleet station permit and the licenses of all inspectors employed at the station shall be prominently displayed at the fleet's inspection facility.
2. A fleet station shall only certify a vehicle owned by or leased to the holder of the fleet station permit.
3. The inspection equipment shall be operated, calibrated, and maintained as follows:
   a. All test equipment and instrumentation shall be maintained in accurate working condition as required by the manufacturer. An instrument requiring periodic calibration shall be calibrated according to instructions and recommendations of the instrument or equipment manufacturer. An NDIR emissions analyzer shall be registered and calibrated according to R18-2-1027. Calibration records for each instrument, except an NDIR emissions analyzer, shall be maintained by the fleet station. The calibration records shall be signed and dated by the technician performing each calibration.
   b. The instrument calibration records shall be available for review by the Department.
   c. Working gases used by the fleet station shall be subject to analysis and comparison to the Department's standard gases at any time.
   d. Fleet station equipment shall be subject to both scheduled and unscheduled checks for accuracy and condition by the Department.

4. A fleet emissions inspection station that is unable to test at least 25 vehicles according to R18-2-1006 and subsection (A) shall surrender its permit.
5. A motor vehicle dealer with a fleet station permit shall comply with A.R.S. § 49-542.03.
6. If a fleet station fails to meet any requirement of subsection (B), (C), or (D), it shall immediately cease operating as a fleet station until the requirement is met. If the fleet is cited for failure to have the necessary equipment under subsection (B), it shall not resume operation as a fleet emissions inspection station until compliance is verified by the Department.
7. A fleet station shall notify the Department in writing within seven days of the end or start of employment of any vehicle emissions inspector. The written notification shall include the name and license number of the vehicle emissions inspector, a statement declaring the employment change, and the effective date of the employment change. A fleet station that does not employ a vehicle emissions inspector shall immediately cease operating as a fleet station and notify the Department immediately by telephone and within seven days in writing. All unused vehicle certificates of inspection shall be returned to the Department for a refund within seven days after operations cease.
8. A fleet station that does not employ a fleet agent, as described in subsection (D)(4), shall immediately cease operating as a fleet station and shall notify the Department immediately by telephone and within seven days in writing. The written notification shall include the name and license number of the fleet agent, a statement declaring the employment change, and the effective date of the employment change. The fleet station may resume fleet station operation after the permit applicant or other designated employee takes and passes the examination required in subsection (D)(4), if the responsibility of the day-to-day operation of the fleet station and a fleet agent designation form has been filed with the Department.

H. A fleet's activities shall be governed by the following compliance and enforcement rules:
1. Subsections (B) through (G) apply at all times after the issuance of a fleet station permit. In addition, subsections (B), (C), and (D) apply before a permit can be issued or removed from suspension.
2. The Director may suspend or revoke a fleet station permit according to A.R.S. §§ 49-546(F) and A.R.S. Title 41, Chapter 6, if the permittee, or any person employed by the permittee:
   a. Violates any provision of Title 49, Chapter 3, Article 5 of the Arizona Revised Statutes or any provision of this Article;
   b. Misrepresents a material fact in obtaining a permit;
   c. Fails to make, keep, and submit to the Department records for a vehicle tested as a permittee; or
   d. Does not provide a state inspector access to the information required by this Article.
3. If a fleet station permit is surrendered, suspended or revoked, all unused vehicle certificates of inspection shall be returned to the Department for a refund.
4. A fleet vehicle is subject to inspection by a state inspector.
5. Surrender of a permit under subsection (A)(8) or (G)(4) shall not prevent the Department from carrying out an investigative or disciplinary proceeding against the permit holder for a violation before surrender.

Historical Note

Adopted effective January 13, 1976 (Supp. 76-1). Amended effective January 3, 1977 (Supp 77-1). Amended effective March 2, 1978 (Supp. 78-2). Amended effective January 3, 1979 (Supp. 79-1). Amended effective February 20, 1980 (Supp. 80-1). Amended as an emergency effective January 2, 1981, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1019 as amended effective February 20, 1980, and amended as an emergency effective January 2, 1981, now amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1019 renumbered as Section R18-2-1019 and amended effective August 1, 1988 (Supp. 88-3). Amended effective September 19, 1990 (Supp. 90-3). Amended effective February 4, 1993 (Supp. 93-1). Amended effective November 14, 1994 (Supp. 94-4). Amended effective October 15, 1998 (Supp. 98-4). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1020. Licensing of Third Party Agents; Issuing Alternative Fuel Certificates

A. Licensing of Third Party Agents. The Department shall accept an application for a third party agent license to issue Alternative Fuel Certificates from any person who demonstrates all of the following:
1. The applicant has knowledge of all laws and rules governing the inspection of alternative fuel vehicles;
2. The applicant has training or experience in inspecting alternative fuel vehicles; and
3. The applicant agrees to conduct inspections in accordance with the laws and rules for the inspection of alternative fuel vehicles.

B. A third party agent license is valid for a period of five years.

C. Issuing Alternative Fuel Certificates. The Department or its agent shall issue an Alternative Fuel Certificate according to A.R.S. § 28-2416 if the vehicle is currently powered by an alternative fuel as defined in A.R.S. § 1-215(4).

Historical Note

New Section adopted by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1021. Reserved

R18-2-1022. Procedure for Waiving Inspections Due to Technical Difficulties

A vehicle emissions station manager employed by an official emissions inspection station may issue a Director's certificate for a vehicle that cannot be inspected as required by this Article because of technical difficulties inherent in the manufacturer's design or construction of the vehicle.

Historical Note

Adopted effective January 13, 1976 (Supp. 76-1). Amended effective January 3, 1977 (Supp. 77-1). Amended effective March 2, 1978 (Supp. 78-2). Amended effective January 3, 1979 (Supp. 79-1). Amended effective January 1, 1986 (Supp. 85-6). Former Section R9-3-1022 renumbered without change as Section R18-2-1022 (Supp. 88-3). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000

(Supp. 00-1).

R18-2-1023. Certificate of Exemption for Out-of-State Vehicles

A. If a vehicle being registered or reregistered in area A or area B requires an emission test and will not be available for inspection within the state during the 90-day period before the emissions compliance expiration date, and an emissions inspection is not available for that class of vehicle at an official inspection station in the area where the vehicle is located, the owner or owner's agent may apply in writing to the Department for a certificate of exemption.

B. The owner or owner's agent shall complete the owner portion of the certificate of exemption form, and a law enforcement official shall complete the vehicle verification portion. The owner or owner's agent shall submit the completed form to the Department.

C. The Department shall issue a certificate of exemption:

1. For a vehicle that meets the requirements of subsection (A) as indicated by the form completed under subsection (B).
2. For a vehicle that has passed an official emissions inspection in another state during the 90 days before emissions compliance expiration upon submission of the inspection compliance document issued by the government entity conducting the inspection program.

D. The fee for a certificate of exemption shall be fixed by the Director according to A.R.S. § 49-543 and shall be based upon the Director's estimated costs to the state of administering and enforcing the provisions of this Article as they apply to issuance of certificates of exemption. The payment for the certificates shall be included with the application for certificates. Checks shall be made payable to the Department of Environmental Quality.

Historical Note

Adopted effective January 13, 1976 (Supp. 76-1). Amended effective January 3, 1977 (Supp. 77-1). Amended effective January 3, 1979 (Supp. 79-1). Amended as an emergency effective January 2, 1981 pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1023 as amended effective January 3, 1979 and amended as an emergency effective January 2, 1981 now amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Former Section R9-3-1023 renumbered without change as Section R18-2-1023 (Supp. 88-3). Amended effective February 4, 1993 (Supp. 93-1). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1).

R18-2-1024. Pilot Program for Roadside Diesel Testing

A. Purpose. This rule:

1. Establishes criteria for the pilot program required by Laws 2001, Chapter 371, Section 19;
2. Allows an interested contractor the opportunity to demonstrate testing procedures and technology to the Department over a minimum three-week period; and
3. Provides for the collection of data and information to enable the Department to submit a report to the diesel vehicle emissions testing study committee on roadside diesel testing.

B. Authority and Definitions. The Department or any person may contract with any local or state law enforcement agency, to perform roadside diesel tests under this Section to determine excessive smoke under A.R.S. § 28-955(C), or to assist in other services related to testing. For the purposes of this Section:

1. "Excessive smoke" means smoke with an opacity that exceeds the applicable standard in R18-2-1006(H)(1);
2. "Interested contractor" means a person, business, firm, partnership, or corporation that receive a notice to proceed for the roadside diesel testing pilot program under subsection (C)(2);
3. "Responsible official" has the meaning at R18-2-301; and
4. "Three week period" means a time interval containing at least 21days of testing by an interested contractor according to this Section.

C. A pilot program is established to evaluate methods of determining excessive smoke under A.R.S. § 28-955. A person may participate in the pilot program if:

1. The person submits a letter of intent to the Department within 30 days after the effective date of this rule, demonstrating how the person will comply with subsection (D). The letter of intent shall contain all of the following:
   a. Identification of the person, including a statement of qualifications describing technical capability, key personnel, experience, and any other information the person believes is relevant to implement the pilot program;
   b. Identification of any subcontractor the person plans to use, including a statement of the subcontractor's qualifications described in subsection (a);
   c. The proposed methods, locations, and dates of testing, including an evaluation of how the methods, locations, and dates allow for trucks to be identified, stopped, and tested safely, without creating traffic congestion, or exposing drivers, enforcement and testing personnel, or the public to dangerous traffic or other harmful conditions;
   d. Each proposed method of visually screening a vehicle for excessive smoke;
   e. A copy of any agreement with an enforcement agency;
   f. Each proposed method for communicating the nature and purpose of the pilot program and the right of a vehicle operator to refuse testing;
   g. A statement by a responsible official, that the person, with any subcontractor, has the equipment, personnel, and experience necessary to conduct testing and produce a report as required by this Section;
   h. The following language: "To the extent permitted by A.R.S. § 41-621 and § 35-154, [name of person] agrees to indemnify and hold harmless the state of Arizona for its vicarious liability for incidents arising out of implementation of this letter of intent";
   i. Evidence of financial responsibility including evidence of an insurance policy that covers any incident arising out of participation in the pilot program;
   j. A description of a proposed system for data collection; and
   k. A description of how the proposed pilot program will demonstrate a testing system that meets the requirements of A.R.S. §§ 49-542.06 and 49-542.07; and
2. The person receives a notice to proceed from the Department. The Department shall issue a notice to proceed to any person who submits a letter of intent that complies with subsection (1). The Department, with the consent of the person receiving the notice to proceed, may add conditions to the notice to proceed not contained in the letter of intent to enhance the pilot program.

D. Pilot program requirements.
1. An interested contractor participating in the pilot program retains ownership of any intellectual property rights it has or develops in the process of participating in the pilot program.
2. An interested contractor participating in the pilot program shall:
   a. Not be paid a fee by the Department or by the operator of the vehicle;
   b. Conduct the pilot program consistent with the letter of intent and notice to proceed, except that the interested contractor may vary from the terms of the letter of intent and notice with the advance written approval of the Department;
   c. Employ procedures and equipment conforming to Society of Automotive Engineers standard J1667, as incorporated by reference in R18-2-1006(H)(1);
   d. Not issue any citation for excessive smoke if a vehicle is stopped and tested;
   e. Provide motorist advisory information at the time of testing;
   f. Test a sufficient number and variety of vehicles, including apportioned vehicles, with a GVWR greater than 10,000 pounds operated in area A or B, to justify the evaluations in the report required under subsection (E); and
   g. Conduct testing for at least a three week period.

E. Pilot program report. An interested contractor that participates in the pilot program, shall submit a report to the Department by April 15, 2002, that contains the following:
1. A general description of the testing;
2. Any deviation from the letter of intent and notice to proceed, and any known instance of the interested contractor's noncompliance with state or local law;
3. A demonstration that the procedures and technology used are effective for screening potential polluters;
4. A demonstration of the actual test time and testing volume capabilities of a roadside diesel testing system based on the pilot program that could be used to implement a program under A.R.S. §§ 49-542.06 and 49-542.07;
5. An evaluation of the use of various screening cut points, database management and recordkeeping procedures, including any cooperation that may be necessary with the Arizona Department of Transportation;
6. An evaluation of maximum allowable opacity cut points for each model year of vehicle to be tested; and
7. An evaluation of the feasibility of a civil penalty system complying with A.R.S. § 49-542.07, including an enforcement database that tracks all citations, penalties, and payments by vehicle and driver.

F. A person may not participate in the procurement process for the roadside diesel testing program under A.R.S. § 49-542.06 unless the person participates in the pilot program. Participating in the pilot program for the purpose of participating in the procurement process for the roadside diesel testing program under A.R.S. § 49-542.06, means the person:
1. Receives a notice to proceed under subsection (C)(2), and
2. Submits the report required under subsection (E).

Historical Note

New Section made by final rulemaking at 8 A.A.R. 84, effective December 14, 2001 (Supp. 01-4).

R18-2-1025. Inspection of Contractor's Equipment and Personnel

A. State stations shall be inspected by state inspectors as follows:
1. In Area A:
   a. Automated emission analyzers, calibrated and maintained according to "IM240 and Evap Technical Guidance," shall be inspected using state station field calibration gases at least once every other month.
   b. Opacity meters shall be inspected for accuracy using a neutral density filter at least once each month.
   c. During audits, a check shall be made for equipment tampering, worn instrumentation, blocked filters, and other conditions that would impair accurate sampling.
2. In Area B:
   a. Automated emission analyzers shall be inspected using state station field calibration gases at least two times each month.
   b. Opacity meters shall be inspected for accuracy using a neutral density filter at least two times each month.
   c. During audits, a check shall be made for tampering, worn instrumentation, blocked filters, and other conditions that would impair accurate sampling.
   d. Functional checks of dynamometer accuracy including roll speed and power absorption shall be performed at least quarterly.

B. Equipment used to perform a transient loaded emissions test, shall be audited at least twice a year for all of the following:
1. Constant volume sampler critical flow and calibration;
2. Optimization of the flame ionization detector fuel to air ratio using methane;
3. Proper dynamometer coast down, roll distance, and inertia weight;
4. Ability to detect background pollutant concentrations;
5. Evaporative pressure test system for accuracy, response time, and other criteria consistent with "IM240 and Evap Technical Guidance;" and
6. Functional gas cap analysis equipment.

C. If an equipment audit of an inspection lane in either area A or area B indicates that a state station analyzer is not operating within contractually specified tolerance, the state inspector shall immediately re-audit the failing equipment. If the equipment fails the second audit, the inspector shall immediately notify the station manager. The station manager shall either replace or repair the failing equipment or close the affected lane until the equipment is repaired and its accuracy verified. The state inspector shall provide a copy of the analyzer's failing results to the station manager.

D. A state station analyzer removed by the contractor may be returned to service upon its repair and written verification of a passing calibration audit. The contractor shall immediately notify the Department in writing of the analyzer's return to service. The contractor's calibration audit of the analyzer shall be provided to the Department within seven calendar days after the analyzer's return to service.

E. State inspectors shall conduct performance audits to determine whether vehicle emissions inspectors are correctly performing all inspections and functions related to inspections as follows:
1. Overt audits at least two times each year for each inspection lane:
   a. Check for proper document security;
   b. Check for required recordkeeping including vehicle emissions inspector licenses; and
   c. Observation and written evaluation of each vehicle emissions inspector's ability to perform an inspection.
2. State station and vehicle emissions inspector records shall be reviewed at least monthly to assess station perfor-

mance and identify any problems, potential fraud, or incompetence.

3. If a vehicle emissions inspector fails an audit under subsection (E)(1) or (E)(2), the vehicle emissions inspector's license may be suspended or revoked according to R18-2-1016(A)(4).

F. On-road emissions analyzers shall be inspected by a state inspector at least monthly using dry-gas analysis equipment.

G. If an equipment audit indicates that an on-road emissions analyzer is not operating within contractually specified tolerance, the state inspector shall immediately re-audit the failing equipment. If the equipment fails the second audit, the inspector shall immediately notify the contractor and the contractor shall repair or replace the equipment according to subsections (C) and (D).

Historical Note

Adopted effective January 3, 1977 (Supp. 77-1). Amended effective March 2, 1978 (Supp. 78-2). Amended as an emergency effective January 2, 1981, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1025 as amended effective March 2, 1978, and amended as an emergency effective January 2, 1981, now amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended subsection (A) effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1025 renumbered as Section R18-2-1025 and subsection (C) amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1026. Inspection of Fleet Stations

A. Equipment used by fleet stations shall be inspected by state inspectors for accuracy as follows:

1. Emission analyzers shall be inspected using field calibration gases at least quarterly.
2. Opacity meters shall be inspected using a neutral density filter at least quarterly.
3. Equipment for transient loaded emissions tests shall be inspected according to R18-2-1025(A) and (B).

B. A fleet station's emissions analyzer shall not be used for an official emissions inspection if:

1. The state's field calibration gases are not read within the tolerances prescribed by subsection (J);
2. There is a leak in the sampling systems or the calibration port; or
3. The sample handling system is restricted.

C. The fleet station is responsible for calibration of the fleet station emission analyzer.

D. A state inspector may, at the inspector's discretion, allow a fleet station employee, or someone authorized by the fleet station, to calibrate the analyzer utilizing the state's field calibration gases.

E. The Department shall assign HC and CO concentrations to a calibration gas submitted by a fleet station emission analyzer technician and purchased from a private source.

F. A state inspector shall tag a fleet station emission analyzer if the analyzer does not meet the requirements of this Section. The fleet vehicle emissions inspector shall not use the analyzer for inspection until the tag is removed by a state inspector or an analyzer repair person certified under R18-2-1028. The tag shall be in the form of a U.S. postcard and contain the information listed in R18-2-1027(E).

G. An analyzer tagged under subsection (F) shall not be returned to service until its accuracy is verified by a state inspector or an emissions analyzer repair person certified under R18-2-1028.

H. A fleet station is responsible for periodic maintenance and calibrations of its emissions analyzers. Repair and maintenance requirements are prescribed in R18-2-1019.

I. If a state inspector has approved its use, a fleet station may lease or borrow an emission analyzer for official inspections for up to six months while the station's approved analyzer is being repaired.

J. Fleet station analyzers used for transient loaded tests shall comply with and be quality control checked according to "IM240 and Evap Technical Guidance." All other fleet station emission analyzers used for emissions inspections are required to read the calibration gases within the following tolerances:

1. Within plus 0.50% CO to minus 0.25% CO in the range from 0 to 2% CO;
2. Within plus 1.00% CO to minus 0.50% CO in the range from 2% to 10% CO;
3. Within plus 60 PPM HC to minus 30 PPM HC in the range from 0 to 500 PPM HC when read as N-HEXANE; and
4. Within plus 200 PPM HC to minus 100 PPM HC in the range from 500 to 2,000 PPM HC when read as N-HEXANE.

K. A fleet station opacity meter used for emission inspections is required to read the equivalent opacity value of neutral density filter within ± 5% opacity at any point in the range of the meter.

L. A state inspector shall conduct performance audits to determine whether a vehicle emissions inspector is correctly performing inspections and functions related to inspections as follows:

1. Overt audits at least two times each year for each facility:
   a. Check for proper document security;
   b. Check for required recordkeeping including vehicle emissions inspector licenses; and
   c. Observe and make a written evaluation of each vehicle emissions inspector's ability to perform an inspection.
2. Fleet station and vehicle emissions inspector records shall be reviewed at least monthly to assess fleet performance and identify any problems, potential fraud, or incompetence.

Historical Note

Adopted effective January 3, 1977 (Supp. 77-1). Amended effective January 1, 1986 (Supp. 85-6). Amended subsections (A) and (J) and added subsection (K) effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1026 renumbered as Section R18-2-1026 and subsections (B), (F), (G) and (H) amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1).

R18-2-1027. Registration and Inspection of Emissions Analyzers and Opacity Meters

A. An automotive repair facility may apply to the Department at no charge for registration of NDIR HC and CO analyzers, and opacity meters. NDIR emission analyzers and opacity meters used by fleet inspection stations shall be registered for the fleet station permit approval. Application forms for analyzer or opacity meter registration are available from the Department. Completed application forms shall be submitted to the Depart-

ment. For purposes of Chapter 1 of this Title, the application components for registration of an analyzer or opacity meter are:

1. The Department receives a completed application form;
2. The applicant or employee successfully completes the "Certified Technician" examination described in R18-2-1028(A)(2); and
3. The Department inspects the analyzer.

B. A registered analyzer shall be calibrated at least monthly, by a certified technician, with calibration gases approved by the Department. A registered opacity meter shall be calibrated according to manufacturer's specifications before performing the first vehicle emissions inspection in any month.

C. A registered analyzer shall meet the requirements of R18-2-1006(F)(7)(a). Calibration shall be verified by a state inspector before the analyzer is registered. The analyzer shall read the value of the calibration gases within the following tolerances:

1. Plus 0.50% CO to minus 0.25% CO in the range from 0 to 2% CO;
2. Plus 1.00% CO to minus 0.50% CO in the range from 2% to 10% CO;
3. Plus 60 PPM HC to minus 30 PPM HC in the range from 0 to 500 PPM HC when read as N-HEXANE; and
4. Plus 200 PPM HC to minus 100 PPM HC in the range from 500 to 2,000 PPM HC when read as N-HEXANE.

D. Each registered opacity meter and analyzer shall have a unique registration number assigned by the Department. The technician shall maintain a repair and calibration log for each registered opacity meter and analyzer on a form provided by the Department. The log shall be made available to a state inspector on request.

E. A state inspector shall tag a registered opacity meter or analyzer if the opacity meter or analyzer does not meet the requirements of this Section. A tagged opacity meter or analyzer shall not be used for the purposes of R18-2-1010 or R18-2-1019 until the tag is removed by a state inspector or an emission analyzer repair person certified under R18-2-1028 after accuracy is verified.

1. The tag shall be in the form of a U.S. postcard and contain the following information:
   a. Analyzer registration number or opacity meter registration number;
   b. Brief statement that the analyzer does not meet state operating requirements for registered analyzers;
   c. Reason for tagging;
   d. Date the analyzer was tagged and the signature of state inspector issuing the tag;
   e. Details of repairs performed to correct the failure;
   f. CO and HC concentrations of calibration gases used to verify analyzer accuracy;
   g. Analyzer readings when gases were introduced into the analyzer sampling probe; and
   h. Repair person's certificate number and signature or signature of state inspector removing the tag and date accuracy is verified.
2. The tag shall be returned to the Department within two business days after accuracy is verified.

F. An owner of a registered emission analyzer or opacity meter shall notify the Department within seven business days of the retirement, resignation, or termination of any licensed vehicle emissions inspector or certified technician. The Department shall revoke the registration of an emission analyzer or opacity meter if the owner of the analyzer or meter does not employ an inspector licensed under R18-2-1019 or a technician certified under R18-2-1028.

Historical Note

Adopted effective January 3, 1977 (Supp. 77-1). Amended effective March 2, 1978 (Supp. 78-2). Amended effective January 3, 1979 (Supp. 79-1). Amended as an emergency effective January 2, 1981, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1027 as amended effective January 3, 1979, and amended as an emergency effective January 2, 1981, now amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1027 renumbered as Section R18-2-1027 and subsections (B), (D), (F) and (G) amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

R18-2-1028. Certification of Users of Registered Analyzers and Analyzer Repair Persons

A. A person may be certified to use a registered analyzer and opacity meter if:

1. The person completes the application form and submits it to the Department; and
2. The person demonstrates proficiency by scoring 80% or higher on a Department-administered examination in the following areas:
   a. Equipment used in the inspection and control of emissions;
   b. Types of emissions inspection failures;
   c. Correction procedures for excessive HC emissions;
   d. Correction procedures for excessive CO emissions;
   e. Proper carburetor adjustment procedures; and
   f. Diesel fuel injection systems.

B. Certification under subsection (A) shall be valid for one year from date of issue and may be renewed, under the conditions of subsection (A), by submitting a renewal application to the Department 30 days before the current certification expiration date.

C. A person certified under subsection (A) shall notify the Department within seven business days of the person's retirement, resignation, or termination from employment.

D. A person may be certified to repair and remove tags from an emission analyzer under R18-2-1027 if:

1. Application is made to the Department;
2. The person demonstrates proficiency by scoring 80% or higher on a Department-administered examination in the following areas:
   a. State and federal regulations governing emissions analyzers,
   b. Fundamentals of emission analyzer operation, repair and preventive maintenance,
   c. Theory of operation of vehicle emissions control devices.

E. Certification under subsection (D) shall be valid for one year from date of issue and may be renewed, under the conditions of subsection (D), by submitting a renewal application to the Department 30 days before the current certification expiration date.

F. Each person certified under this Section shall receive a unique nontransferable certification number.

G. The Department may suspend, revoke or refuse to renew the certification issued under subsection (A) if:

1. The person's actions demonstrate a lack of proficiency in the areas listed under subsection (A)(2); or

2. The person has willfully violated any provision of this Article.

H. The Department may suspend, revoke, or refuse to renew the certification issued under subsection (D) if:

1. The person's actions demonstrate a lack of proficiency in the areas listed under subsection (D)(2); or
2. The person has willfully violated any provision of this Article.

Historical Note

Adopted effective January 1, 1986 (Supp. 85-6). Amended subsections (A) and (F) effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1028 renumbered as Section R18-2-1028 and subsection (D) amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1).

R18-2-1029. Vehicle Emission Control Devices

For the purposes of A.R.S. §§ 28-955 and 49-447, a registered motor vehicle shall have in operating condition all emission control devices installed by the vehicle manufacturer to comply with federal requirements for motor vehicle emissions or equivalent aftermarket replacement parts or devices.

Historical Note

Adopted effective January 3, 1977 (Supp. 77-1). Former Section R9-3-1029 renumbered as Section R18-2-1029 and amended effective August 1, 1988 (Supp. 88-3). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1).

R18-2-1030. Visible Emissions; Mobile Sources

A. A vehicle other than a diesel-powered vehicle or 2-stroke vehicle that emits any visible emissions for 10 consecutive seconds or more is "excessive" for the purposes of A.R.S. § 28-955(C).

B. A diesel-powered vehicle shall not emit any visible emissions in excess of:

1. Twenty percent visual opacity for 10 consecutive seconds or more at or below 2,000 feet elevation;
2. Thirty percent visual opacity for 10 consecutive seconds or more above 2,000 feet and at or below 4,000 feet elevation; and
3. Forty percent visual opacity for 10 consecutive seconds above 4,000 feet elevation.

C. A vehicle that exceeds the standards in subsection (B) fails the inspection under R18-2-1006 and is considered to have "excessive" emissions under A.R.S. § 28-955(C).

Historical Note

Adopted effective January 3, 1977 (Supp. 77-1). Amended as an emergency effective January 2, 1981, pursuant to A.R.S. § 41-1003, valid for only 90 days (Supp. 81-1). Former Section R9-3-1030 as adopted effective January 3, 1977, and amended as an emergency effective January 2, 1981, now amended effective April 15, 1981 (Supp. 81-2). Amended effective January 1, 1986 (Supp. 85-6). Amended subsection (C) effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1030 renumbered as Section R18-2-1030 and subsection (C) amended effective August 1, 1988 (Supp. 88-3). Amended effective September 19, 1990 (Supp. 90-3). Amended by final rulemaking at 6 A.A.R. 562, effective January 14, 2000 (Supp. 00-1).

R18-2-1031. Standards for Evaluating the Oxidation Efficiency of a Catalytic Converter

A. Except for a vehicle requiring an Idle-Only Inspection, a gasoline-powered vehicle requiring a catalytic converter test under R18-2-1008(C) shall be tested using the following Catalyst Efficiency Test Procedure:

1. Immediately after a vehicle completes an Inspection and Maintenance (I/M) test in the waiver lane, the exhaust sampling cone shall be removed from the tailpipe. The vehicle shall remain on the dynamometer with the engine idling and the transmission in neutral. The vehicle engine must be at normal operating temperature.
2. For the catalyst test, the dynamometer and the constant volume sampler shall remain at the settings used for the vehicle's I/M test.
3. The inspector shall insert the sampling tube for the A/F analyzer into the tailpipe of the vehicle.
4. The inspector shall accelerate the vehicle to 40 ± 2.5 MPH and maintain a steady-state operating mode for the duration of the test. Once the vehicle obtains the test speed, the test shall begin.
5. Once the test begins, a two-minute stabilization period shall take place, during which the inspector shall monitor the A/F analyzer to ensure that the A/F is 14.0 or greater. If the mean A/F is less than 14.0, the inspector shall abort the test.
6. If the A/F is 14.0 or greater, the exhaust sampling cone shall be repositioned for exhaust sampling.
7. After the stabilization period ends, the total hydrocarbon and methane concentrations and the A/F ratio shall be continuously recorded for two minutes.
8. At the end of the two-minute sampling period, the inspector shall stop the vehicle, remove the exhaust sampling cone and the A/F analyzer sampling probe from the tailpipe, and remove the vehicle from the dynamometer.
9. The mean total hydrocarbon concentration shall be divided by the mean methane concentration for the recorded values of the test, to produce a ratio (R) of total hydrocarbon to methane. The ratio, R, shall be applied to the formula: Catalyst Efficiency (%) = -3 (R) +100.
10. A vehicle passes the test if the Catalyst Efficiency (%) is 75% or greater.
11. The test result for a non-passing vehicle with a mean A/F equal to, or less than, 14.3 shall be inconclusive.
12. A vehicle fails the Catalyst Efficiency Test Procedure if the A/F is greater than 14.3 and the Catalyst Efficiency (%) is less than 75%. The failing vehicle cannot be granted a waiver according to R18-2-1008(C)(1).

B. Analytical equipment required to perform the Catalyst Efficiency Test Procedure shall meet the following requirements:

1. Analyzer Specifications:
   a. An analyzer shall meet performance specifications of 40 CFR 86 subparts B, D, and N with respect to accuracy, precision, drift, interference, and noise. 40 CFR, subparts B, D, and N, adopted as of July 1, 1998, are incorporated by reference and on file with the Department and the Secretary of State. This incorporation contains no future editions or amendments. A copy of this referenced material may be obtained from the U.S. Government Printing Office, Superintendent of Documents, Mail Stop SSOP, Washington D.C. 20402-9328.
   b. Total hydrocarbon analysis shall be determined by a flame ionization detector. The analyzer shall be single range with a calibration curve covering at least 0 to 300 ppm carbon.

c. Methane analysis shall be determined by a flame ionization detector equipped with a non-methane cutter capable of oxidizing 98% of the hydrocarbons (except methane) while more than 90% of the methane remains unchanged. The analyzer shall be single range with a calibration curve covering at least 0 to 30 ppm.

d. Engine A/F mixture analysis shall be determined by a Universal Exhaust Gas Oxygen Sensor. The range shall be 8.0 to 25.5 A/F for gasoline with an accuracy of ±2% of point and a response time of less than 150 milliseconds.

2. Analyzer Performance Verification and Calibration:

a. The operator of an analyzer under this Section shall verify analyzer performance according to manufacturer recommendations.

b. Upon initial installation, and monthly thereafter, the operator of an analyzer under this Section shall generate a 10-point calibration curve for each total hydrocarbon and methane analyzer. A gas divider employing equally spaced points may be used to generate the calibration curve.

i. Each calibration curve generated shall fit the data within ± 2.0% at each calibration point.

ii. Each calibration curve shall be verified for each analyzer with a confirming calibration standard between 15-80% of full scale that is not used for curve generation. Each confirming standard shall be measured by the curve within ± 2.5%.

Historical Note

Adopted effective January 1, 1987, filed December 31, 1986 (Supp. 86-6). Former Section R9-3-1031 renumbered as Section R18-2-1031 and amended effective August 1, 1988 (Supp. 88-3). Amended effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4).

Table 1. Dynamometer Loading Table - Annual Tests

Gross Vehicle Weight Rating (Pounds)	Engine Size	Speed (MPH)	Load (HP)
8500 or less	4 cyl. or less	22-25	2.8-4.1
8500 or less	5 or 6 cyl.	29-32	6.4-8.4
8500 or less	8 cyl. or more	32-35	8.4-10.8
8501 or more	All	37-40	12.7-15.8

Historical Note

Adopted effective November 14, 1994 (Supp. 94-4).

Table 2. Emissions Standards - Annual Tests

MAXIMUM ALLOWABLE

Motorcycles

Vehicle Engine Type	Vehicle Model Year	Number of Cylinders	Conditioning Mode		Curb Idle Mode Test		Loaded Cruise Mode Test	
			HC PPM	CO %	HC PPM	CO %	HC PPM	CO %
2-Stroke	All	All	18,000	5.00	18,000	5.00	N/A	N/A
4-Stroke	All	All	500	5.00	1,800	5.50	N/A	N/A

Reconstructed Vehicles

Vehicle Engine Type	Vehicle Model Year	Number of Cylinders	Conditioning Mode		Curb Idle Mode Test		Loaded Cruise Mode Test	
			HC PPM	CO %	HC PPM	CO %	HC PPM	CO %
4-Stroke	1967-1980	All	700	5.25	1,200	7.50	1,200	5.60
4-Stroke	1980 & Newer	All	700	5.25	1,200	7.50	700	5.25

Light-Duty Vehicles

Vehicle Engine Type	Vehicle Model Year	Number of Cylinders	Conditioning Mode		Curb Idle Mode Test		Loaded Cruise Mode Test	
			HC PPM	CO %	HC PPM	CO %	HC PPM	CO %
2-Stroke	All	All	18,000	5.00	18,000	5.00	18,000	5.00
4-Stroke	1967-1971	4 or less	450	3.75	500	5.50	500	4.20
4-Stroke	1967-1971	more than 4	380	3.00	450	5.00	450	3.75
4-Stroke	1972-1974	4 or less	380	3.50	400	5.50	400	4.20
4-Stroke	1972-1974	more than 4	300	3.00	400	5.00	400	3.75
4-Stroke	1975-1978	4 or less	120	1.00	250	2.20	250	1.65
4-Stroke	1975-1978	more than 4	120	1.00	250	2.00	250	1.50
4-Stroke	1979	4 or less	120	1.00	220	2.20	220	1.65
4-Stroke	1979	more than 4	120	1.00	220	2.00	220	1.50
4-Stroke	1980 & newer	All	100	0.50	220	1.20	220	1.20

Light-Duty Truck 1 (0-6000 lbs GVWR)

Vehicle Engine Type	Vehicle Model Year	Number of Cylinders	Conditioning Mode		Curb Idle Mode Test		Loaded Cruise Mode Test	
			HC PPM	CO %	HC PPM	CO %	HC PPM	CO %
2-Stroke	All	All	18,000	5.00	18,000	5.00	18,000	5.00
4-Stroke	1967-1971	4 or less	450	3.75	500	5.50	500	4.20
4-Stroke	1967-1971	more than 4	380	3.00	450	5.00	450	3.75
4-Stroke	1972-1974	4 or less	380	3.50	400	5.50	400	4.20
4-Stroke	1972-1974	more than 4	300	3.00	400	5.00	400	3.75
4-Stroke	1975-1978	4 or less	120	1.00	250	2.20	250	1.65
4-Stroke	1975-1978	more than 4	120	1.00	250	2.00	250	1.50
4-Stroke	1979	4 or less	120	1.00	220	2.20	220	1.65
4-Stroke	1979	more than 4	120	1.00	220	2.00	220	1.50
4-Stroke	1980 & newer	All	100	0.50	220	1.20	220	1.20

Light-Duty Truck 2 (6001 - 8500 lbs GVWR)

Vehicle Engine Type	Vehicle Model Year	Number of Cylinders	Conditioning Mode		Curb Idle Mode Test		Loaded Cruise Mode Test	
			HC PPM	CO %	HC PPM	CO %	HC PPM	CO %
2-Stroke	All	All	18,000	5.00	18,000	5.00	18,000	5.00
4-Stroke	1967-1971	4 or less	450	3.75	500	5.50	500	4.20
4-Stroke	1967-1971	more than 4	380	3.00	450	5.00	450	3.75
4-Stroke	1972-1974	4 or less	380	3.50	400	5.50	400	4.20
4-Stroke	1972-1974	more than 4	300	3.00	400	5.00	400	3.75
4-Stroke	1975-1978	All	300	3.00	350	4.00	350	3.00
4-Stroke	1979	4 or less	120	1.00	220	2.20	220	1.65
4-Stroke	1979	more than 4	120	1.00	220	2.00	220	1.50
4-Stroke	1980 & newer	All	100	0.50	220	1.20	220	1.20

Heavy-Duty Truck (8501 lbs or greater GVWR)

Vehicle Engine Type	Vehicle Model Year	Number of Cylinders	Conditioning Mode		Curb Idle Mode Test		Loaded Cruise Mode Test	
			HC PPM	CO %	HC PPM	CO %	HC PPM	CO %
2-Stroke	All	All	18,000	5.00	18,000	5.00	18,000	5.00
4-Stroke	1967-1971	4 or less	450	3.75	500	5.50	500	4.20
4-Stroke	1967-1971	more than 4	380	3.00	450	5.00	450	3.75
4-Stroke	1972-1974	4 or less	380	3.50	400	5.50	400	4.20
4-Stroke	1972-1974	more than 4	300	3.00	400	5.00	400	3.75
4-Stroke	1975-1978	All	300	3.00	350	4.00	350	3.00
4-Stroke	1979 & newer	All	300	3.00	300	4.00	300	3.00

Historical Note

Renumbererd from R18-2-1006 and amended effective November 14, 1994 (Supp. 94-4). See emergency amendment below (Supp. 94-4). Emergency amendment adopted effective December 23, 1994, pursuant to A.R.S. § 41-1026, valid for 180 days (Supp. 95-2). Emergency amendment expired, previous text placed back into effect effective June 21, 1995 (Supp. 95-3). Amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

Table 3. Emissions Standards - Transient Loaded Emissions Tests

FINAL STANDARDS (Standards are in grams per mile)

(i) Light Duty Vehicles

Model Years	Hydrocarbons		Carbon Monoxide		Oxides of Nitrogen	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1981-1982	3.0	2.5	25.0	21.8	3.5	3.4
1983-1985	2.4	2.0	20.0	17.3	3.5	3.4
1986-1989	1.6	1.4	15.0	12.8	2.5	2.4
1990-1993	1.0	0.8	12.0	10.1	2.5	2.4
1994+	0.8	0.7	12.0	10.1	2.0	1.9

(ii) Light Duty Trucks 1 (less than 6000 pounds GVWR)

Model Years	Hydrocarbons		Carbon Monoxide		Oxides of Nitrogen	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1981-1985	4.0	3.4	40.0	35.3	5.5	5.4
1986-1989	3.0	2.5	25.0	21.8	4.5	4.4
1990-1993	2.0	1.7	20.0	17.3	4.0	3.9
1994+	1.6	1.4	20.0	17.3	3.0	2.9

(iii) Light Duty Trucks 2 (greater than 6000 pounds GVWR)

Model Years	Hydrocarbons		Carbon Monoxide		Oxides of Nitrogen	
	Composite	Phase 2	Composite	Phase 2	Composite	Phase 2
1981-1985	4.4	3.7	48.0	42.5	7.0	6.9
1986-1987	4.0	3.4	40.0	35.3	5.5	5.4
1988-1989	3.0	2.5	25.0	21.8	5.5	5.4
1990-1993	3.0	2.5	25.0	21.8	5.0	4.9
1994+	2.4	2.0	25.0	21.8	4.0	3.9

Historical Note

Adopted effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Table heading amended by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

Table 4. Transient Driving Cycle

Time second	Speed mph	Time second	Speed mph	Time second	Speed mph	Time second	Speed mph	Time second	Speed mph
0	0	30	20.7	60	26	90	51.5	120	54.9
1	0	31	21.7	61	26	91	52.2	121	55.4
2	0	32	22.4	62	25.7	92	53.2	122	55.6
3	0	33	22.5	63	26.1	93	54.1	123	56
4	0	34	22.1	64	26.5	94	54.6	124	56
5	3.3	35	21.5	65	27.3	95	54.9	125	55.8
6	6.6	36	20.9	66	30.5	96	55	126	55.2
7	9.9	37	20.4	67	33.5	97	54.9	127	54.5
8	13.2	38	19.8	68	36.2	98	54.6	128	53.6
9	16.5	39	17	69	37.3	99	54.6	129	52.5
10	19.8	40	17.1	70	39.3	100	54.8	130	51.5
11	22.2	41	15.8	71	40.5	101	55.1	131	50.8
12	24.3	42	15.8	72	42.1	102	55.5	132	48
13	25.8	43	17.7	73	43.5	103	55.7	133	44.5
14	26.4	44	19.8	74	45.1	104	56.1	134	41
15	25.7	45	21.6	75	46	105	56.3	135	37.5
16	25.1	46	22.2	76	46.8	106	56.6	136	34
17	24.7	47	24.5	77	47.5	107	56.7	137	30.5
18	25.2	48	24.7	78	47.5	108	56.7	138	27
19	25.4	49	24.8	79	47.3	109	56.3	139	23.5
20	27.2	50	24.7	80	47.2	110	56	140	20
21	26.5	51	24.6	81	47.2	111	55	141	16.5
22	24	52	24.6	82	47.4	112	53.4	142	13
23	22.7	53	25.1	83	47.9	113	51.6	143	9.5
24	19.4	54	25.6	84	48.5	114	51.8	144	6
25	17.7	55	25.7	85	49.1	115	52.1	145	2.5
26	17.2	56	25.4	86	49.5	116	52.5	146	0
27	18.1	57	24.9	87	50	117	53		
28	18.6	58	25	88	50.6	118	53.5		
29	20	59	25.4	89	51	119	54		

Historical Note

Adopted effective November 14, 1994 (Supp. 94-4). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4).

Table 5. Tolerances

	Range	State Station	Fleet Station
4 & 2 stroke vehicles:			
CO in MOL percent	0 to 2.0%	±0.1%	±0.25%
	2 to 10.0%	±0.25%	±0.5%
4-stroke vehicles:			
HC as N-hexane in PPM	0 to 500 PPM	±15 PPM	±30 PPM
	500 to 2000 PPM	±50 PPM	±100 PPM
2-stroke vehicles:			
HC as propane in PPM	0 to 25,000 PPM	±1250 PPM	±1250 PPM

Historical Note
Adopted effective November 14, 1994 (Supp. 94-4).

Table 6. Repealed

Historical Note
Adopted effective November 14, 1994 (Supp. 94-4). See emergency amendment below (Supp. 94-4). Emergency amendment adopted effective December 23, 1994, pursuant to A.R.S. § 41-1026, valid for 180 days (Supp. 95-2). Emergency amendment expired, previous text placed back into effect effective June 21, 1995 (Supp. 95-3). Amended by final rulemaking at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4). Table 6 repealed by final rulemaking at 8 A.A.R. 90, effective January 1, 2002 (Supp. 01-4).

ARTICLE 11. FEDERAL HAZARDOUS AIR POLLUTANTS

R18-2-1101. National Emission Standards for Hazardous Air Pollutants (NESHAPs)

A. Except as provided in R18-2-1102, the following subparts of 40 CFR 61, National Emission Standards for Hazardous Air Pollutants (NESHAPs), and all accompanying appendices, as of July 1, 2001, and no future editions or amendments, are incorporated by reference. These standards are on file with the Office of the Secretary of State and the Department and shall be applied by the Department.

1. Subpart A - General Provisions.
2. Subpart C - Beryllium.
3. Subpart D - Beryllium Rocket Motor Firing.
4. Subpart E - Mercury.
5. Subpart F - Vinyl Chloride.
6. Subpart J - Equipment Leaks (Fugitive Emission Sources) of Benzene.
7. Subpart L - Benzene Emissions from Coke By-Product Recovery Plants.
8. Subpart M - Asbestos.
9. Subpart N - Inorganic Arsenic Emissions from Glass Manufacturing Plants.
10. Subpart O - Inorganic Arsenic Emissions from Primary Copper Smelters.
11. Subpart P - Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities.
12. Subpart V - Equipment Leaks (Fugitive Emission Sources).
13. Subpart Y - Benzene Emissions From Benzene Storage Vessels.
14. Subpart BB - Benzene Emissions from Benzene Transfer Operations.
15. Subpart FF - Benzene Waste Operations.

B. Except as provided in R18-2-1102, the following subparts of 40 CFR 63, NESHAPs for Source Categories, and all accompanying appendices, as of July 1, 2001, and no future editions or amendments, are incorporated by reference. These standards are on file with the Office of the Secretary of State and the Department and shall be applied by the Department.

1. Subpart A - General Provisions.
2. Subpart B - Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j).
3. Subpart D - Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants.
4. Subpart F - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.
5. Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.
6. Subpart H - National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.
7. Subpart I - National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks.
8. Subpart L - National Emission Standards for Coke Oven Batteries.
9. Subpart M - National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities.
10. Subpart N - National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.
11. Subpart O - Ethylene Oxide Emissions Standards for Sterilization Facilities.
12. Subpart Q - National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers.
13. Subpart R - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations).
14. Subpart S - National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.
15. Subpart T - National Emission Standards for Halogenated Solvent Cleaning.
16. Subpart U - National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins.
17. Subpart W - National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production.
18. Subpart X - National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting.
19. Subpart AA - National Emission Standards for Hazardous Air Pollutants From Phosphoric Acid Manufacturing Plants.

20. Subpart BB - National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants.
21. Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries.
22. Subpart DD - National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations.
23. Subpart EE - National Emission Standards for Magnetic Tape Manufacturing Operations.
24. Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities.
25. Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities.
26. Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations.
27. Subpart KK - National Emission Standards for the Printing and Publishing Industry.
28. Subpart LL - National Emission Standards for Hazardous Air Pollutants for Primary Aluminum Reduction Plants.
29. Subpart MM - National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills.
30. Subpart OO - National Emission Standards for Tanks -- Level 1.
31. Subpart PP - National Emission Standards for Containers.
32. Subpart QQ - National Emission Standards for Surface Impoundments.
33. Subpart RR - National Emission Standards for Individual Drain Systems.
34. Subpart SS - National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process.
35. Subpart TT - National Emission Standards for Equipment Leaks - Control Level 1.
36. Subpart UU - National Emission Standards for Equipment Leaks - Control Level 2 Standards.
37. Subpart VV - National Emission Standards for Oil-Water Separators and Organic-Water Separators.
38. Subpart WW - National Emission Standards for Storage Vessels (Tanks) - Control Level 2.
39. Subpart YY - National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards.
40. Subpart CCC - National Emission Standards for Hazardous Air Pollutants for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants.
41. Subpart DDD - National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production.
42. Subpart EEE - National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors.
43. Subpart GGG - National Emission Standards for Pharmaceuticals Production.
44. Subpart HHH - National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities.
45. Subpart III - National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production.
46. Subpart JJJ - National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins.
47. Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.
48. Subpart MMM - National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production.
49. Subpart NNN - National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing.
50. Subpart OOO - National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins.
51. Subpart PPP - National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols Production.
52. Subpart RRR - National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production.
53. Subpart TTT - National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting.
54. Subpart VVV - National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works.
55. Subpart XXX - National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese.
56. Subpart CCCC - National Emission Standards for Hazardous Air Pollutants: Manufacture of Nutritional Yeast.
57. Subpart GGGG - National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production.

Historical Note

Former Section R18-2-1101 repealed effective September 26, 1990 (Supp. 90-3). New Section R18-2-1101 renumbered from R18-2-901 and amended effective November 15, 1993 (Supp. 93-4). Amended effective June 10, 1994 (Supp. 94-2). Amended effective February 17, 1995 (Supp. 95-1). Amended effective December 7, 1995 (Supp. 95-4). Amended effective May 9, 1996 (Supp. 96-2). Amended effective April 4, 1997; filed with the Office of the Secretary of State March 14, 1997 (Supp. 97-1). Amended effective December 4, 1997 (Supp. 97-4). Amended by final rulemaking at 5 A.A.R. 3221, effective August 12, 1999 (Supp. 99-3). Amended by final rulemaking at 6 A.A.R. 4170, effective October 11, 2000 (Supp. 00-4). Amended by final rulemaking at 8 A.A.R. 2543, effective May 24, 2002 (Supp. 02-2).

R18-2-1102. General Provisions

A. When used in 40 CFR 61 or 63, "Administrator" means the Director of the Arizona Department of Environmental Quality except that the Director shall not be authorized to approve alternate or equivalent test methods or alternate standards or work practices, except as specifically provided in Part 63, Subpart B.

B. From the general standards identified in R18-2-1101(A), delete 40 CFR 61.04. All requests, reports, applications, submittals, and other communications to the Director pursuant to this Article shall be submitted to the Arizona Department of Environmental Quality, Air Quality Division, 3033 North Central Avenue, Phoenix, Arizona 85012.

C. The Director shall not be delegated authority to deal with equivalency determinations that are nontransferable through Section 112(e)(3) of the Act.

Historical Note

Former Section R18-2-1102 repealed effective September 26, 1990 (Supp. 90-3). New Section R18-2-1102 renumbered from R18-2-902 and amended effective November 15, 1993 (Supp. 93-4). Amended effective June 10, 1994 (Supp. 94-2). Amended effective February 17, 1995 (Supp. 95-1).

ARTICLE 12. EMISSIONS BANK

R18-2-1201. Definitions

In addition to the definitions contained in Article 1 of this Chapter, and A.R.S. § 49-401.01, the following definitions apply to this Article:

1. "Certified credit" means an emission reduction credit that meets the criteria under R18-2-1205.
2. "Conditional credit" means an emission reduction credit that is in the review process before qualifying for certification under R18-2-1205.
3. "Credit generation" means the process by which a source obtains emission reduction credits for eventual listing in the registry.
4. "Credit retirement" means a person's purchase of a banked emission reduction credit for the purpose of permanent removal from the emissions bank.
5. "Credit utilization" means the use of a certified emission reduction credit.
6. "Credit withdrawal" means the removal of an emission reduction credit from the bank by the source originally depositing the emission reduction credit.
7. "Emission reduction credit" or "credit" means a certified unit that may be banked, sold, transferred, withdrawn, or retired.
8. "Permitting authority" means the state or county that has jurisdiction over a source under A.R.S. § 49-402 and may review, issue, revise, administer, and enforce a permit; and certify a credit under this Article.
9. "Registry" means the location where emission reduction credits are posted for the purpose of public notice, allowing a person to determine the availability of credits for related market transactions.
10. "Surplus" means the amount of a permitted source's emission reduction that is not required by federal, state, or local law.

Historical Note

New Section made by final rulemaking at 8 A.A.R. 1815, effective March 18, 2002 (Supp. 02-1).

R18-2-1202. Applicability

The provisions of this Article apply to permitted sources emitting particulate matter, sulfur dioxide, carbon monoxide, nitrogen oxides, or volatile organic compounds. The provisions of this Article shall not apply to sources granted authority to operate under 18 A.A.C. 2, Article 5.

Historical Note

New Section made by final rulemaking at 8 A.A.R. 1815, effective March 18, 2002 (Supp. 02-1).

R18-2-1203. Emissions Bank Administration

A. The Director shall place an emission reduction credit in the emissions bank credit registry upon conditional certification, certification, pending use, and final disposition. For each credit, the Director shall place in the registry:
1. Source's contact name and information;
2. Source name and information;
3. Amount and type of pollutant;
4. Date of emission reduction and credit status.

B. The Director shall issue a certificate of deposit to the reducing source for each certified credit deposited in the bank, and issue a certificate of retirement to a person for each certified credit permanently retired.

Historical Note

New Section made by final rulemaking at 8 A.A.R. 1815, effective March 18, 2002 (Supp. 02-1).

R18-2-1204. Credit Generation

A. A source wanting to generate an emission reduction for deposit into the bank shall submit a Credit Generation Application (CGA) to the Director on a form prescribed by the Director. The CGA shall contain:
1. The company name;
2. The company mailing address;
3. The owner, co-owner, or partner;
4. The contact person name, title, and telephone number;
5. The permitted source name, location, permit number, and industry code;
6. The pollutant;
7. The attainment status of the area where the source is located;
8. The amount of actual emissions reduced;
9. The date of emission reduction to be credited;
10. The description of emission reduction credit generation activity;
11. The signature of and verification of truthfulness and accuracy by a responsible official as defined in R18-2-301(17);
12. The name, title, and telephone number of the responsible official.

The source shall submit a copy of the CGA to the permitting authority with an application to revise the permit or request to terminate the permit.

B. Upon receipt by the Director of the CGA with a check for the administrative fee specified in R18-2-1208(A), the Director shall list each conditional credit in the registry.

Historical Note

New Section made by final rulemaking at 8 A.A.R. 1815, effective March 18, 2002 (Supp. 02-1).

R18-2-1205. Credit Certification

A. A permitting authority may certify an emission credit if the permitting authority verifies the credit is based on:
1. A reduction in actual emissions that occurred after August 17, 1999;
2. A quantifiable reduction in actual emissions;
3. A permanent reduction in actual emissions;
4. An enforceable reduction in actual emissions; and
5. A surplus reduction in actual emissions occurring in addition to any other required emission reduction.

B. The source must notify the permitting authority when the reduction occurs.

C. In order for an emission reduction to be quantifiable under this Section:
1. The emission reduction must be quantifiable under R18-2-301(14); and
2. The reducing source shall submit documentation of any testing or monitoring that demonstrates an emission reduction.

D. The permitting authority shall certify one emission reduction credit for each ton per year of particulate matter, sulfur dioxide, carbon monoxide, nitrogen dioxide, or volatile organic compound actually reduced.

E. At the time of deposit in the emissions bank, the Director shall discount by 10 percent the certified credit total. The 10 percent of certified credit total shall be permanently retired to the bank.

F. A banked credit does not expire.

G. The permitting authority shall notify the source and the Director that a credit is certified. Upon receipt of the notice, the Director shall issue a certificate for each certified credit to the applicant identified in R18-2-1204, and list the certified credit in the registry.

Historical Note

New Section made by final rulemaking at 8 A.A.R. 1815, effective March 18, 2002 (Supp. 02-1).

R18-2-1206. Credit Utilization

A. A source may use a certified emission reduction credit in the same nonattainment area, maintenance area, or modeling domain in which the emission reduction occurred by submitting a Credit Utilization Application (CUA) to the Director on a form prescribed by the Director. The CUA shall contain:

1. The name and mailing address of the source that generated the credit;
2. The owner, co-owner, or partner of the source that generated the credit;
3. The contact person name, title, telephone number of the source that generated the credit;
4. The name and mailing address of the source utilizing the credit;
5. The owner, co-owner, or partner of the source utilizing the credit;
6. The contact person name, title, telephone number of the source utilizing the credit;
7. The purpose of the utilization;
8. The pollutant;
9. The amount of emission reduction credit to be utilized;
10. Each emission reduction credit certificate number;
11. The signature of and verification of truthfulness and accuracy by a responsible official as defined in R18-2-301(17); and
12. The name, title, and telephone number of the responsible official.

The source shall submit a copy of the CUA to the permitting authority at the time the source submits an application for a permit or permit revision.

B. Upon receipt by the Director of the CUA with a check for the administrative fee specified in R18-2-1208(B), the Director shall list the pending sale in the registry.

C. The Director shall not list the final sale in the registry until:

1. The permitting authority evaluates and verifies the authenticity of the credit with the emissions bank;
2. The permitting authority determines that there will be no adverse impact on air quality; and
3. The permitting authority completes the permitting action and submits the credit certificate to the Director.

D. After the permitting authority notifies the Director that the requirements of this Section have been met, the Director shall delist the credits in the registry.

Historical Note

New Section made by final rulemaking at 8 A.A.R. 1815, effective March 18, 2002 (Supp. 02-1).

R18-2-1207. Credit Withdrawal

Any party purchasing certified credits listed in the emissions bank for the purpose of credit retirement, or any source withdrawing its own credits from the emissions bank, shall submit a CUA specified in R18-2-1204(A) with the surrendered certificates to the Director. Upon receipt of the CUA and surrendered certificates, the Director shall delist the credits in the registry.

Historical Note

New Section made by final rulemaking at 8 A.A.R. 1815, effective March 18, 2002 (Supp. 02-1).

R18-2-1208. Fees

A. A source generating a credit shall pay a non-refundable administrative fee of $200.00 to the Director when submitting the CGA. This fee is in addition to the fees specified in R18-2-326.

B. A source utilizing a credit shall pay a non-refundable administrative fee of $200.00 to the Director when submitting the CUA. This fee is in addition to the fees specified in R18-2-326.

C. The Director shall not assess an administrative fee to a person:

1. Purchasing a credit for retirement;
2. Amending ownership information contained in the registry; or
3. Withdrawing a credit from the bank.

Historical Note

New Section made by final rulemaking at 8 A.A.R. 1815, effective March 18, 2002 (Supp. 02-1).

ARTICLE 13. DIESEL CONVERSION GRANT PROGRAM

Article 13, consisting of Sections R18-2-1301 through R18-2-1307, made by final rulemaking at 9 A.A.R. 1295, effective April 2, 2003 (Supp. 03-2).

R18-2-1301. Definitions

The following definitions apply in this Article, unless the context otherwise requires:

1. "Alternative fuel" has the meaning in A.R.S. § 1-215.
2. "Alternative fuel vehicle" means a self-propelled vehicle that is registered and titled in this state for operation on the highways and that is propelled by an alternative fuel.
3. "Application" means the application submitted to the Department as specified in R18-2-1304.
4. "Application priority list" means the list specified in R18-2-1305.
5. "Conversion" means modification of a diesel vehicle to operate on an alternative fuel.
6. "Cost of conversion" means the actual cost of conversion, including the parts and materials used, the hours required for conversion, and the hourly rate for labor of this type, as shown by receipts or other evidence.
7. "Diesel vehicle" means a vehicle that operates only on diesel fuel.
8. "Director" means the Director of the Department of Environmental Quality or designee.
9. "GVWR" means the gross vehicle weight rating, the maximum loaded weight for which the vehicle is designed, as specified by the vehicle manufacturer.
10. "MVD Alternative Fuel Certificate" means a form issued by the Arizona Department of Transportation Motor Vehicle Division certifying that the vehicle has been inspected and is equipped to operate on alternative fuel. An applicant shall obtain this Certificate from an:
    a. Arizona Department of Environmental Quality waiver station, or
    b. Arizona Department of Environmental Quality licensed third-party inspector.
11. "Pre-approval letter" means a letter issued by the Department as specified in R18-2-1304.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 1295, effective April 2, 2003 (Supp. 03-2).

R18-2-1302. Available Funds

Funds are available only as appropriated by the legislature. Once all available funds have been encumbered, the Department shall notify all applicants who have not been placed on the application priority list.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 1295, effective April 2, 2003 (Supp. 03-2).

R18-2-1303. Eligibility

A person may submit an application for a grant under this Article if the person has a purchase order or contract that is dated on or after January 1, 2000, to convert a diesel vehicle and the vehicle:

1. Has not previously been the subject of a grant under this program;
2. Has a GVWR of at least 19,500 lbs;
3. Is not a recreational vehicle as defined in A.R.S. § 28-3102;
4. Is registered in this state;
5. Will be registered in this state for at least three years from the date the vehicle is registered as an alternative fuel vehicle;
6. Will be operated more than 50 percent of the time in area A or area B as defined in A.R.S. § 49-541; and
7. Is subject to A.R.S. § 28-4032(A), is a school bus, or a municipal vehicle.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 1295, effective April 2, 2003 (Supp. 03-2).

R18-2-1304. Application Process

A. An applicant shall submit an application to the Department for each vehicle for which the applicant is claiming a grant, before 5:00 p.m., June 30, 2003, on a form provided by the Department. The application shall contain:

1. The application form prescribed by the Department with the following information included:
   a. Applicant's status as an individual or a business;
   b. Applicant's name, address, and telephone number;
   c. If the applicant is a business, school district, or municipality, the applicant's:
      i. Federal Taxpayer Identification Number, and
      ii. Authorized representative's name and title;
   d. The vehicle's:
      i. Vehicle identification number (VIN),
      ii. Model year,
      iii. Make,
      iv. Model, and
      v. GVWR;
   e. From whom the applicant purchased or leased the vehicle and the seller or lessor's telephone number;
   f. The Arizona registration date of the vehicle;
   g. For the converted or to-be-converted vehicle:
      i. The conversion vendor's name and business address, contact person, and the contact's telephone number,
      ii. The conversion kit manufacturer and kit serial number, and
      iii. The conversion date or expected conversion date;
   h. The type of alternative fuel the converted vehicle uses or will use:
      i. Compressed natural gas-CNG,
      ii. Liquid natural gas-LNG,
      iii. Liquefied petroleum gas-LPG,
      iv. Electric,
      v. Solar, or
      vi. Hydrogen.
2. A signed and dated "Statement of Assurances" on a form prescribed by the Department that includes:
   a. A statement signed by the applicant, under penalty of perjury, that the applicant intends:
      i. To keep the vehicle registered in this state for at least three years from the date the vehicle is registered as an alternative fuel vehicle;
      ii. To operate the vehicle more than 50 percent of the time in area A or area B as defined in A.R.S. § 49-541;
   b. An additional statement that:
      i. The applicant owns or leases the vehicle;
      ii. The applicant has the vehicle titled, registered, and insured in Arizona;
      iii. The vehicle is not a recreational vehicle as defined in A.R.S. § 28-3102;
      iv. The vehicle is a diesel vehicle over 19,500 pounds GVWR that has been or will be converted to operate on alternative fuel; and
      v. The vehicle is subject to A.R.S. § 28-4032(A), is a school bus, or a municipal vehicle.
   c. An additional statement that applicant agrees that, if the Statement of Assurances and the application are not truthful, correct, and complete, the Department may seek recourse in the Superior Court of Maricopa County, Arizona, with the applicant paying all costs of collection of any monies due the Department, including reasonable attorneys' fees.
   d. A notarized statement as specified in A.R.S. § 41-311(6), under penalty of perjury, that the information contained in the application is truthful, correct, and complete.
3. A current and complete W-9 Federal tax form (Request for Taxpayer Identification Number and Certification);
4. A copy of the validated Arizona registration and Arizona title for the vehicle (for a new vehicle, these copies shall be submitted within 15 days of receipt from the State);
5. A copy of the contract, or purchase order entered into by the applicant, for conversion of the vehicle for which applicant requests a grant;
6. If the vehicle is not a school bus or a municipal vehicle, a copy of the declarations page from the current liability policy for the vehicle, or other evidence of compliance with A.R.S. § 28-4032(A);
7. If the conversion has been completed, copies of:
   a. The MVD Alternative Fuel Certificate issued according to A.R.S. § 28-2416; and
   b. The invoice or other evidence of the cost of conversion, including:
      i. The conversion date;
      ii. A list of all parts used by the conversion vendor;
      iii. A list of all tasks completed by the conversion vendor, specifying the hours spent on each task and the hourly rate charged; and
      iv. The conversion kit manufacturer and kit serial number or serial number of conversion parts.

B. The Department may require verification of information provided, including original documents.

C. The Department shall review an application for completeness and eligibility for a grant.

D. If the Department determines that the application is complete through subsection (A)(7), funds are available as specified in R18-2-1302, and the vehicle meets the eligibility requirements in R18-2-1303:

1. The Department shall provide a pre-approval letter to the applicant, stating that the applicant is eligible for a grant under the program when the vehicle is converted as specified in the application and the information specified in subsection (A)(7) is submitted to the Department. The letter shall state the amount of the grant.
2. After the Department provides the letter under subsection (D)(1), the Department shall list the vehicle in the appli-

cation priority list specified in R18-2-1305 and encumber the grant funds.

3. The applicant shall complete the vehicle conversion and submit all requested information to the Department by the deadline date specified in the pre-approval letter. The deadline date shall be 180 days from the date of the letter. For good cause shown, the Department may grant one extension of the deadline date of up to 45 days.
4. If the applicant fails to comply with the requirements of the pre-approval letter, the Department shall remove the vehicle from the application priority list and unencumber the grant funds.
5. If the Department determines that the applicant has complied with all the requirements of the pre-approval letter, the Department shall notify the applicant in writing that a grant award will be paid to the applicant in the amount according to R18-2-1306.
6. If the conversion is completed before the application is submitted and the vehicle meets the eligibility requirements, the Department shall list the vehicle in the application priority list specified in R18-2-1305 and encumber the grant funds. The Department shall notify the applicant in writing of the grant award determined under R18-2-1306.

E. If an application is not complete, the Department shall notify applicant in writing that the application:

1. Cannot be processed because:
   a. A specified item is missing, or
   b. The Department requires additional specified action; and
2. Shall be processed after the applicant submits the additional required information and performs any required action specified in the Department's notification to the applicant.
3. If the applicant completes the application, and the Department approves it, the Department shall place the applicant on the application priority list described in R18-2-1305.

F. If the Department determines that the vehicle specified in the application is not eligible for a grant under R18-2-1303, the Department shall notify the applicant in writing of the determination, including each reason for ineligibility.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 1295, effective April 2, 2003 (Supp. 03-2).

R18-2-1305. Application Priority List

A. The Department shall maintain for public inspection an application priority list for approved applications, where grant priority is determined by the date of the contract or purchase order entered into by the applicant.

B. If two or more vehicles have the same priority and insufficient funds exist to provide grants for each vehicle, the Department shall use the following computer-based, random-number process to determine the order in which these vehicles are eligible for grant funds:

1. Applications for each vehicle with the same priority shall arranged in a stack, in any order, by the Director.
2. A sequence of random numbers equal in length to the number of applications shall be generated using the random number generator at www.random.org/sform.html. One random number shall be assigned to each of the applications, with the top application receiving the first number in the sequence, continuing down through the stack until the bottom application has been assigned the last random number in the sequence.
3. The applications shall then be ranked, with lower random numbers indicating higher priority.
4. The Director shall notify each of the equal priority applicants of the random number process, to afford them the opportunity to be present when the random numbers are assigned.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 1295, effective April 2, 2003 (Supp. 03-2).

R18-2-1306. Grant Amount

The Department shall award grants to qualified applicants within 30 days of the date it notifies the applicant in writing that it will pay applicant a grant award. The Department shall award grants for the lesser of the cost of conversion or $30,000.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 1295, effective April 2, 2003 (Supp. 03-2).

R18-2-1307. Review of Grant Determination

A. Any interested party may request a review of:

1. A determination of eligibility for a grant under this Article;
2. An applicant's priority in the awarding of the grants; or
3. The amount of a grant under this Article.

B. If a request for review is made, the funds requested for conversion shall be reserved until the Director's decision after the review under subsection (C).

C. A request under subsection (A) shall be made in writing, and received by the Director within 10 business days of the date of the determination. Unless the Director and the interested party agree otherwise, the review shall take place within 10 business days after the Director's receipt of the request. The Director shall arrange the date and location of the review with the interested party at least five business days before the review. The Director shall mail his or her review decision to the interested party within five business days after the review date. The Director's decision after review becomes final unless, within 30 days after applicant's receipt of the review decision, the interested party requests a hearing under R18-1-202.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 1295, effective April 2, 2003 (Supp. 03-2).

ARTICLE 14. CONFORMITY DETERMINATIONS

R18-2-1401. Definitions

Terms used in this Article but not defined in this Article, Article 1 of this Chapter, or A.R.S. § 49-401.01 shall have the meaning given them by the CAA, Titles 23 and 40 U.S.C., other EPA regulations, or other USDOT regulations, in that order of priority. The following definitions and the definitions contained in Article 1 of this Chapter and in A.R.S. § 49-401.01 shall apply to this Article:

1. "ADEQ" means the Arizona Department of Environmental Quality.
2. "ADOT" means the Arizona Department of Transportation.
3. "Applicable implementation plan" is defined in § 302(q) of the CAA and means the portion (or portions) of the implementation plan, or most recent revision thereof, which has been approved under § 110, or promulgated under § 110(c), or promulgated or approved pursuant to regulations promulgated under § 301(d) and which implements the relevant requirements of the CAA.
4. "CAA" means the Clean Air Act, as amended.
5. "Cause or contribute to a new violation" for a project means either of the following:

a. To cause or contribute to a new violation of a standard in the area substantially affected by the project or over a region which would otherwise not be in violation of the standard during the future period in question, if the project were not implemented.
b. To contribute to a new violation in a manner that would increase the frequency or severity of a new violation of a standard in such area.

6. "Consultation" means that one party confers with another identified party, provides access to all appropriate information to that party needed for meaningful input, and, prior to taking any action, considers the views of that party and responds in accordance with the procedures established in R18-2-1405.
7. "Control strategy implementation plan revision" is the applicable implementation plan which contains specific strategies for controlling the emissions of and reducing ambient levels of pollutants in order to satisfy CAA requirements for demonstrations of reasonable further progress and attainment (CAA §§ 182(b)(1), 182(c)(2)(A), 182(c)(2)(B), 187(a)(7), 189(a)(1)(B), and 189(b)(1)(A); and §§ 192(a) and 192(b), for nitrogen dioxide).
8. "Control strategy period" with respect to particulate matter less than 10 microns in diameter (PM_{10}), carbon monoxide (CO), nitrogen dioxide (NO_2), or ozone precursors (volatile organic compounds (VOC) and oxides of nitrogen (NOx)), means that period of time after EPA approves control strategy implementation plan revisions containing strategies for controlling PM_{10}, NO_2, CO, or ozone, as appropriate. This period ends when the state submits and EPA approves a request under § 107(d) of the CAA for redesignation to an attainment area.
9. "Design concept" means the type of facility identified by the project, e.g., freeway, expressway, arterial highway, grade-separated highway, reserved right-of-way rail transit, mixed traffic rail transit, exclusive busway, etc.
10. "Design scope" means the design aspects of a facility which will affect the proposed facility's impact on regional emissions, usually as they relate to vehicle or person carrying capacity and control, e.g., number of lanes or tracks to be constructed or added, length of project, signalization, access control including approximate number and location of interchanges, preferential treatment for high-occupancy vehicles, etc.
11. "EPA" means the United States Environmental Protection Agency.
12. "FHWA" means the Federal Highway Administration of USDOT.
13. "FHWA or FTA project" means any highway or transit project which is proposed to receive funding assistance and approval through the Federal-Aid Highway program or the federal mass transit program, or requires Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) approval for some aspect of the project, such as connection to an interstate highway or deviation from applicable design standards on the interstate system.
14. "FTA" means the Federal Transit Administration of USDOT.
15. "Forecast period" with respect to a transportation plan means the period covered by the transportation plan pursuant to 23 CFR 450.
16. "Highway project" means an undertaking to implement or modify a highway facility or highway-related program. Such an undertaking consists of all required phases necessary for implementation. For analytical purposes, it shall be defined sufficiently to:
    a. Connect logical termini and be of sufficient length to address environmental matters on a broad scope.
    b. Have independent utility or significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made.
    c. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.
17. "Horizon year" means a year for which the transportation plan describes the envisioned transportation system in accordance with R18-2-1406.
18. "Hot-spot analysis" means an estimation of likely future localized CO and PM_{10} pollutant concentrations and a comparison of those concentrations to the national ambient air quality standards. Pollutant concentrations to be estimated should be based on the total emissions burden which may result from the implementation of a single, specific project, summed together with future background concentrations (which can be estimated using the ratio of future to current traffic multiplied by the ratio of future to current emission factors) expected in the area. The total concentration shall be estimated and analyzed at appropriate receptor locations in the area substantially affected by the project. Hot-spot analysis assesses impacts on a scale smaller than the entire nonattainment or maintenance area, including, for example, congested roadway intersections and highways or transit terminals, and uses an air quality dispersion model to determine the effects of emissions on air quality.
19. "Incomplete data area" means any ozone nonattainment area which EPA has classified, in 40 CFR 81, as an incomplete data area.
20. "Increase the frequency or severity of a violation" means to cause a location or region to exceed a standard more often or to cause a violation at a greater concentration than previously existed or would otherwise exist during the future period in question, if the project were not implemented.
21. "ISTEA" means the Intermodal Surface Transportation Efficiency Act of 1991.
22. "Local transportation agency" means a city, town, or county.
23. "Maintenance area" means any geographic region of the United States previously designated nonattainment pursuant to the CAA Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under § 175A of the CAA.
24. "Maintenance period" with respect to a pollutant or pollutant precursor means that period of time beginning when a state submits and EPA approves a request under § 107(d) of the CAA for redesignation to an attainment area, and lasting for 20 years, unless the applicable implementation plan specifies that the maintenance period shall last for more than 20 years.
25. "Metropolitan planning organization (MPO)" means the organization designated as being responsible, together with the state, for conducting the continuing, cooperative, and comprehensive planning process under 23 U.S.C. 134 and 49 U.S.C. 1607.
26. "Milestone" means an emissions level and the date on which it is required to be achieved as described in § 182(g)(1) and § 189(c) of the CAA.

27. "Motor vehicle emissions budget" means that portion of the total allowable emissions defined in a revision to the applicable implementation plan (or in an implementation plan revision which was endorsed by the Governor or Director of ADEQ, subject to a public hearing, and submitted to EPA, but not yet approved by EPA) for a certain date for the purpose of meeting reasonable further progress milestones or attainment or maintenance demonstrations, for any criteria pollutant or its precursors, allocated by the applicable implementation plan to highway and transit vehicles. The applicable implementation plan for an ozone nonattainment area may also designate a motor vehicle emissions budget for oxides of nitrogen (NOx) for a reasonable further progress milestone year if the applicable implementation plan demonstrates that this NOx budget will be achieved with measures in the implementation plan (as an implementation plan must do for VOC milestone requirements). The applicable implementation plan for an ozone nonattainment area includes a NOx budget if NOx reductions are being substituted for reductions in volatile organic compounds in milestone years required for reasonable further progress.
28. "National ambient air quality standards (NAAQS)" means those standards established pursuant to § 109 of the CAA.
29. "NEPA" means the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.).
30. "NEPA process completion" with respect to FHWA or FTA, means the point at which there is a specific action to do any of the following:
    a. Make a formal final determination that a project is categorically excluded.
    b. Make a Finding of No Significant Impact.
    c. Issue a record of decision on a Final Environmental Impact Statement under NEPA.
31. "Nonattainment area" means any geographic region of the United States which has been designated as nonattainment under § 107 of the CAA for any pollutant for which a national ambient air quality standard exists.
32. "Not classified area" means any carbon monoxide nonattainment area which EPA has not classified as either moderate or serious.
33. "Phase II of the interim period" with respect to a pollutant or pollutant precursor means that period of time after December 27, 1993, lasting until the earlier of the following:
    1. Submission to EPA of the relevant control strategy implementation plan revisions which have been endorsed by the Governor or the Director of ADEQ and have been subject to a public hearing.
    2. The date that the CAA requires relevant control strategy implementation plans to be submitted to EPA, provided EPA has made a finding of the state's failure to submit any such plans and the state, MPO, and USDOT have received notice of such finding of the state's failure to submit any such plans.
34. "Project" means a highway project or transit project.
35. "Recipient of funds designated under 23 U.S.C. or the Federal Transit Act" means any agency at any level of state, county, or city government, including any political subdivision or MPO, that routinely receives 23 U.S.C. or Federal Transit Act funds to construct FHWA or FTA projects, operate FHWA or FTA projects or equipment, purchase equipment, or undertake other services or operations via contracts or agreements. This definition does not include private landowners or developers, or contractors or entities that are only paid for services or products created by their own employees.
36. "Regional transportation agency" means a regional transit authority established pursuant to A.R.S. Title 28, Chapter 20 or Chapter 24, or a formal association of political subdivisions involved in regional transportation issues.
37. "Regionally significant transportation project" means a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals, as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.
38. "Rural transport ozone nonattainment area" means an ozone nonattainment area that does not include, and is not adjacent to, any part of a Metropolitan Statistical Area or, where one exists, a Consolidated Metropolitan Statistical Area (as defined by the United States Bureau of the Census) and is classified under CAA § 182(h) as a rural transport area.
39. "Standard" means a national ambient air quality standard.
40. "Statewide transportation improvement program (STIP)" means a staged, multi-year, intermodal program of transportation projects covering the state, which is consistent with the statewide transportation plan and metropolitan transportation plans, and developed pursuant to 23 CFR 450.
41. "Statewide transportation plan" means the official intermodal statewide transportation plan that is developed through the statewide planning process for the state, developed pursuant to 23 CFR 450.
42. "Submarginal area" means any ozone nonattainment area which EPA has classified as submarginal in 40 CFR 81.
43. "Transit" is mass transportation by bus, rail, or other conveyance which provides general or special service to the public on a regular and continuing basis. It does not include school buses or charter or sightseeing services.
44. "Transit project" means an undertaking to implement or modify a transit facility or transit-related program, purchase transit vehicles or equipment, or provide financial assistance for transit operations. It does not include actions that are solely within the jurisdiction of local transit agencies, such as changes in routes, schedules, or fares. It may consist of several phases. For analytical purposes, it shall be defined inclusively enough to:
    a. Connect logical termini and be of sufficient length to address environmental matters on a broad scope.
    b. Have independent utility or independent significance, i.e., be a reasonable expenditure even if no additional transportation improvements in the area are made.
    c. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.
45. "Transitional area" means any ozone nonattainment area which EPA has classified as transitional in 40 CFR 81.
46. "Transitional period" with respect to a pollutant or pollutant precursor means that period of time which begins after submission to EPA of the relevant control strategy implementation plan which has been endorsed by the Governor or Director of ADEQ and has been subject to a

public hearing. The transitional period lasts until EPA takes final approval or disapproval action on the control strategy implementation plan submission or finds it to be incomplete. The precise beginning and end of the transitional period is defined in R18-2-1428.

47. "Transportation control measure (TCM)" means any measure that is specifically identified and committed to in the applicable implementation plan that is either one of the types listed in § 108 of the CAA, or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Notwithstanding the above, vehicle technology-based, fuel-based, and maintenance-based measures which control the emissions from vehicles under fixed traffic conditions are not TCMs for the purposes of this rule.
48. "Transportation improvement program (TIP)" means a staged, multi-year, intermodal program of transportation projects covering a metropolitan planning area which is consistent with the metropolitan transportation plan and developed pursuant to 23 CFR 450.
49. "Transportation plan" means the official intermodal metropolitan transportation plan that is developed through the metropolitan planning process for the metropolitan planning area, developed pursuant to 23 CFR 450.
50. "Transportation project" means a highway project or a transit project.
51. "USDOT" means the United States Department of Transportation.
52. "VMT" means the number of vehicle miles traveled.

Historical Note
Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1402. Applicability

A. Except as provided for in subsection (F) or R18-2-1434, conformity determinations are required for all of the following:
1. The adoption, acceptance, approval, or support of transportation plans developed pursuant to 23 CFR 450 or 49 CFR 613 by an MPO or USDOT.
2. The adoption, acceptance, approval, or support of TIPs developed pursuant to 23 CFR 450 or 49 CFR 613 by an MPO or USDOT.
3. The approval, funding, or implementation of FHWA or FTA projects.

B. Conformity determinations are not required under this Article for individual projects which are not FHWA or FTA projects. However, R18-2-1429 applies to such projects if they are regionally significant.

C. The provisions of this Article shall apply in all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan.

D. The provisions of this Article apply with respect to emissions of the following criteria pollutants: ozone, carbon monoxide, nitrogen dioxide, and particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM_{10}).

E. The provisions of this Article apply with respect to emissions of the following precursor pollutants:
1. Volatile organic compounds and nitrogen oxides in ozone areas (unless the Administrator determines under § 182(f) of the CAA that additional reductions of NOx would not contribute to attainment).
2. Nitrogen oxides in nitrogen dioxide areas.
3. Volatile organic compounds, nitrogen oxides, and PM_{10} in PM_{10} areas if either of the following apply:
   a. During the interim period, the EPA Regional Administrator or the Director of ADEQ has made a finding (including a finding in an applicable implementation plan or a submitted implementation plan revision) that transportation-related precursor emissions within the nonattainment area are a significant contributor to the PM_{10} nonattainment problem and has so notified ADOT or the MPO where one exists and USDOT.
   b. During the transitional, control strategy, and maintenance periods, the applicable implementation plan or implementation plan submission establishes a budget for such emissions as part of the reasonable further progress, attainment, or maintenance strategy.

F. Projects subject to this Article for which the NEPA process and a conformity determination have been completed by FHWA or FTA may proceed toward implementation without further conformity determinations if one of the following major steps has occurred within the most recent three-year period: NEPA process completion; formal start of final design; acquisition of a significant portion of the right-of-way; or approval of the plans, specifications, and estimates. All phases of such projects which were considered in the conformity determination are also included, if those phases were for the purpose of funding, final design, right-of-way acquisition, construction, or any combination of these phases.

G. A new conformity determination for the project will be required if there is a significant change in project design concept and scope, if a supplemental environmental document for air quality purposes is initiated, or if no major steps to advance the project have occurred within the most recent three-year period.

Historical Note
Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1403. Priority

When assisting or approving any action with air quality-related consequences, FHWA and FTA shall give priority to the implementation of those transportation portions of an applicable implementation plan prepared to attain and maintain the NAAQS. This priority shall be consistent with statutory requirements for allocation of funds among states or other jurisdictions.

Historical Note
Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1404. Frequency of Conformity Determinations

A. Conformity determinations and conformity redeterminations for transportation plans, TIPs, and FHWA or FTA projects shall be made according to the requirements of this Section and the applicable implementation plan.

B. Each new transportation plan shall be found to conform before the transportation plan is approved by the MPO or accepted by USDOT.

C. All transportation plan revisions shall be found to conform before the transportation plan revisions are approved by the MPO or accepted by USDOT, unless the revision merely adds or deletes exempt projects listed in R18-2-1434 and has been made in accordance with the notification provisions contained in R18-2-1405. The conformity determination shall be based on the transportation plan and the revision taken as a whole.

D. An existing conformity determination shall lapse unless conformity of existing transportation plans is redetermined:
1. By May 25, 1995, unless previously redetermined consistent with 40 CFR 51, subpart T.

2. Within 18 months after EPA approval of an implementation plan revision which either:
   a. Establishes or revises a transportation-related emissions budget (as required by CAA §§ 175A(a), 182(b)(1), 182(c)(2)(A), 182(c)(2)(B), 187(a)(7), 189(a)(1)(B), and 189(b)(1)(A); and §§ 192(a) and 192(b), for nitrogen dioxide); or
   b. Adds, deletes, or changes TCMs.
3. Within 18 months after EPA promulgation of an implementation plan which establishes or revises a transportation-related emissions budget or adds, deletes, or changes TCMs.

E. In any case, conformity determinations shall be made no less frequently than every three years, or the existing conformity determination will lapse.

F. A new TIP shall be found to conform before the TIP is approved by the MPO or accepted by USDOT.

G. A TIP amendment requires a new conformity determination for the entire TIP before the amendment is approved by the MPO or accepted by USDOT, unless the amendment merely adds or deletes exempt projects listed in R18-2-1434 and has been made in accordance with the notification procedures under R18-2-1405.

H. After an MPO adopts a new or revised transportation plan, TIP conformity shall be redetermined by the MPO and USDOT within six months from the date of adoption of the plan, unless the new or revised plan merely adds or deletes exempt projects listed in R18-2-1434. Otherwise, the existing conformity determination for the TIP shall lapse.

I. In any case, TIP conformity determinations shall be made no less frequently than every three years or the existing TIP conformity determination shall lapse.

J. FHWA or FTA projects shall be found to conform before they are adopted, accepted, approved, or funded. Conformity shall be redetermined for any FHWA or FTA project if none of the following major steps has occurred within the most recent three-year period:
1. NEPA process completion,
2. Start of final design,
3. Acquisition of a significant portion of the right-of-way,
4. Approval of the plans, specifications, and estimates.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1405. Consultation

A. Consultation procedures as described in this Section shall be undertaken by all of the following entities and shall include the public and affected local and regional transportation agencies in preparing for and making conformity determinations and in developing applicable implementation plans:
1. An MPO where one exists.
2. The Arizona Department of Transportation (ADOT).
3. The United States Department of Transportation (USDOT).
4. The Arizona Department of Environmental Quality (ADEQ).
5. The county air pollution control agency established pursuant to A.R.S. Title 49 where one exists.
6. The United States Environmental Protection Agency (EPA).

B. The following elements shall be used to implement the consultation processes under subsection (M), with the exception of subsection (M)(8), and under subsection (N), with the exception of subsections (N)(2) and (N)(3), and shall include all affected agencies and interested members of the public, and may be conducted at separate times or in combination:
1. Providing to the affected agencies and interested members of the public information describing the upcoming decision process,
2. Distributing or providing access to draft documents,
3. Providing an opportunity for informal question and answer on the draft document or proposed decision,
4. Providing an opportunity for formal written comment,
5. Writing and distributing both a response to comments and the final document or decision.

C. An MPO where one exists, ADEQ, a county air pollution control agency where one exists, ADOT, a transit authority where one exists, and any local transportation agency shall undertake a consultation process in accordance with this Section with each other, with the local or regional offices of EPA, FHWA and FTA, with affected regional transportation agencies, and with the public on the development of the following as described in subsections (D) through (G):
1. The implementation plan, including the emission budget and list of TCMs in the applicable implementation plan;
2. The unified planning work program under 23 CFR § 450.314;
3. The transportation plan and TIP;
4. The statewide transportation plan and STIP;
5. Any revisions to the preceding documents;
6. All transportation conformity determinations.

D. ADEQ, or the MPO in a county having a population greater than 250,000 persons, shall be the lead agency responsible for preparing an implementation plan, the associated emission budgets, and the list of TCMs in the plan. The lead agency shall also be responsible for assuring the adequacy of the consultation process. The concurrence of ADEQ on each implementation plan is required before ADEQ adopts the plan and transmits it to EPA for inclusion in the state implementation plan pursuant to A.R.S. § 49-406.

E. ADOT, or the MPO where one exists, shall be the lead agency responsible for preparing the final document or decision and for assuring the adequacy of the consultation process with respect to the development of the transportation plan and the TIP. The MPO shall be the lead agency responsible for preparing the final document or decision and for assuring the adequacy of the consultation process with respect to the development of the unified planning work program under 23 CFR 450.314.

F. ADOT shall be the lead agency responsible for preparing the final document or decision and for assuring the adequacy of the consultation process with respect to the development of the statewide transportation plan and the STIP.

G. ADOT, or the MPO where one exists, shall be the lead agency responsible for preparing the final document or decision and for assuring the adequacy of the consultation process with respect to determinations of transportation conformity, except that the entity authorized to adopt or approve a project shall be the lead agency responsible for project-level conformity determinations for projects outside of the transportation plan or TIP and shall assure the adequacy of the consultation process.

H. Each lead agency described in subsections (D) through (G) shall:
1. Confer with all other agencies having an interest in the document or decision to be developed;
2. Provide access to all information needed for meaningful input;
3. Solicit early and continuing input from those agencies;
4. Conduct the public consultation process described in subsection (P);
5. Assure policy-level contact with agencies;

6. With the exception of notifications pursuant to subsection (M)(8), prior to taking any action required pursuant to subsections (D) through (G), consider the views of each agency and the public and respond to significant comments in a timely, substantive written manner prior to taking any final action and assure that such views and written response are made part of the record of any action.

I. FHWA and FTA shall be responsible for assuring timely action on final findings of conformity for transportation plans, TIPs, and federally funded projects, including the basis for those findings, after consulting with other agencies as provided in this Section. FHWA and FTA shall also be responsible for providing guidance on conformity and the transportation planning process to agencies in consultation. FHWA and FTA may rely on the consultation process initiated by ADOT or the MPO where one exists and shall not be required to duplicate that process.

J. EPA shall be responsible for reviewing and approving updated motor vehicle emissions factors and providing guidance on conformity criteria and procedures to agencies in consultation.

K. Each lead agency subject to a consultation process under this Section, including any federal agency, shall provide or notice the availability of each final document that is the product of the consultation process, together with all supporting information, to each other agency and members of the public that have participated in the consultation process within 15 days of adopting or approving the document or making the determination. An agency may supply a checklist of available supporting information, which other participating agencies or the public may use to request all or part of the supporting information, in lieu of generally distributing all supporting information.

L. A meeting that is scheduled or required for another purpose may be used for the purposes of consultation if the conformity consultation purpose is identified in the public notice for the meeting.

M. A consultation process involving an MPO where one exists, ADEQ, a county air pollution control agency where one exists, ADOT, a transit authority where one exists, local and regional transportation agencies, EPA, USDOT, and the public shall be undertaken for the following:

1. Evaluating and choosing each model and associated methods and assumptions to be used in hot-spot analyses and regional emissions analyses including vehicle miles traveled (VMT) forecasting. The consultation process pursuant to this subsection shall be initiated by ADOT or the MPO where one exists.
2. Determining whether the responsible agency identified in R18-2-1433 has demonstrated that the requirements of R18-2-1416, R18-2-1418 and R18-2-1419 are satisfied without a particular mitigation or control measure. The consultation process pursuant to this subsection shall be initiated by the responsible agency.
3. Making a determination, as required by R18-2-1429(C)(2), whether the project is included in the regional emissions analysis supporting the currently conforming TIP's conformity determination, even if the project is not included in the TIP for the purposes of MPO project selection or endorsement, and whether the project's design concept and scope have changed significantly from those which were included in the regional emissions analysis, or in a manner which would significantly impact use of the facility. The consultation process pursuant to this subsection shall be initiated by the MPO. In nonattainment areas where no MPO exists, ADOT shall initiate the consultation process for making a determination, as required by R18-2-1429(C)(2), whether a project that is outside of a TIP is included in the regional emissions analysis, and whether the project's design concept and scope have changed significantly from those which were included in the regional emissions analysis, or in a manner which would significantly impact use of the facility.
4. Determining pursuant to subsection (R) which minor arterials and other transportation projects should be considered "regionally significant" for the purposes of regional emissions analysis and which projects should be considered to have a significant change in design concept and scope from the transportation plan or TIP. The consultation process pursuant to this subsection shall be initiated by the MPO. In nonattainment areas where no MPO exists, ADOT shall initiate the consultation process for determining pursuant to subsection (R) which minor arterials and other transportation projects should be considered "regionally significant" for the purposes of regional emissions analysis.
5. Evaluating whether exempt projects as described in R18-2-1434 and R18-2-1435 should be treated as non-exempt in cases where potential adverse emissions impacts may exist for any reason. The consultation process pursuant to this subsection shall be initiated by ADOT or the MPO where one exists.
6. Making a determination, as required by R18-2-1413, whether past obstacles to implementation of TCMs which are behind the schedule established in the applicable implementation plan have been identified and are being overcome, and whether state and local agencies with influence over approvals or funding for TCMs are giving maximum priority to approval or funding for TCMs. This consultation process shall also consider whether delays in TCM implementation necessitate revisions to the applicable implementation plan to remove TCMs or to substitute TCMs or other emission reduction measures. The consultation process pursuant to this subsection shall be initiated by ADOT or the MPO where one exists.
7. Identifying, as required by R18-2-1431, projects located at sites in PM_{10} nonattainment areas which have vehicle and roadway emission and dispersion characteristics which are essentially identical to those at sites which have violations verified by monitoring, and therefore require quantitative PM_{10} hot-spot analysis. The consultation process pursuant to this subsection shall be initiated by ADOT or the MPO where one exists.
8. Notification of transportation plan or TIP revisions or amendments which merely add or delete exempt projects listed in R18-2-1434. Notice shall be provided by the MPO and need not be provided prior to final action. Notice shall be provided by ADOT for revisions and amendments affecting the state transportation plan and the state TIP. The public involvement process described in subsection (P) is not required for the purposes of this subsection.
9. Project-level conformity determinations pursuant to R18-2-1416. The consultation process pursuant to this subsection shall be initiated by the recipient of the funds designated under 23 U.S.C. or the Federal Transit Act.

N. A consultation process involving the MPO, ADEQ, a county air pollution control agency where one exists, ADOT, appropriate political subdivisions, regional transportation agencies, if any, and the public shall be undertaken for the following:

1. Evaluating events which will trigger new conformity determinations in addition to those triggering events

established in R18-2-1404 and including any changes in planning assumptions that may trigger a new conformity determination. The consultation process pursuant to this subsection shall be initiated by ADOT or the MPO where one exists.

2. Consulting on emissions analysis for transportation activities which cross the borders of MPOs or nonattainment areas or air basins. The consultation process pursuant to this subsection shall be initiated by ADOT or the MPO where one exists. The public involvement process described in subsection (P) is not required for the purposes of this subsection.
3. Where the metropolitan planning area does not include the entire nonattainment or maintenance area, a consultation process involving the MPO and ADOT for cooperative planning and analysis for purposes of determining conformity of all projects outside the metropolitan area and within the nonattainment or maintenance area. The consultation process pursuant to this subsection shall be initiated by ADOT. The public involvement process described in subsection (P) is not required for the purposes of this subsection.
4. The design, schedule, and funding of research and data collection efforts and regional transportation model development. The consultation process pursuant to this subsection shall be initiated by ADOT or the MPO where one exists.
5. Determining that a conforming project approved with mitigation no longer requires mitigation. The consultation process pursuant to this subsection shall be initiated by ADOT or the MPO where one exists.

O. The following consultation processes involve recipients of funds designated under 23 U.S.C. or the Federal Transit Act:

1. A consultation process involving the MPO, ADEQ, a county air pollution control agency where one exists, ADOT, recipients of funds designated under 23 U.S.C. or the Federal Transit Act and any agency created under state law that sponsors or approves transportation projects shall be undertaken to assure that plans for construction of regionally significant projects which are not FHWA or FTA projects, including projects for which alternative locations, design concept or scope, or the no-build option are still being considered, are disclosed as soon as practicable to ADOT or the MPO where one exists, so as to assure that any significant changes to the design concept or scope of those plans are disclosed as soon as practicable. The political subdivision having authority to adopt or approve a regionally significant transportation project, and any agency that becomes aware of any such project through applications for approval, permitting, funding, or otherwise shall disclose such project to ADOT or the MPO if one exists as soon as practicable. To help assure timely disclosure, the political subdivision having authority to adopt or approve any potential regionally significant transportation project shall disclose to ADOT or the MPO on a schedule prescribed by ADOT or the MPO, whichever is appropriate, each project for which alternatives have been identified through the NEPA process and, in particular, any preferred alternative that may be a regionally significant project. The consultation process shall include assuming the location, design concept, and scope of the project, where the sponsor has not yet decided these features, in sufficient detail to allow ADOT or the MPO to perform a regional emissions analysis. The consultation process pursuant to this subsection shall be initiated by ADOT or the MPO where one exists.
2. A consultation process involving the MPO, ADEQ, a county air pollution control agency where one exists, ADOT, recipients of funds designated under 23 U.S.C. or the Federal Transit Act, any agency created under state law that sponsors or approves transportation projects, and the public shall be undertaken for the development of procedures as described in R18-2-1429. The consultation process pursuant to this subsection shall be initiated by ADOT or the MPO where one exists.

P. Public involvement processes shall be conducted according to the requirements of this subsection.

1. ADOT or the MPO, where one exists, when making conformity determinations on transportation plans, programs, and projects shall establish and continuously implement a proactive public involvement process which provides opportunity for public review and comment prior to taking formal action on a conformity determination for all transportation plans and TIPs, that meets the following minimum requirements:
   a. Includes a process that provides complete information, timely public notice, full public access to key decisions and supports early and continuing involvement of the public in developing plans and TIPs.
   b. Requires a minimum public comment period of 45 days before the public involvement process is initially adopted or revised.
   c. Provides timely information about transportation issues and processes to citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation, other interested parties and segments of the community affected by transportation plans, programs, and projects, including but not limited to central city and other local jurisdiction concerns.
   d. Provides reasonable public access to technical and policy information used in the development of plans and TIPs and open public meetings where matters related to the federal-aid highway and transit programs are being considered.
   e. Requires adequate public notice of public involvement activities and time for public review and comment at key decision points, including, but not limited to, approval of plans and TIPs and approval of changes in plans and TIPs. In nonattainment areas classified as serious and above, the comment period shall be at least 30 days for the plan, TIP, and major amendments. Public notice shall include mailing of notice to a list of all persons who have requested notice of actions covered by this Article.
   f. Demonstrates explicit consideration and response to public input received during the planning and program development processes.
   g. Seeks out and considers the needs of those traditionally underserved by existing transportation systems, including but not limited to low-income and minority households.
   h. When significant written and oral comments are received on a draft transportation plan or TIP, including the financial plan, as a result of the public involvement process or the consultation process required by this Section, a summary, analysis, and report on the disposition of comments shall be made part of the final plan and TIP.
   i. If the final transportation plan or TIP differs significantly from the one which was made available for public comment by the MPO and it raises new mate-

rial issues which interested parties could not reasonably have foreseen from the public involvement efforts, an additional opportunity for public comment on the revised plan or TIP shall be made available.

j. ADOT or the MPO where one exists shall specifically address in writing all public comments that known plans for a regionally significant transportation project which is not receiving FHWA or FTA funding or approval have not been properly reflected in the emissions analysis supporting a proposed conformity finding for a transportation plan or TIP.

k. Public involvement processes shall be periodically reviewed by ADOT or the MPO in terms of their effectiveness in assuring that the process provides full and open access to all.

l. These procedures will be reviewed by the FHWA and the FTA during certification reviews for TMAs, and as otherwise necessary for all MPOs, to assure that full and open access is provided to MPO decisionmaking processes.

m. Metropolitan public involvement processes shall be coordinated with statewide public involvement processes wherever possible to enhance public consideration of the issues, plans, and programs and to reduce redundancies and costs.

2. Local and regional transportation agencies when making conformity determinations on regionally significant transportation projects shall establish and implement a public involvement process which meets, at a minimum, the following requirements:

a. Provides to the affected agencies and interested members of the public information describing the upcoming decision process.

b. Distributes or provides access to draft documents and all information needed for meaningful input.

c. Solicits early and continuing input from interested agencies and the public.

d. Provides an opportunity for informal question and answer on the draft document or proposed decision.

e. Provides an opportunity for formal written comment.

f. Provides for writing and distributing both a response to comments and the final document or decision. The response to comments shall consider the views of each agency and the public. The response to comments shall be made in a timely, substantive written manner prior to taking any final action and shall be made part of the record of any action.

Q. Any conflict among state agencies or between state agencies and an MPO shall be escalated to the Governor if the conflict cannot be resolved by the directors of the involved agencies. In the first instance, such entities shall make every effort to resolve any differences, including personal meetings between the directors of such entities or their policy-level representatives, to the extent possible. Within 14 calendar days after ADOT or the MPO has notified ADEQ of its decision, ADEQ may appeal a proposed determination of conformity, or other policy decision under this Article, to the Governor. ADEQ must provide notice of any appeal under this subsection to ADOT or the MPO. If ADEQ does not appeal to the Governor within 14 days, ADOT or the MPO may proceed with the final determination or decision. If ADEQ appeals to the Governor, the final conformity determination or policy decision shall have the concurrence of the Governor. The Governor may delegate to another official or agency within the state the role of hearing any appeal under this subsection and of deciding whether to concur in the determination or decision but may not delegate these functions to the director or staff of ADEQ, to any local air quality agency, to ADOT, to any state transportation commission or board, to an MPO, or to any agency that has responsibility for any of these functions.

R. The following procedures shall govern the consultation process regarding regionally significant transportation projects as defined in R18-2-1401(37):

1. By September 1, 1995, ADOT or the MPO where one exists shall develop and make available, for each nonattainment or maintenance area, consistent with A.R.S. § 49-408(A), the following:

a. A map of the highway or transit facilities in the nonattainment or maintenance area that serve regional transportation needs.

b. Guidance on which undertakings to implement or modify a highway facility are not transportation projects as defined in this Article, because they are not of sufficient length to address environmental matters on a broad scope.

c. Guidance on which types of transportation projects are normally included in the regional transportation model.

2. The map and guidance described in subsection (R)(1) shall be produced only after consultation with ADEQ, a county air pollution control agency where one exists, ADOT, a transit authority where one exists, local and regional transportation agencies, and the public. The map developed pursuant to subsection (R)(1) shall be updated prior to the commencement of the next TIP or STIP development cycle, unless no changes have occurred. The guidance developed pursuant to subsection (R)(3) shall be revised as necessary to reflect changes in the regional transportation model.

3. ADOT or the MPO where one exists shall develop and initiate the consultation process described in subsection (H) for a proposed list of transportation projects to be considered regionally significant. The consultation process shall include the MPO where one exists, ADEQ, a county air pollution control agency where one exists, ADOT, a transit authority where one exists, local and regional transportation agencies, EPA, USDOT, and the public. The list shall include information supporting the proposed classification.

4. In determining whether a facility serves regional transportation needs, ADOT or the MPO where one exists shall consider at a minimum whether the facility:

a. Would be classified as a principal arterial based on average daily traffic or other factors, if not for limitations that the USDOT places on the percentage of streets that can be so classified.

b. For all other roadways, whether the facility:

i. Serves regional mobility needs, as opposed to local access.

ii. Carries regional traffic from one principal arterial to another.

iii. Is a modification that expands a facility such that it would serve regional transportation needs.

5. For the purposes of this Article, a street with a lower classification than a collector street, as specified in the most recent federal classification map for the region, does not serve regional transportation needs.

6. None of the following attributes, by itself, shall require a transportation project to be included in the modeling of a metropolitan area's transportation network:
   a. The connection of a facility that does not serve regional transportation needs to a facility that does serve regional transportation needs.
   b. The addition or modification of a lane other than a through lane.

S. An agency having a role or responsibility under this Section may delegate that role or responsibility to another entity pursuant to the applicable state law but shall notify all other parties to the consultation process of this fact when the delegation occurs and shall also provide to the other parties the name, address, and telephone number of one or more contact persons representing the entity that is accepting the delegated role or responsibility.

T. The provisions of this Section apply only to TIP and STIP planning cycles beginning with the cycles next following the effective date of this Section. The provisions of 40 CFR 51, Subpart T, continue to apply to all TIP and STIP planning cycles in progress at the time of the effective date of this Section. The provisions of this Section apply to consultation on projects and TIP amendments as of the effective date of this Section.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1406. Content of Transportation Plans

A. For transportation plans adopted after January 1, 1995, in serious, severe, or extreme ozone nonattainment areas and in serious carbon monoxide nonattainment areas, the following shall apply:
1. The transportation plan shall specifically describe the transportation system envisioned for certain future years which shall be called horizon years.
2. The agency or organization developing the transportation plan, after consultation pursuant to R18-2-1405, may choose any years to be horizon years, subject to the following restrictions:
   a. Horizon years may be no more than 10 years apart.
   b. The first horizon year may be no more than 10 years from the base year used to validate the transportation demand planning model.
   c. If the attainment year is in the time span of the transportation plan, the attainment year shall be a horizon year.
   d. The last horizon year shall be the last year of the transportation plan's forecast period.
3. For these horizon years all of the following apply:
   a. The transportation plan shall quantify and document the demographic and employment factors influencing expected transportation demand, including land-use forecasts, in accordance with implementation plan provisions and R18-2-1405.
   b. The highway and transit system shall be described in terms of the regionally significant additions or modifications to the existing transportation network which the transportation plan envisions to be operational in the horizon years. Additions and modifications to the highway network shall be sufficiently identified to indicate intersections with existing regionally significant facilities and to determine their effect on route options between transportation analysis zones. Each added or modified highway segment shall also be sufficiently identified in terms of its design concept and design scope to allow modeling of travel times under various traffic volumes, consistent with the modeling methods for area-wide transportation analysis in use by the MPO. Transit facilities, equipment, and services envisioned for the future shall be identified in terms of design concept, design scope, and operating policies sufficiently to allow modeling of their transit ridership. The description of additions and modifications to the transportation network shall also be sufficiently specific to show that there is a reasonable relationship between expected land use and the envisioned transportation system.
   c. Other future transportation policies, requirements, services, and activities, including intermodal activities, shall be described.

B. Ozone or CO nonattainment areas which are reclassified from moderate to serious shall meet the requirements of subsection (A) within two years from the date of reclassification.

C. Transportation plans for other areas shall meet the requirements of subsection (A) at least to the extent it has been the previous practice of the MPO to prepare plans which meet those requirements. Otherwise, transportation plans shall describe the transportation system envisioned for the future specifically enough to allow determination of conformity according to the criteria and procedures of R18-2-1409 through R18-2-1427.

D. The requirements of this Section supplement other requirements of applicable law or regulation governing the format or content of transportation plans.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1407. Relationship of Transportation Plan and TIP Conformity with the NEPA Process

The degree of specificity required in the transportation plan and the specific travel network assumed for air quality modeling do not preclude the consideration of alternatives in the NEPA process or other project development studies. Should the NEPA process result in a project with design concept and scope significantly different from that in the transportation plan or TIP, the project shall meet the criteria in R18-2-1409 through R18-2-1427 for projects not from a TIP before NEPA process completion.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1408. Fiscal Constraints for Transportation Plans and TIPs

Transportation plans and TIPs shall demonstrate that they are fiscally constrained consistent with USDOT's metropolitan planning regulations at 23 CFR 450 in order to be found in conformity.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1409. Criteria and Procedures for Determining Conformity of Transportation Plans, Programs, and Projects: General

A. In order to be found to conform, each transportation plan, program, and FHWA or FTA project shall satisfy the applicable criteria and procedures in R18-2-1410 through R18-2-1427 as listed in Table 1 of this Section and shall comply with all applicable conformity requirements of implementation plans and of court orders for the area which pertain specifically to conformity determination requirements. The criteria for making conformity determinations differ based on the action under review (transportation plans, TIPs, and FHWA or FTA projects), the time period in which the conformity determination is made, and the relevant pollutant.

B. The following table indicates the criteria and procedures in R18-2-1410 through R18-2-1427 which apply for each action in each time period:

Table 1. Conformity Criteria

DURING ALL PERIODS

Action	Criteria
Transportation Plan	R18-2-1410, R18-2-1411, R18-2-1412, R18-2-1413(B)
TIP	R18-2-1410, R18-2-1411, R18-2-1412, R18-2-1413(C)
Project (from a conforming plan and TIP)	R18-2-1410, R18-2-1411, R18-2-1412, R18-2-1414, R18-2-1415, R18-2-1416, R18-2-1417
Project (not from a conforming plan and TIP)	R18-2-1410, R18-2-1411, R18-2-1412, R18-2-1413(D), R18-2-1414, R18-2-1416, R18-2-1417

PHASE II OF THE INTERIM PERIOD

Action	Criteria
Transportation Plan	R18-2-1422, R18-2-1425
TIP	R18-2-1423, R18-2-1426
Project (from a conforming plan and TIP)	R18-2-1421
Project (not from a conforming plan and TIP)	R18-2-1421, R18-2-1424, R18-2-1427

TRANSITIONAL PERIOD

Action	Criteria
Transportation Plan	R18-2-1418, R18-2-1422, R18-2-1425
TIP	R18-2-1419, R18-2-1423, R18-2-1426
Project (from a conforming plan and TIP)	R18-2-1421
Project (not from a conforming plan and TIP)	R18-2-1420, R18-2-1421, R18-2-1424, R18-2-1427

CONTROL STRATEGY AND MAINTENANCE PERIODS

Action	Criteria
Transportation Plan	R18-2-1418
TIP	R18-2-1419
Project (from a conforming plan and TIP)	No additional criteria
Project (not from a conforming plan and TIP)	R18-2-1420

R18-2-1410. The conformity determination must be based on the latest planning assumptions.

R18-2-1411. The conformity determination must be based on the latest emission estimation model available.

R18-2-1412. The MPO must make the conformity determination according to the consultation procedures of this rule and the implementation plan revision required by 40 CFR 51.396.

R18-2-1413. The transportation plan, TIP, or FHWA or FTA project which is not from a conforming plan and TIP must provide for the timely implementation of TCMs from the applicable implementation plan.

R18-2-1414. There must be a currently conforming transportation plan and currently conforming TIP at the time of project approval.

R18-2-1415. The project must come from a conforming transportation plan and program.

R18-2-1416. The FHWA or FTA project must not cause or contribute to any new localized CO or PM_{10} violations or increase the frequency or severity of any existing CO or PM_{10} violations in CO and PM_{10} nonattainment and maintenance areas.

R18-2-1417. The FHWA or FTA project must comply with PM_{10} control measures in the applicable implementation plan.

R18-2-1418. The transportation plan must be consistent with the motor vehicle emissions budget(s) in the applicable implementation plan or implementation plan submission.

R18-2-1419. The TIP must be consistent with the motor vehicle emissions budget(s) in the applicable implementation plan or implementation plan submission.

R18-2-1420. The project which is not from a conforming transportation plan and conforming TIP must be consistent with the motor vehicle emissions budget(s) in the applicable implementation plan or implementation plan submission.

R18-2-1421. The FHWA or FTA project must eliminate or reduce the severity and number of localized CO violations in the area substantially affected by the project (in CO nonattainment areas).

R18-2-1422. The transportation plan must contribute to emissions reductions in ozone and CO nonattainment areas.

R18-2-1423. The TIP must contribute to emissions reductions in ozone and CO nonattainment areas.

R18-2-1424. The project which is not from a conforming transportation plan and TIP must contribute to emissions reductions in ozone and CO nonattainment areas.

R18-2-1425. The transportation plan must contribute to emission reductions or must not increase emissions in PM_{10} and NO_2 nonattainment areas.

R18-2-1426. The TIP must contribute to emission reductions or must not increase emissions in PM_{10} and NO_2 nonattainment areas.

R18-2-1427. The project which is not from a conforming transportation plan and TIP must contribute to emission reductions or must not increase emissions in PM_{10} and NO_2 nonattainment areas.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1410. Criteria and Procedures: Latest Planning Assumptions

A. During all periods the conformity determination, with respect to all other applicable criteria in R18-2-1411 through R18-2-1427, shall be based upon the most recent complete planning assumptions in force at the time of the conformity determination. The conformity determination shall satisfy the requirements of subsections (B) through (F).

B. Assumptions, including vehicle miles traveled per capita or per household, trip generation per household, vehicle occupancy, household size, vehicle fleet mix, vehicle ownership, and the geographic distribution of population growth shall be derived from the estimates of current and future population, employment, travel, and congestion most recently used by ADOT or the MPO where one exists. Population estimates shall be consistent with the estimates developed by the Arizona Department of Economic Security pursuant to A.R.S. § 41-1954(A). The conformity determination shall also be based

on the latest assumptions about current and future background concentrations.

C. The conformity determination for each transportation plan and TIP shall discuss how transit operating policies (including fares and service levels) and assumed transit ridership have changed since the previous conformity determination.

D. The conformity determination shall include reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time.

E. The conformity determination shall use the latest existing information regarding the effectiveness of the TCMs which have already been implemented.

F. Key assumptions shall be specified and included in the draft documents and supporting materials used for the interagency and public consultation required by R18-2-1405.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1411. Criteria and Procedures: Latest Emissions Model

A. During all periods the conformity determination shall be based on the latest emission estimation model available. This criterion is satisfied if the most current version of the motor vehicle emissions model specified by EPA for use in the preparation or revision of implementation plans in that state or area is used for the conformity analysis. Where EMFAC is the motor vehicle emissions model used in preparing or revising the applicable implementation plan, new versions shall be approved by EPA before they are used in the conformity analysis.

B. Conformity analyses for which the emissions analysis was begun during the grace period or before the Federal Register notice of availability of the latest emission model, or during any grace period announced in such notice, may continue to use the previous version of the model for transportation plans and TIPs. The previous model may also be used for projects if the analysis was begun during the grace period or before the Federal Register notice of availability, provided no more than three years have passed since the draft environmental document was issued.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1412. Criteria and Procedures: Consultation

All conformity determinations shall be made according to the consultation procedures in R18-2-1405. This criterion applies during all periods. Until the implementation plan revision required by 40 CFR 51.396 is approved by EPA, the conformity determination shall be made according to the procedures in R18-2-1405. Once the implementation plan revision has been approved by EPA, this criterion is satisfied if the conformity determination is made consistent with the implementation plan's consultation requirements.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1413. Criteria and Procedures: Timely Implementation of TCMs

A. During all periods the transportation plan, TIP, or FHWA, or FTA project which is not from a conforming plan and TIP shall provide for the timely implementation of TCMs from the applicable implementation plan.

B. For transportation plans, this criterion is satisfied if the following two conditions are met:

1. The transportation plan, in describing the envisioned future transportation system, provides for the timely completion or implementation of all TCMs in the applicable implementation plan which are eligible for funding under 23 U.S.C. or the Federal Transit Act, consistent with schedules included in the applicable implementation plan.
2. Nothing in the transportation plan interferes with the implementation of any TCM in the applicable implementation plan.

C. For TIPs, this criterion is satisfied if all of the following conditions are met:

1. An examination of the specific steps and funding source needed to fully implement each TCM indicates that TCMs which are eligible for funding under 23 U.S.C. or the Federal Transit Act are on or ahead of the schedule established in the applicable implementation plan, or, if such TCMs are behind the schedule established in the applicable implementation plan, the MPO and USDOT have determined that past obstacles to implementation of the TCMs have been identified and have been or are being overcome, and that all state and local agencies with influence over approvals or funding for TCMs are giving maximum priority to approval or funding of TCMs over other projects within their control, including projects in locations outside the nonattainment or maintenance area. Maximum priority to approval or funding of TCMs includes demonstrations with respect to funding acceleration, commitment of staff or other agency resources, diligent efforts to seek approvals, and similar actions.
2. If federal funding intended for TCMs in the applicable implementation plan has previously been programmed but is reallocated to projects in the TIP other than TCMs, (or if there are no other TCMs in the TIP, to projects in the TIP other than projects which are eligible for federal funding under ISTEA's Congestion Mitigation and Air Quality Improvement Program), and the TCMs are behind the schedule in the implementation plan, the TIP cannot be found to conform.
3. Nothing in the TIP may interfere with the implementation of any TCM in the applicable implementation plan.

D. For FHWA or FTA projects which are not from a conforming transportation plan and TIP, this criterion is satisfied if the project does not interfere with the implementation of any TCM in the applicable implementation plan.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1414. Criteria and Procedures: Currently Conforming Transportation Plan and TIP

During all periods there shall be a currently conforming transportation plan and currently conforming TIP at the time of project approval. This criterion is satisfied if the current transportation plan and TIP have been found to conform to the applicable implementation plan by the MPO and USDOT according to the procedures of this subpart. Only one conforming transportation plan or TIP may exist in an area at any time; conformity determinations of a previous transportation plan or TIP expire once the current plan or TIP is found to conform by USDOT. The conformity determination on a transportation plan or TIP will also lapse if conformity is not determined according to the frequency requirements of R18-2-1404.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1415. Criteria and Procedures: Projects from a Plan and TIP

A. During all periods the project shall come from a conforming transportation plan and program. Otherwise, the project shall satisfy all criteria in Table 1 of R18-2-1409 for a project not from a conforming transportation plan and TIP. A project is considered to be from a conforming transportation plan if it

meets the requirements of subsection (B) and from a conforming program if it meets the requirements of subsection (C).

B. A project is considered to be from a conforming transportation plan if one of the following conditions applies:

1. For projects which are required to be identified in the transportation plan in order to satisfy R18-2-1406, the project is specifically included in the conforming transportation plan and the project's design concept and scope have not changed significantly from those which were described in the transportation plan, or in a manner which would significantly impact use of the facility.
2. For projects which are not required to be specifically identified in the transportation plan, the project is identified in the conforming transportation plan, or is consistent with the policies and purpose of the transportation plan and will not interfere with other projects specifically included in the transportation plan.

C. A project is considered to be from a conforming program if all of the following conditions are met:

1. The project is included in the conforming TIP and the design concept and scope of the project were adequate at the time of the TIP conformity determination to determine its contribution to the TIP's regional emissions and have not changed significantly from those which were described in the TIP, or in a manner which would significantly impact use of the facility.
2. If the TIP describes a project design concept and scope which includes project-level emissions mitigation or control measures, enforceable written commitments to implement such measures shall be obtained from the project sponsor or operator as required by R18-2-1433 in order for the project to be considered from a conforming program. Any change in these mitigation or control measures that would significantly reduce their effectiveness constitutes a change in the design concept and scope of the project.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1416. Criteria and Procedures: Localized CO and PM_{10} Violations (Hot Spots)

A. During all periods any FHWA or FTA project shall not cause or contribute to any new localized CO or PM_{10} violations or increase the frequency or severity of any existing CO or PM_{10} violations in CO and PM_{10} nonattainment and maintenance areas. This criterion is satisfied if it is demonstrated that no new local violations will be created and the severity or number of existing violations will not be increased as a result of the project.

B. The demonstration shall be performed according to the requirements of R18-2-1405 and R18-2-1431.

C. For projects which are not of the type identified by R18-2-1431(A) or R18-2-1431(D), this criterion may be satisfied if consideration of local factors clearly demonstrates that no local violations presently exist and no new local violations will be created as a result of the project. Otherwise, in CO nonattainment and maintenance areas, a quantitative demonstration shall be performed according to the requirements of R18-2-1431(B).

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1417. Criteria and Procedures: Compliance with PM_{10} Control Measures

During all periods any FHWA or FTA project shall comply with PM_{10} control measures in the applicable implementation plan. This condition is satisfied if control measures (for the purpose of limiting PM_{10} emissions from the construction activities or normal use and operation associated with the project) contained in the applicable implementation plan are included in the final plans, specifications, and estimates for the project.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1418. Criteria and Procedures: Motor Vehicle Emissions Budget (Transportation Plan)

A. The transportation plan shall be consistent with the motor vehicle emissions budget in the applicable implementation plan or implementation plan submission. This criterion applies during the transitional period and the control strategy and maintenance periods, except as provided in R18-2-1436. This criterion may be satisfied if the requirements in subsections (B) and (C) are met:

B. A regional emissions analysis shall be performed as follows:

1. The regional analysis shall estimate emissions of any of the following pollutants and pollutant precursors for which the area is in nonattainment or maintenance and for which the applicable implementation plan or implementation plan submission establishes an emissions budget:
   a. VOC as an ozone precursor.
   b. NOx as an ozone precursor, unless the Administrator determines that additional reductions of NOx would not contribute to attainment.
   c. CO.
   d. PM_{10} (and its precursors VOC or NOx if the applicable implementation plan or implementation plan submission identifies transportation-related precursor emissions within the nonattainment area as a significant contributor to the PM_{10} nonattainment problem or establishes a budget for such emissions).
   e. NOx (in NO_2 nonattainment or maintenance areas).
2. The regional emissions analysis shall estimate emissions from the entire transportation system, including all regionally significant transportation projects contained in the transportation plan and all other regionally significant highway and transit projects expected in the nonattainment or maintenance area in the time-frame of the transportation plan.
3. The emissions analysis methodology shall meet the requirements of R18-2-1430.
4. For areas with a transportation plan that meets the content requirements of R18-2-1406(A), the emissions analysis shall be performed for each horizon year. Emissions in milestone years which are between the horizon years may be determined by interpolation.
5. For areas with a transportation plan that does not meet the content requirements of R18-2-1406(A), the emissions analysis shall be performed for all of the following:
   a. The last year of the plan's forecast period.
   b. The attainment year, if the attainment year is in the time span of the transportation plan.
   c. Any other years in the time span of the transportation plan such that there is not a gap of more than 10 years between analysis years. Emissions in milestone years which are between these analysis years may be determined by interpolation.

C. The regional emissions analysis shall demonstrate that for each of the applicable pollutants or pollutant precursors in subsection (B)(1) the emissions are less than or equal to the motor vehicle emissions budget as established in the applicable implementation plan or implementation plan submission as follows:

1. If the applicable implementation plan or implementation plan submission establishes emissions budgets for milestone years, emissions in each milestone year are less than or equal to the motor vehicle emissions budget established for that year.
2. For nonattainment areas, emissions in the attainment year are less than or equal to the motor vehicle emissions budget established in the applicable implementation plan or implementation plan submission for that year.
3. For nonattainment areas, emissions in each analysis or horizon year after the attainment year are less than or equal to the motor vehicle emissions budget established by the applicable implementation plan or implementation plan submission for the attainment year. If emissions budgets are established for years after the attainment year, emissions in each analysis year or horizon year shall be less than or equal to the motor vehicle emissions budget for that year, if any, or the motor vehicle emissions budget for the most recent budget year prior to the analysis year or horizon year.
4. For maintenance areas, emissions in each analysis or horizon year are less than or equal to the motor vehicle emissions budget established by the maintenance plan for that year, if any, or the emissions budget for the most recent budget year prior to the analysis or horizon year.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1419. Criteria and Procedures: Motor Vehicle Emissions Budget (TIP)

A. The TIP shall be consistent with the motor vehicle emissions budgets in the applicable implementation plan or implementation plan submission. This criterion applies during the transitional period and the control strategy and maintenance periods, except as provided in R18-2-1436. This criterion may be satisfied if the requirements in subsections (B) and (C) are met.

B. For areas with a conforming transportation plan that fully meets the content requirements of R18-2-1406(A), this criterion may be satisfied without additional regional emissions analysis if:

1. Each program year of the TIP is consistent with the federal funding which may be reasonably expected for that year, and required state or local matching funds and funds for state or local funding-only projects are consistent with the revenue sources expected over the same period; and
2. The TIP is consistent with the conforming transportation plan such that the regional emissions analysis already performed for the plan applies to the TIP also. This requires a demonstration that:
   a. The TIP contains all projects which shall be started in the TIP's time-frame in order to achieve the highway and transit system envisioned by the transportation plan in each of its horizon years;
   b. All TIP projects which are regionally significant are part of the specific highway or transit system envisioned in the transportation plan's horizon years; and
   c. The design concept and scope of each regionally significant transportation project in the TIP is not significantly different from that described in the transportation plan.
3. If the requirements in subsections (B)(1) and (B)(2) are not met, then either:
   a. The TIP may be modified to meet those requirements; or
   b. The transportation plan shall be revised so that the requirements in subsections (B)(1) and (B)(2) are met. Once the revised plan has been found to conform, this criterion is met for the TIP with no additional analysis except a demonstration that the TIP meets the requirements of subsections (B)(1) and (B)(2).

C. For areas with a transportation plan that does not meet the content requirements of R18-2-1406(A), a regional emissions analysis shall meet all of the following requirements:

1. The regional emissions analysis shall estimate emissions from the entire transportation system, including all projects contained in the proposed TIP, the transportation plan, and all other regionally significant highway and transit projects expected in the nonattainment or maintenance area in the time-frame of the transportation plan.
2. The analysis methodology shall meet the requirements of R18-2-1430(C).
3. The regional emissions analysis shall satisfy the requirements of R18-2-1418(B)(1), R18-2-1418(B)(5), and R18-2-1418(C).

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1420. Criteria and Procedures: Motor Vehicle Emissions Budget (Project Not from a Plan and TIP)

A. The project which is not from a conforming transportation plan and a conforming TIP shall be consistent with the motor vehicle emissions budget in the applicable implementation plan or implementation plan submission. This criterion applies during the transitional period and the control strategy and maintenance periods, except as provided in R18-2-1436. It is satisfied if emissions from the implementation of the project, when considered with the emissions from the projects in the conforming transportation plan and TIP and all other regionally significant transportation projects expected in the area, do not exceed the motor vehicle emissions budget in the applicable implementation plan or implementation plan submission.

B. For areas with a conforming transportation plan that meets the content requirements of R18-2-1406(A):

1. This criterion may be satisfied without additional regional analysis if the project is included in the conforming transportation plan, even if it is not specifically included in the latest conforming TIP. This requires a demonstration that all of the following apply:
   a. Allocating funds to the project will not delay the implementation of projects in the transportation plan or TIP which are necessary to achieve the highway and transit system envisioned by the transportation plan in each of its horizon years.
   b. The project is not regionally significant or is part of the specific highway or transit system envisioned in the transportation plan's horizon years.
   c. The design concept and scope of the project is not significantly different from that described in the transportation plan.
2. If the requirements in subsection (B)(1) are not met, a regional emissions analysis shall be performed as follows:
   a. The analysis methodology shall meet the requirements of R18-2-1430.
   b. The analysis shall estimate emissions from the transportation system, including the proposed project and all other regionally significant transportation projects expected in the nonattainment or maintenance area in the time-frame of the transportation plan. The analysis shall include emissions from all

previously approved projects which were not from a transportation plan and TIP.

c. The regional emissions analysis shall meet the requirements of R18-2-1418(B)(1), R18-2-1418(B)(4) and R18-2-1418(C).

C. For areas with a transportation plan that does not meet the content requirements of R18-2-1406(A), a regional emissions analysis shall be performed for the project together with the conforming TIP and all other regionally significant transportation projects expected in the nonattainment or maintenance area. This criterion may be satisfied if all of the following apply:

1. The analysis methodology meets the requirements of R18-2-1430(C).
2. The analysis estimates emissions from the transportation system, including the proposed project, and all other regionally significant transportation projects expected in the nonattainment or maintenance area in the time-frame of the transportation plan.
3. The regional emissions analysis satisfies the requirements of R18-2-1418(B)(1), R18-2-1418(B)(5), and R18-2-1418(C).

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1421. Criteria and Procedures: Localized CO Violations (Hot Spots) in the Interim and Transitional Periods

A. Each FHWA or FTA project shall eliminate or reduce the severity and number of localized CO violations in the area substantially affected by the project (in CO nonattainment areas). This criterion applies during the interim and transitional periods only. This criterion is satisfied with respect to existing localized CO violations if it is demonstrated that existing localized CO violations will be eliminated or reduced in severity and number as a result of the project.

B. The demonstration shall be performed according to the requirements of R18-2-1405 and R18-2-1431.

C. For projects which are not of the type identified by R18-2-1431(A), this criterion may be satisfied if consideration of local factors clearly demonstrates that existing CO violations will be eliminated or reduced in severity and number. Otherwise, a quantitative demonstration shall be performed according to the requirements of R18-2-1431(B).

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1422. Criteria and Procedures: Interim and Transitional Period Reductions in Ozone and CO Areas (Transportation Plan)

A. A transportation plan shall contribute to emissions reductions in ozone and CO nonattainment areas. This criterion applies during the interim and transitional periods only, except as otherwise provided in R18-2-1436. It applies to the net effect on emissions of all projects contained in a new or revised transportation plan. This criterion may be satisfied if a regional emissions analysis is performed as described in subsections (B) through (F).

B. Determine the analysis years for which emissions are to be estimated. Analysis years shall be no more than 10 years apart. The first analysis year shall be no later than the first milestone year (1995 in CO nonattainment areas and 1996 in ozone nonattainment areas). The second analysis year shall be either the attainment year for the area or, if the attainment year is the same as the first analysis year or earlier, the second analysis year shall be at least five years beyond the first analysis year. The last year of the transportation plan's forecast period shall also be an analysis year.

C. Define the Baseline scenario for each of the analysis years to be the future transportation system that would result from current programs, composed of all of the following, except that projects listed in R18-2-1434 and R18-2-1435 need not be explicitly considered:

1. All in-place regionally significant highway and transit facilities, services and activities.
2. All ongoing travel demand management or transportation system management activities.
3. Completion of all regionally significant transportation projects, regardless of funding source, which are currently under construction or are undergoing right-of-way acquisition (except for hardship acquisition and protective buying); come from the first three years of the previously conforming transportation plan or TIP; or have completed the NEPA process. For the first conformity determination on the transportation plan after November 24, 1993, a project may not be included in the Baseline scenario and shall be included in the Action scenario as described in subsection (D), if one of the following major steps has not occurred within the most recent three-year period:
   a. NEPA process completion;
   b. Start of final design;
   c. Acquisition of a significant portion of the right-of-way;
   d. Approval of the plans, specifications and estimates.

D. Define the Action scenario for each of the analysis years as the transportation system that will result in that year from the implementation of the proposed transportation plan, TIPs adopted under it, and other expected regionally significant transportation projects in the nonattainment area. The Action scenario will include all of the following except that projects listed in R18-2-1434 and R18-2-1435 need not be explicitly considered:

1. All facilities, services, and activities in the Baseline scenario;
2. Completion of all TCMs and regionally significant transportation projects, including facilities, services, and activities, specifically identified in the proposed transportation plan which will be operational or in effect in the analysis year, except that regulatory TCMs may not be assumed to begin at a future time unless the regulation is already adopted by the enforcing jurisdiction or the TCM is identified in the applicable implementation plan;
3. All travel demand management programs and transportation system management activities known to the MPO, but not included in the applicable implementation plan or utilizing any federal funding or approval, which have been fully adopted or funded by the enforcing jurisdiction or sponsoring agency since the last conformity determination on the transportation plan;
4. The incremental effects of any travel demand management programs and transportation system management activities known to the MPO, but not included in the applicable implementation plan or utilizing any federal funding or approval, which were adopted or funded prior to the date of the last conformity determination on the transportation plan, but which have been modified since then to be more stringent or effective;
5. Completion of all expected regionally significant highway and transit projects which are not from a conforming transportation plan and TIP;

6. Completion of all expected regionally significant non-FHWA/FTA highway and transit projects that have clear funding sources and commitments leading toward their implementation and completion by the analysis year.

E. Estimate the emissions predicted to result in each analysis year from travel on the transportation systems defined by the Baseline and Action scenarios and determine the difference in regional VOC and NOx emissions (unless the Administrator determines that additional reductions of NOx would not contribute to attainment) between the two scenarios for ozone nonattainment areas and the difference in CO emissions between the two scenarios for CO nonattainment areas. The analysis shall be performed for each of the analysis years according to the requirements of R18-2-1430. Emissions in milestone years which are between the analysis years may be determined by interpolation.

F. This criterion is met if the regional VOC and NOx emissions (for ozone nonattainment areas) and CO emissions (for CO nonattainment areas) predicted in the Action scenario are less than the emissions predicted from the Baseline scenario in each analysis year, and if this can reasonably be expected to be true in the periods between the first milestone year and the analysis years. The regional analysis shall show that the Action scenario contributes to a reduction in emissions from the 1990 emissions by any nonzero amount.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1423. Criteria and Procedures: Interim Period Reductions in Ozone and CO Areas (TIP)

A. A TIP shall contribute to emissions reductions in ozone and CO nonattainment areas. This criterion applies during the interim and transitional periods only, except as otherwise provided in R18-2-1436. It applies to the net effect on emissions of all projects contained in a new or revised TIP. This criterion may be satisfied if a regional emissions analysis is performed as described in subsections (B) through (F).

B. Determine the analysis years for which emissions are to be estimated. The first analysis year shall be no later than the first milestone year (1995 in CO nonattainment areas and 1996 in ozone nonattainment areas). The analysis years shall be no more than 10 years apart. The second analysis year shall be either the attainment year for the area or, if the attainment year is the same as the first analysis year or earlier, the second analysis year shall be at least five years beyond the first analysis year. The last year of the transportation plan's forecast period shall also be an analysis year.

C. Define the Baseline scenario as the future transportation system that would result from current programs, composed of all of the following, except that projects listed in R18-2-1434 and R18-2-1435 need not be explicitly considered:

1. All in-place regionally significant highway and transit facilities, services, and activities.
2. All ongoing travel demand management or transportation system management activities.
3. Completion of all regionally significant transportation projects, regardless of funding source, which are currently under construction or are undergoing right-of-way acquisition, except for hardship acquisition and protective buying; come from the first three years of the previously conforming TIP; or have completed the NEPA process. For the first conformity determination on the TIP after November 24, 1993, a project may not be included in the Baseline scenario if one of the following major steps has not occurred within the most recent three-year period:
   a. NEPA process completion.
   b. Start of final design.
   c. Acquisition of a significant portion of the right-of-way.
   d. Approval of the plans, specifications, and estimates. Such a project shall be included in the Action scenario, as described in subsection (D).

D. Define the Action scenario as the future transportation system that will result from the implementation of the proposed TIP and other expected regionally significant transportation projects in the nonattainment area in the time-frame of the transportation plan. It will include all of the following, except that projects listed in R18-2-1434 and R18-2-1435 need not be explicitly considered:

1. All facilities, services, and activities in the Baseline scenario;
2. Completion of all TCMs and regionally significant transportation projects, including facilities, services, and activities, included in the proposed TIP, except that regulatory TCMs may not be assumed to begin at a future time unless the regulation is already adopted by the enforcing jurisdiction or the TCM is contained in the applicable implementation plan;
3. All travel demand management programs and transportation system management activities known to the MPO, but not included in the applicable implementation plan or utilizing any federal funding or approval, which have been fully adopted or funded by the enforcing jurisdiction or sponsoring agency since the last conformity determination on the TIP;
4. The incremental effects of any travel demand management programs and transportation system management activities known to the MPO, but not included in the applicable implementation plan or utilizing any federal funding or approval, which were adopted or funded prior to the date of the last conformity determination on the TIP, but which have been modified since then to be more stringent or effective;
5. Completion of all expected regionally significant highway and transit projects which are not from a conforming transportation plan and TIP;
6. Completion of all expected regionally significant non-FHWA/FTA highway and transit projects that have clear funding sources and commitments leading toward their implementation and completion by the analysis year.

E. Estimate the emissions predicted to result in each analysis year from travel on the transportation systems defined by the Baseline and Action scenarios, and determine the difference in regional VOC and NOx emissions (unless the Administrator determines that additional reductions of NOx would not contribute to attainment) between the two scenarios for ozone nonattainment areas and the difference in CO emissions between the two scenarios for CO nonattainment areas. The analysis shall be performed for each of the analysis years according to the requirements of R18-2-1430. Emissions in milestone years which are between analysis years may be determined by interpolation.

F. This criterion is met if the regional VOC and NOx emissions in ozone nonattainment areas and CO emissions in CO nonattainment areas predicted in the Action scenario are less than the emissions predicted from the Baseline scenario in each analysis year, and if this can reasonably be expected to be true in the period between the analysis years. The regional analysis shall show that the Action scenario contributes to a reduction in emissions from the 1990 emissions by any nonzero amount.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1424. Criteria and Procedures: Interim Period Reductions for Ozone and CO Areas (Project Not from a Plan and TIP)

A transportation project shall contribute to emissions reductions in ozone and CO nonattainment areas. This criterion applies during the interim and transitional periods only, except as otherwise provided in R18-2-1436. This criterion is satisfied if a regional emissions analysis is performed which meets the requirements of R18-2-1422 and which includes the transportation plan and project in the Action scenario. If the project which is not from a conforming transportation plan and TIP is a modification of a project currently in the plan or TIP, the Baseline scenario shall include the project with its original design concept and scope, and the Action scenario shall include the project with its new design concept and scope.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1425. Criteria and Procedures: Interim Period Reductions for PM_{10} and NO_2 Areas (Transportation Plan)

A. A transportation plan shall contribute to emission reductions or shall not increase emissions in PM_{10} and NO_2 nonattainment areas. This criterion applies only during the interim and transitional periods. It applies to the net effect on emissions of all projects contained in a new or revised transportation plan. This criterion may be satisfied if the requirements of either subsections (B) or (C) are met.

B. Demonstrate that implementation of the plan and all other regionally significant transportation projects expected in the nonattainment area will contribute to reductions in emissions of PM_{10} in a PM_{10} nonattainment area, and of each transportation-related precursor of PM_{10} in PM_{10} nonattainment areas if the EPA Regional Administrator or the Director of ADEQ has made a finding that such precursor emissions from within the nonattainment area are a significant contributor to the PM_{10} nonattainment problem and has so notified the MPO and USDOT, and of NOx in an NO_2 nonattainment area, by performing a regional emissions analysis as follows:

1. Determine the analysis years for which emissions are to be estimated. Analysis years shall be no more than 10 years apart. The first analysis year shall be no later than 1996 (for NO_2 areas) or four years and six months following the date of designation (for PM_{10} areas). The second analysis year shall be either the attainment year for the area or, if the attainment year is the same as the first analysis year or earlier, the second analysis year shall be at least five years beyond the first analysis year. The last year of the transportation plan's forecast period shall also be an analysis year.
2. Define for each of the analysis years the Baseline scenario, as defined in R18-2-1422(C), and the Action scenario, as defined in R18-2-1422(D).
3. Estimate the emissions predicted to result in each analysis year from travel on the transportation systems defined by the Baseline and Action scenarios and determine the difference between the two scenarios in regional PM_{10} emissions in a PM_{10} nonattainment area (and transportation-related precursors of PM_{10} in PM_{10} nonattainment areas if the EPA Regional Administrator or the Director of ADEQ has made a finding that such precursor emissions from within the nonattainment area are a significant contributor to the PM_{10} nonattainment problem and has so notified ADOT, the MPO where one exists and USDOT) and in NOx emissions in an NO_2 nonattainment area. The analysis shall be performed for each of the analysis years according to the requirements of R18-2-1430. The analysis shall address the periods between the analysis years and the periods between 1990, the first milestone year if any, and the first of the analysis years. Emissions in milestone years which are between the analysis years may be determined by interpolation.
4. Demonstrate that the regional PM_{10} emissions and PM_{10} precursor emissions, where applicable, (for PM_{10} nonattainment areas) and NOx emissions (for NO_2 nonattainment areas) predicted in the Action scenario are less than the emissions predicted from the Baseline scenario in each analysis year, and that this can reasonably be expected to be true in the periods between the first milestone year (if any) and the analysis years.

C. Demonstrate that when the projects in the transportation plan and all other regionally significant transportation projects expected in the nonattainment area are implemented, the transportation system's total highway and transit emissions of PM_{10} in a PM_{10} nonattainment area (and transportation-related precursors of PM_{10} in PM_{10} nonattainment areas if the EPA Regional Administrator or the Director of ADEQ has made a finding that such precursor emissions from within the nonattainment area are a significant contributor to the PM_{10} nonattainment problem and has so notified the MPO and USDOT) and of NOx in an NO_2 nonattainment area will not be greater than baseline levels, by performing a regional emissions analysis as follows:

1. Determine the baseline regional emissions of PM_{10} and PM_{10} precursors, where applicable (for PM_{10} nonattainment areas) and NOx (for NO_2 nonattainment areas) from highway and transit sources. Baseline emissions are those estimated to have occurred during calendar year 1990, unless the control strategy implementation plan for that area includes a baseline emissions inventory for a different year.
2. Estimate the emissions of the applicable pollutant or pollutants from the entire transportation system, including projects in the transportation plan and TIP and all other regionally significant transportation projects in the nonattainment area, according to the requirements of R18-2-1430. Emissions shall be estimated for analysis years which are no more than 10 years apart. The first analysis year shall be no later than 1996 (for NO_2 areas) or four years and six months following the date of designation (for PM_{10} areas). The second analysis year shall be either the attainment year for the area or, if the attainment year is the same as the first analysis year or earlier, the second analysis year shall be at least five years beyond the first analysis year. The last year of the transportation plan's forecast period shall also be an analysis year.
3. Demonstrate that for each analysis year the emissions estimated in subsection (C)(2) are no greater than baseline emissions of PM_{10} and PM_{10} precursors, where applicable (for PM_{10} nonattainment areas) or NOx (for NO_2 nonattainment areas) from highway and transit sources.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1426. Criteria and Procedures: Interim Period Reductions for PM_{10} and NO_2 Areas (TIP)

A. A TIP shall contribute to emission reductions or shall not increase emissions in PM_{10} and NO_2 nonattainment areas. This criterion applies only during the interim and transitional periods. It applies to the net effect on emissions of all projects contained in a new or revised TIP. This criterion may be satis-

fied if the requirements of either subsection (B) or subsection (C) are met.

B. Demonstrate that implementation of the plan and TIP and all other regionally significant transportation projects expected in the nonattainment area will contribute to reductions in emissions of PM_{10} in a PM_{10} nonattainment area (and transportation-related precursors of PM_{10} in PM_{10} nonattainment areas if the EPA Regional Administrator or the Director of ADEQ has made a finding that such precursor emissions from within the nonattainment area are a significant contributor to the PM_{10} nonattainment problem and has so notified the MPO and USDOT) and of NOx in an NO_2 nonattainment area, by performing a regional emissions analysis as follows:

1. Determine the analysis years for which emissions are to be estimated, according to the requirements of R18-2-1425(B)(1).
2. Define for each of the analysis years the Baseline scenario, as defined in R18-2-1423(C), and the Action scenario, as defined in R18-2-1423(D).
3. Estimate the emissions predicted to result in each analysis year from travel on the transportation systems defined by the Baseline and Action scenarios as required by R18-2-1425(B)(3), and make the demonstration required by R18-2-1425(B)(4).

C. Demonstrate that when the projects in the transportation plan and TIP and all other regionally significant transportation projects expected in the area are implemented, the transportation system's total highway and transit emissions of PM_{10} in a PM_{10} nonattainment area (and transportation-related precursors of PM_{10} in PM_{10} nonattainment areas if the EPA Regional Administrator or the Director of ADEQ has made a finding that such precursor emissions from within the nonattainment area are a significant contributor to the PM_{10} nonattainment problem and has so notified the MPO and USDOT) and of NOx in an NO_2 nonattainment area will not be greater than baseline levels, by performing a regional emissions analysis as required by R18-2-1425(C).

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1427. Criteria and Procedures: Interim Period Reductions for PM_{10} and NO_2 Areas (Project Not from a Plan and TIP)

A transportation project which is not from a conforming transportation plan and TIP shall contribute to emission reductions or shall not increase emissions in PM_{10} and NO_2 nonattainment areas. This criterion applies during the interim and transitional periods only. This criterion is met if a regional emissions analysis is performed which meets the requirements of R18-2-1425 and which includes the transportation plan and project in the Action scenario. If the project which is not from a conforming transportation plan and TIP is a modification of a project currently in the transportation plan or TIP, and R18-2-1425(B) is used to demonstrate satisfaction of this criterion, the Baseline scenario shall include the project with its original design concept and scope, and the Action scenario shall include the project with its new design concept and scope.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1428. Transition from the Interim Period to the Control Strategy Period

A. For areas which submit a control strategy implementation plan revision after November 24, 1993:

1. The transportation plan and TIP shall be demonstrated to conform according to transitional period criteria and procedures by one year from the date the CAA requires submission of such control strategy implementation plan revision. Otherwise, the conformity status of the transportation plan and TIP will lapse, and no new project-level conformity determinations may be made.
   a. The conformity of new transportation plans and TIPs may be demonstrated according to Phase II interim period criteria and procedures for 90 days following submission of the control strategy implementation plan revision, provided the conformity of such transportation plans and TIPs is redetermined according to transitional period criteria and procedures as required in subsection (A)(1) and such transportation plans and TIPs are consistent with the motor vehicle emissions budget in the applicable implementation plan or any previously submitted control strategy implementation plan revision.
   b. Beginning 90 days after submission of the control strategy implementation plan revision, new transportation plans and TIPs shall demonstrate conformity according to transitional period criteria and procedures.
2. If EPA disapproves the submitted control strategy implementation plan revision and so notifies the state, the MPO where one exists, and USDOT, which initiates the sanction process under CAA §§ 179 or 110(m), the conformity status of the transportation plan and TIP shall lapse 120 days after EPA's disapproval, and no new project-level conformity determinations may be made. No new transportation plan, TIP, or project may be found to conform until another control strategy implementation plan revision is submitted and conformity is demonstrated according to transitional period criteria and procedures.
3. Notwithstanding subsection (A)(2), if EPA disapproves the submitted control strategy implementation plan revision but determines that the control strategy contained in the revision would have been considered approvable with respect to requirements for emission reductions if all committed measures had been submitted in enforceable form as required by CAA § 110(a)(2)(A), the provisions of subsection (A)(1) shall apply for 12 months following the date of disapproval. The conformity status of the transportation plan and TIP shall lapse 12 months following the date of disapproval unless another control strategy implementation plan revision is submitted to EPA and found to be complete.

B. For areas which have not submitted a control strategy implementation plan revision:

1. For areas whose CAA deadline for submission of the control strategy implementation plan revision is after November 24, 1993, and EPA has notified the state, the MPO where one exists, and USDOT of the state's failure to submit a control strategy implementation plan revision, which initiates the sanction process under CAA §§ 179 or 110(m) all of the following shall apply:
   a. No new transportation plans or TIPs may be found to conform beginning 120 days after the CAA deadline.
   b. The conformity status of the transportation plan and TIP shall lapse one year after the CAA deadline, and no new project-level conformity determinations may be made.
2. For areas whose CAA deadline for submission of the control strategy implementation plan was before November 24, 1993, and EPA has made a finding of failure to submit a control strategy implementation plan revision, which initiates the sanction process under CAA §§ 179 or

110(m), all of the following apply unless the failure has been remedied and acknowledged by a letter from the EPA Regional Administrator:

a. No new transportation plans or TIPs may be found to conform beginning March 24, 1994.

b. The conformity status of the transportation plan and TIP shall lapse November 25, 1994, and no new project-level conformity determinations may be made.

C. For areas which have not submitted a complete control strategy implementation plan revision:

1. For areas where EPA notifies the state, the MPO where one exists, and USDOT after November 24, 1993, that the control strategy implementation plan revision submitted by the state is incomplete, which initiates the sanction process under CAA §§ 179 or 110(m), all of the following apply unless the failure has been remedied and acknowledged by a letter from the EPA Regional Administrator:

a. No new transportation plans or TIPs may be found to conform beginning 120 days after EPA's incompleteness finding.

b. The conformity status of the transportation plan and TIP shall lapse one year after the CAA deadline, and no new project-level conformity determinations may be made.

c. Notwithstanding subsections (C)(1)(a) and (b), if EPA notes in its incompleteness finding that the submittal would have been considered complete with respect to requirements for emission reductions if all committed measures had been submitted in enforceable form as required by CAA § 110(a)(2)(A), the provisions of subsection (A)(1) shall apply for a period of 12 months following the date of the incompleteness determination. The conformity status of the transportation plan and TIP shall lapse 12 months following the date of the incompleteness determination unless another control strategy implementation plan revision is submitted to EPA and found to be complete.

2. For areas where EPA has determined before November 24, 1993, that the control strategy implementation plan revision is incomplete, which initiates the sanction process under CAA §§ 179 or 110(m), all of the following apply unless the failure has been remedied and acknowledged by a letter from the EPA Regional Administrator:

a. No new transportation plans or TIPs may be found to conform beginning March 24, 1994.

b. The conformity status of the transportation plan and TIP shall lapse November 25, 1994, and no new project-level conformity determinations may be made.

c. Notwithstanding subsections (C)(2)(a) and (b), if EPA notes in its incompleteness finding that the submittal would have been considered complete with respect to requirements for emission reductions if all committed measures had been submitted in enforceable form as required by CAA § 110(a)(2)(A), the provisions of subsection (D)(1) shall apply for a period of 12 months following the date of the incompleteness determination. The conformity status of the transportation plan and TIP shall lapse 12 months following the date of the incompleteness determination unless another control strategy implementation plan revision is submitted to EPA and found to be complete.

D. For areas which submitted a control strategy implementation plan before November 24, 1993:

1. The transportation plan and TIP shall have been demonstrated to conform according to transitional period criteria and procedures by November 25, 1994. Otherwise, their conformity status will lapse, and no new project-level conformity determinations may be made. From and after February 22, 1994, new transportation plans and TIPs shall demonstrate conformity according to transitional period criteria and procedures.

2. If EPA has disapproved the most recent control strategy implementation plan submission, the conformity status of the transportation plan and TIP shall lapse March 24, 1994, and no new project-level conformity determinations may be made. No new transportation plans, TIPs, or projects may be found to conform until another control strategy implementation plan revision is submitted and conformity is demonstrated according to transitional period criteria and procedures.

3. Notwithstanding subsection (D)(2), if EPA has disapproved the submitted control strategy implementation plan revision but determines that the control strategy contained in the revision would have been considered approvable with respect to requirements for emission reductions if all committed measures had been submitted in enforceable form as required by CAA § 110(a)(2)(A), the provisions of subsection (D)(1) shall apply until November 25, 1994. The conformity status of the transportation plan and TIP shall lapse November 25, 1994, unless another control strategy implementation plan revision is submitted to EPA and found to be complete.

E. If the currently conforming transportation plan and TIP have not been demonstrated to conform according to transitional period criteria and procedures, the requirements of subsections (E)(1) and (2) shall be met.

1. Before a FHWA or FTA project which is regionally significant and increases single-occupant vehicle capacity (a new general purpose highway on a new location or adding general purpose lanes) may be found to conform, ADEQ shall be consulted on how the emissions which the existing transportation plan and TIP's conformity determination estimates for the Action scenario, as required by R18-2-1422 through R18-2-1427, compare to the motor vehicle emissions budget in the implementation plan submission or the projected motor vehicle emissions budget in the implementation plan under development.

2. In the event of unresolved disputes on such project-level conformity determinations, ADEQ may escalate the issue to the governor consistent with the procedure in R18-2-1405, which applies for ADEQ comments on a conformity determination.

F. Redetermination of conformity of the existing transportation plan and TIP according to the transitional period criteria and procedures:

1. The redetermination of the conformity of the existing transportation plan and TIP according to transitional period criteria and procedures (as required by subsections (A)(1) and (D)(1)) does not require new emissions analysis and does not have to satisfy the requirements of R18-2-1410 and R18-2-1411 if all of the following are met:

a. The control strategy implementation plan revision submitted to EPA uses the MPO's modeling of the existing transportation plan and TIP for its projections of motor vehicle emissions.

b. The control strategy implementation plan does not include any transportation projects which are not included in the transportation plan and TIP.

2. A redetermination of conformity as described in subsection (F)(1) is not considered a conformity determination for the purposes of R18-2-1404(E) or R18-2-1404(I) regarding the maximum intervals between conformity determinations. Conformity shall be determined according to all the applicable criteria and procedures of R18-2-1409 within three years of the last determination which did not rely on subsection (F)(1).

G. Ozone nonattainment areas:

1. The requirements of subsection (B)(1) apply if a serious or above ozone nonattainment area has not submitted the implementation plan revisions which CAA §§ 182(c)(2)(A) and 182(c)(2)(B) require to be submitted to EPA November 15, 1994, even if the area has submitted the implementation plan revision which CAA § 182(b)(1) requires to be submitted to EPA November 15, 1993.
2. The requirements of subsection (B)(1) apply if a moderate ozone nonattainment area which is using photochemical dispersion modeling to demonstrate the "specific annual reductions as necessary to attain" required by CAA § 182(b)(1), and which has permission from EPA to delay submission of such demonstration until November 15, 1994, does not submit such demonstration by that date. The requirements of subsection (B)(1) apply in this case even if the area has submitted the 15% emission reduction demonstration required by CAA § 182(b)(1).
3. The requirements of subsection (A) apply when the implementation plan revisions required by CAA §§ 182(c)(2)(A) and 182(c)(2)(B) are submitted.

H. Nonattainment areas which are not required to demonstrate reasonable further progress and attainment. If an area listed in R18-2-1436 submits a control strategy implementation plan revision, the requirements of subsections (A) and (E) apply. Because the areas listed in R18-2-1436 are not required to demonstrate reasonable further progress and attainment and therefore have no CAA deadline, the provisions of subsection (B) do not apply to these areas at any time.

I. If a control strategy implementation plan revision is not submitted to EPA but a maintenance plan required by CAA § 175A is submitted to EPA, the requirements of subsection (A) or (D) apply, with the maintenance plan submission treated as a "control strategy implementation plan revision" for the purposes of those requirements.

J. This Section does not become effective until June 1, 1996.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1429. Requirements for Adoption or Approval of Projects by Recipients of Funds Designated under 23 U.S.C. or the Federal Transit Act

A. This Section shall not apply to any of the following:

1. A transportation project that is a street with a lower classification than a collector street, as specified in the most recent federal classification map for the region.
2. An exempt project listed in R18-2-1434.

B. No recipient of federal funds designated under 23 U.S.C. or the Federal Transit Act shall adopt or approve a transportation project, regardless of funding source, without first determining whether the transportation project is regionally significant. In making this determination, the recipient shall not take any action that is inconsistent with the procedures developed by ADOT or the MPO pursuant to R18-2-1405(R).

C. No recipient of federal funds designated under 23 U.S.C. or the Federal Transit Act shall adopt or approve a regionally significant highway or transit project, regardless of funding source, unless both of the following apply:

1. There is a currently conforming transportation plan and TIP consistent with the requirements of R18-2-1414.
2. The requirements of one of the following are met:
   a. The project comes from a conforming plan and program consistent with the requirements of R18-2-1415.
   b. The project is included in the regional emissions analysis supporting the currently conforming TIP's conformity determination, even if the project is not strictly "included" in the TIP for the purposes of MPO project selection or endorsement, and the project's design concept and scope have not changed significantly from those which were included in the regional emissions analysis, or in a manner which would significantly impact use of the facility.
   c. During the control strategy or maintenance period, the project is consistent with the motor vehicle emissions budget in the applicable implementation plan consistent with the requirements of R18-2-1420.
   d. During Phase II of the interim period, the project contributes to emissions reductions or does not increase emissions consistent with the requirements of R18-2-1424 (in ozone and CO nonattainment areas) or R18-2-1427 (in PM_{10} and NO_2 nonattainment areas).
   e. During the transitional period, the project satisfies the requirements of both subsections (1)(2)(c) and (d).

D. Pursuant to the consultation process established in R18-2-1405(O), ADOT or the MPO where one exists shall, not later than September 1, 1995, develop and make available the procedures to be used by any recipient of federal funds designated under 23 U.S.C. or the Federal Transit Act to comply with subsections (B) and (C). These procedures may be revised periodically, as needed, using the same consultation process. At a minimum, such procedures shall provide for the following:

1. The minimum information required by the recipient to make determinations in compliance with subsections (B) and (C);
2. The time-frames for action to be taken by the recipient;
3. For transportation projects determined to be regionally significant, the documentation necessary to demonstrate that the requirements of 23 CFR 450.324(e), (g), and (h) have been met.

E. After a transportation project is adopted or approved, no subsequent act defined as adoption or approval under this Section or under procedures developed to implement this Section shall be subject to subsection (B) or (C), unless project's design concept or scope have changed significantly since the project was first adopted or approved.

F. A regionally significant transportation project found to be in conformity, either as a result of a TIP or a separate project analysis, shall retain such conformity finding, irrespective of subsequent analysis, unless the project fails to meet the conditions of its approval or undergoes a significant change in scope. In any event, a conformity determination shall lapse after three years in the absence of a redetermination; except that a project undergoing NEPA approval shall retain its conformity determination, unless none of the following major steps has occurred within the most recent three-year period:

1. NEPA process completion;
2. Start of final design;

3. Acquisition of a significant portion of the right-of-way;
4. Approval of the plans, specifications, and estimates.

Historical Note
Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1430. Procedures for Determining Regional Transportation-related Emissions

A. The following are general requirements for determining regional transportation-related emissions:
1. The regional emissions analysis for the transportation plan, TIP, or project not from a conforming plan and TIP shall include all regionally significant transportation projects expected in the nonattainment or maintenance area, including FHWA or FTA projects proposed in the transportation plan and TIP and all other regionally significant transportation projects which are disclosed to ADOT or the MPO as required by R18-2-1405. Projects which are not regionally significant are not required to be explicitly modeled, but VMT from such projects shall be estimated in accordance with reasonable professional practice. The effects of TCMs and similar projects that are not regionally significant may also be estimated in accordance with reasonable professional practice.
2. The emissions analysis may not include for emissions reduction credit any TCMs which have been delayed beyond the scheduled date until such time as implementation has been assured. If the TCM has been partially implemented and it can be demonstrated that it is providing quantifiable emission reduction benefits, the emissions analysis may include that emissions reduction credit.
3. Emissions reduction credit from projects, programs, or activities which require a regulation in order to be implemented may not be included in the emissions analysis unless the regulation is already adopted by the enforcing jurisdiction. Adopted regulations are required for demand management strategies for reducing emissions which are not specifically identified in the applicable implementation plan, and for control programs which are external to the transportation system itself, such as tailpipe or evaporative emission standards, limits on gasoline volatility, inspection and maintenance programs, and oxygenated or reformulated gasoline or diesel fuel. A regulatory program may also be considered to be adopted if an opt-in to a federally enforced program has been approved by EPA, if EPA has promulgated the program (if the control program is a federal responsibility, such as tailpipe standards), or if the CAA requires the program without need for individual state action and without any discretionary authority for EPA to set its stringency, delay its effective date, or not implement the program.
4. Notwithstanding subsection (A)(3), during the transitional period, control measures or programs which are committed to in an implementation plan submission as described in R18-2-1418 through R18-2-1420, but which has not received final EPA action in the form of a finding of incompleteness, approval, or disapproval, may be assumed for emission reduction credit for the purpose of demonstrating that the requirements of R18-2-1418 through R18-2-1420 are satisfied.
5. A regional emissions analysis for the purpose of satisfying the requirements of R18-2-1422 through R18-2-1424 may account for the programs in subsection (A)(4), but the same assumptions about these programs shall be used for both the Baseline and Action scenarios.
6. Ambient temperatures shall be consistent with those used to establish the emissions budget in the applicable implementation plan. Factors other than temperatures, for example the fraction of travel in a hot stabilized engine mode, may be modified after interagency consultation according to R18-2-1405 if the newer estimates incorporate additional or more geographically specific information or represent a logically estimated trend in such factors beyond the period considered in the applicable implementation plan.

B. For serious, severe, and extreme ozone nonattainment areas and serious carbon monoxide areas after January 1, 1995, estimates of regional transportation-related emissions used to support conformity determinations shall be made according to procedures which meet the requirements in subsections (B)(1) through (5).
1. A network-based transportation demand model or models relating travel demand and transportation system performance to land-use patterns, population demographics, employment, transportation infrastructure, and transportation policies shall be used to estimate travel within the metropolitan planning area of the nonattainment area. Such a model shall possess all of the following attributes:
   a. The modeling methods and the functional relationships used in the model shall in all respects be in accordance with acceptable professional practice and reasonable for purposes of emission estimation.
   b. The network-based model shall be validated against ground counts for a base year that is not more than 10 years prior to the date of the conformity determination. Land use, population, and other inputs shall be based on the best available information and appropriate to the validation base year.
   c. For peak-hour or peak-period traffic assignments, a capacity sensitive assignment methodology shall be used.
   d. Zone-to-zone travel times used to distribute trips between origin and destination pairs shall be in reasonable agreement with the travel times which result from the process of assignment of trips to network links. Where use of transit currently is anticipated to be a significant factor in satisfying transportation demand, these times should also be used for modeling mode splits.
   e. Free-flow speeds on network links shall be based on empirical observations.
   f. Peak and off-peak travel demand and travel times shall be provided.
   g. Trip distribution and mode choice shall be sensitive to pricing, where pricing is a significant factor, if the network model is capable of such determinations and the necessary information is available.
   h. The model shall utilize and document a logical correspondence between the assumed scenario of land development and use and the future transportation system for which emissions are being estimated. Reliance on a formal land-use model is not specifically required but is encouraged.
   i. A dependence of trip generation on the accessibility of destinations via the transportation system, including pricing, is strongly encouraged but not specifically required, unless the network model is capable of such determinations and the necessary information is available.
   j. A dependence of regional economic and population growth on the accessibility of destinations via the

transportation system is strongly encouraged but not specifically required, unless the network model is capable of such determinations and the necessary information is available.

k. Consideration of emissions increases from construction-related congestion is not specifically required.

2. Highway Performance Monitoring System (HPMS) estimates of vehicle miles traveled shall be considered the primary measure of vehicle miles traveled within the portion of the nonattainment or maintenance area and for the functional classes of roadways included in HPMS, for urban areas which are sampled on a separate urban area basis. A factor or factors shall be developed to reconcile and calibrate the network-based model estimates of vehicle miles traveled in the base year of its validation to the HPMS estimates for the same period, and these factors shall be applied to model estimates of future vehicle miles traveled. In this factoring process, consideration will be given to differences in the facility coverage of the HPMS and the modeled network description. Departure from these procedures is permitted with the concurrence of USDOT and EPA.
3. Reasonable methods shall be used to estimate nonattainment area vehicle travel on off-network roadways within the urban transportation planning area and on roadways outside the urban transportation planning area.
4. Reasonable methods in accordance with good practice shall be used to estimate traffic speeds and delays in a manner that is sensitive to the estimated volume of travel on each roadway segment represented in the network model.

C. For areas which are not serious, severe, or extreme ozone nonattainment areas or serious carbon monoxide areas, or before January 1, 1995:

1. Procedures which satisfy some or all of the requirements of subsection (A) shall be used in all areas not subject to subsection (A) in which those procedures have been the previous practice of the MPO.
2. Regional emissions may be estimated by methods which do not explicitly or comprehensively account for the influence of land use and transportation infrastructure on vehicle miles traveled and traffic speeds and congestion. Such methods shall account for VMT growth by extrapolating historical VMT or projecting future VMT by considering growth in population and historical growth trends for vehicle miles travelled per person. These methods shall also consider future economic activity, transit alternatives, and transportation system policies.

D. This subsection applies to any nonattainment or maintenance area or any portion thereof which does not have a metropolitan transportation plan or TIP and whose projects are not part of the emissions analysis of any MPO's metropolitan transportation plan or TIP (because the nonattainment or maintenance area or portion thereof does not contain a metropolitan planning area or portion of a metropolitan planning area and is not part of a Metropolitan Statistical Area or Consolidated Metropolitan Statistical Area which is or contains a nonattainment or maintenance area).

1. Conformity demonstrations for projects in these areas may satisfy the requirements of R18-2-1420, R18-2-1424, and R18-2-1427 with one regional emissions analysis which includes all the regionally significant transportation projects in the nonattainment or maintenance area or portion thereof.
2. The requirements of R18-2-1420 shall be satisfied according to the procedures in R18-2-1420(C), with references to the "transportation plan" taken to mean the statewide transportation plan.
3. The requirements of R18-2-1424 and R18-2-1427 which reference "transportation plan" or "TIP" shall be taken to mean those projects in the statewide transportation plan or statewide TIP which are in the nonattainment or maintenance area or portion thereof.
4. The requirement of R18-2-1429(A)(2) shall be satisfied if all of the following are met:
   a. The project is included in the regional emissions analysis which includes all regionally significant highway and transportation projects in the nonattainment or maintenance area or portion thereof and supports the most recent conformity determination made according to the requirements of R18-2-1420, R18-2-1424 or R18-2-1427 (as modified by subsections (D)(2) and (D)(3)), as appropriate for the time period and pollutant.
   b. The project's design concept and scope have not changed significantly from those which were included in the regional emissions analysis or in a manner which would significantly impact use of the facility.

E. For areas in which the implementation plan does not identify construction-related fugitive PM_{10} as a contributor to the nonattainment problem, the fugitive PM_{10} emissions associated with highway and transit project construction are not required to be considered in the regional emissions analysis.

F. In PM_{10} nonattainment and maintenance areas with implementation plans which identify construction-related fugitive PM_{10} as a contributor to the nonattainment problem, the regional PM_{10} emissions analysis shall consider construction-related fugitive PM_{10} and shall account for the level of construction activity, the fugitive PM_{10} control measures in the applicable implementation plan, and the dust-producing capacity of the proposed activities.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1431. Procedures for Determining Localized CO and PM_{10} Concentrations (Hot-spot Analysis)

A. In the following cases, CO hot-spot analyses shall be based on the applicable air quality models, data bases, and other requirements specified in 40 CFR 51 Appendix W ("Guideline on Air Quality Models (Revised)" (1988), supplement (A) (1987) and supplement (B) (1993), EPA publication no. 450/2-78-027R, incorporated by reference and on file with the Department and with the Secretary of State), unless, after the interagency consultation process described in R18-2-1405 and with the approval of the EPA Regional Administrator, these models, data bases, and other requirements are determined to be inappropriate:

1. For projects in or affecting locations, areas, or categories of sites which are identified in the applicable implementation plan as sites of current violation or possible current violation;
2. For those intersections at Level-of-Service D, E, or F, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes related to a new project in the vicinity;
3. For any project involving or affecting any of the intersections which the applicable implementation plan identifies as the top three intersections in the nonattainment or maintenance area based on the highest traffic volumes;
4. For any project involving or affecting any of the intersections which the applicable implementation plan identifies

as the top three intersections in the nonattainment or maintenance area based on the worst Level-of-Service;

5. Where use of the "Guideline" models is practicable and reasonable given the potential for violations.

B. In cases other than those described in subsection (A), other quantitative methods may be used if they represent reasonable and common professional practice.

C. CO hot-spot analyses shall include the entire project and may be performed only after the major design features which will significantly impact CO concentrations have been identified. The background concentration may be estimated using the ratio of future to current traffic multiplied by the ratio of future to current emission factors.

D. PM_{10} hot-spot analysis shall be performed for projects which are located at sites at which violations have been verified by monitoring, and at sites which have essentially identical vehicle and roadway emission and dispersion characteristics (including sites near one at which a violation has been monitored). The projects which require PM_{10} hot-spot analysis shall be determined through the interagency consultation process required in R18-2-1405. In PM_{10} nonattainment and maintenance areas, new or expanded bus and rail terminals and transfer points which increase the number of diesel vehicles congregating at a single location require hot-spot analysis. USDOT may choose to make a categorical conformity determination on bus and rail terminals or transfer points based on appropriate modeling of various terminal sizes, configurations, and activity levels. The requirements of this subsection for quantitative hot-spot analysis will not take effect until EPA releases modeling guidance on this subject and announces in the Federal Register that these requirements are in effect.

E. Hot-spot analysis assumptions shall be consistent with those in the regional emissions analysis for those inputs which are required for both analyses.

F. PM_{10} or CO mitigation or control measures shall be assumed in the hot-spot analysis only where there are enforceable written commitments from the project sponsor or operator to the implementation of such measures, as required by R18-2-1433(A).

G. CO and PM_{10} hot-spot analyses are not required to consider construction-related activities which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established "Guideline" methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1432. Using the Motor Vehicle Emissions Budget in the Applicable Implementation Plan or Implementation Plan Submission

A. In interpreting an applicable implementation plan or implementation plan submission with respect to its motor vehicle emissions budget, ADOT or the MPO where one exists and USDOT may not infer additions to the budget that are not explicitly intended by the implementation plan or submission. Unless the implementation plan explicitly quantifies the amount by which motor vehicle emissions could be higher while still allowing a demonstration of compliance with the milestone, attainment, or maintenance requirement and explicitly states an intent that some or all of this additional amount should be available to ADOT or the MPO and USDOT in the emission budget for conformity purposes, ADOT or the MPO may not interpret the budget to be higher than the implementation plan's estimate of future emissions. This applies in particular to applicable implementation plans or submissions which demonstrate that after implementation of control measures in the implementation plan any of the following apply:

1. Emissions from all sources will be less than the total emissions that would be consistent with a required demonstration of an emissions reduction milestone.
2. Emissions from all sources will result in achieving attainment prior to the attainment deadline or ambient concentrations in the attainment deadline year will be lower than needed to demonstrate attainment.
3. Emissions will be lower than needed to provide for continued maintenance.

B. If an applicable implementation plan submitted before November 24, 1993, demonstrates that emissions from all sources will be less than the total emissions that would be consistent with attainment and quantifies that "safety margin," the state may submit a SIP revision which assigns some or all of this safety margin to highway and transit mobile sources for the purposes of conformity. Such a SIP revision, once it is endorsed by the governor and has been subject to a public hearing, may be used for the purposes of transportation conformity before it is approved by EPA.

C. A conformity demonstration shall not trade emissions among budgets which the applicable implementation plan or implementation plan submission allocates for different pollutants or precursors, or among budgets allocated to motor vehicles and other sources, without a SIP revision or a SIP which establishes mechanisms for such trades.

D. If the applicable implementation plan or implementation plan submission estimates future emissions by geographic subarea of the nonattainment area, ADOT or the MPO where one exists and USDOT are not required to consider this to establish subarea budgets, unless the applicable implementation plan or implementation plan submission explicitly indicates an intent to create such subarea budgets for the purposes of conformity.

E. If a nonattainment area includes more than one MPO, the SIP may establish motor vehicle emissions budgets for each MPO. Otherwise, the MPOs shall collectively make a conformity determination for the entire nonattainment area.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1433. Enforceability of Design Concept and Scope and Project-level Mitigation and Control Measures

A. Prior to determining that a transportation project is in conformity, ADOT, the MPO where one exists, other recipient of funds designated under 23 U.S.C. or the Federal Transit Act, FHWA, or FTA shall obtain from the project sponsor or operator enforceable written commitments to implement in the construction of the project and operation of the resulting facility or service any project-level mitigation or control measures which are identified as conditions for NEPA process completion with respect to local PM_{10} or CO impacts. Before making conformity determinations enforceable written commitments shall also be obtained for project-level mitigation or control measures which are conditions for making conformity determinations for a transportation plan or TIP and included in the project design concept and scope which is used in the regional emissions analysis required by R18-2-1418 through R18-2-1420 and R18-2-1422 through R18-2-1424 or used in the project-level hot-spot analysis required by R18-2-1416 and R18-2-1421.

B. Project sponsors voluntarily committing to mitigation measures to facilitate positive conformity determinations shall provide enforceable written commitments and comply with the obligations of such commitments.

C. Enforceable written commitments to mitigation or control measures shall be obtained prior to a positive conformity determination, and that project sponsors shall comply with such commitments.

D. During the control strategy and maintenance periods, if ADOT, the MPO, or project sponsor believes the mitigation or control measure is no longer necessary for conformity, the project sponsor or operator may be relieved of its obligation to implement the mitigation or control measure if it can demonstrate that the requirements of R18-2-1416, R18-2-1418, and R18-2-1419 are satisfied without the mitigation or control measure and so notifies the agencies involved in the interagency consultation process required under R18-2-1405. ADOT or the MPO where one exists and USDOT shall confirm that the transportation plan and TIP still satisfy the requirements of R18-2-1418 and R18-2-1419 and that the project still satisfies the requirements of R18-2-1416, and therefore that the conformity determinations for the transportation plan, TIP, and project are still valid.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1434. Exempt Projects

Notwithstanding the other requirements of this subpart, highway and transit projects of the types listed in Table 2 are exempt from the requirement that a conformity determination be made. Such projects may proceed toward implementation even in the absence of a conforming transportation plan and TIP. A particular action of the type listed in Table 2 is not exempt if ADOT or the MPO where one exists in consultation with other agencies pursuant to R18-2-1405, the EPA, and the FHWA (in the case of a highway project) or the FTA (in the case of a transit project) concur that it has potentially adverse emissions impacts for any reason. States and MPOs shall ensure that exempt projects do not interfere with TCM implementation.

Table 2
Exempt Projects
SAFETY

1. Railroad or highway crossing.
2. Hazard elimination program.
3. Safer non-federal-aid system roads.
4. Shoulder improvements.
5. Increasing sight distance.
6. Safety improvement program.
7. Traffic control devices and operating assistance other than signalization projects.
8. Railroad or highway crossing warning devices.
9. Guardrails, median barriers, crash cushions.
10. Pavement resurfacing or rehabilitation.
11. Pavement marking demonstration.
12. Emergency relief (23 U.S.C. 125).
13. Fencing.
14. Skid treatments.
15. Safety roadside rest areas.
16. Adding medians.
17. Truck climbing lanes outside the urbanized area.
18. Lighting improvements.
19. Widening narrow pavements or reconstructing bridges (no additional travel lanes).
20. Emergency truck pullovers.

MASS TRANSIT

1. Operating assistance to transit agencies.
2. Purchase of support vehicles.
3. Rehabilitation of transit vehicles. (In PM_{10} nonattainment or maintenance areas, such projects are exempt only if they are in compliance with control measures in the applicable implementation plan.)
4. Purchase of office, shop, and operating equipment for existing facilities.
5. Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.).
6. Construction or renovation of power, signal, and communications systems.
7. Construction of small passenger shelters and information kiosks.
8. Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures).
9. Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way.
10. Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet. (In PM_{10} nonattainment or maintenance areas, such projects are exempt only if they are in compliance with control measures in the applicable implementation plan.)
11. Construction of new bus or rail storage or maintenance facilities categorically excluded in 23 CFR 771.

AIR QUALITY

1. Continuation of ride-sharing and van-pooling promotion activities at current levels.
2. Bicycle and pedestrian facilities.

OTHER

1. Specific activities which do not involve or lead directly to construction, such as:
   a. Planning and technical studies.
   b. Grants for training and research programs.
   c. Planning activities conducted pursuant to Titles 23 and 49 U.S.C.
   d. Federal-aid systems revisions.
2. Engineering to assess social, economic and environmental effects of the proposed action or alternatives to that action.
3. Noise attenuation.
4. Advance land acquisitions (23 CFR 712 or 23 CFR 771).
5. Acquisition of scenic easements.
6. Plantings, landscaping, etc.
7. Sign removal.
8. Directional and informational signs.
9. Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities).
10. Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational or capacity changes.

Historical Note

Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1435. Projects Exempt from Regional Emissions Analyses

Notwithstanding the other requirements of this subpart, highway and transit projects of the types listed in Table 3 are exempt from regional emissions analysis requirements. The local effects of these projects with respect to CO or PM_{10} concentrations shall be considered to determine if a hot-spot analysis is required prior to making a project-level conformity determination. These projects may then proceed to the project development process even in the absence of a conforming transportation plan and TIP. A particular action of the type listed in Table 3 is not exempt from regional emissions analysis if the MPO in consultation with other agencies pursuant to R18-2-1405, the EPA, and the FHWA (in the case of a highway project) or the FTA (in the case of a transit project) concur that it has potential regional impacts for any reason.

Table 3
Projects Exempt From Regional Emissions Analyses

1. Intersection channelization projects.
2. Intersection signalization projects at individual intersections.
3. Interchange reconfiguration projects.
4. Changes in vertical and horizontal alignment.
5. Truck size and weight inspection stations.
6. Bus terminals and transfer points.

Historical Note
Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1436. Special Provisions for Nonattainment Areas Which are Not Required to Demonstrate Reasonable Further Progress and Attainment

A. This Section applies in the following areas:
1. Rural transport ozone nonattainment areas,
2. Marginal ozone areas,
3. Submarginal ozone areas,
4. Transitional ozone areas,
5. Incomplete data ozone areas,
6. Moderate CO areas with a design value of 12.7 ppm or less,
7. Not classified CO areas.

B. The criteria and procedures in R18-2-1422 through R18-2-1424 will remain in effect throughout the control strategy period for transportation plans, TIPs, and projects (not from a conforming plan and TIP) in lieu of the procedures in R18-2-1418 through R18-2-1420, except as otherwise provided in subsection (C).

C. The state or MPO may voluntarily develop an attainment demonstration and corresponding motor vehicle emissions budget like those required in areas with higher nonattainment classifications. In this case, the state shall submit an implementation plan revision which contains that budget and attainment demonstration. Once EPA has approved this implementation plan revision, the procedures in R18-2-1418 through R18-2-1420 apply in lieu of the procedures in R18-2-1422 through R18-2-1424.

Historical Note
Adopted effective June 15, 1995 (Supp. 95-2).

R18-2-1437. Reserved

R18-2-1438. General Conformity for Federal Actions

The following subparts of 40 CFR 93, Determining Conformity of Federal Actions to State or Federal Implementation Plans, and all accompanying appendices, adopted as of July 1, 1994, and no future editions, are incorporated by reference. These standards are on file with the Office of the Secretary of State and with the Department and shall be applied by the Department.

Subpart B - Determining Conformity of General Federal Actions to State or Federal Implementation Plans (58 FR 63253, November 30, 1993).

Historical Note
Adopted effective January 31, 1995 (Supp. 95-1).

ARTICLE 15. FOREST AND RANGE MANAGEMENT BURNS

R18-2-1501. Definitions

In addition to the definitions contained in A.R.S. § 49-501 and R18-2-101, in this Article:

1. "Activity fuels" means those fuels created by human activities such as thinning or logging.
2. "ADEQ" means the Department of Environmental Quality.
3. "Annual emissions goal" means the annual establishment in cooperation with the F/SLMs, under R18-2-1503(G), of a planned quantifiable value of emissions reduction from prescribed fires and fuels management activities.
4. "Burn plan" means the ADEQ form that includes information on the conditions under which a burn will occur with details of the burn and smoke management prescriptions.
5. "Burn prescription" means, with regard to a burn project, the pre-determined area, fuel, and weather conditions required to attain planned resource management objectives.
6. "Burn project" means an active or planned prescribed burn, including a wildland fire use incident.
7. "Duff" means forest floor material consisting of decomposing needles and other natural materials.
8. "Emission reduction techniques (ERT)" means methods for controlling emissions from prescribed fires to minimize the amount of emission output per unit of area burned.
9. "Federal land manager (FLM)" means any department, agency, or agent of the federal government, including the following:
   a. United States Forest Service,
   b. United States Fish and Wildlife Service,
   c. National Park Service,
   d. Bureau of Land Management,
   e. Bureau of Reclamation,
   f. Department of Defense,
   g. Bureau of Indian Affairs, and
   h. Natural Resources Conservation Service.
10. "F/SLM" means a federal land manager or a state land manager.
11. "Local fire management officer" means a person designated by a F/SLM as responsible for fire management in a local district or area.
12. "Mop-up" means the act of extinguishing or removing burning material from a prescribed fire to reduce smoke impacts.
13. "National Wildfire Coordinating Group" means the national inter-agency group of federal and state land managers that shares similar wildfire suppression programs and has established standardized inter-agency training courses and qualifications for fire management positions.
14. "Non-burning alternatives to fire" means techniques that replace fire for at least five years as a means to treat activity fuels created to achieve a particular land management objective (e.g., reduction of fuel-loading, manipulation of fuels, enhancement of wildlife habitat, and ecosystem restoration). These alternatives are not used in conjunction with fire. Techniques used in conjunction with fire are referred to as emission reduction techniques (ERTs).
15. "Planned resource management objectives" means public interest goals in support of land management agency objectives including silviculture, wildlife habitat management, grazing enhancement, fire hazard reduction, wilderness management, cultural scene maintenance, weed abatement, watershed rehabilitation, vegetative manipulation, and disease and pest prevention.
16. "Prescribed burning" means the controlled application of fire to wildland fuels that are in either a natural or modified state, under certain burn and smoke management prescription conditions that have been specified by the land manager in charge of or assisting the burn, to attain planned resource management objectives. Prescribed burning does not include a fire set or permitted by a pub-

lic officer to provide instruction in fire fighting methods, or construction or residential burning under R18-2-602.

17. "Prescribed fire manager" means a person designated by a F/SLM as responsible for prescribed burning for that land manager.
18. "Smoke management prescription" means the predetermined meteorological conditions that affect smoke transport and dispersion under which a burn could occur without adversely affecting public health and welfare.
19. "Smoke management techniques (SMT)" means management and dispersion practices used during a prescribed burn or wildland fire use incident which affect the direction, duration, height, or density of smoke.
20. "Smoke management unit" means any of the geographic areas defined by ADEQ whose area is based on primary watershed boundaries and whose outline is determined by diurnal windflow patterns that allow smoke to follow predictable drainage patterns. A map of the state divided into the smoke management units is on file with ADEQ.
21. "State land manager (SLM)" means any department, agency, or political subdivision of the state government including the following:
    a. State Land Department,
    b. Department of Transportation,
    c. Department of Game and Fish, and
    d. Parks Department.
22. "Wildfire" means an unplanned wildland fire subject to appropriate control measures. Wildfires include those incidents where suppression may be limited for safety, economic, or resource concerns.
23. "Wildland fire use" means a wildland fire that is ignited by natural causes, such as lightning, and is managed using the same controls and for the same planned resource management objectives as prescribed burning.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4).
Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1502. Applicability

A. A F/SLM that is conducting or assisting a prescribed burn shall follow the requirements of this Article.

B. A private or municipal burner with whom ADEQ has entered into a memorandum of agreement shall follow the requirements of this Article.

C. The provisions of this Article apply to all areas of the state except Indian Trust lands. All federally managed lands and all state lands, parks, and forests are under the jurisdiction of ADEQ in matters relating to air pollution from prescribed burning.

D. Notwithstanding subsection (C), ADEQ and any Indian tribe may enter into a memorandum of agreement to implement this Article.

E. ADEQ and any private or municipal prescribed burner may enter into a memorandum of agreement to implement this Article.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4).
Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1503. Annual Registration, Program Evaluation and Planning

A. Each F/SLM shall register annually with ADEQ on a form prescribed by ADEQ, all planned burn projects, including areas planned for wildland fire use.

B. Each planned year extends from January 1 of the registration year to December 31 of the same year. Each F/SLM shall use best efforts to register before December 31 and no later than January 31 of each year.

C. A F/SLM shall include the following information on the registration form:

1. The F/SLM's name, address, and business telephone number;
2. The name, address, and business telephone number of an air quality representative who will provide technical support to ADEQ for decisions regarding prescribed burning. The same air quality representative may be selected by more than one F/SLM;
3. All prescribed burn projects and potential wildland fire use areas planned for the next year;
4. Maximum project and annual acres to be burned, maximum daily acres to be burned, fuel types within project area, and planned use of emission reduction techniques to support the annual emissions goal for each prescribed burn project;
5. Planned use of any smoke management techniques for each prescribed burn project;
6. Maximum project and annual acres projected to be burned, maximum daily acres projected to be burned, and a map of the anticipated project area, fuel types and loading within the planned area for an area the F/SLM anticipates for wildland fire use;
7. A list of all burn projects that were completed during the previous year;
8. Project area for treatment, treatment type, fuel types to be treated, and activity fuel loading to support the annual emissions goal for areas to be treated using non-burning alternatives to fire; and
9. The area treated using non-burning alternatives to fire during the previous year including the number of acres, the specific types of alternatives utilized, and the location of these areas.

D. After consultation with the F/SLM, ADEQ may request additional information for registration of prescribed burns and wildland fire use to support regional coordination of smoke management, annual emission goal setting using ERTs, and non-burning alternatives to fire.

E. A F/SLM may amend a registration at any time with a written submission to ADEQ.

F. ADEQ accepts a facsimile or other electronic method as a means of complying with the deadline for registration. If an electronic means is used, the F/SLM shall deliver the original paper registration form to ADEQ for its records. ADEQ shall acknowledge in writing the receipt of each registration.

G. ADEQ shall hold a meeting after January 31 and before April 1 of each year between ADEQ and F/SLMs to evaluate the program and cooperatively establish the annual emission goal. The annual emission goal shall be developed to minimize prescribed fire emissions to the maximum extent feasible using emission reduction techniques and alternatives to burning subject to economic, technical, and safety feasibility criteria, and consistent with land management objectives.

H. At least once every five years, ADEQ shall request long-term projections of future prescribed fire and wildland fire use activity from the F/SLMs to support planning for visibility impairment and assessment of other air quality concerns by ADEQ.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4).
Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1504. Prescribed Burn Plan

Each F/SLM planning a prescribed burn shall complete and submit to ADEQ the "Burn Plan" form supplied by ADEQ no later than 14 days before the date on which the F/SLM requests permission to burn. ADEQ shall consider the information supplied on the Burn Plan Form as binding conditions under which the burn shall be conducted. A Burn Plan shall be maintained by ADEQ until notification from the F/SLM of the completion of the burn project. Revisions to the Burn Plan for a burn project shall be submitted in writing no later than 14 days before the date on which the F/SLM requests permission to burn. To facilitate the Daily Burn authorization process under R18-2-1505, the F/SLM shall include on the Burn Plan form:

1. An emergency telephone number that is answered 24 hours a day, seven days a week;
2. Burn prescription;
3. Smoke management prescription;
4. The number of acres to be burned, the quantity and type of fuel, type of burn, and the ignition technique to be used;
5. The land management objective or purpose for the burn such as restoration or maintenance of ecological function and indicators of fire resiliency;
6. A map depicting the potential impact of the smoke unless waived either orally or in writing by ADEQ. The potential impact shall be determined by mapping both the daytime and nighttime smoke path and down-drainage flow for 15 miles from the burn site, with smoke-sensitive areas delineated. The map shall use the appropriate scale to show the impacts of the smoke adequately;
7. Modeling of smoke impacts unless waived either orally or in writing by ADEQ, for burns greater than 250 acres per day, or greater than 50 acres per day if the burn is within 15 miles of a Class I Area, an area that is non-attainment for particulates, a carbon monoxide non-attainment area, or other smoke-sensitive area. In consultation with the F/SLM, ADEQ shall provide guidelines on modeling;
8. The name of the official submitting the Burn Plan on behalf of the F/SLM; and
9. After consultation with the F/SLM, any other information to support the Burn Plan needed by ADEQ to assist in the Daily Burn authorization process for smoke management purposes or assessment of contribution to visibility impairment of Class I areas.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4).
Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1505. Prescribed Burn Requests and Authorization

A. Each F/SLM planning a prescribed burn, shall complete and submit to ADEQ the "Daily Burn Request" form supplied by ADEQ. The Daily Burn Request form shall include:
1. The contact information of the F/SLM conducting the burn;
2. Each day of the burn;
3. The area to be burned on the day for which the Burn Request is submitted, with reference to the Burn Plan, including size, legal location to the section, and latitude and longitude to the minute;
4. Projected smoke impacts; and
5. Any local conditions or circumstances known to the F/SLM that, if conveyed to ADEQ, could impact the Daily Burn authorization process.

B. After consultation with the F/SLM, ADEQ may request additional information related to the burn, meteorological, smoke dispersion, or air quality conditions to supplement the Daily Burn Request form and to aid in the Daily Burn authorization process.

C. The F/SLM shall submit the Daily Burn Request form to ADEQ as expeditiously as practicable, but no later than 2:00 p.m. of the business day preceding the burn. An original form, a facsimile, or an electronic information transfer are acceptable submittals.

D. An F/SLM shall not ignite a prescribed burn without receiving the approval of ADEQ, as follows:
1. ADEQ shall approve, approve with conditions, or disapprove a burn on the same business day as the Burn Request submittal.
2. If ADEQ fails to address a Burn Request by 10:00 p.m. of the business day on which the request is submitted, the Burn Request is approved by default after the burner makes a good faith effort to contact ADEQ to confirm that the Burn Request was received.
3. ADEQ may communicate its decision by verbal, written, or electronic means. ADEQ shall provide a written or electronic reply if requested by the F/SLM.

E. If weather conditions cease to conform to those in the smoke management prescription of either the Burn Plan or an Approval with Conditions, the F/SLM shall take appropriate action to reduce further smoke impacts, ensure safe and appropriate fire control, and notify the public when necessary. After consultation with ADEQ, the smoke management prescription or burn plan may be modified.

F. The F/SLM shall ensure that there is appropriate signage and notification to protect public safety on transportation corridors including roadways and airports during a prescribed fire.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4).
Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1506. Smoke Dispersion Evaluation

ADEQ shall approve, approve with conditions, or disapprove a Daily Burn Request submitted under R18-2-1505, by using the following factors for each smoke management unit:

1. Analysis of the emissions from burns in progress and residual emissions from previous burns on a day-to-day basis;
2. Analysis of emissions from active wildland fire use incidents, and active multiple-day burns, and consideration of potential long-term emissions estimates;
3. Analysis of the emissions from wildfires greater than 100 acres and consideration of their potential long-term growth;
4. Local burn conditions;
5. Burn prescription and smoke management prescription from the applicable Burn Plan;
6. Existing and predicted local air quality;
7. Local and synoptic meteorological conditions;
8. Type and location of areas to be burned;
9. Protection of the national visibility goal for Class I Areas under § 169A(a)(1) of the Act and 40 CFR 51.309;
10. Assessment of duration and intensity of smoke emissions to minimize cumulative impacts;
11. Minimization of smoke impacts in Class I Areas, areas that are non-attainment for particulate matter, carbon monoxide non-attainment areas, or other smoke-sensitive areas; and

12. Protection of the National Ambient Air Quality Standards.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4).
Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1507. Prescribed Burn Accomplishment; Wildfire Reporting

A. Each F/SLM conducting a prescribed burn shall complete and submit to ADEQ the "Burn Accomplishment" form supplied by ADEQ. For each burn approval, the F/SLM shall submit a Burn Accomplishment form to ADEQ by 2:00 p.m. of the business day following the approved burn. The F/SLM shall include the following information on the Burn Accomplishment form:
1. Any known conditions or circumstances that could impact the Daily Burn decision process;
2. The date, location, fuel type, fuel loading, and acreage accomplishments;
3. The ERTs and SMTs described in R18-2-1509 and R18-2-1510, respectively, and may include any further ERTs and SMTs that become available, that the F/SLM used to reduce emissions or manage the smoke from the burn.

B. The F/SLM shall submit the Burn Accomplishment form as an original form, a facsimile, or an electronic information transfer.

C. ADEQ shall maintain a record of Burn Requests, Burn Approvals/Conditional Approvals/Denials and Burn Accomplishments for five years.

D. The F/SLM in whose jurisdiction a wildfire occurs shall make available to ADEQ no later than the day after the activity all required information for wildfire incidents that burned more than 100 acres per day in timber or slash fuels or 300 acres per day in brush or grass fuels. For each day of a wildfire incident that exceeds the daily activity threshold, the F/SLM shall provide the location, an estimate of predominant fuel type and quantity consumed, and an estimate of the area blackened that day.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4).
Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1508. Wildland Fire Use: Plan, Authorization, Monitoring; Inter-agency Consultation; Status Reporting

A. In order for ADEQ to participate in the wildland fire use decision-making process, the F/SLM shall notify ADEQ as soon as practicable of any wildland fire use incident projected to attain or attaining a size of 50 acres of timber fuel or 250 acres of brush or grass fuel.

B. For each wildland fire use incident that has been declared as such by the F/SLM, the F/SLM shall complete and submit to ADEQ a Wildland Fire Use Burn Plan in a format approved by ADEQ in cooperation with the F/SLM. The F/SLM shall submit the Wildland Fire Use Burn Plan to ADEQ as soon as practicable but no later than 72 hours after the wildland fire use incident is declared or under consideration for such designation. The F/SLM shall include the following information in the Wildland Fire Use Burn Plan:
1. An emergency telephone number that is answered 24 hours a day, seven days a week;
2. Anticipated burn prescription;
3. Anticipated smoke management prescription;
4. The estimated daily number of acres, quantity, and type of fuel to be burned;
5. The anticipated maximum allowable perimeter or size with map;
6. Information on the condition of the area to be burned, such as whether it is in maintenance or restoration, its ecological function, and other indicators of fire resiliency;
7. The anticipated duration of the wildland fire use incident;
8. The anticipated long-range weather trends for the site;
9. A map depicting the potential impact of the smoke. The potential impact shall be determined by mapping both the daytime and nighttime smoke path and down-drainage flow for 15 miles from the wildland fire use incident, with smoke-sensitive areas delineated. Mapping is mandatory unless waived either orally or in writing by ADEQ. The map shall use the appropriate scale to show the impacts of the smoke adequately; and
10. Modeling or monitoring of smoke impacts, if requested by ADEQ after consultation with the F/SLM.

C. ADEQ shall approve or disapprove a Wildland Fire Use Burn Plan within three hours of receipt. ADEQ shall consult directly with the requesting F/SLM before disapproving a Wildland Fire Use Burn Plan. If ADEQ fails to address the Wildland Fire Use Burn Plan within the time allotted, the Plan is approved by default under the condition that the F/SLM makes a good faith effort to contact ADEQ to confirm that the Plan was received. Approval by ADEQ of a Wildland Fire Use Burn Plan is binding upon ADEQ for the duration of the wildland fire use incident, unless smoke from the incident creates a threat to public health or welfare. If a threat to public health or welfare is created, ADEQ shall consult with the F/SLM regarding the situation and develop a joint action plan for reducing further smoke impacts.

D. The F/SLM shall submit a Daily Status Report for each wildland fire use incident to ADEQ for each day of the burn that the fire burns more than 100 acres in timber or slash fuels or 300 acres in brush or grass fuels. The F/SLM shall include a synopsis of smoke behavior, future daily anticipated growth, and location of the activity of the wildland fire use incident in the Daily Status Report.

E. The F/SLM shall consult with ADEQ prior to initiating human-made ignition on the wildland fire use incident when greater than 250 acres is anticipated to be burned by the ignition. Emergency human-made ignition on the incident for protection of public or fire-fighter safety does not require consultation with ADEQ regardless of the size of the area to be burned.

F. The F/SLM shall ensure that there is appropriate signage and notification to protect public safety on transportation corridors including roadways and airports during a wildland fire use incident.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4).
Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1509. Emission Reduction Techniques

A. Each F/SLM conducting a prescribed burn shall implement as many Emission Reduction Techniques as are feasible subject to economic, technical, and safety feasibility criteria, and land management objectives.

B. Emission Reduction Techniques include:
1. Reducing biomass to be burned by use of techniques such as yarding or consolidation of unmerchandisable material, multi-product timber sales, or public firewood access, when economically feasible;

2. Reducing biomass to be burned by fuel exclusion practices such as preventing the fire from consuming dead snags or dead and downed woody material through lining, application of fire-retardant foam, or water;
3. Using mass ignition techniques such as aerial ignition by helicopter to produce high intensity fires of high fuel density areas such as logging slash decks;
4. Burning only fuels essential to meet resource management objectives;
5. Minimizing consumption and smoldering by burning under conditions of high fuel moisture of duff and litter;
6. Minimizing fuel consumption and smoldering by burning under conditions of high fuel moisture of large woody fuels;
7. Minimizing soil content when slash piles are constructed by using brush blades on material-moving equipment and by constructing piles under dry soil conditions or by using hand piling methods;
8. Burning fuels in piles;
9. Using a backing fire in grass fuels;
10. Burning fuels with an air curtain destructor, as defined in R18-2-101, operated according to manufacturer specifications and meeting applicable state or local opacity requirements;
11. Extinguishing or mopping-up of smoldering fuels;
12. Chunking of piles and other consolidations of burning material to enhance flaming and fuel consumption, and to minimize smoke production;
13. Burning before litter fall;
14. Burning before green-up of fuels;
15. Burning before recently cut large fuels cure in areas with activity; and
16. Burning just before precipitation to reduce fuel smoldering and consumption.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4). Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1510. Smoke Management Techniques

A. Each F/SLM conducting a prescribed burn shall implement as many Smoke Management Techniques as are feasible subject to economic, technical, and safety feasibility criteria, and land management objectives.

B. Smoke management techniques include:
1. Burning from March 15 through September 15, when meteorological conditions allow for good smoke dispersion;
2. Igniting burns under good-to-excellent ventilation conditions;
3. Suspending operations under poor smoke dispersion conditions;
4. Considering smoke impacts on local community activities and land users;
5. Burning piles when other burns are not feasible, such as when snow or rain is present;
6. Using mass ignition techniques such as aerial ignition by helicopter to produce high intensity fires with short duration impacts;
7. Using all opportunities that meet the burn prescription and all burn locations to spread smoke impacts over a broader time period and geographic area;
8. Burning during optimum mid-day dispersion hours, with all ignitions in a burn unit completed by 3:00 p.m. to prevent trapping smoke in inversions or diurnal windflow patterns;
9. Providing information on the adverse impacts of using green or wet wood as fuel when public firewood access is allowed;
10. Implementing maintenance burning in a periodic rotation to shorten prescribed fire duration and to reduce excessive fuel accumulations that could result in excessive smoke production in a wildfire; and
11. Using wildland fire-use strategies to shift smoke into more favorable smoke dispersion seasons.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4). Former Section R18-2-1510 renumbered to R18-2-1511; new R18-2-1510 made by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1511. Monitoring

A. ADEQ may require a F/SLM to monitor air quality before or during a prescribed burn or a wildland fire use incident if necessary to assess smoke impacts. Air quality monitoring may be conducted using both federal and non-federal reference method as well as other techniques.

B. ADEQ may require a F/SLM to monitor weather before or during a prescribed burn or a wildland fire use incident, if necessary to predict or assess smoke impacts. After consultation with the F/SLM, ADEQ may also require the F/SLM to establish burn site or area-representative remote automated weather stations or their equivalent, having telemetry that allows retrieval on a real-time basis by ADEQ. An F/SLM shall give ADEQ notice and an opportunity to comment before making any change to a long-term established remote automated weather station.

C. A F/SLM shall employ the following types of monitoring, unless waived by ADEQ, for burns greater than 250 acres per day, or greater than 50 acres per day if the burn is within 15 miles of a Class I Area, an area that is non-attainment for particulate matter, carbon monoxide, or ozone, or other smoke-sensitive area:
1. Smoke plume measurements, using a format supplied by ADEQ; and
2. The release of pilot balloons (PIBALs) at the burn site to verify needed wind speed, direction, and stability. Instead of pilot balloons, a test burn at the burn site may be used for specific prescribed burns on a case-by-case basis as approved by ADEQ, to verify needed wind speed, direction, and stability.

D. An F/SLM shall make monitoring information required under subsection (C) available to ADEQ on the business day following the burn ignition.

E. The F/SLM shall keep on file for one year following the burn date any monitoring information required under this Section.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4). Former Section R18-2-1511 renumbered to R18-2-1512; new R18-2-1511 renumbered from R18-2-1510 and amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1512. Burner Qualifications

A. All burn projects shall be conducted by personnel trained in prescribed fire and smoke management techniques as required by the F/SLM in charge of the burn and established by National Wildfire Coordinating Group training qualifications.

B. A Prescribed Fire Boss or other local Fire Management Officer of the F/SLM having jurisdiction over prescribed burns shall have smoke management training obtained through one of the following:

1. Successful completion of a National Wildfire Coordinating Group or F/SLM-equivalent course addressing smoke management; or
2. Attendance at an ADEQ-approved smoke management workshop.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4). Former Section R18-2-1512 renumbered to R18-2-1513; new R18-2-1512 renumbered from R18-2-1511 and amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1513. Public Notification and Awareness Program; Regional Coordination

A. The Director shall conduct a public education and awareness program in cooperation with F/SLMs and other interested parties to inform the general public of the smoke management program described by this Article. The program shall include smoke impacts from prescribed fires and the role of prescribed fire in natural ecosystems.

B. ADEQ shall make annual registration, prescribed burn approval, and wildfire and wildland fire use activity information readily available to the public and to facilitate regional coordination efforts and public notification.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4). Former Section R18-2-1513 renumbered to R18-2-1514; new R18-2-1513 renumbered from R18-2-1512 and amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1514. Surveillance and Enforcement

A. An F/SLM conducting a prescribed burn shall permit ADEQ to enter and inspect burn sites unannounced to verify the accuracy of the Daily Burn Request, Burn Plan, or Accomplishment data as well as matching burn approval with actual conditions, smoke dispersion, and air quality impacts. On-ground site inspection procedures and aerial surveillance shall be coordinated by ADEQ and the F/SLM for safety purposes.

B. ADEQ may use remote automated weather station data if necessary to verify current and previous meteorological conditions at or near the burn site.

C. ADEQ may audit burn accomplishment data, smoke dispersion measurements, or weather measurements from previously conducted burns, if necessary to verify conformity with, or deviation from, procedures and authorizations approved by ADEQ.

D. Deviation from procedures and authorizations approved by ADEQ constitute a violation of this Article. Violations may require containment or mop-up of any active burns and may also require, in the Director's discretion, a five-day moratorium on ignitions by the responsible F/SLM. Violations of this Article are also subject to a civil penalty of not more than $10,000 per day per violation under A.R.S. § 49-463.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4). Former Section R18-2-1514 repealed; new R18-2-1514 renumbered from R18-2-1513 and amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

R18-2-1515. Forms; Electronic Copies; Information Transfers

A. ADEQ shall make available on paper and in electronically readable format any form required to be developed by ADEQ and completed by a F/SLM.

B. After consultation with an F/SLM, ADEQ may require the F/SLM to provide data in a manner that facilitates electronic transfers of information.

Historical Note

Adopted effective October 8, 1996 (Supp. 96-4). Amended by final rulemaking at 10 A.A.R. 388, effective March 16, 2004 (Supp. 04-1).

ARTICLE 16. VISIBILITY; REGIONAL HAZE

Article 16, consisting of Sections R18-2-1601 through R18-2-1606, made by final rulemaking at 9 A.A.R. 4541, effective December 2, 2003 (Supp. 03-4).

R18-2-1601. Definitions

In addition to the definitions contained in Articles 1 and 4 of this Chapter and A.R.S. § 49-401.01, the following definitions apply to this Article:

1. "Best available retrofit technology (BART)" means an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant emitted by an existing stationary facility. The emission limitation is established on a case-by-case basis under R18-2-1605.
2. "Existing stationary facility" means any of the following stationary sources of air pollutants, including any reconstructed source, which was not in operation before August 7, 1962, and was in existence on August 7, 1977, and has the potential to emit 250 tons per year or more of any air pollutant. A person who determines potential to emit shall count fugitive emissions to the extent quantifiable.
   a. Fossil-fuel fired steam electric plants of more than 250 million British thermal units per hour heat input;
   b. Coal cleaning plants (thermal dryers);
   c. Kraft pulp mills;
   d. Portland cement plants;
   e. Primary zinc smelters;
   f. Iron and steel mill plants;
   g. Primary aluminum ore reduction plants;
   h. Primary copper smelters;
   i. Municipal incinerators capable of charging more than 250 tons of refuse per day;
   j. Hydrofluoric, sulfuric, and nitric acid plants;
   k. Petroleum refineries;
   l. Lime plants;
   m. Phosphate rock processing plants;
   n. Coke oven batteries;
   o. Sulfur recovery plants;
   p. Carbon black plants (furnace process);
   q. Primary lead smelters;
   r. Fuel conversion plants;
   s. Sintering plants;
   t. Secondary metal production facilities;
   u. Chemical process plants;
   v. Fossil-fuel boilers of more than 250 million British thermal units per hour heat input;
   w. Petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels;
   x. Taconite ore processing facilities;
   y. Glass fiber processing plants; and
   z. Charcoal production facilities.
3. "Federal Land Manager" means the secretary of the department, or the secretary's designee, with authority over the Federal Class I area.
4. "Mandatory Federal Class I Area" means any area identified in 40 CFR 81.400 through 81.436.

5. "Reasonably attributable" means ascribable by visual observation or other techniques described in R18-2-1604.
6. "Reasonably attributable visibility impairment" means visibility impairment that is caused by the emission of air pollutants from one source, or a small group of sources.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 4541, effective December 2, 2003 (Supp. 03-4).

R18-2-1602. Applicability

This Article applies to any existing stationary source located in the state that may reasonably be anticipated to cause or contribute to visibility impairment in any mandatory Federal Class I area identified in 40 CFR 81.401 through 81.436. Mandatory Federal Class I areas within Arizona are: Chiricahua National Monument Wilderness, Chiricahua Wilderness, Galiuro Wilderness, Grand Canyon National Park, Mazatzal Wilderness, Mount Baldy Wilderness, Petrified Forest National Park, Pine Mountain Wilderness, Saguaro Wilderness, Sierra Ancha Wilderness, Superstition Wilderness, and Sycamore Canyon Wilderness.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 4541, effective December 2, 2003 (Supp. 03-4).

R18-2-1603. Certification of Impairment

A. A Federal Land Manager with authority over a mandatory Federal Class I area may certify to the Director, at any time, that a reasonably attributable visibility impairment exists in a mandatory Federal Class I area. The Director may also certify that reasonably attributable visibility impairment exists in any mandatory Federal Class I area to assure reasonable progress under section 169A(b)(2) of the Clean Air Act.

B. Documentation that supports the Federal Land Manager or Director's certification shall include:
1. The mandatory Federal Class I area for which visibility impairment is being certified,
2. Any information documenting the basis for the certification of impairment.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 4541, effective December 2, 2003 (Supp. 03-4).

R18-2-1604. Attribution Analysis; Finding

A. If a mandatory Federal Class I area is certified as having reasonably attributable visibility impairment, the Director shall conduct an attribution analysis to identify each existing stationary source that may be reasonably anticipated to cause or contribute to visibility impairment. The Director shall notify the Federal Land Manager, affected source or small group of sources, and local air pollution control officer of the intent to conduct an attribution analysis. The attribution analysis shall be based on the following:
1. Monitoring information obtained through the Arizona Class I Visibility Monitoring Network or special studies approved by ADEQ to ascertain:
   a. The times visibility impairment occurred, and
   b. The pollutants contributing to the visibility impairment;
2. Transport analysis or air quality modeling based upon meteorological records to ascertain whether the pollutants were transported to the mandatory Federal Class I area;
3. Other available studies, modeling analyses, and emissions inventories of point, area, and mobile source emissions to ascertain:
   a. The pollutant causing the impairment, and
   b. The source, or a small group of sources, emitting the pollutant;
4. Other relevant supporting documentation provided by the Federal Land Manager or Director used to make the draft attribution analysis finding; and
5. Consideration of any documentation provided by the source, a small group of sources, or other interested parties.

B. In conducting the attribution analysis, the Director shall use monitoring information, meteorological records, and emissions inventories that represent times and locations reasonably concurrent with the visibility impairment.

C. The Director shall issue a draft attribution finding that impairment has or has not occurred, and provide public notice of the draft attribution finding. The Director shall publish notice of the draft attribution finding in a newspaper of general circulation in each county containing the mandatory Federal Class I area and the affected source. The Director shall provide at least 30 days from the date of the notice for public comment. Written comments to the Director shall include the name of the person and the person's agent or attorney, if any, and shall clearly set forth reasons why the Director should review the draft attribution finding. The Director shall issue a final attribution finding after the public comment period. If the Director finds existing stationary sources cause or contribute to visibility impairment in a mandatory Federal Class I area, the source shall be subject to a BART Control Analysis under R18-2-1605.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 4541, effective December 2, 2003 (Supp. 03-4).

R18-2-1605. BART Control Analysis; Finding

A. The Director shall analyze for BART controls each existing stationary source for which a final attribution finding is made under R18-2-1604(C). The Director shall consider the following factors:
1. Available control technology;
2. New source performance standards (NSPS) in Article 9;
3. Alternative control systems if retrofitting to comply with applicable NSPS standards in Article 9 is infeasible;
4. Cost of compliance;
5. Energy and non-air quality environmental impacts of compliance;
6. Existing pollution control technology in use at the source or small group of sources;
7. Remaining useful life of the source or small group of sources;
8. Net environmental impact associated with the proposed emission control system;
9. Economic impacts associated with installing and operating the proposed emission control system; and
10. Degree of improvement in visibility anticipated to result from application of the proposed emission control system.

B. The Director shall issue a draft BART finding, and provide public notice of the draft BART finding. The Director shall publish notice of the draft BART finding in a newspaper of general circulation in each county containing the mandatory Federal Class I area and the affected source. The Director shall provide at least 30 days from the date of the notice for public comment. Written comments to the Director shall include the name of the person and the person's agent or attorney, and shall clearly set forth reasons why the Director should review the draft BART finding. The Director shall issue a final BART finding after the public comment period.

1. The Director shall submit each final BART finding to the Administrator as a revision to the SIP.
2. The Director shall require that each existing stationary source meet BART as expeditiously as practicable but in no case later than five years after EPA approval of the SIP revision.

C. If the Director determines that technological or economic limitations on the applicability of measurement methodology to a particular existing stationary source would make the imposition of an emission standard infeasible, the Director may, as part of the finding under subsection (B), prescribe a design, equipment, work practice, operational standard, or combination of design, equipment, work practice, or operational standard. The standard, to the degree possible, shall set forth the emission reduction to be achieved by implementation of the design, equipment, work practice, or operation, and shall provide for compliance by means that achieve equivalent results.

D. The Director shall make a finding that the attributable source satisfies the BART requirement if the attributable source:
1. Voluntarily applies best available retrofit technology;
2. Previously applied emission control standards equivalent to BART; or
3. Agrees to shutdown or curtail operations at the attributable source within five years of the finding. An attributable source that does not shutdown or curtail operations shall meet BART as expeditiously as practicable, but in no case later than five years after EPA's approval of the revision to the SIP.

E. If the Director determines that the imposition of BART or a standard under subsection (C) is infeasible at the time of the finding, the Director shall require the attributable source to install and operate BART at a later date when the Director determines that BART or equivalent controls are feasible.

F. The Director shall provide for a BART control analysis of any existing stationary source that might cause or contribute to impairment of visibility in any mandatory Federal Class I area identified under this Article at such time as the Administrator determines new control technology for the pollutant becomes reasonably available:
1. The pollutant is emitted by that existing stationary source,
2. Controls representing BART for the pollutant have not previously been required under this Article, and
3. The impairment of visibility in any mandatory Federal Class I area is reasonably attributable to the emissions of that pollutant.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 4541, effective December 2, 2003 (Supp. 03-4).

R18-2-1606. Exemption from BART

Any existing stationary source required to install, operate, and maintain BART under this Article, may apply to the Administrator for an exemption from that requirement according to 40 CFR 51.303. The existing stationary source shall obtain the Director's written concurrence before sending the application for exemption to the Administrator.

Historical Note

New Section made by final rulemaking at 9 A.A.R. 4541, effective December 2, 2003 (Supp. 03-4).

APPENDIX 1. STANDARD PERMIT APPLICATION FORM AND FILING INSTRUCTIONS

FILING INSTRUCTIONS

No application shall be considered complete until the Director has determined that all information required by this application form and the applicable statutes and regulations has been submitted. The Director may waive certain application requirements for specific source types, pursuant to R18-2-304(B). For permit revisions, the applicant need only supply information which directly pertains to the revision. The Director shall develop special guidance documents and forms to assist certain sources requiring Class 2 permits in completing the application form and filing instructions. Guidance documents can be requested by contacting the Office of Air Quality at the address and phone number given on the "Standard Permit Application Form."

In addition to the information required on the application form, the applicant shall supply the following:
1. Description of the process to be carried out in each unit (include Source Classification Code, if known).
2. Description of product(s).
3. Description of alternate operating scenario, if desired by applicant (include Source Classification Code).
4. Description of alternate operating scenario product(s), if applicable.
5. A flow diagram for all processes.
6. A material balance for all processes (optional, only if emission calculations are based on a material balance).
7. Emissions Related Information:
   a. The source shall be required to submit the potential emissions of regulated air pollutants as defined in R18-2-101 for all emission sources. Emissions shall be expressed in pounds per hour, tons per year, and such other terms as may be requested. Emissions shall be submitted using the standard "Emission Sources" portion of the "Standard Permit Application Form." Emissions information shall include fugitive emissions in the same manner as stack emissions, 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.
   b. The source shall be required to identify and describe all points of emissions and to submit additional information related to the emissions of regulated air pollutants sufficient to verify which requirements are applicable to the source and sufficient to determine any fees under this Chapter.
8. Citation and description of all applicable requirements as defined in R18-2-101 including voluntarily accepted limits pursuant to R18-2-306.01.
9. An explanation of any proposed exemptions from otherwise applicable requirements.
10. The following information to the extent it is needed to determine or regulate emissions or to comply with the requirements of R18-2-306.01:
    a. Maximum annual process rate for each piece of equipment which generates air emissions.
    b. Maximum annual process rate for the whole plant.
    c. Maximum rated hourly process rate for each piece of equipment which generates air emissions.
    d. Maximum rated hourly process rate for the whole plant.
    e. For all fuel burning equipment including generators, a description of fuel use, including the type used, the quantity used per year, the maximum and average quantity used per hour, the percent used for process heat, and higher heating value of the fuel. For solid fuels and fuel oils, state the potential sulfur and ash content.
    f. A description of all raw materials used and the maximum annual and hourly, monthly, or quarterly quantities of each material used.

g. Anticipated Operating Schedules
   i. Percent of annual production by season.
   ii. Days of the week normally in operation.
   iii. Shifts or hours of the day normally in operation.
   iv. Number of days per year in operation.
h. Limitations on source operations and any work practice standards affecting emissions.

11. A description of all process and control equipment for which permits are required including:
    a. Name.
    b. Make (if available).
    c. Model (if available).
    d. Serial number (if available).
    e. Date of manufacture (if available).
    f. Size/production capacity.
    g. Type.
12. Stack Information:
    a. Identification.
    b. Description.
    c. Building Dimensions.
    d. Exit Gas Temperature.
    e. Exit Gas Velocity.
    f. Height.
    g. Inside Dimensions.
13. Site diagram which includes:
    a. Property boundaries.
    b. Adjacent streets or roads.
    c. Directional arrow.
    d. Elevation.
    e. Closest distance between equipment and property boundary.
    f. Equipment layout.
    g. Relative location of emission sources/points.
    h. Location of emission points and non-point emission areas.
    i. Location of air pollution control equipment.
14. Air Pollution Control Information:
    a. Description of or reference to any applicable test method for determining compliance with each applicable requirement.
    b. Identification, description and location of air pollution control equipment, including spray nozzles and hoods, and compliance monitoring devices or activities.
    c. The rated and operating efficiency of air pollution control equipment.
    d. Data necessary to establish required efficiency for air pollution control equipment (e.g. air to cloth ratio for baghouses, pressure drop for scrubbers, and warranty information).
    e. Evidence that operation of the new or modified pollution control equipment will not violate any ambient air quality standards, or maximum allowable increases under R18-2-218.
15. Equipment manufacturer's bulletins or shop drawings are acceptable for the purposes of supplying the information required by any item in numbers 11, 12 or 14 of this Appendix.
16. Compliance Plan:
    a. A description of the compliance status of the source with respect to all applicable requirements including, but not limited to:
       i. A demonstration that the source or modification will comply with the applicable requirements contained in Article 6.
       ii. A demonstration that the source or modification will comply with the applicable requirements contained in Article 7.
       iii. A demonstration that the source or modification will comply with the applicable requirements contained in Article 8.
       iv. A demonstration that the source or modification will comply with the applicable requirements contained in Article 9.
       v. A demonstration that the source or modification will comply with the applicable requirements contained in Article 11 and in rules promulgated pursuant to A.R.S. § 49-426.03.
       vi. A demonstration that the source or modification will comply with the applicable requirements contained in rules promulgated pursuant to A.R.S. § 49-426.06.
       vii. A demonstration that the source or modification will comply with any voluntarily accepted limitations pursuant to R18-2-306.01.
    b. 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 noncompliance with, the applicable requirements on which it is based.
    c. A schedule for submission of certified progress reports no less frequently than every six months for sources required to have a schedule of compliance to remedy a violation.
    d. The compliance plan content requirements specified in this subsection 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 and incorporated pursuant to R18-2-333 with regard to the schedule and method(s) the source will use to achieve compliance with the acid rain emissions limitations.
17. Compliance Certification: A certification of compliance with all applicable requirements including voluntarily accepted limitations pursuant to R18-2-306.01 by a

responsible official consistent with R18-2-309(A)(5). The certification shall include:

a. Identification of the applicable requirements which are the basis of the certification;
b. A statement of methods used for determining compliance, including a description of monitoring, recordkeeping, and reporting requirements and test methods;
c. 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; and
d. A statement indicating the source's compliance status with any applicable enhanced monitoring and compliance certification requirements.
e. A certification of truth, accuracy, and completeness pursuant to R18-2-304(H).

18. Acid Rain Program Compliance Plan: Sources subject to the Federal acid rain regulations shall use nationally-standardized forms for acid rain portions of permit applications and compliance plans, as required by regulations promulgated under Title IV of the Act and incorporated pursuant to R18-2-333.
19. A new major source as defined in R18-2-401 or a major modification shall submit all information required in this Appendix and information necessary to show compliance with Article 4 including, but not limited to:
    a. For sources located in a Non-Attainment Area:
        i. In the case of a new major source as defined in R18-2-401 or a major modification subject to an emission limitation which is LAER (Lowest Achievable Emission Rate) for that source or facility, the application shall contain a determination of LAER that is consistent with the requirements of the definition of LAER contained in R18-2-401. The demonstration shall contain the data and information relied upon by the applicant in determining the emission limitation that is LAER for the source or facility for which a permit is sought.
        ii. In the case of a new major source as defined in R18-2-401 or a major modification subject to the demonstration requirement of R18-2-403(A)(2), the applicant shall submit such demonstration in a form that lists and describes all existing major sources owned or operated by the applicant and a statement of compliance with all conditions contained in the permits or conditional orders of each of the sources.
        iii. In the case of a new major source as defined in R18-2-401 or a major modification subject to the offset requirements described in R18-2-403(A)(3), the applicant shall demonstrate the manner in which the new major source or major modification meets the requirements of R18-2-404.
        iv. An applicant for a new major source as defined in R18-2-401 or a major modification for volatile organic compounds or carbon monoxide (or both) which will be located in a nonattainment area for photochemical oxidants or carbon monoxide (or both) shall submit the analysis described in R18-2-403(B).
    b. For sources located in an Attainment Area:
        i. A demonstration of the manner in which a new major source or major modification which will be located in an attainment area for a pollutant for which the source is classified as a major source as defined in R18-2-401 or the modification is classified as a major modification will meet the requirements of R18-2-406.
        ii. In the case of a new major source as defined in R18-2-401 or major modification subject to an emission limitation which is BACT (Best Available Control Technology) for that source or facility, the application shall contain a determination of BACT that is consistent with the requirements of the definition of BACT contained in R18-2-101. The demonstration shall contain the data and information relied upon by the applicant in determining the emission limitation that is BACT for the source or facility for which a permit is sought.
        iii. In the case of a new major source as defined in R18-2-401 or major modification required to perform and submit an air impact analysis in the form prescribed in R18-2-407, such an analysis shall meet the requirements of R18-2-406. Unless otherwise exempted in writing by the Director, the air impact analysis shall include all of the information and data specified in R18-2-407.
        iv. If an applicant seeks an exemption from any or all of the requirements of R18-2-406, the applicant shall provide sufficient information and data in the application to demonstrate compliance with the requirements of the subsection(s) under which an exemption is sought.
20. Calculations on which all information requested in this Appendix is based.

Department of Environmental Quality – Air Pollution Control

STANDARD PERMIT APPLICATION FORM

(As required by A.R.S. § 49-426, and A.A.C. Title 18, Chapter 2, Article 3)

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF AIR QUALITY
P.O. Box 600 • Phoenix, AZ 85001-0600 • Phone: (602) 207-2338

1. Permit to be issued to: (Business license name of organization that is to receive permit) _____

2. Mailing Address: _____

   City: _____ State: _____ ZIP: _____

3. Plant Name (if different item #1 above): _____

4. Name (or names) of Owner or Operator: _____ Phone: _____

5. Name of Owner's Agent: _____ Phone: _____

6. Plant/Site Manager or Contact Person: _____ Phone: _____

7. Proposed Equipment/Plant Location Address:

   City: _____ County: _____ ZIP: _____

   Indian Reservation (if applicable): _____

   Section/Township/Range, Latitude/Longitude, Elevation: _____

8. General Nature of Business: _____

   Standard Industrial Classification Code: _____

9. Type of Organization:

   ☐ Corporation ☐ Individual Owner

   ☐ Partnership ☐ Government Entity (Government Facility Code: _____)

   ☐ Other _____

10. Permit Application Basis: ☐ New Source ☐ Revision ☐ Renewal of Existing Permit

    ☐ Portable Source ☐ General Permit (Check all that apply.)

    For renewal or modification, include existing permit number: _____

    Date of Commencement of Construction or Modification: _____

    Is **any** of the equipment to be leased to another individual or entity? ☐ Yes ☐ No

11. Signature of Responsible Official of Organization:

    Official Title of Signer: _____

12. Typed or Printed Name of Signer: _____

    Date: _____ Telephone Number: _____

PAGE 1 OF 2

ADEQ/OAQ/100B

COMPANY NAME _____

EMISSION SOURCES

PAGE _____ OF _____
DATE _____

Estimated Potential to Emit as per R18-2-101(84).
Review of applications and issuance of permits will be expedited by supplying all necessary information on this Table.

REGULATED AIR POLLUTANT DATA					EMISSION POINT DISCHARGE PARAMETERS									
EMISSION POINT (1)		CHEMICAL COMPOSITION OF TOTAL STREAM	R.AIR POLLUTANT EMISSION RATE		UTM COORDINATES OF EMISSION PT. (5)			STACK SOURCES (6)					NONPOINT SOURCES (7)	
NUMBER	NAME	REGULATED AIR POLLUTANT NAME (2)	#/ HR. (3)	TONS/ YEAR (4)	ZONE	EAST (Mtrs)	NORTH (Mtrs)	HEIGHT ABOVE GROUND /feet	HEIGHT ABOVE STRUC. /feet	EXIT DATA DIA (ft.)	EXIT DATA VEL. (fps.)	EXIT DATA TEMP. (°F)	LENGTH (ft.)	WIDTH (ft.)

GROUND ELEVATION OF FACILITY ABOVE MEAN SEA LEVEL _____ feet
ADEQ STANDARD CONDITIONS ARE 293K AND 101.3 KILOPASCALS (A.A.C. R18-2-101)

General Instructions:

1. Identify each emission point with a unique number for this plant site, consistent with emission point identification used on plot plan, previous permits, and Emissions Inventory Questionnaire. Include fugitive emissions. Limit emission point number to eight (8) character spaces. For each emission point use as many lines as necessary to list regulated air pollutant data. Typical emission point names are: heater, vent, boiler, tank, reactor, separator, baghouse, fugitive, etc. Abbreviations are O.K.
2. Components to be listed include regulated air pollutants as defined in R18-2-101. Examples of typical component names are: Carbon Monoxide (CO), Nitrogen Oxides (NO_X), Sulfur Dioxide (SO_2), Volatile Organic Compounds (VOC), particulate matter (PM), particulate less than 10 microns (PM_{10}), etc. Abbreviations are O.K.
3. Pounds per hour (#/HR) is maximum potential emission rate expected by applicant.
4. Tons per year is annual maximum potential emission expected by applicant, which takes into account process operating schedule.
5. As a minimum applicant shall furnish a facility plot plan as described in the filing instructions. UTM coordinates are required only if the source is a major source or is required to perform refined modeling for the purposes of demonstrating compliance with ambient air quality guidelines.
6. Supply additional information as follows if appropriate:
   (a) Stack exit configuration other than a round vertical stack. Show length and width for a rectangular stack. Indicate if horizontal discharge with a note.
   (b) Stack's height above supporting or adjacent structures if structure is within 3 "stack height above the ground" of stack.
7. Dimensions of nonpoint sources as defined in R18-2-101.

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Historical Note

Former Appendix 1 repealed, new Appendix 1 adopted effective October 2, 1979 (Supp. 79-5). Amended effective May 28, 1982 (Supp. 82-3). Amended effective September 22, 1983 (Supp. 83-5). Amended effective December 1, 1988 (Supp. 88-4). Appendix 1 repealed, new Appendix 1 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(80) amended to reference R18-2-101(84) (Supp. 99-3).

APPENDIX 2. TEST METHODS AND PROTOCOLS

The following test methods and protocols are approved for use as directed by the Department under this Chapter. These standards are incorporated by reference revised as of July 1, 2001, and no future editions or amendments. These standards are on file with the Department and the Office of the Secretary of State, and items 1-10 are also available from the U.S. Government Printing Office, Superintendent of Documents, Mail Stop SSOP, Washington, D.C. 20402-9328.

1. 40 CFR 50;
2. 40 CFR 50, Appendices A through K;
3. 40 CFR Part 51, Appendix M, Appendix S, Section IV, and Appendix W;
4. 40 CFR 52, Appendices D and E;
5. 40 CFR 58;
6. 40 CFR 58, all appendices;
7. 40 CFR Part 60, all appendices;
8. 40 CFR Part 61, all appendices;
9. 40 CFR Part 63, all appendices;
10. 40 CFR Part 75, all appendices.

Historical Note

Former Appendix 2 repealed, new Appendix 2 adopted effective October 2, 1979 (Supp. 79-5). Amended effective May 28, 1982 (Supp. 82-3). Amended effective December 1, 1988 (Supp. 88-4). Repealed effective November 15, 1993 (Supp. 93-4). New Appendix 2 adopted effective December 7, 1995 (Supp. 95-4). Amended effective May 9, 1996 (Supp. 96-2). Amended effective April 4, 1997; filed with the Office of the Secretary of State March 14, 1997 (Supp. 97-1). Amended effective December 4, 1997 (Supp. 97-4). Amended by final rulemaking at 5 A.A.R. 3221, effective August 12, 1999 (Supp. 99-3). Amended by final rulemaking at 6 A.A.R. 4170, effective October 11, 2000 (Supp. 00-4). Amended by final rulemaking at 8 A.A.R. 2543, effective May 24, 2002 (Supp. 02-2).

APPENDIX 3. LOGGING

1. Each log entry required by a change under R18-2-317.02(B) shall include at least the following information:
   a. A description of the change, including:
      i. A description of any process change.
      ii. A description of any equipment change, including both old and new equipment descriptions, model numbers and serial numbers, or any other unique equipment number.
      iii. A description of any process material change.
   b. The date and time that the change occurred.
   c. The provision of R18-2-317.02(B) that authorizes the change to be made with logging.
   d. The date the entry was made and the first and last name of the person making the entry.
2. Logs shall be kept for five years from the date created. Logging shall be performed in indelible ink in a bound log book with sequentially numbered pages, or in any other form, including electronic format, approved by the Director.

Historical Note

Appendix 3 adopted by final rulemaking at 5 A.A.R. 4074, effective September 22, 1999 (Supp. 99-3).

APPENDIX 4. RESERVED

APPENDIX 5. REPEALED

Historical Note

Appendix 5 repealed effective November 15, 1993 (Supp. 93-4).

APPENDIX 6. REPEALED

Historical Note

Adopted effective August 7, 1975 (Supp. 75-1). Former Appendix 6 repealed, new Appendix 6 adopted effective July 7, 1978 (Supp. 78-4). Former Appendix 6 repealed effective May 14, 1979 (Supp. 79-1).

APPENDIX 7. REPEALED

Historical Note

Adopted effective December 22, 1976 (Supp. 76-5). Former Appendix 7 repealed, new Appendix 7 adopted effective January 8, 1980 (Supp. 80-1). Editorial correction, Instructions for Schedule 2, paragraph (15) (Supp. 80-2). Repealed effective September 26, 1990 (Supp. 90-3).

A8. APPENDIX 8

PROCEDURES FOR UTILIZING THE SULFUR BALANCE METHOD FOR DETERMINING SULFUR EMISSIONS

A8.1. Calculating Input Sulfur

Total sulfur input is the sum of the product of the weight of each sulfur bearing material introduced into the smelting process as calculated in A8.1.1. below multiplied by the fraction of sulfur contained in that material as calculated in A8.1.2. below plus the amount of sulfur contained in fuel utilized in the smelting process as calculated in A8.1.3. below.

A8.1.1. Material Weight

All sulfur bearing materials, other than fuels, introduced into the smelting process shall be weighed. Such weighing shall be subject to the following conditions:

A8.1.1.1. Weight shall be determined on a belt scale, rail or truck scales, or other weighing device.

A8.1.1.2. Weight shall be determined within an accuracy of ±5%.

A8.1.1.3. All devices or scales used for weighing are to be calibrated to manufacturer's specifications but no less than once a month.

A8.1.1.4. Sulfur bearing materials subject to being weighed shall include but not be limited to concentrate, cement copper, reverts which are discarded and not part of the internal circulating load and precipitates. Materials such as limestone and silica flux which are mixed with a charge of sulfur bearing materials shall be weighed and reported.

A8.1.2. Sulfur Content

The sulfur content of all sulfur bearing materials introduced into the smelting process shall be calculated using the following steps or an equivalent method approved by the Director.

A8.1.2.1. Sampling

The procedure to be followed in sampling is dependent upon the input vehicles for the sulfur bearing material.

A8.1.2.1.1. Beltfeed

The smelter operator shall collect a five-pound sample each hour. Hourly samples shall be combined for a total daily sample.

A8.1.2.1.2. Railcar

The smelter operator shall collect a 24-pound sample from each car by the auger method at a minimum of four points. Each car sample shall be combined with all other car samples for a total lot sample.

A8.1.2.1.3. Truck

The smelter operator shall collect a 12-pound sample from each truck load. Samples are to be taken at two points during unloading. Where more than one truck delivers a single lot, the samples from each truck shall be combined for a total lot sample.

A8.1.2.2. Sample Preparation

Each total sample shall be prepared for analysis in the following manner:

A8.1.2.2.1. The sample shall be crushed to minus ¼ inch particles.

A8.1.2.2.2. 2000 gm of the sample shall be split out using a Jones Riffle Splitter or similar device.

A8.1.2.2.3. The 2000 gm sample shall be pulverized to minus 150 mesh.

A8.1.2.2.4. The pulverized mass shall be mixed using a rolling cloth.

A8.1.2.2.5. 500 gm shall be split out for sample analysis.

A8.1.2.3. Sample Analysis

A8.1.2.3.1. The sample shall be analyzed to determine sulfur content using the Barium Sulfate ($BaSO_4$) Gravimetric Method. Such analysis shall be accurate to within ±1%.

A8.1.2.3.2.For purpose of comparison the sample shall be analyzed for copper content using the Potassium Iodine (KI) Titration Method. Such analysis shall be accurate to within ±1%.

A8.1.3. Fuel Sulfur Content

Sulfur in fuels shall be calculated by multiplying the amount of fuel delivered to the process by the fraction of sulfur in the fuel as reported to the smelter operator by the fuel's supplier. The sulfur content determination shall be accurate to within ±5%.

A8.2. Calculating Removed Sulfur

Total removed sulfur is the sum of the sulfur removed in each of the following products as determined by each process set forth below or by other processes approved by the Director.

A8.2.1. Reverberatory and Convertor Slags

A8.2.1.1. The weight of the slag shall be determined using a scale with an accuracy within ±5%.

A8.2.1.2. A five-pound sample shall be collected from each slag pot during tapping operations.

A8.2.1.3. The sample shall be prepared and the amount of sulfur and copper analyzed using the procedures specified in A8.1.2.2. and A8.1.2.3. above.

A8.2.2. Cottrell, Scrubber, and Cyclone Dusts

A8.2.2.1. After the dust is collected and placed in a rail car or truck it shall be weighed using a scale with an accuracy within ± 5%.

A8.2.2.2. The dust shall be sampled, and a sample prepared and analyzed for sulfur and copper using the procedures specified in A8.1.2.1., A8.1.2.2., and A8.1.2.3. above.

A8.2.3. Strong Acids

A8.2.3.1. An inventory of strong acids shall be taken daily by means of a manometer or sight glass. The inventory shall be increased by the amounts of acid shipped or otherwise transferred during that day.

A8.2.3.2. The daily inventory will be accurate to within ± 5%.

A8.2.3.3. A sample of each batch of the acid inventoried shall be taken and analyzed for sulfur in accordance with the procedures in A8.1.2.3. above.

A8.2.4. Weak Acids

A8.2.4.1. The amount of weak acid discharged from an acid plant and scrubber systems is to be determined by a time volumetric method of measurement in gallons/minute and to an accuracy of within ±20%.

A8.2.4.2. A 500 ml sample of the weak acid shall be analyzed daily for sulfur content in accordance with the procedures in A8.1.2.3.

A8.2.5. Sulfur in Copper Production

A8.2.5.1. The weight of copper produced is to be determined by weight of copper cast to an accuracy of within ±5%.

A8.2.5.2. The weight and number of castings shall be recorded.

A8.2.5.3. A sample of the copper is to be obtained either by the grab sample method while casting, or by the use of at least three drill holes on a representative casting from each charge.

A8.2.5.4. At least one sample must be obtained from each charge.

A8.2.5.5. Each sample is to be analyzed for sulfur content using the chemical gravimetric means of analysis to an accuracy of within +50%.

A8.2.6. Materials in Process

A8.2.6.1. Total tonnage of materials in process shall be determined by physical inventory on the first or last day of each month.

A8.2.6.2. A monthly change in in-process inventory shall be calculated for each material in process by taking the difference between the inventory from each material in process on the first or last day of the preceding month and multiplying that difference by the monthly composite sulfur assay for that material.

A8.2.6.3. The change in monthly in-process inventory must be accurate to within ±50%.

A8.3. Sulfur Dioxide Emissions Monitoring

A8.3.1. The sulfur dioxide emissions monitoring and recording system required under R18-2-715(C)(4) shall meet the following specifications:

A8.3.1.1. It shall be capable of continuously monitoring sulfur dioxide emissions with an accuracy of within ±20% and a confidence level of 95%.

A8.3.1.2. Sulfur dioxide emission monitoring and recording equipment shall be operated and calibrated in accordance with manufacturer's specifications for the equipment except that calibration must be done at least once every 24 hours.

A8.3.2. The sulfur removal equipment bypass monitoring required under R18-2-715(C)(7)(v) shall consist of a detector and recorder system capable of producing a permanent record of all periods in which a bypass has been operated.

A8.4. General Provisions

A8.4.1. For purposes of this Appendix, an approved equivalent process or procedure must be approved in writing by the Director prior to its use by a smelter operator.

A8.4.2. The processes and procedures specified in this Appendix shall be available for inspection, review and verification by the Department at all reasonable times.

Historical Note

Adopted effective December 22, 1976 (Supp. 76-5). Correction, Appendix 8, A8-2-1.1 (Supp. 77-2). Amended effective May 28, 1982 (Supp. 82-3). Amended effective November 15, 1993 (Supp. 93-4).

A9. APPENDIX 9

MONITORING REQUIREMENTS

A9.1. Unless otherwise approved by the Director or specified in applicable Sections, the requirements of this Appendix shall apply to all continuous monitoring systems required under applicable Sections.

A9.2. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under rule R18-2-312. Verification of operational status shall, as a minimum, consist of the following:

A9.2.1. For continuous monitoring systems referenced in A9.3.1. below, completion of the conditioning period specified by applicable requirements in the Arizona Testing Manual and 40 CFR 60.

A9.2.2. For continuous monitoring systems referenced in A9.3.2. below, completion of seven days of operation.

A9.2.3. For monitoring devices referenced in other applicable Sections, completions of the manufacturer's written requirements or recommendations for checking the operation or calibration of the device.

A9.3. During any performance tests required under rule R18-2-312 or within 30 days thereafter and at such other times as may be required by the Director, the owner or operator of any affected facility shall conduct continuous monitoring system performance evaluations and furnish the Director within 60 days thereof, 2, or upon request, more copies of a written report of the results of such tests. The continuous monitoring system performance evaluations shall be conducted in accordance with the following specifications and procedures:

A9.3.1. Continuous monitoring systems listed within this subsection, except as provided in A9.3.2. below shall be evaluated in accordance with the requirements and procedures contained in the applicable performance specification of the Arizona Testing Manual and 40 CFR 60.

A9.3.1.1. Continuous monitoring systems for measuring opacity of emissions shall comply with Performance Specification 1.

A9.3.1.2. Continuous monitoring systems for measuring nitrogen oxides emissions shall comply with Performance Specification 2.

A9.3.1.3. Continuous monitoring systems for measuring sulfur dioxide emissions shall comply with Performance Specification 2.

A9.3.1.4. Continuous monitoring systems for measuring the oxygen content or carbon dioxide content of effluent gases shall comply with Performance Specification 3.

A9.3.2. An owner or operator who, prior to September 11, 1974, entered into a binding contractual obligation to purchase specific continuous monitoring system components except as referenced by A9.3.2.3. below shall comply with the following requirements:

A9.3.2.1. Continuous monitoring systems for measuring opacity of emissions shall be capable of measuring emission levels within ± 20%. The Calibration Error Test and associated calculation procedures set forth in Performance Specification 1 of 40 CFR 60, Appendix B shall be used for demonstrating compliance with this specification.

A9.3.2.2. Continuous monitoring systems for measurement of nitrogen oxides or sulfur dioxide shall be capable of measuring emission levels within ± 20% with a confidence level of 95%. The Calibration Error Test, the Field Test for Accuracy (Relative), and associated operating and calculation procedures set forth in Performance Specification 2 of 40 CFR 60, Appendix B shall be used for demonstrating compliance with this specification.

A9.3.2.3. Owners or operators of all continuous monitoring systems installed on an affected facility prior to October 6, 1975, are not required to conduct tests under A9.3.2.1. and/or A9.3.2.2. above unless requested by the Director.

A9.3.3. All continuous monitoring systems referenced by A9.3.2. above shall be upgraded or replaced (if necessary) with new continuous monitoring systems, and such improved systems shall be demonstrated to comply with applicable performance specifications under A9.3.1. above by September 11, 1979.

A9.4. Owners or operators of all continuous monitoring systems installed in accordance with the provisions of these rules shall check the zero and span drift at least once daily in accordance with the method prescribed by the manufacturer of such systems unless the manufacturer recommends adjustments at shorter intervals, in which case such recommendations shall be followed. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour calibration drift limits of the applicable performance specifications in 40 CFR 60, Appendix B are exceeded. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero or span drift adjustments except that for systems using automatic zero adjustments, the optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4% opacity. Unless otherwise approved by the Director, the following procedures, as applicable, shall be followed:

A9.4.1. For extractive continuous monitoring systems measuring gases, minimum procedures shall include introducing applicable zero and span gas mixtures into the measurement system as near the probe as practical. Span and zero gases certified by their manufacturer to be traceable to the National Bureau of Standards reference gases will be used whenever these reference gases are available. The span and zero gas mixtures shall be the same composition as specified in the 40 CFR 60, Appendix B. Every six months from date of manufacture, span and zero gases shall be re-analyzed by conducting triplicate analyses with Reference Methods 6 for SO_2, 7 for NOx and 3 for O_2 and CO_2, respectively. The gases may be analyzed at less frequent intervals if longer shelf lives are guaranteed by the manufacturer.

A9.4.2. For nonextractive continuous monitoring systems measuring gases, minimum procedures shall include upscale check(s) using a certified calibration gas cell or test cell which is functionally equivalent to a known gas concentration. The zero check may be performed by computing the zero value from upscale measurements or by mechanically producing a zero condition.

A9.4.3. For continuous monitoring systems measuring opacity of emissions, minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly.

A9.5. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under A9.4. above, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

A9.5.1. All continuous monitoring systems referenced by A9.3.1. and A9.3.2. above for measuring opacity of emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 10-second period.

A9.5.2. All continuous monitoring systems referenced by A9.3.1. above for measuring oxides of nitrogen, sulfur dioxide, carbon dioxide, or oxygen shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

A9.5.3. All continuous monitoring systems referenced by A9.3.2. above, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive one-hour period.

A9.6. All continuous monitoring systems for monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of 40 CFR 60, Appendix B shall be used.

A9.7. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install applicable continuous monitoring systems on each separate effluent unless the installation of fewer systems is approved by the Director.

A9.8. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to six-minute averages and for systems other than opacity to one-hour averages, respectively. Six minute opacity averages shall be calculated from 24 or more data points equally spaced over each six-minute period. For systems other than opacity, one-hour averages shall be computed from four or more data points equally spaced over each one-hour period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this subsection. An arithmetic or integrated average of all data may be used. The data output of all continuous monitoring systems may be recorded in reduced or nonreduced form (e.g. ppm pollutant and percent O_2 or lb/million Btu of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in these rules to specify the applicable standard (e.g., rounded to the nearest 1% opacity).

A9.9. Upon written application by an owner or operator, the Director may approve alternatives to any monitoring procedures or requirements of these rules including, but not limited to the following:

A9.9.1. Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by these rules would not provide accurate measurements due to liquid water or other interferences caused by substances with the effluent gases.

A9.9.2. Alternative monitoring requirements when the affected facility is infrequently operated.

A9.9.3. Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

A9.9.4. Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

A9.9.5. Alternative methods of converting pollutant concentration measurements to units of the standards.

A9.9.6. Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

A9.9.7. Alternatives to the ASTM test methods or sampling procedures specified by any subpart.

A9.9.8. Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1 in 40 CFR 60, Appendix B but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Director may require that such demonstration be performed for each affected facility.

A9.9.9. Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities are released to the atmosphere through more than one point.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective September 26, 1990 (Supp. 90-3). Amended effective June 15, 1995 (Supp. 95-2).

A10. APPENDIX 10

EVALUATION OF AIR QUALITY DATA

A10.1. General Statistical Requirements

A10.1.1. The measurements of air quality shall be corrected to a reference temperature of 298°K (25°C) and to a reference pressure of 101.3 kilopascals (760 millimeters of mercury). For these reference conditions the following conversion factors shall be used:

Carbon monoxide: ppm x 1.145 = mg/m^3
Hydrocarbons: ppm x 656 = ug/m^3
Nitrogen dioxide: ppm x 1882 = ug/m^3
Sulfur dioxide: ppm x 2620 = ug/m^3

mg/m^3 and ug/m^3 are abbreviations for milligrams per cubic meter and micrograms per cubic meter, respectively.

A10.1.2. For purposes of reporting and determining compliance with ambient air quality standards, all ambient air quality data shall be expressed in micrograms per cubic meter, except for carbon monoxide which shall be expressed in milligrams per cubic meter, and for ozone which shall be expressed in parts per million.

A10.1.3. Significant Figures

A10.1.3.1.Continuous Monitoring Instrument Data

Ambient air quality data from continuous monitoring instruments shall be measured, and processed and recorded to the following degrees of precision:

For analog recorders, 1% of full scale
For digital recorders, 0.1% of full scale

A10.1.3.2.Manual Sampling Data

Data from manual samplers shall be reported to the following degrees of precision:

Nitrogen dioxide, 1.0 ug/m^3
Sulfur dioxide, 1.0 ug/m^3
Particulate matter, 1.0 ug/m^3
Benzene soluble organics, 0.1 ug/m^3
Lead, 0.1 ug/m^3
Nitrates, 0.1 ug/m^3
Sulfates, 0.1 ug/m^3

A10.1.3.3.Computational Procedures

All computations shall be made to one more decimal place than shown in A10.1.3.2. above. If the least significant figure is 5 or greater, the computed value shall be rounded up to the required number of decimal places. If the least significant figure is 4 or less, the computed value shall be rounded down to the required number of decimal places.

A10.1.4. Annual mean pollutant concentrations and compliance with the annual ambient air quality standards shall be based on calendar year means only.

A10.2. Statistical Requirements for Manual Sampling Techniques-High Volume Samplers and Gas Bubblers.

A10.2.1. For computing annual means there shall be at least 11 samples per quarter, based on a sampling frequency of at least one sample every six days. The sampling period shall be 24 hours, starting at midnight and ending the following midnight.

A10.2.2. For determining compliance with 24-hour ambient air quality standards, the sampling period shall be 24 hours, starting at midnight and ending on the following midnight.

A10.3. Statistical Requirements for Continuous Monitors

A10.3.1. Hourly averages shall be computed for each discrete clock hour using the data measured for the preceding 60-minute period. All measurements of the analyzer shall be used for computing hourly averages which are the basis for all other averages.

A10.3.2. Determining Compliance with Ambient Air Quality Standards

Any three or 8, consecutive, hourly averages shall be used to determine compliance with the three or eight-hour ambient air quality standards provided the minimum number of observations required in A10.3.4. are available. If a violation of a standard occurs, no hourly averages used to compute that violation shall be used to compute additional violations of the same standard. In other words, the time periods for violations of the same standard cannot overlap. For example, a maximum of two violations of the same three-hour standard could be recorded at the same monitor in any period of six consecutive hours. For determining compliance with 24-hour ambient air quality standards, 24 hourly averages for a calendar day shall be used provided the minimum number of observations required in A10.3.4. are available.

A10.3.3. Determining Maximum Concentrations

For determining maximum three- or eight-hour concentrations for information, planning, and reporting requirements, any three or 8, consecutive, hourly averages may be used provided the minimum number of observations required in A10.3.4. are available. The time period for the maximum concentration may overlap time periods for violations.

A10.3.4. Minimum requirements for statistical validity for averaging times shall be as follows:

Time Interval	Minimum Number of Observations
1 hour	45 minutes of measured concentrations
3 hours	consecutive valid hourly averages
8 hours	6 valid hourly averages
24 hours	18 valid hourly averages within a calendar day
Monthly	Valid hourly data for at least 75% of the hours in the month
Quarterly	3 consecutive valid monthly averages
Annual	6,570 hourly averages with at least two months, each having

75% data recovery, per quarter, and at least nine months, each having 75% data recovery per year. All valid hourly averages shall be used to compute the annual averages.

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective July 9, 1980 (Supp. 80-4). Amended effective June 19, 1981 (Supp. 81-3).

A11. APPENDIX 11

ALLOWABLE PARTICULATE EMISSIONS COMPUTATIONS

A11.1. Figure 1, hereto, plots the formulae for determining allowable particulate emissions from fuel burning equipment, based on the heat input to the equipment.

A11.2. Figure 2, hereto, plots the formulae for determining allowable particulate emissions from process industries, based on the process weight rate of the industry.

FUEL BURNING EQUIPMENT

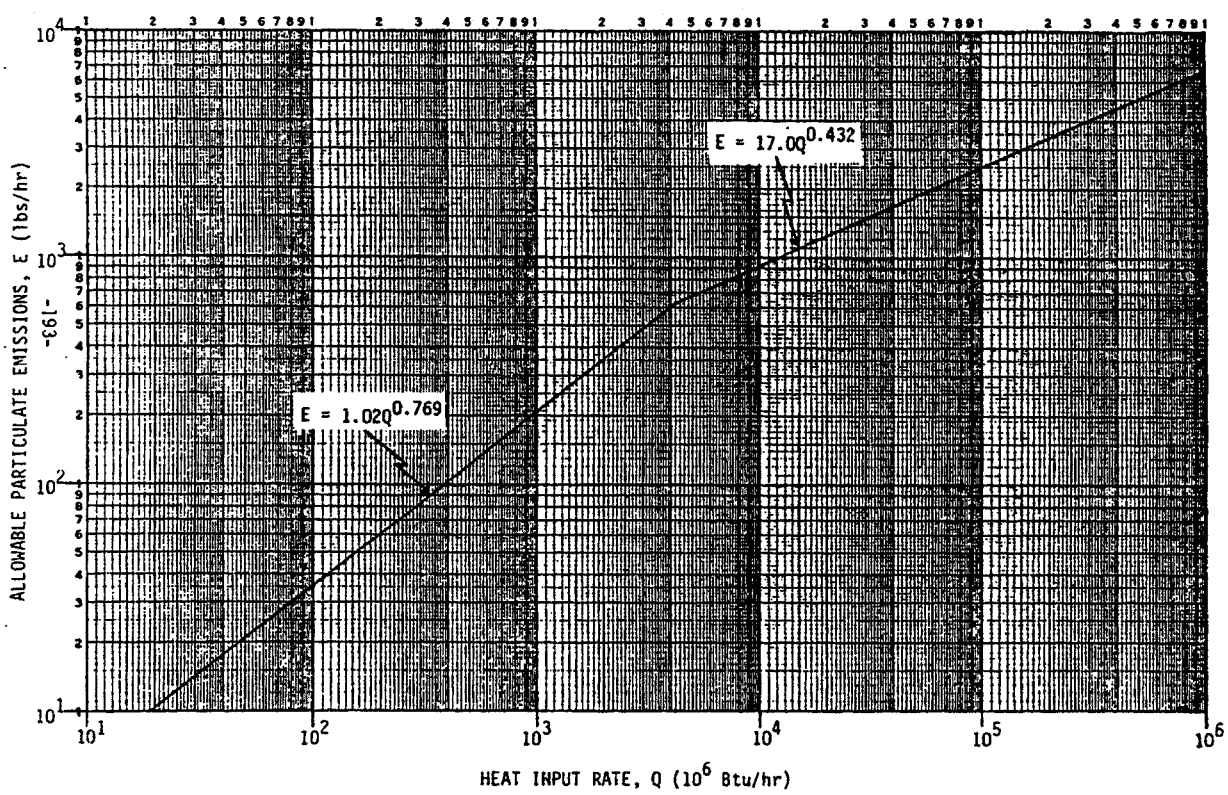

FIGURE 1

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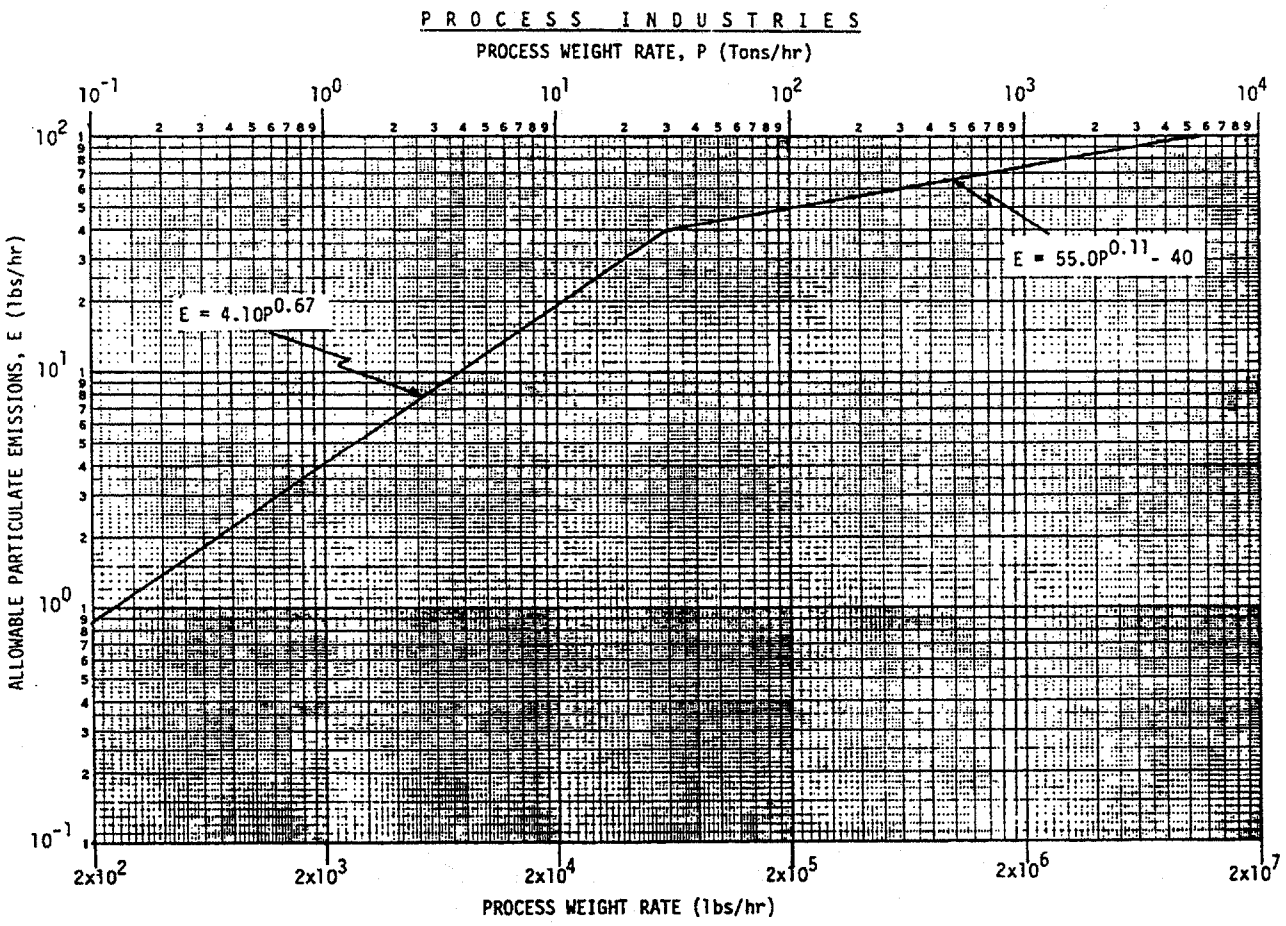

FIGURE 2

Historical Note

Adopted effective May 14, 1979 (Supp. 79-1). Amended effective September 11, 1983 (Supp. 83-5).