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Section R9-3-301, Installation permits: general

A. No person shall commence construction of a new major or minor source, or any stationary source that will emit 5 or more tons of lead per year, or -a- the major alteration of a source or the construction or modification of air pollution control equipment, or alteration of a point source that emits 5 or more tons of lead per year without first obtaining an installation permit from the Director.

B. There shall be three classes of installation permits:

1. Class A permits shall be issued to persons proposing to commence construction of a new major source or make a major alteration to a major source, or the construction or alteration of a stationary source emitting 5 or more tons of lead per year.

2. Class B permits shall be issued to persons proposing solely to commence construction or an alteration of any air pollution control equipment.

3. Class C permits shall be issued to persons proposing to commence construction of a minor source.

1. A new major source that is classified as a major source solely because it is capable of generating more than a total of seventy-five tons per day of air pollutants regulated under this Chapter and not because the source has potential emissions of 100 or 250 tons per year (as applicable) of any single pollutant regulated under this Chapter, shall meet the following requirements:

a. The source or alteration shall comply with the general Class A installation permit requirements in Subsection D.;

b. The source or alteration shall comply with the installation permit application requirements in Subsection E.

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C. No Class A installation permit shall be issued to a person proposing to commence construction of a new major source or make a major alteration to a major source unless that person can demonstrate to the Director that one of the following conditions is met:

1. A new major source that is classified as a major source solely because it is capable of generating more than a total of seventy-five tons per day of air pollutants regulated under this Chapter and not because the source has potential emissions of 100 or 250 tons per year (as applicable) of any single pollutant regulated under this Chapter, shall meet the following requirements:

a. The source or alteration shall comply with the general Class A installation permit requirements in Subsection D.;

b. The source or alteration shall comply with the installation permit application requirements in Subsection E.

c. The source or alteration shall comply with the more stringent of the applicable new source performance standards in Article 8 or the existing source performance standards in Article 5; or,

2. A new major source or major alteration to a major source, or a new stationary source or alteration to a stationary source that emits 5 or more tons of lead per year, and not regulated under Paragraph 1, above shall meet the following requirements:

a. The source or alteration shall comply with all applicable provisions of Sections R9-3-302 through R9-3-305.

b. The source or alteration shall comply with the general Class A installation permit requirements of Subsection D.

c. The source or alteration shall comply with the installation permit application requirements of Subsection E.

D. No Class A installation permit shall be issued to a person unless that person can demonstrate to the Director that:

1. The new major source or major alteration will be in compliance with whatever emission limitation, design, equipment, work practice or operational standard, or combination thereof is applicable to the source or alteration.

a. The degree of emission limitation required for control of any pollutant under this Article shall not be affected in any manner by:

i. So much of the stack height of any source as exceeds good engineering practice, or,

ii. Any other dispersion technique.

b. Subparagraph D.1.a. of this Section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

2. The new major source or major alteration will not exceed the applicable standards for hazardous air pollutants contained in Article 9.

3. The new major source or major alteration will not exceed the limitations, if applicable, on emission from nonpoint sources contained in Article 4.

4. A stationary source that will emit 5 or more tons of lead per year will not violate the ambient air quality standards for lead as contained in Section R9-3-207.

E. An application for a Class A installation permit shall be made on forms prescribed by the Director, and shall be signed by the applicant. An application shall contain, at a minimum, the information required by Appendix 1. In addition, the application shall contain such information or data as is necessary to demonstrate compliance with Subsection C. of this Section.

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(F) Except for assessing air quality impacts within Class I areas, the air impact analysis required to be conducted in connection with the filing for a Class A installation permit shall initially consider only the geographical area located within a fifty (50) kilometer radius from the new major source or major alteration's point of greatest emissions. The Director (on his own initiative or upon receipt of written notice from any person) shall have the right at any time 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 installation permit written notice thereof, specifying the enlarged radius to be so considered. In performing an air impact analysis for any geographical area ever with a radius of more than fifty (50) kilometers, the person applying for the installation permit 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.

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(G) The application for a Class B installation permit shall be made forms prescribed by the Director, and shall be signed by the applicant. An application shall contain, at a minimum, the information required by Appendix I.

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(H) No Class C installation permit shall be issued to a person proposing to commence construction of a minor source unless that person can demonstrate that the source:

1. Will not violate the standards of performance contained in Articles 5, 6 or 8 of this Chapter. Where more than one standard of performance is applicable to a minor source, the more stringent standard shall apply.
2. Will not violate the visible emission standards of R9-3-501.
3. Will not violate the nonpoint source emission standards of Article 4 of these Rules and Regulations.

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(D) Upon receipt of an application, the Director shall make a preliminary determination whether the permit should be approved or disapproved and whether, if approved, conditions should be attached to such approval.

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J. The Director shall make available in at least one location in each air quality control region in which the proposed major source or major alteration (or the proposed construction or alteration of a stationary source emitting 5 or more tons of lead per year) would be constructed, a copy of all materials submitted with an application for a Class A installation permit, a copy of the preliminary determination, a brief summary of the basis for the preliminary determination, and, to the maximum extent practicable, a copy or summary of all other materials to be considered in making a final determination on the application.

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K The Director shall notify the public within five days of receipt of an application for a Class A installation permit, by advertisement in a newspaper of general circulation in each air quality control region in which the proposed major source or major alteration would be constructed, of the application. Such notification shall include a summary of the application, the Director's preliminary determination, the degree of increment consumption expected from operation of the new major source or major alteration, and a statement informing the public of the opportunity for written comment and the time frame, which shall not be less than thirty days, within which comments are to be submitted.

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M-L. A copy of the notice required by Subsection -L K shall be sent to the permit applicant, to the Administrator, and to the officials and agencies having cognizance over the location where the proposed major source or major alteration would occur.

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M. ~~N. J.~~ Within twenty days after receipt of an application for a Class A installation permit, or any addition to such application, the Director shall advise the applicant of any deficiency in the application or in the information submitted. In the event of such a 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.

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N. ~~Q. K. J.~~ The Director may require the applicant to provide additional information or to provide and maintain such facilities or perform such air impact modeling procedures as are necessary to secure information that will disclose the nature, extent, quantity or effects of air contaminants discharged into the atmosphere from the major source or facility described in the application.

O. ~~P. L. J.~~ The Director shall take final action on the application within thirty days of the proper filing of the completed application. The Director shall notify the applicant in writing of his approval or denial. Such notification shall be made available for public inspection in at least one location in the air quality control region in which the major source is located.

P. ~~Q. M. J.~~ An installation permit shall remain in effect until the operating permit for such major source is granted, the operating permit for a major source is amended to reflect the installation of air pollution control equipment, or the installation permit is cancelled.

Q. ~~R. N. J.~~ The Director may cancel an installation permit issued under this section if the proposed construction or major alteration is not begun within 18 months of issuance, or if during the construction or major alteration, work is suspended for more than 18 months.

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R9-3-304. Installation permit requirements for sources located in attainment and unclassifiable areas.

A. Except as provided in Subsection B through G below and R9-3-307, Innovative control technology, no Class A installation permit shall be issued to a per-

son proposing to construct a new major source or make a major alteration to a major source (or to construct or modify a stationary source that emits 5 or more tons of lead per year) that would be constructed in an area designated as attainment or unclassifiable for any pollutant and for which construction commenced after May 15, 1982 unless the source or alteration meets the following conditions:

1. A new major source shall apply best available control technology for each pollutant subject to regulation under this Chapter that it would have the potential to emit in significant amounts.

2. A major alteration shall apply best available control technology for each pollutant subject to regulation under this Chapter for which the alteration 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 best available control technology 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. The person applying for the permit performs the air impact analysis and monitoring required by R9-3-305 and such analysis and monitoring demonstrates that allowable emission increases from the proposed new major source or major alteration, in conjunction with all other applicable emissions increases or reduc-

tions (including secondary emissions):

a. Would not cause or contribute to air pollution in violation of any applicable maximum allowable increase over the baseline concentration in R9-3-217.B 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 area in which the Arizona primary or secondary ambient air quality standards for that pollutant are being violated. A new major source of volatile organic compounds or a major alteration to a major source of volatile organic compounds will be presumed to contribute to violations of the Arizona ambient air quality standards for ozone if it will be located within fifty (50) kilometers of a nonattainment area for ozone. The presumption may be rebutted for a new major source or major alteration if it can be satisfactorily demonstrated to the Director that emissions of volatile organic compounds from the new major source or major alteration 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 alteration 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.

5. 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" (OAQPS 1.2-080, U.S. Environmental

Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, April 1978).

b. Where an air quality impact model specified in the "Guideline on Air Quality Models" is inappropriate, the model may be modified or another model substituted. Such a change must be subject to notice and opportunity for public comment. Written approval of the EPA Administrator must be obtained for any modification or substitution. Methods like those outlined in the "Workbook for the Comparison of Air Quality Models" (U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, May 1978) should be used to determine the comparability of air quality models.

B. The requirements of this Section shall not apply to a new major source or major alteration to a major source if an installation permit for the new source or alteration was received before May 15, 1982. In such a case the new major source or major alteration shall be subject to the requirements contained in its installation permit and the regulations in effect on the date on which the permit was issued.

C. The requirements of this Section shall not apply to a new major source or major alteration to a source with respect to a particular pollutant if the person applying for the permit demonstrates that, as to that pollutant, the source or alteration is located in an area designated as nonattainment for the pollutant.

D. The requirements of this Section shall not apply to a new major source or major alteration 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 new major source or major alteration of a source if such source or alteration would be a major source or major alteration only if fugitive emissions, to the extent quantifi-

able, are considered in calculating the potential emissions of the source or alteration, and the source is not either among the Categorical Sources listed in R9-3-101 or belongs to the category of sources for which New Source Performance Standards under Article 8 or Hazardous Air Pollutant Standards under Article 9 were adopted prior to August 7, 1980.

F. The requirements of this Section shall not apply to a new major source which is classified as a major source solely because the source is capable of generating more than a total of seventy-five tons per day of air pollutants regulated under this Chapter and not because the source has potential emissions of 100 or 250 tons per year (as applicable) of any single pollutant regulated under this Chapter.

G. The requirements of this Section shall not apply to a portable source which would otherwise be a new major source or major alteration to an existing source if such portable source is under an installation or operating permit issued under this Chapter, is in compliance with the conditions of that permit, and the emissions from the source will not impact a Class I area nor an area where an applicable increment is known to be violated.

H. 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 alteration to a source will have significant adverse impact on visibility or other specifically defined air quality related values of any Federal Mandatory Class I area designated in R9-3-217.A.2. regardless of the fact that the change in air quality resulting from emissions attributable to such new major source or major alteration 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 demonstration, the permit shall be denied.

2. If the owner or operator of a proposed new major source or a source for which major alteration is proposed demonstrates to the Federal Land Manager that the emissions attributable to such major source or major alteration 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 issued a permit notwithstanding the fact that the change in air quality resulting from emissions attributable to such new major source or major alteration will cause or contribute to concentrations which exceed the maximum allowable increases for a Class I area. Such a permit shall require that such new major source or major alteration 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:

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

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R9-3-409. Agricultural practices

No person shall cause, suffer, allow or permit the performance of agricultural practices including but not limited to tilling of land and application of fertilizers without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne.

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R9-3-505. 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.

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B. The provisions of this Section are applicable to all cement plants under State of Arizona jurisdiction which are existing sources.

1. No person shall cause, suffer, allow or permit the discharge of particulate matter from the kilns of any existing cement plant subject to the provisions of this Section and located in ~~The Phoenix---Tucson-Air~~ Quality-Control-Region Gila, Maricopa, Pima, Pinal, or Santa Cruz counties which is:

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a. In excess of 0.30 pounds per ton of feed to the kilns, ~~maximum-two~~ hour-average-

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b. Greater than 20 percent opacity.

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2. No person shall cause, suffer, allow or permit the discharge of particulate matter from the clinker cooler of any existing plant located in ~~The Phoenix---Tucson-Air-Quality-Control-Region~~ Gila, Maricopa, Pima, Pinal, or Santa Cruz counties which is:

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a. In excess of 0.10 pounds per ton of feed to the kilns, maximum-two hour-average-

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b. Ten percent opacity or greater.

6.3.82

3. Other existing cement plant facilities with ~~The-Phoenix---Tucson~~ Air-Quality-Control-Region Gila, Maricopa, Pima, Pinal, or Santa Cruz counties shall meet the requirements of Subsection A. of Section R9-3-502., Unclassified sources, and shall not exceed 20 percent opacity.

4. Cement plants subject to the provisions of this Section and outside ~~The-Phoenix---Tucson-Air-Quality-Control-Region~~ Gila, Maricopa, Pima, Pinal, or Santa Cruz counties shall not emit from any equipment particulate matter which is greater than 40 percent opacity or exceeds the amounts allowable under the following:

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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 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 subparagraph B.4.a.

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

C. 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.

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

1. The reference methods in the Arizona Testing Manual, except as provided for in section R9-3-312. shall be used to determine compliance with the standards prescribed in subsection B. of 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; and

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 determined during each testing period by suitable methods; and shall be 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, $g/hr = Q_s \times c$, where Q_s - volumetric flow rate of the total effluent in dscm/hr as determined in accordance with subparagraph D.1.c. of this section, and c = particulate concentration in g/dscm as determined in accordance with subparagraph D.1.a. of this section.

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R9-3-508. Standards of performance for existing asphalt concrete plants

A. For the purpose of this section an asphalt concrete plant is comprised only of any combination of the following: Dryer, systems for screening, handling, storing and weighing hot aggregate, systems for loading, transferring and storing mineral filler; systems for mixing asphalt concrete; and the loading, transferring and storage systems associated with emission control systems. Drum dryer plants, wherein the asphalt is introduced into the dryer, are included hereunder.

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B. Fixed asphalt plants or portable asphalt plants which are existing sources shall meet the standards set forth in this Section. The owner or operator shall submit proof of prior use to the Director.

1. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing asphalt plant located outside of the Phoenix-Tucson Air Quality Control Region Gila, Maricopa, Pima, Pinal, or Santa Cruz counties in total quantities in excess of the amounts calculated by the equations set forth below:

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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 emission rate in pounds-mass per hour,

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

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b. 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 subparagraph B.1.a. of this Section

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2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing asphalt plant located in ~~The-Phoenix-Tucson-Air-Quality-Control-Region~~ Gila, Maricopa, Pima, Pinal, or Santa Cruz counties in total quantities in excess of the amount calculated by the equations set forth below.

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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:

$$E = 3.59p^{0.62}$$

where "E" and "P" are defined as indicated in subparagraph B.1.a. of this Section.

b. 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:

$$E = 17.31p^{0.16}$$

where "E" and "P" are defined as indicated in subparagraph B.1.a. of this Section.

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3. 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.

4. For purposes of this regulation, 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.

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5. Nothing in this Regulation shall be construed to prohibit the Director from issuing an installation or operating permit for an asphalt plant which will not operate in compliance with B.2. above provided that the plant will operate in compliance with B.1. above and the permit contains a condition prohibiting the operating of the plant in ~~The-Phoenix---Tucson-Air-Quality Control-Region~~ Gila, Maricopa, Pima, Pinal, or Santa Cruz counties.

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5. 6. The standard for sulfur in fuel under this Section is:
a. Liquid fuel containing greater than 0.9 percent sulfur by weight shall not be utilized for asphalt plants subject to this Section.
b. Solid fuel containing greater than 0.5 percent sulfur by weight shall not be utilized for asphalt plants subject to this Section.

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C. The test methods and procedures required under this section are:
1. The referenced methods given in the Arizona Testing Manual shall be used to determine compliance with the standards prescribed in subsection B. of this section.

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a. Method 5 for the concentration of particulate matter and the associated

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moisture content;

- b. Method 1 for sample and velocity traverses;
- c. Method 2 for velocity and 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 0.9 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-129-64, and the percent sulfur in solid fuel shall be determined by ASTM method D-3177-73.

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Part 19. Section R9-3-516, Standards of performance for existing coal preparation plants, is amended to read as follows:

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 (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems. This Section is applicable to all coal preparation plants which are existing sources. For purposes of this Section, the definitions contained in 40 CFR 60.251 are adopted by reference and incorporated herein.

1. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing coal preparation plant located outside of ~~The-Phoenix-Tucson-Air-Quality-Control~~ Region, Gila, Maricopa, Pima, Pinal, and Santa Cruz counties, in total quantities in excess of the amounts calculated by the equations set forth below:

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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.

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b. 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 subparagraph A.1.a. of this Section.

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2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing coal preparation plant located in ~~The-Phoenix---Tucson-Air-Quality-Control-Region~~ Gila, Maricopa, Pima, Pinal, and Santa Cruz counties, in total quantities in excess of the amount calculated by the equations set forth below:

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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:

$$E = 3.59P^{0.62}$$

where:

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

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

b. 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:

$$E = 17.31P^{0.16}$$

where "E" and "P" are defined as indicated in subparagraph A.2.a. of this Section.

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3. For reference purposes only, the equations in paragraphs A.1. and A.2. of this Section are plotted in Figure 2, Appendix 11. The emission values obtained from the graph are approximately correct for the process weight rate shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

4. For purposes of this regulation, 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.

■ 5. The opacity of any emission subject to the provisions of this Section shall not exceed 40 percent.

■ 6. Fugitive emissions from coal preparation plants shall be controlled in accordance with R9-3-404, through R9-3-407.

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B. The test methods and procedures required by this section are as follows:

1. The reference methods in the Arizona Testing Manual are used to determine compliance with standards prescribed in subsection A. of this section 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, and
- d. Method 3 for gas analysis.

2. For Method 5, the sampling time for each run is 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 is not to be started until 30 minutes

after start-up and is to 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 paragraph B.1. of this section.

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Part 23. Section R9-3-521, Standards of performance for existing nonferrous metals industry sources, is amended to read as follows:

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 which are existing sources.

1. No person shall cause, suffer, 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 and outside of ~~the Phoenix-Tucson Air Quality Control Region~~ Gila, Maricopa, Pima, Pinal, and Santa Cruz counties, in total quantities in excess of the amounts calculated by the equations set forth below:

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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 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 subparagraph A.1.a. of this Section.

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2. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any mining property process source located in the-Phoenix-Tucson-Air-Quality-Control-Region Gila, Maricopa, Pima, Pinal, and Santa Cruz counties, except smelters, in total quantities in excess of the amount calculated by the equations set forth below:

4-1-80

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:

$$E = 3.59P^{0.62}$$

where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Section.

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

$$E = 17.31P^{0.16}$$

where "E" and "P" are defined as indicated in subparagraph A.1.a. of this Section.

3. For reference purposes only, the equations in paragraphs A.1. and A.2. of this Section 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.

4. For purposes of this regulation, 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.

5. No person shall cause, suffer, allow or permit the discharge of any emissions from any mining property process or non-point source subject to the provisions of this Section, dust or smoke that exceeds 40 percent opacity.

1-4-79

B. No person shall cause, suffer, allow or permit to be discharged into the atmosphere from any dryer or roaster the operating temperature of which exceeds 700° F., reduced sulfur, which includes sulfur equivalent from all sulfur emissions including but not limited to sulfur dioxide, sulfur trioxide and sulfuric acid, in excess of ten percent of the sulfur entering the process as feed.

C. Monitoring of operations required by this section are:

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

2. ~~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 B. of this section.

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

1. The reference methods in the Arizona Testing Manual shall be used to determine compliance with the standard prescribed in subsections A. and B. of 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; and

d. Method 3 for gas analysis and calculation of excess air, using the integrated sample technique;

e. Method 6 for concentration of SO₂.

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.

6.3.82

Part 24. Section R9-3-522, Standards of performance for existing gravel or crushed stone processing plants, is amended to read as follows:

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 which are existing sources.

1. No person shall cause, suffer, 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 outside of the ~~Phoenix-Tucson Air-Quality-Control-Region~~, Gila, Maricopa, Pima, Pinal, and Santa Cruz counties, in total quantities in excess of the amounts calculated by the equations set forth below:

1-4-79

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 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 subparagraph A.1.a.

6-3-82

2. No person shall cause, suffer, 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 located in the ~~Phoenix-Tucson~~ Air-Quality-Control-Region Gila, Maricopa, Pima, Pinal and Santa Cruz counties in total quantities in excess of the amount calculated by the equations set forth below:

1-4-79

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:

$$E = 3.59P^{0.62}$$

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

$$E = 17.31P^{0.16}$$

where "E" and "P" are defined as indicated in subparagraph A.2.a. of this section.

3. For reference purposes only, the equations in paragraphs A.1. and A.2. of this section 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.

4. Notwithstanding the provisions of section R9-3-501., no person shall cause, suffer, allow or permit to be emitted into the atmosphere from any gravel or crushed stone processing plant, smoke or dust that exceeds 40 percent opacity.

5. Fugitive emissions from gravel or crushed stone processing plants shall be controlled in accordance with sections R9-3-404. through R9-3-407.

B. Monitoring of operations required by this section is as follows:

1. 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 \pm 5 percent over their operating range.

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

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

1. The reference methods in the Arizona Testing Manual shall be used to determine compliance with the standards prescribed in subsection A. of 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, and
- d. Method 3 for gas analysis.

2. For Method 5, the sampling time for each run is 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 is not to be started until 30 minutes after start-up and is to be terminated before shutdown procedures commence. The owner or operator of this affected facility shall eliminate cyclonic flow during performance tests in a manner acceptable to the Director.

ARTICLE 1. GENERAL

R18-2-101. Definitions

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

1. “Act” means the Clean Air Act of 1963 (P.L. 88-206; 42 U.S.C. 7401 through 7671q) as amended through December 31, 2011 (and no future editions).
2. “Actual emissions” means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in subsections (2)(a) through (e).
 - a. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period that precedes the particular date and that is representative of normal source operation. The Director may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit’s actual operating hours, production rates, and types of materials processed, stored or combusted during the selected time period.
 - b. The Director may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
 - c. For any emissions unit at a Class I source 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. This definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL. Instead, the definitions of projected actual emissions and baseline actual emissions in R18-2-401 shall apply for those purposes.
3. “Administrator” means the Administrator of the United States Environmental Protection Agency.
4. “Affected facility” means, with reference to a stationary source, any apparatus to which a standard is applicable.
5. “Affected source” means a source that includes one or more units which are subject to emission reduction requirements or limitations under Title IV of the Act.
6. “Affected state” means any state whose air quality may be affected by a source applying for a permit, permit revision, or permit renewal and that is contiguous to Arizona or that is within 50 miles of the permitted source.
7. “Afterburner” means an incinerator installed in the secondary combustion chamber or stack for the purpose of incinerating smoke, fumes, gases, unburned carbon, and other combustible material not consumed during primary combustion.
8. “Air contaminants” means smoke, vapors, charred paper, dust, soot, grime, carbon, fumes, gases, sulfuric acid mist aerosols, aerosol droplets, odors, particulate matter, wind-borne matter, radioactive materials, or noxious chemicals, or any other material in the outdoor atmosphere.
9. “Air curtain destructor” means an incineration device designed and used to secure, by means of a fan-generated air curtain, controlled combustion of only wood waste and slash materials in an earthen trench or refractory-lined pit or bin.
10. “Air pollution” means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in sufficient quantities, which either alone or in connection with other substances by reason of their concentration and duration are or tend to be injurious to human, plant or animal life, or cause damage to property, or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the director. A.R.S. § 49-421(2).
11. “Air pollution control equipment” means equipment used to eliminate, reduce or control the emission of air pollutants into the ambient air.
12. “Air quality control region” (AQCR) means an area so designated by the Administrator pursuant to Section 107 of the Act and includes the following regions in Arizona:
 - a. Maricopa Intrastate Air Quality Control Region which is comprised of the County of Maricopa.
 - b. Pima Intrastate Air Quality Control Region which is comprised of the County of Pima.
 - c. Northern Arizona Intrastate Air Quality Control Region which encompasses the counties of Apache, Coconino, Navajo, and Yavapai.
 - d. Mohave-Yuma Intrastate Air Quality Control Region which encompasses the counties of La Paz, Mohave, and Yuma.
 - e. Central Arizona Intrastate Air Quality Control Region which encompasses the counties of Gila and Pinal.
 - f. Southeast Arizona Intrastate Air Quality Control Region which encompasses the counties of Cochise, Graham, Greenlee, and Santa Cruz.
13. “Allowable emissions” means the emission rate of a stationary source calculated using both the maximum rated capacity of the source, unless the source is subject to federally enforceable limits which restrict the operating rate or hours of operation, and the most stringent of the following:
 - a. The applicable standards as set forth in 40 CFR 60, 61 or 63;
 - 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 stationary source.
14. “Ambient air” means that portion of the atmosphere, external to buildings, to which the general public has access.
15. “Applicable implementation plan” means those provisions of the state implementation plan approved by the Administrator or a federal implementation plan promulgated for Arizona or any portion of Arizona in accordance with Title I of the Act.
16. “Applicable requirement” means any of the following:
 - a. Any federal applicable requirement.
 - b. Any other requirement established pursuant to this Chapter or A.R.S. Title 49, Chapter 3.
17. “Arizona Testing Manual” means sections 1 and 7 of the Arizona Testing Manual for Air Pollutant Emissions amended as of March 1992 (and no future editions).
18. “ASTM” means the American Society for Testing and Materials.
19. “Attainment area” means any area in the state that has been identified in regulations promulgated by the Admin-

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- istrator as being in compliance with national ambient air quality standards.
20. “[NOT APPROVED]”
21. “Best available control technology” (BACT) means an emission limitation, including a visible emissions standard, based on the maximum degree of reduction for each air regulated NSR pollutant which would be emitted from any proposed major source or major modification, taking into account energy, environmental, and economic impact and other costs, determined by the Director in accordance with R18-2-406(A)(4) to be achievable for such source or modification.
22. “Btu” means British thermal unit, which is the quantity of heat required to raise the temperature of one pound of water 1°F.
23. “Categorical sources” means the following classes of sources:
- a. Coal cleaning plants with thermal dryers;
 - b. Kraft pulp mills;
 - c. Portland cement plants;
 - d. Primary zinc smelters;
 - e. Iron and steel mills;
 - f. Primary aluminum ore reduction plants;
 - g. Primary copper smelters;
 - h. Municipal incinerators capable of charging more than 250 tons of refuse per day;
 - i. Hydrofluoric, sulfuric, or nitric acid plants;
 - j. Petroleum refineries;
 - k. Lime plants;
 - l. Phosphate rock processing plants;
 - m. Coke oven batteries;
 - n. Sulfur recovery plants;
 - o. Carbon black plants using the furnace process;
 - p. Primary lead smelters;
 - q. Fuel conversion plants;
 - r. Sintering plants;
 - s. Secondary metal production plants;
 - t. Chemical process plants, which shall not include ethanol production facilities that produce ethanol by natural fermentation included in North American Industry Classification System codes 325193 or 312140;
 - u. Fossil-fuel boilers, combinations thereof, totaling more than 250 million Btus per hour heat input;
 - v. Petroleum storage and transfer units with a total storage capacity more than 300,000 barrels;
 - w. Taconite 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 Btus per hour heat input.
24. “Categorically exempt activities” means any of the following:
- a. Any combination of diesel-, natural gas- or gasoline-fired engines with cumulative power equal to or less than 145 horsepower.
 - b. Natural gas-fired engines with cumulative power equal to or less than 155 horsepower.
 - c. Gasoline-fired engines with cumulative power equal to or less than 200 horsepower.
 - d. Any of the following emergency or stand-by engines used for less than 500 hours in each calendar year, provided the permittee keeps records documenting the hours of operation of the engines:
 - i. Any combination of diesel-, natural gas- or gasoline-fired emergency engines with cumulative power equal to or less than 2,500 horsepower.

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- ii. Natural gas-fired emergency engines with cumulative power equal to or less than 2,700 horsepower.
 - iii. Gasoline-fired emergency engines with cumulative power equal to or less than 3,700 horsepower.
 - e. Any combination of boilers with a cumulative maximum design heat input capacity of less than 10 million Btu/hr.
25. “CFR” means the Code of Federal Regulations, amended as of July 1, 2011, (and no future editions), with standard references in this Chapter by Title and Part, so that “40 CFR 51” means Title 40 of the Code of Federal Regulations, Part 51.
 26. “Charge” means the addition of metal bearing materials, scrap, or fluxes to a furnace, converter or refining vessel.
 27. “Clean coal technology” means any technology, including technologies applied at the precombustion, combustion, or post-combustion stage, at a new or existing facility that will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam, that was not in widespread use as of November 15, 1990.
 28. “Clean coal technology demonstration project” means a project using funds appropriated under the heading “Department of Energy - Clean Coal Technology,” up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology or similar projects funded through appropriations for the Environmental Protection Agency. The federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.
 29. “Coal” means all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D-388-91, (Classification of Coals by Rank).
 30. “Combustion” means the burning of matter.
 31. “Commence” means, as applied to construction of a source, or a major modification as defined in Article 4 of this Chapter, that the owner or operator has all necessary preconstruction approvals or permits and either has:
 - a. Begun, or caused to begin, a continuous program of actual onsite construction of the source, to be completed within a reasonable time; or
 - b. Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
 32. “Construction” means any physical change or change in the method of operation, including fabrication, erection, installation, demolition, or modification of an emissions unit, which would result in a change in actual emissions.
 33. “Continuous monitoring system” means a CEMS, CERMS, or CPMS.
 34. “Continuous emissions monitoring system” or “CEMS” means the total equipment, required under the emission monitoring provisions in this Chapter, used to sample, condition (if applicable), analyze, and to provide, on a continuous basis, a permanent record of emissions.
 35. “Continuous emissions rate monitoring system” or “CERMS” means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).
 36. “Continuous parameter monitoring system” or “CPMS” means the total equipment, required under the emission monitoring provisions in this Chapter, to monitor process or control device operational parameters or other information and to provide, on a continuous basis, a permanent record of monitored values.
 37. “Controlled atmosphere incinerator” means one or more refractory-lined chambers in which complete combustion is promoted by recirculation of gases by mechanical means.
 38. “Conventional air pollutant” means any pollutant for which the Administrator has promulgated a primary or secondary national ambient air quality standard. A.R.S. § 49-401.01(12).
 39. “Department” means the Department of Environmental Quality. A.R.S. § 49-101(2)
 40. “Director” means the director of environmental quality who is also the director of the department. A.R.S. § 49-101(3).
 41. “Discharge” means the release or escape of an effluent from a source into the atmosphere.
 42. “Dust” means finely divided solid particulate matter occurring naturally or created by mechanical processing, handling or storage of materials in the solid state.
 43. “Dust suppressant” means a chemical compound or mixture of chemical compounds added with or without water to a dust source for purposes of preventing air entrainment.
 44. “Effluent” means any air contaminant which is emitted and subsequently escapes into the atmosphere.
 45. “Electric utility steam generating unit” means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.
 46. “Emission” means an air contaminant or gas stream, or the act of discharging an air contaminant or a gas stream, visible or invisible.
 47. “Emission standard” or “emission limitation” means a requirement established by the state, a local government, or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirements which limit the level of opacity, prescribe equipment, set fuel specifications, or prescribe operation or maintenance procedures for a source to assure continuous emission reduction.
 48. “Emissions unit” means any part of a stationary source which emits or would have the potential to emit any regulated air pollutant and includes an electric steam generating unit.
 49. “Equivalent method” means any method of sampling and analyzing for an air pollutant which has been demonstrated under R18-2-311(D) to have a consistent and quantitatively known relationship to the reference method, under specified conditions.
 50. “Excess emissions” means emissions of an air pollutant in excess of an emission standard as measured by the compliance test method applicable to such emission standard.
 51. “Federal applicable requirement” means any of the following (including requirements that have been promulgated or approved by EPA through rulemaking at the time of issuance but have future effective compliance dates):

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- a. Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under Title I of the Act that implements the relevant requirements of the Act, including any revisions to that plan promulgated in 40 CFR 52.
 - b. Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under Title I, including parts C or D, of the Act.
 - c. Any standard or other requirement under section 111 of the Act, including 111(d).
 - d. Any standard or other requirement under section 112 of the Act, including any requirement concerning accident prevention under section 112(r)(7) of the Act.
 - e. Any standard or other requirement of the acid rain program under Title IV of the Act or the regulations promulgated thereunder and incorporated pursuant to R18-2-333.
 - f. Any requirements established pursuant to section 504(b) or section 114(a)(3) of the Act.
 - g. Any standard or other requirement governing solid waste incineration, under section 129 of the Act.
 - h. Any standard or other requirement for consumer and commercial products, under section 183(e) of the Act.
 - i. Any standard or other requirement for tank vessels under section 183(f) of the Act.
 - j. Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under section 328 of the Act.
 - k. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, unless the Administrator has determined that such requirements need not be contained in a Title V permit.
 - l. Any national ambient air quality standard or 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.
52. “Federal Land Manager” means, with respect to any lands in the United States, the secretary of the department with authority over such lands.
 53. “Federally enforceable” means all limitations and conditions which are enforceable by the Administrator under the Act, including all of the following:
 - a. The requirements of the New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants 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 and registration programs that have been approved by the Administrator. Notwithstanding this subsection, the condition of any permit or registration designated as being enforceable only by the state is not federally enforceable.
 - c. The requirements of any applicable implementation plan.
 - d. Emissions limitations, controls, and other requirements, and any associated monitoring, recordkeeping, and reporting requirements, other than those designated as enforceable only by the state, that are included in a permit pursuant to R18-2-306.01 or R18-2-306.02.
 54. “Federally listed hazardous air pollutant” means a pollutant listed pursuant to R18-2-1701(9).
 55. “Final permit” means the version of a permit issued by the Department after completion of all review required by this Chapter.
 56. “Fixed capital cost” means the capital needed to provide all the depreciable components.
 57. “Fuel” means any material which is burned for the purpose of producing energy.
 58. “Fuel burning equipment” means any machine, equipment, incinerator, device or other article, except stationary rotating machinery, in which combustion takes place.
 59. “Fugitive emissions” means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
 60. “Fume” means solid particulate matter resulting from the condensation and subsequent solidification of vapors of melted solid materials.
 61. “Fume incinerator” means a device similar to an after-burner installed for the purpose of incinerating fumes, gases and other finely divided combustible particulate matter not previously burned.
 62. “Good engineering practice (GEP) stack height” means a stack height meeting the requirements described in R18-2-332.
 63. “Hazardous air pollutant” means any federally listed hazardous air pollutant.
 64. “Heat input” means the quantity of heat in terms of Btus generated by fuels fed into the fuel burning equipment under conditions of complete combustion.
 65. “Incinerator” means any equipment, machine, device, contrivance or other article, and all appurtenances thereof, used for the combustion of refuse, salvage materials or any other combustible material except fossil fuels, for the purpose of reducing the volume of material.
 66. “Indian governing body” means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.
 67. “Indian reservation” means any federally recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.
 68. “Insignificant activity” means any of the following activities:
 - a. Liquid Storage and Piping
 - i. Petroleum product storage tanks containing the following substances, provided the applicant lists and identifies the contents of each tank with a volume of 350 gallons or more and provides threshold values for throughput or capacity or both for each such tank: diesel fuels and fuel oil in storage tanks with capacity of 40,000 gallons or less, lubricating oil, transformer oil, and used oil.
 - ii. Gasoline storage tanks with capacity of 10,000 gallons or less.
 - iii. Storage and piping of natural gas, butane, propane, or liquified petroleum gas, provided the applicant lists and identifies the contents of each stationary storage vessel with a volume of 350 gallons or more and provides threshold values for throughput or capacity or both for each such vessel.

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- iv. Piping of fuel oils, used oil and transformer oil, provided the applicant includes a system description.
 - v. Storage and handling of drums or other transportable containers where the containers are sealed during storage, and covered during loading and unloading, including containers of waste and used oil regulated under the federal Resource Conservation and Recovery Act, 42 U.S.C. 6901-6992k. Permit applicants must provide a description of material in the containers and the approximate amount stored.
 - vi. Storage tanks of any size containing exclusively soaps, detergents, waxes, greases, aqueous salt solutions, aqueous solutions of acids that are not regulated air pollutants, or aqueous caustic solutions, provided the permit applicant specifies the contents of each storage tank with a volume of 350 gallons or more.
 - vii. Electrical transformer oil pumping, cleaning, filtering, drying and the re-installation of oil back into transformers.
 - b. Internal combustion engine-driven compressors, internal combustion engine-driven electrical generator sets, and internal combustion engine-driven water pumps used for less than 500 hours per calendar year for emergency replacement or standby service, provided the permittee keeps records documenting the hours of operation of this equipment.
 - c. Low Emitting Processes
 - i. Batch mixers with rated capacity of 5 cubic feet or less.
 - ii. Wet sand and gravel production facilities that obtain material from subterranean and subaqueous beds, whose production rate is 200 tons/hour or less, and whose permanent in-plant roads are paved and cleaned to control dust. This does not include activities in emissions units which are used to crush or grind any non-metallic minerals.
 - iii. Powder coating operations.
 - iv. Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing.
 - v. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system or collector serving them exclusively.
 - vi. Plastic pipe welding.
 - d. Site Maintenance
 - i. Housekeeping activities and associated products used for cleaning purposes, including collecting spilled and accumulated materials at the source, including operation of fixed vacuum cleaning systems specifically for such purposes.
 - ii. Sanding of streets and roads to abate traffic hazards caused by ice and snow.
 - iii. Street and parking lot striping.
 - iv. Architectural painting and associated surface preparation for maintenance purposes at industrial or commercial facilities.
 - e. Sampling and Testing
 - i. Noncommercial (in-house) experimental, analytical laboratory equipment which is bench scale in nature, including quality control/quality assurance laboratories supporting a stationary source and research and development laboratories.
 - ii. Individual sampling points, analyzers, and process instrumentation, whose operation may result in emissions but that are not regulated as emission units.
 - f. Ancillary Non-Industrial Activities
 - i. General office activities, such as paper shredding, copying, photographic activities, and blueprinting, but not to include incineration.
 - ii. Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) where the product is used at a source in the same manner as normal consumer use.
 - iii. Activities directly used in the diagnosis and treatment of disease, injury or other medical condition.
 - g. Miscellaneous Activities
 - i. Installation and operation of potable, process and waste water observation wells, including drilling, pumping, filtering apparatus.
 - ii. Transformer vents.
69. "Kraft pulp mill" means any stationary source which produces pulp from wood by cooking or digesting wood chips in a water solution of sodium hydroxide and sodium sulfide at high temperature and pressure. Regeneration of the cooking chemicals through a recovery process is also considered part of the kraft pulp mill.
70. "Lead" means elemental lead or alloys in which the predominant component is lead.
71. "Lime hydrator" means a unit used to produce hydrated lime product.
72. "Lime plant" includes any plant which produces a lime product from limestone by calcination. Hydration of the lime product is also considered to be part of the source.
73. "Lime product" means any product produced by the calcination of limestone.
74. "Major modification" is defined as follows:
- a. A major modification is any physical change in or change in the method of operation of a major source that would result in both a significant emissions increase of any regulated NSR pollutant and a significant net emissions increase of that pollutant from the stationary source.
 - b. Any emissions increase or net emissions increase that is significant for nitrogen oxides or volatile organic compounds is significant for ozone.
 - c. For the purposes of this definition, none of the following is a physical change or change in the method of operation:
 - i. Routine maintenance, repair, and replacement;
 - ii. Use of an alternative fuel or raw material by reason of an order under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. 792, or by reason of a natural gas curtailment plan under the Federal Power Act, 16 U.S.C. 792 - 825r;
 - iii. Use of an alternative fuel by reason of an order or rule under section 125 of the Act;
 - iv. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
 - v. Use of an alternative fuel or raw material by a stationary source that either:

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- (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. [Reserved.]
 - ix. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, if the project complies with:
 - (1) The SIP, and
 - (2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated;
 - x. For electric utility steam generating units located in attainment and unclassifiable areas only, the installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, if the project does not result in an increase in the potential to emit any regulated pollutant emitted by the unit. This exemption applies on a pollutant-by-pollutant basis; and
 - xi. For electric utility steam generating units located in attainment and unclassifiable areas only, the reactivation of a very clean coal-fired electric utility steam generating unit.
 - d. This definition shall not apply with respect to a particular regulated NSR pollutant when the major source is complying with the requirements of R18-2-412 for a PAL for that regulated NSR pollutant. Instead, the definition of PAL major modification in R18-2-401(17) shall apply.
75. "Major source" means:
- a. A major source as defined in R18-2-401.
 - b. A major source under section 112 of the Act:
 - i. For pollutants other than radionuclides, any stationary source that emits or has the potential to emit, in the aggregate, including fugitive emission 10 tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to section 112(b) of the Act, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as described in Article 11 of this Chapter. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or
 - ii. For radionuclides, "major source" shall have the meaning specified by the Administrator by rule.
 - c. A major stationary source, as defined in section 302 of the Act, that directly emits or has the potential to emit, 100 tpy or more of any air pollutant including any major source of fugitive emissions of any such pollutant. The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of section 302(j) of the Act, unless the source belongs to a section 302(j) category.
76. "Malfunction" means any sudden and unavoidable failure of air pollution control equipment, process equipment or a process to operate in a normal and usual manner, but does not include failures that are caused by poor maintenance, careless operation or any other upset condition or equipment breakdown which could have been prevented by the exercise of reasonable care.
77. "Minor source" means a source of air pollution which is not a major source for the purposes of Article 4 of this Chapter and over which the Director, acting pursuant to A.R.S. § 49-402(B), has asserted jurisdiction.
78. "Minor source baseline area" means the air quality control region in which the source is located.
79. "Mobile source" means any combustion engine, device, machine or equipment that operates during transport and that emits or generates air contaminants whether in motion or at rest. A.R.S. § 49-401.01(23).
80. "Modification" or "modify" means a physical change in or change in the method of operation of a source that increases the emissions of any regulated air pollutant emitted by such source by more than any relevant de minimis amount or that results in the emission of any regulated air pollutant not previously emitted by more than such de minimis amount. An increase in emissions at a minor source shall be determined by comparing the source's potential to emit before and after the modification. The following exemptions apply:
 - a. A physical or operational change does not include routine maintenance, repair or replacement.
 - b. An increase in the hours of operation or if the production rate is not considered an operational change unless such increase is prohibited under any permit condition that is legally and practically enforceable by the department.
 - c. A change in ownership at a source is not considered a modification. A.R.S. § 49-401.01(24).
81. "Monitoring device" means the total equipment, required under the applicable provisions of this Chapter, used to measure and record, if applicable, process parameters.
82. "Motor vehicle" means any self-propelled vehicle designed for transporting persons or property on public highways.
83. "Multiple chamber incinerator" means three or more refractory-lined combustion chambers in series, physically separated by refractory walls and interconnected by gas passage ports or ducts.
84. "Natural conditions" includes naturally occurring phenomena that reduce visibility as measured in terms of light extinction, visual range, contrast, or coloration.
85. "National ambient air quality standard" means the ambient air pollutant concentration limits established by the

Administrator pursuant to section 109 of the Act. A.R.S. § 49-401.01(25).

- 86. “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.
- 87. “Net emissions increase” means:
 - a. The amount by which the sum of subsections (87)(a)(i) and (ii) exceeds zero:
 - i. The increase in emissions of a regulated NSR pollutant from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to R18-2-402(D); and
 - ii. Any other increases and decreases in actual emissions of the regulated NSR pollutant at the source that are contemporaneous with the particular change and are otherwise creditable.
 - iii. For purposes of calculating increases and decreases in actual emissions under subsection (87)(a)(ii), baseline actual emissions shall be determined as provided in the definition of baseline actual emissions in R18-2-401(2), except that subsections R18-2-401(a)(iii) and (b)(iv) shall not apply.
 - b. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
 - i. The date five years before 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.
 - d. An increase or decrease in actual emissions of sulfur dioxide, nitrogen oxides, or PM₁₀ 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 it satisfies all of the following conditions:
 - i. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions.
 - ii. It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.
 - iii. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
 - iv. The emissions unit was actually operated and emitted the specific pollutant.
 - v. For a source located in an area designated as nonattainment for the regulated NSR pollutant, the Director has not relied on it in issuing any permit under Article 4 or R18-2-334, and the

state has not relied on it in demonstrating attainment or reasonable further progress.

- g. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any emissions unit that replaces an existing emissions unit and that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- 88. “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.
- 89. “Nitric acid plant” means any facility producing nitric acid 30% to 70% in strength by either the pressure or atmospheric pressure process.
- 90. “Nitrogen oxides” means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in the Appendices to 40 CFR 60.
- 91. “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.
- 92. “Nonpoint source” means a source of air contaminants which lacks an identifiable plume or emission point.
- 93. “Opacity” means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.
- 94. “Operation” means any physical or chemical action resulting in the change in location, form, physical properties, or chemical character of a material.
- 95. “Owner or operator” means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source.
- 96. “Particulate matter” means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers.
- 97. “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.
- 98. “Permitting authority” means the department or a county department, agency or air pollution control district that is charged with enforcing a permit program adopted pursuant to A.R.S. § 49-480(A). A.R.S. § 49-401.01(28).
- 99. “Permitting exemption thresholds” for a regulated minor NSR pollutant means the following:

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

- 100. “Person” means any public or private corporation, company, partnership, firm, association or society of persons, the federal government and any of its departments or

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- agencies, the state and any of its agencies, departments or political subdivisions, as well as a natural person.
101. “*Planning agency*” means an organization designated by the governor pursuant to 42 U.S.C. 7504. A.R.S. § 49-401.01(29).
 102. “*Predictive Emissions Monitoring System*” or “*PEMS*” means the total equipment, required under the emission monitoring provisions in this Chapter, to monitor process and control device operational parameters and other information, and calculate and record the mass emissions rate on a continuous basis.
 103. “*PM_{2.5}*” means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 CFR 50 Appendix L, or by an equivalent method designated according to 40 CFR 53.
 104. “*PM₁₀*” means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method contained within 40 CFR 50 Appendix J or by an equivalent method designated in accordance with 40 CFR 53.
 105. “*PM₁₀ emissions*” means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by applicable test methods and procedures described in R18-2-311.
 106. “*Plume*” means visible effluent.
 107. “*Pollutant*” means an air contaminant the emission or ambient concentration of which is regulated pursuant to this Chapter.
 108. “*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.
 109. “*Potential to emit*” or “*potential emission rate*” means the maximum capacity of a stationary source to emit a pollutant, excluding secondary emissions, under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is legally and practically enforceable by the Department or a county under A.R.S. Title 49, Chapter 3; any rule, ordinance, order or permit adopted or issued under A.R.S. Title 49, Chapter 3 or the state implementation plan.
 110. “*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.
 111. “*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.
 112. “*Project*” means a physical change in, or change in the method of operation of, an existing major source.
 113. “*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).
 114. “*Proposed final permit*” means the version of a Class I permit or Class I permit revision that the Department proposes to issue and forwards to the Administrator for review in compliance with R18-2-307(A).
 115. “*Reactivation of a very clean coal-fired electric utility steam generating unit*” means any physical change or change in the method of operation associated with commencing commercial operations by a coal-fired utility unit after a period of discontinued operation if the unit:
 - a. Has not been in operation for the two-year period before enactment of the Clean Air Act Amendments of 1990, and the emissions from the unit continue to be carried in the Director’s emissions inventory at the time of enactment;
 - b. Was equipped before shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85% and a removal efficiency for particulates of no less than 98%;
 - c. Is equipped with low-NO_x burners before commencement of operations following reactivation; and
 - d. Is otherwise in compliance with the Act.
 116. “*Reasonable further progress*” means the schedule of emission reductions defined within a nonattainment area plan as being necessary to come into compliance with a national ambient air quality standard by the primary standard attainment date.
 117. “*Reasonably available control technology*” (RACT) means devices, systems, process modifications, work practices or other apparatus or techniques that are determined by the Director to be reasonably available taking into account:
 - a. The necessity of imposing the controls in order to attain and maintain a national ambient air quality standard;
 - b. The social, environmental, energy and economic impact of the controls;
 - c. Control technology in use by similar sources; and
 - d. The capital and operating costs and technical feasibility of the controls.
 118. “*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.
 119. “*Reference method*” means the methods of sampling and analyzing for an air pollutant as described in the Arizona Testing Manual; 40 CFR 50, Appendices A through K; 40 CFR 51, Appendix M; 40 CFR 52, Appendices D and E; 40 CFR 60, Appendices A through F; and 40 CFR 61, Appendices B and C, as incorporated by reference in 18 A.A.C. 2, Appendix 2.
 120. “*Regulated air pollutant*” means any of the following:
 - a. Any conventional air pollutant.
 - 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 Article 17 of this Chapter.
 - e. Any Class I or II substance listed in section 602 of the Act.
 121. “*Regulated minor NSR pollutant*” means any pollutant for which a national ambient air quality standard has been promulgated and the following precursors for such pollutants:
 - a. VOC and nitrogen oxides as precursors to ozone.
 - b. Nitrogen oxides and sulfur dioxide as precursors to PM_{2.5}.
 122. “*Regulated NSR pollutant*” means any of the following:
 - a. Any pollutant for which a national ambient air quality standard has been promulgated and any pollutant identified under this subsection as a constituent or

- precursor to such pollutant. Precursors for purposes of NSR are the following:
- i. Volatile organic compounds and nitrogen oxides are precursors to ozone in all areas.
 - ii. Sulfur dioxide is a precursor to PM_{2.5} in all areas.
 - iii. Nitrogen oxides are precursors to PM_{2.5} in all areas.
- b. Any pollutant that is subject to any standard promulgated under Article 9 of this Chapter.
 - c. Any Class I or II substance subject to a standard promulgated under or established by Title VI of the Act as of July 1, 2011.
 - d. [Reserved.]
 - e. Notwithstanding subsections (122)(a) through (d), the term regulated NSR pollutant shall not include any or all hazardous air pollutants listed under R18-2-1101, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act as of July 1, 2010.
 - f. Particulate matter emissions, PM_{2.5} emissions, and PM₁₀ emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On and after January 1, 2011, condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for particulate matter, PM_{2.5} and PM₁₀ in permits issued under Article 4.
123. "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.
124. "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.
125. "SCREEN model" means the AERSCREEN air dispersion model published by the Administrator in April 2011 and available on the Support Center for Regulatory Atmospheric Modeling web site: <http://www.epa.gov/ttn/scram>.
126. "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.
127. "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.
128. "Section 302(j) category" means:
- a. Any of the classes of sources listed in the definition of categorical source in subsection (23); or
 - b. Any category of affected facility which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.
129. "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.
130. "Significant" means, in reference to a significant emissions increase, a net emissions increase or a stationary source's potential to emit a regulated NSR pollutant:
- a. 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
PM _{2.5}	10 tpy of direct PM _{2.5} emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions.
VOC	40 tpy
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H ₂ S)	10 tpy
Total reduced sulfur (including H ₂ S)	10 tpy
Reduced sulfur compounds (including H ₂ S)	10 tpy

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| <p>Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans) 3.5×10^{-6} tpy</p> <p>Municipal waste combustor metals (measured as particulate matter) 15 tpy</p> <p>Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride) 40 tpy</p> <p>Municipal solid waste landfill emissions (measured as nonmethane organic compounds) 50 tpy</p> | <p>submitted to and approved by the Administrator pursuant to 42 U.S.C. 7410.</p> <p>138. “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.</p> <p>139. “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.”</p> <p>140. “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.</p> <p>141. “Temporary clean coal technology demonstration project” means a clean coal technology demonstration project operated for five years or less, and that complies with the applicable implementation plan and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after the project is terminated.</p> <p>142. “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.</p> <p>143. “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.</p> <p>144. “Trivial activities” means activities and emissions units, such as the following, that may be omitted from a permit or registration application. Certain of the following listed activities include qualifying statements intended to exclude similar activities:</p> <ol style="list-style-type: none"> a. Low-Emitting Combustion <ol style="list-style-type: none"> i. Combustion emissions from propulsion of mobile sources; ii. Emergency or backup electrical generators at residential locations; iii. Portable electrical generators that can be moved by hand from one location to another. “Moved by hand” means capable of being moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device; b. Low- Or Non-Emitting Industrial Activities <ol style="list-style-type: none"> i. Blacksmith forges; ii. Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, sawing, grinding, turning, routing or machining of ceramic art work, precision parts, leather, metals, plastics, fiberboard, masonry, carbon, glass, or wood; iii. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in |
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- b. In ozone nonattainment areas classified as serious or severe, significant emissions of nitrogen oxides and VOC shall be determined under R18-2-405.
- c. In a carbon monoxide nonattainment area classified as serious, a rate of emissions that would equal or exceed 50 tons per year, if the Administrator has determined that stationary sources contribute significantly to carbon monoxide levels in that area.
- d. For a regulated NSR pollutant that is not listed in subsection (130)(a), any emission rate.
- e. Notwithstanding the emission rates listed in subsection (130)(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 mg/m³ (24-hour average).
131. “Significant emissions increase” means, for a regulated NSR pollutant, an increase in emissions that is significant as defined in this Section for that pollutant.
132. “Smoke” means particulate matter resulting from incomplete combustion.
133. “Source” means any building, structure, facility or installation that may cause or contribute to air pollution or the use of which may eliminate, reduce or control the emission of air pollution. A.R.S. § 49-401.01(23).
134. “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.
135. “Stack in existence” means that the owner or operator had either:
- a. Begun, or caused to begin, a continuous program of physical onsite construction of the stack;
 - b. Entered into binding agreements or contractual obligations, which could not be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed in a reasonable time.
136. “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.
137. “State implementation plan” or “SIP” means the accumulated record of enforceable air pollution control measures, programs and plans adopted by the Director and

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- emission of HAP metals. Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are insignificant activities based on size or production level thresholds. Brazing, soldering, and welding equipment, and cutting torches directly related to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately in this definition;
- iv. Drop hammers or hydraulic presses for forging or metalworking;
 - v. Air compressors and pneumatically operated equipment, including hand tools;
 - vi. Batteries and battery charging stations, except at battery manufacturing plants;
 - vii. Drop hammers or hydraulic presses for forging or metalworking;
 - viii. Equipment used exclusively to slaughter animals, not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment;
 - ix. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation;
 - x. Equipment used for surface coating, painting, dipping, or spraying operations, except those that will emit VOC or HAP;
 - xi. CO₂ lasers used only on metals and other materials that do not emit HAP in the process;
 - xii. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam;
 - xiii. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants;
 - xiv. Laser trimmers using dust collection to prevent fugitive emissions;
 - xv. Process water filtration systems and demineralizers;
 - xvi. Demineralized water tanks and demineralizer vents;
 - xvii. Oxygen scavenging or de-aeration of water;
 - xviii. Ozone generators;
 - xix. Steam vents and safety relief valves;
 - xx. Steam leaks; and
 - xxi. Steam cleaning operations and steam sterilizers;
 - xxii. Use of vacuum trucks and high pressure washer/cleaning equipment within the stationary source boundaries for cleanup and in-source transfer of liquids and slurried solids to waste water treatment units or conveyances;
 - xxiii. Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing.
 - xxiv. Electric motors.
- c. Building and Site Maintenance Activities
 - i. Plant and building maintenance and upkeep activities, including grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots, if these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and do not otherwise trigger a permit revision. Cleaning and painting activities qualify as trivial activities if they are not subject to VOC or hazardous air pollutant control requirements;
 - ii. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating, de-greasing, or solvent metal cleaning activities, and not otherwise triggering a permit revision;
 - iii. Janitorial services and consumer use of janitorial products;
 - iv. Landscaping activities;
 - v. Routine calibration and maintenance of laboratory equipment or other analytical instruments;
 - vi. Sanding of streets and roads to abate traffic hazards caused by ice and snow;
 - vii. Street and parking lot striping;
 - viii. Caulking operations which are not part of a production process.
 - d. Incidental, Non-Industrial Activities
 - i. Air-conditioning units used for human comfort that do not have applicable requirements under Title VI of the Act;
 - ii. Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing, industrial or commercial process;
 - iii. Tobacco smoking rooms and areas;
 - iv. Non-commercial food preparation;
 - v. General office activities, such as paper shredding, copying, photographic activities, pencil sharpening and blueprinting, but not including incineration;
 - vi. Laundry activities, except for dry-cleaning and steam boilers;
 - vii. Bathroom and toilet vent emissions;
 - viii. Fugitive emissions related to movement of passenger vehicles, if the emissions are not counted for applicability purposes under subsection (144)(c) of the definition of major source in this Section and any required fugitive dust control plan or its equivalent is submitted with the application;
 - ix. Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) where the product is used at a source in the same manner as normal consumer use;
 - x. Activities directly used in the diagnosis and treatment of disease, injury or other medical condition;
 - xi. Circuit breakers;
 - xii. Adhesive use which is not related to production.
 - e. Storage, Piping and Packaging
 - i. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP;
 - ii. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and

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- nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
- iii. Chemical storage associated with water and wastewater treatment where the water is treated for consumption and/or use within the permitted facility;
 - iv. Chemical storage associated with water and wastewater treatment where the water is treated for consumption and/or use within the permitted facility;
 - v. Storage cabinets for flammable products;
 - vi. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities;
 - vii. Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, if appropriate lids and covers are used;
- f. Sampling and Testing
- i. Vents from continuous emissions monitors and other analyzers;
 - ii. Bench-scale laboratory equipment used for physical or chemical analysis, but not laboratory fume hoods or vents;
 - iii. Equipment used for quality control, quality assurance, or inspection purposes, including sampling equipment used to withdraw materials for analysis;
 - iv. Hydraulic and hydrostatic testing equipment;
 - v. Environmental chambers not using HAP gases;
 - vi. Soil gas sampling;
 - vii. Individual sampling points, analyzers, and process instrumentation, whose operation may result in emissions but that are not regulated as emission units;
- g. Safety Activities
- i. Fire suppression systems;
 - ii. Emergency road flares;
- h. Miscellaneous Activities
- i. Shock chambers;
 - ii. Humidity chambers;
 - iii. Solar simulators;
 - iv. Cathodic protection systems;
 - v. High voltage induced corona; and
 - vi. Filter draining.
145. “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.
146. “Uncombined water” means condensed water containing analytical trace amounts of other chemical elements or compounds.
147. “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.
148. “Vacant lot” means a subdivided residential or commercial lot which contains no buildings or structures of a temporary or permanent nature.
149. “Vapor” means the gaseous form of a substance normally occurring in a liquid or solid state.
150. “Visibility impairment” means any humanly perceptible change in visibility (light extinction, visual range, contrast, coloration) from that which would have existed under natural conditions.
151. “Visible emissions” means any emissions which are visually detectable without the aid of instruments and which contain particulate matter.
152. “Volatile organic compounds” or “VOC” means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions. This includes any such organic compound other than the following:
- a. Methane;
 - b. Ethane;
 - c. Methylene chloride (dichloromethane);
 - d. 1,1,1-trichloroethane (methyl chloroform);
 - e. 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
 - f. Trichlorofluoromethane (CFC-11);
 - g. Dichlorodifluoromethane (CFC-12);
 - h. Chlorodifluoromethane (HCFC-22);
 - i. Trifluoromethane (HFC-23);
 - j. 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114);
 - k. Chloropentafluoroethane (CFC-115);
 - l. 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123);
 - m. 1,1,1,2-tetrafluoroethane (HFC-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-365mf);
 - 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 (C₄F₉OCH₃);
 - oo. 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CFCF₂OCH₃);
 - pp. 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C₄F₉OC₂H₅);
 - qq. 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF₃)₂CFCF₂OC₂H₅);
 - rr. Methyl acetate; and
 - ss. 1,1,1,2,2,3,3-heptafluoro-3-methoxypropane (n-C₃F₇OCH₃, HFE—7000);
 - tt. 3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE – 7500);
 - uu. 1,1,1,2,3,3,3-hentafluoropropane (HFC 227ea);

- vv. Methyl formate (HCOOCH₃); and
- ww. (1) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300);
- xx. Propylene carbonate;
- yy. Dimethyl carbonate; and
- zz. Perfluorocarbon compounds that fall into these classes:
 - i. Cyclic, branched, or linear, completely fluorinated alkanes.
 - ii. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations.
 - iii. Cycle, branched, or linear, completely fluorinated tertiary amines with no unsaturations; or
 - iv. Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

aaa. The following compound is VOC for purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements which apply to VOC and shall be uniquely identified in emission reports, but are not VOC for purposes of VOC emissions limitations or VOC content requirements: t-butyl acetate.

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

Historical Note

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

R18-2-102. Incorporated Materials

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

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

Historical Note

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

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: PM₁₀ and PM_{2.5}

- A. PM₁₀ Standards**
1. The level of the primary and secondary ambient air quality standards for PM₁₀ is 150 micrograms per cubic meter of PM₁₀ – 24-hour average concentration.
 2. To determine attainment of the primary and secondary standards, a person shall measure PM₁₀ in the ambient air by:
 - a. A reference method based on 40 CFR 50, Appendix J, and designated according to 40 CFR 53; or
 - b. An equivalent method designated according to 40 CFR 53.
 3. The primary and secondary 24-hour ambient air quality standards for PM₁₀ are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter, determined according to 40 CFR 50, Appendix K, is less than or equal to one.
- B. PM_{2.5} Standards**
1. The primary ambient air quality standards for PM_{2.5} are:
 - a. 15 micrograms per cubic meter of PM_{2.5} – annual arithmetic mean concentration.
 - b. 35 micrograms per cubic meter of PM_{2.5} – 24-hour average concentration.
 2. The secondary ambient air quality standards for PM_{2.5} are:



R18-2-612.01. Agricultural PM General Permit For Irrigation Districts; Moderate PM Nonattainment Areas Designated After June 1, 2009, Including Pinal County PM Nonattainment Area

R18-2-613. Yuma PM₁₀ Nonattainment Area; Agricultural Best Management Practices Definitions for R18-2-613.01

R18-2-613.01. Yuma PM₁₀ Nonattainment Area; Agricultural Best Management Practices

Appendix 2. Test Methods and Protocols

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

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

40 CFR 81.303 as amended as of July 1, 2014 (and no future amendments or editions) is incorporated by reference as an applicable requirement and on file with the Department of Environmental Quality. 40 CFR 81.303 is available from the U.S. Government Printing Office, Superintendent of Documents, bookstore.gpo.gov, Mail Stop: SSOP IDCC-SSOM, Washington, D.C. 20402-9328.

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

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

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

1. "Access restriction" means reducing PM emissions by reducing the number of trips driven on agricultural aprons and access roads by restricting or eliminating public access to noncropland or commercial farm roads with signs or physical obstruction at locations that effectively control access to the area.
2. "Aggregate cover" means reducing PM emissions and wind erosion and stabilizing soil by applying and maintaining gravel, concrete, recycled road base, caliche, or other similar material applied to noncropland or commercial farm roads to a depth sufficient to reduce dust generated from vehicle movement, wind or other erosive forces. The aggregate should be clean, hard and durable, and should be applied and maintained to a depth sufficient to reduce PM emissions.
3. "Area A" means the area delineated according to A.R.S. § 49-541(1).
4. "Best management practice" (BMP) means a technique verified by scientific research, that on a case-by-case basis is practical, economically feasible, and effective in reducing PM₁₀ emissions from a regulated agricultural activity.
5. "Cessation of Night Tillage" means the discontinuation of night tillage tilling from sunset to sunrise on a day identified by the Maricopa or Pinal County Dust Control Forecast as being high risk of dust generation.
6. "Chemical irrigation" means reducing a minimum of one ground operation reducing the number of passes across a commercial farm by applying a fertilizer, pesticide, or other agricultural chemical to cropland through an irrigation system, which reduces soil disturbance and increases efficiency of application.
7. "Chips/ mulches" means reducing PM emissions and soil movement and preserving soil moisture by applying and maintaining nontoxic chemical or organic dust suppressants to a depth sufficient to reduce PM emissions. Materials shall meet all specifications required by federal, state, or local water agencies, and is not prohibited for use by any applicable regulations.
78. "Combining tractor operations" means reducing soil compaction and the number of passes a minimum of one tillage or ground operation across a commercial farm by using a tractor, implement, harvester, or other farming support vehicle to perform two or more tillage, cultivation, planting, or harvesting operations at the same time. If Equipment modification is also chosen as a BMP, and uses the same practices as described in this BMP, this action is considered one BMP.
89. "Commercial farm" means 10 or more contiguous acres of land used for agricultural purposes within the boundary of the Maricopa PM₁₀ nonattainment area and Maricopa County portion of Area A, or a PM₁₀ nonattainment area designated after June 1, 2009 as stated in A.R.S. § 49-457(P)(1)(f), or the Pinal County PM Nonattainment Area.
10. "Commercial farm road" means a road that is unpaved, owned by a commercial farmer, and is used exclusively to service a commercial farm.
91. "Commercial farmer" means an individual, entity, or joint operation in general control of a commercial farm.
1012. "Committee" means the Governor's Agricultural Best Management Practices Committee as established by A.R.S. § 49-457.
13. "Conservation Tillage" means a tillage system that reduces a minimum of three tillage operations. This system reduces soil and water loss by planting into existing plant stubble on the field after harvest as well as managing the stubble so that it remains intact during the planting season.
114. "Cover crop" means establishing cover crops that maintain a minimum of 60 percent ground cover. Native or volunteer vegetation that meets the minimum ground cover requirement is acceptable. Compliance shall be determined by the Line Transect Test Method, NRCS National Agronomy Manual, Subpart 503.51, Estimating Crop Residue Cover, amended through February 2011 (and no future editions), reducing wind erosion and PM₁₀ emissions by using plants or a green manure crop seasonally to protect soil surfaces between crops and control soil movement.
1215. "Critical area planting" means reducing PM₁₀ emissions and wind erosion by planting trees, shrubs, vines, grasses, or other vegetative cover on noncropland in order to maintain at least 60 percent adequate ground cover. Compliance shall be determined by the Line Transect Test Method, NRCS National Agronomy Manual, Subpart 503.51, Estimating Crop Residue Cover, amended through February 2011 (and no future editions).

Department of Environmental Quality – Air Pollution Control

Historical Note

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

R18-2-211. Reserved**R18-2-212. Reserved****R18-2-213. Reserved****R18-2-214. Reserved****R18-2-215. Ambient air quality monitoring methods and procedures**

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

Historical Note

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

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

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

Historical Note

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

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

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

- C.** The following areas shall be designated only as Class I or II:
1. An area which as of August 7, 1977, exceeds 10,000 acres in size and is one of the following:
 - a. A national monument,
 - b. A national primitive area,
 - c. A national preserve,
 - d. A national recreational area,
 - e. A national wild and scenic river,
 - f. A national wildlife refuge,
 - g. A national lakeshore or seashore.
 2. A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.
- D.** All other areas shall be Class II areas unless redesignated under subsections (E) or (F).
- E.** The Governor or the Governor's designee may redesignate areas of the state as Class I or Class II, provided that the following requirements are fulfilled:
1. At least one public hearing is held in or near the area affected;
 2. Other states, Indian governing bodies and Federal Land Managers, whose land may be affected by the proposed redesignation are notified at least 30 days prior to the public hearing.
 3. A discussion document of the reasons for the proposed redesignation including a description and analysis of health, environmental, economic, social and energy effects of the proposed redesignation is prepared by the Governor or the Governor's designee. The discussion document shall be made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing shall contain appropriate notification of the availability of such discussion document.
 4. Prior to the issuance of notice respecting the redesignation of an area which includes any federal lands, the Governor or the Governor's designee has provided written notice to the appropriate Federal Land Manager and afforded the Federal Land Manager adequate opportunity, not in excess of 60 days, to confer with the state respecting the redesignation and to submit written comments and recommendations. The Governor or the Governor's designee shall publish a list of any inconsistency between such redesignation and such recommendations, together with the reasons for making such redesignation against the recommendation of the Federal Land Manager, if any Federal Land Manager has submitted written comments and recommendations.
 5. The redesignation is proposed after consultation with the elected leadership of local governments in the area covered by the proposed redesignation.
 6. The redesignation is submitted to the Administrator as a revision to the SIP.
- F.** The Governor or the Governor's designee may redesignate areas of the state as Class III if all of the following criteria are met:
1. Such redesignation meets the requirements of subsection (E);
 2. Such redesignation has been approved after consultation with the appropriate committee of the legislature if it is in session or with the leadership of the legislature if it is not in session.
 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_{2.5}

Annual arithmetic mean	1
24-hr maximum	2

Particulate matter: PM₁₀

Annual arithmetic mean	4
24-hour maximum	8

Sulfur dioxide:

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

Nitrogen dioxide:

Annual arithmetic mean	2.5
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CLASS II

Particulate matter: PM_{2.5}

Annual arithmetic mean	4
24-hr maximum	9

Particulate matter: PM₁₀

Annual arithmetic mean	17
24-hour maximum	30

Sulfur dioxide:

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

Nitrogen dioxide:

Annual arithmetic mean	25
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CLASS III

Particulate matter: PM_{2.5}

Annual arithmetic mean	8
24-hr maximum	18

Particulate matter: PM₁₀

Annual arithmetic mean	34
24-hour maximum	60

Sulfur dioxide:

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

Nitrogen dioxide:

Annual arithmetic mean	50
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- B. The baseline concentration shall be 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 PM₁₀.
 - b. February 8, 1988, for nitrogen dioxide.
 - c. October 20, 2010, for PM_{2.5}.
- 2. The minor source baseline date shall be the earliest date after the trigger date on which a major source as defined in R18-2-401 or major modification subject to 40 CFR 52.21 or R18-2-406 submits a complete application under the relevant regulations. The trigger date is:
 - a. August 7, 1977, for PM₁₀ and sulfur dioxide.
 - b. February 8, 1988, for nitrogen dioxide.
 - c. October 20, 2011, for PM_{2.5}.
- 3. A baseline concentration shall be determined for each pollutant for which there is a minor source baseline date and shall include both:
 - a. The actual emissions representative of sources in existence on the minor source baseline date, except as provided in subsection (B)(4); and
 - b. The allowable emissions of major sources as defined in R18-2-401 which commenced construction before the major source baseline date but were not in operation by the applicable minor source baseline date.
- 4. The following shall not be included in the baseline concentration and shall affect the applicable maximum allowable increase:
 - a. Actual emissions from any major source as defined in R18-2-401 on which construction commenced after the major source baseline date; and
 - b. Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.

- C. The baseline date shall be established for each pollutant for which maximum allowable increases or other equivalent measures have been established if both:

- 1. The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21 or R18-2-406; and
- 2. In the case of a major source as defined in R18-2-401, the pollutant would be emitted in significant amounts, or in the case of a major modification, there would be a significant net emissions increase of the pollutant.

- D. The baseline area shall be the AQCR that contains the area, designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act, in which the major source

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_{2.5}

Annual arithmetic mean	1
24-hr maximum	2

Particulate matter: PM₁₀

Annual arithmetic mean	4
24-hour maximum	8

Sulfur dioxide:

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

Nitrogen dioxide:

Annual arithmetic mean	2.5
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CLASS II

Particulate matter: PM_{2.5}

Annual arithmetic mean	4
24-hr maximum	9

Particulate matter: PM₁₀

Annual arithmetic mean	17
24-hour maximum	30

Sulfur dioxide:

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

Nitrogen dioxide:

Annual arithmetic mean	25
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CLASS III

Particulate matter: PM_{2.5}

Annual arithmetic mean	8
24-hr maximum	18

Particulate matter: PM₁₀

Annual arithmetic mean	34
24-hour maximum	60

Sulfur dioxide:

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

Nitrogen dioxide:

Annual arithmetic mean	50
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- B. The baseline concentration shall be 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 PM₁₀.
 - b. February 8, 1988, for nitrogen dioxide.
 - c. October 20, 2010, for PM_{2.5}.
- 2. The minor source baseline date shall be the earliest date after the trigger date on which a major source as defined in R18-2-401 or major modification subject to 40 CFR 52.21 or R18-2-406 submits a complete application under the relevant regulations. The trigger date is:
 - a. August 7, 1977, for PM₁₀ and sulfur dioxide.
 - b. February 8, 1988, for nitrogen dioxide.
 - c. October 20, 2011, for PM_{2.5}.
- 3. A baseline concentration shall be determined for each pollutant for which there is a minor source baseline date and shall include both:
 - a. The actual emissions representative of sources in existence on the minor source baseline date, except as provided in subsection (B)(4); and
 - b. The allowable emissions of major sources as defined in R18-2-401 which commenced construction before the major source baseline date but were not in operation by the applicable minor source baseline date.
- 4. The following shall not be included in the baseline concentration and shall affect the applicable maximum allowable increase:
 - a. Actual emissions from any major source as defined in R18-2-401 on which construction commenced after the major source baseline date; and
 - b. Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.

- C. The baseline date shall be established for each pollutant for which maximum allowable increases or other equivalent measures have been established if both:

- 1. The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21 or R18-2-406; and
- 2. In the case of a major source as defined in R18-2-401, the pollutant would be emitted in significant amounts, or in the case of a major modification, there would be a significant net emissions increase of the pollutant.

- D. The baseline area shall be the AQCR that contains the area, designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act, in which the major source

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as defined in R18-2-401 or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the minor source baseline date is established, as follows: greater than or equal to 1 microgram per cubic meter (annual average) for sulfur dioxide, nitrogen dioxide or PM₁₀; or greater than or equal to 0.3 microgram per cubic meter (annual average) for PM_{2.5}. Area redesignations under R18-2-217 that would redesignate a baseline area may not intersect or be smaller than the area of impact of any new major source as defined in R18-2-401 or a major modification which either:

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 PM₁₀ 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 PM₁₀ 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 PM₁₀ 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). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

R18-2-219. Repealed**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). Section repealed by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

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 apply to this Article:

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

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- for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the reviewing agency shall deny credit for the effects of such merging in calculating the allowable emissions for the source.
- iii. Smoke management in agricultural or silvicultural prescribed burning programs.
 - iv. Episodic restrictions on residential woodburning and open burning.
 - v. Techniques which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.
7. "Emissions allowable under the permit" means a permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or an emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.
 8. "Fossil fuel-fired steam generator" means a furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.
 9. "Fuel oil" means Number 2 through Number 6 fuel oils as specified in ASTM D-396-90a (Specification for Fuel Oils), gas turbine fuel oils Numbers 2-GT through 4-GT as specified in ASTM D-2880-90a (Specification for Gas Turbine Fuel Oils), or diesel fuel oils Numbers 2-D and 4-D as specified in ASTM D-975-90a (Specification for Diesel Fuel Oils).
 10. "Itemized bill" means a breakdown of the permit processing time into the categories of pre-application activities, completeness review, substantive review, and public involvement activities, and within each category, a further breakdown by employee name.
 11. "Major source threshold" means the lowest applicable emissions rate for a pollutant that would cause the source to be a major source at the particular time and location, under the definition of major source in R18-2-101.
 12. "Minor NSR Modification" means any of the following changes that do not qualify as a major source or major modification:
 - a. Any physical change in or change in the method of operation of an emission unit or a stationary source that either:
 - i. Increases the potential to emit of a regulated minor NSR pollutant by an amount greater than the permitting exemption thresholds, or
 - ii. Results in emissions of a regulated minor NSR pollutant not previously emitted by such emission unit or stationary source in an amount greater than the permitting exemption thresholds.
 - b. Construction of one or more new emissions units that have the potential to emit regulated minor NSR pollutants at an amount greater than the permitting exemption threshold.
 - c. A change covered by subsection (12)(a) or (b) of this Section constitutes a minor NSR modification regardless of whether there will be a net decrease in total source emissions or a net increase in total source emissions that is less than the permitting exemption threshold as a result of decreases in the potential to emit of other emission units at the same stationary source.
 - d. For the purposes of this subsection the following do not constitute a physical change or change in the method of operation:
 - i. A change consisting solely of the construction of, or changes to, a combination of emissions units qualifying as a categorically exempt activity.
 - ii. For a stationary source that is required to obtain a Class II permit under R18-2-302 and that is subject to source-wide emissions caps under R18-2-306.01 or R18-2-306.02, a change that will not result in the violation of the existing emissions cap for that regulated minor NSR pollutant.
 - iii. Replacement of an emission unit by a unit with a potential to emit regulated minor NSR pollutants that is less than or equal to the potential to emit of the existing unit, provided the replacement does not cause an increase in emissions at other emission units at the stationary source. A unit installed under this provision is subject to any limits applicable to the unit it replaced.
 - iv. Routine maintenance, repair, and replacement.
 - v. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, 15 U.S.C. 792, or by reason of a natural gas curtailment plan under the Federal Power Act, 16 U.S.C. 792 to 825r.
 - vi. Use of an alternative fuel by reason of an order or rule under Section 125 of the Act.
 - vii. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
 - viii. Use of an alternative fuel or raw material by a stationary source that either:
 - (1) The source was capable of accommodating before December 12, 1976, unless the change would be prohibited under any federally enforceable permit condition established after December 12, 1976, under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter; or
 - (2) The source is approved to use under any permit issued under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.
 - ix. An increase in the hours of operation or in the production rate, unless the change would be prohibited under any federally enforceable permit condition established after December 12, 1976, under 40 CFR 52.21, or under Articles 3 or 4 of this Chapter.
 - x. Any change in ownership at a stationary source
 - xi. The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, if the project complies with:
 - (1) The SIP, and
 - (2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
 - xii. For electric utility steam generating units located in attainment and unclassifiable areas

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- only, the installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, if the project does not result in an increase in the potential to emit any regulated pollutant emitted by the unit. This exemption applies on a pollutant-by-pollutant basis.
- xiii. For electric utility steam generating units located in attainment and unclassifiable areas only, the reactivation of a very clean coal-fired electric utility steam generating unit.
- e. For purposes of this subsection:
- i. "Potential to emit" means the lower of a source's or emission unit's potential to emit or its allowable emissions.
 - ii. In determining potential to emit, the fugitive emissions of a stationary source shall not be considered unless the source belongs to a section 302(j) category.
 - iii. All of the roadways located at a stationary source constitute a single emissions unit.
13. "NAICS" means the five- or six-digit North American Industry Classification System-United States, 1997, number for industries used by the U.S. Department of Commerce.
14. "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.
15. "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.
16. "Registration" means a registration under R18-2-302.01.
17. "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.
18. "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.
19. "Small source" means a source with a potential to emit, without controls, less than the rate defined as permitting exemption thresholds in R18-2-101, but required to obtain a permit solely because it is subject to a standard under 40 CFR 63.
20. "Startup" means the setting in operation of a source for any purpose.
21. "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.
22. "Uncontrolled potential to emit" 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 only if the limitation or the effect it would have on emissions is subject to an elective limit under R18-2-302.01(F).

Historical Note

Former Section R18-2-301 renumbered to R18-2-302, new Section R18-2-301 adopted effective September 26, 1990 (Supp. 90-3). Correction to table in subsection (A)(13) (Supp. 93-1). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended effective August 1, 1995 (Supp. 95-3). Amended by final rulemaking at 5 A.A.R. 4074, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 6 A.A.R. 343, effective December 20, 1999 (Supp. 99-4). Amended by final rulemaking at 7 A.A.R. 5670, effective January 1, 2002 (Supp. 01-4). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

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

- A. Except as otherwise provided in this Article, no person shall begin actual construction of, operate, or make a modification to any stationary source subject to regulation under this Article, without obtaining a registration, permit or permit revision from the Director.
- B. Class I and II permits and registrations shall be required as follows:
1. A Class I permit shall be required for a person to begin actual construction of or operate any of the following:
 - a. Any major source,
 - b. Any solid waste incineration unit required to obtain a permit pursuant to Section 129(e) of the Act,
 - c. Any affected source, or

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- d. Any stationary source in a source category designated by the Administrator pursuant to 40 CFR 70.3 and adopted by the Director by rule.
2. Unless a Class I permit is required, a Class II permit shall be required for:
- A person to begin actual construction of or operate any stationary source that emits or has the uncontrolled potential to emit, significant quantities of regulated NSR pollutants;
 - A person to make a physical or operational change to a stationary source that would cause the source to emit, or have the uncontrolled potential to emit significant quantities of regulated NSR pollutants.
 - A person to begin actual construction of a source subject to Article 17 of this Chapter.
 - A person to make a modification subject to Article 17 of this Chapter to a source for which a permit has not been issued under this Article.
 - A person to begin actual construction of or modify a stationary source that otherwise would be subject to registration but that the Director has determined requires a permit under R18-2-302.01(B)(3)(b).
3. Until the effective date of the Administrator's approval of the registration program in R18-2-302.01 into the state implementation plan, unless a Class I permit is required, a Class II permit shall be required for any of the activities that would require a registration under subsections (B)(4)(b) and (c).
4. After the effective date of the Administrator's approval of R18-2-302.01 into the state implementation plan, unless a Class I or II permit is required, registration shall be required for:
- A person to begin actual construction of or operate any stationary source that emits or has the maximum capacity to emit under its physical and operational design, without taking any limitations on operations or air pollution controls into account, any regulated minor NSR pollutant in an amount greater than or equal to a permitting exemption threshold.
 - A person to begin actual construction of or operate any stationary source subject to a standard under section 111 of the Act, except that a stationary source is not required to register solely because it is subject to any of the following standards:
 - 40 CFR 60, Subpart AAA (Residential Wood Heaters).
 - 40 CFR 60, Subpart IIII (Stationary Compression Ignition Internal Combustion Engines).
 - 40 CFR 60, Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines).
 - A person to begin actual construction of or operate any stationary source, including an area source, subject to a standard under section 112 of the Act, except that a stationary source is not required to register solely because it is subject to any of the following standards:
 - 40 CFR 61.145.
 - 40 CFR 63, Subpart ZZZZ (Reciprocating Internal Combustion Engines).
 - 40 CFR 63, Subpart WWWW (Ethylene Oxide Sterilizers).
 - 40 CFR 63, Subpart CCCCC (Gasoline Distribution).
 - 40 CFR 63, Subpart HHHHH (Paint Stripping and Miscellaneous Surface Coating Operations).
 - 40 CFR 63, Subpart JJJJJ (Industrial, Commercial, and Institutional Boilers Area Sources), published at 76 FR 15554 (March 21, 2011).
 - A regulation or requirement under section 112(r) of the Act.
- d. A physical or operational change to a source that would cause the source to emit or have the maximum capacity to emit under its physical and operational design, without taking any limitations on operations or air pollution control into account, any regulated minor NSR pollutant in excess of a permitting exemption threshold.
- C. Notwithstanding subsections (A) and (B), the following stationary sources do not require a permit or registration unless the source is a major source, or unless operation without a permit would result in a violation of the Act:
- A stationary source that consists solely of a single categorically exempt activity plus any combination of trivial activities.
 - 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, 61 or 63.
- D. No person may construct or reconstruct any major source of hazardous air pollutants, unless the Director determines that maximum achievable control technology emission limitation (MACT) for new sources under Section 112 of the Act will be met. If MACT has not been established by the Administrator, such determination shall be made on a case-by-case basis pursuant to 40 CFR 63.40 through 63.44, as incorporated by reference in R18-2-1101(B). For purposes of this subsection, constructing and reconstructing a major source shall have the meaning prescribed in 40 CFR 63.41.
- E. Elective limits or controls adopted under R18-2-302.01(F) shall not be considered in determining whether a source requires registration but shall be considered in determining any of the following:
- Whether the registration is subject to the public participation requirements of R18-2-330, as provided in R18-2-302.01(B)(3)(a).
 - Whether review for possible interference with attainment or maintenance of ambient standards is required under R18-2-302.01(C).
 - Whether the source requires a Class II permit, as provided in subsection (B)(2)(a) or (b).
- F. The fugitive emissions of a stationary source shall not be considered in determining whether the source requires a Class II permit under subsection (B)(2)(a) or (b) or a registration under subsection (B)(4)(a) or (e), unless the source belongs to a section 302(j) category. If a permit is required for a stationary source, the fugitive emissions of the source shall be subject to all of the requirements of this Article.
- G. Notwithstanding subsections (A) and (B) of this Section, a person may begin actual construction, but not operation, of a source requiring a Class I permit or Class I permit revision upon the Director's issuance of the proposed final permit or proposed final permit revision.

Historical Note

Amended effective August 7, 1975 (Supp. 75-1).
 Amended as an emergency effective December 15, 1975 (Supp. 75-2). Amended effective May 10, 1976 (Supp. 76-3). Amended effective April 12, 1977 (Supp. 77-2).
 Amended effective March 24, 1978 (Supp. 78-2). Former Section R9-3-301 repealed, new Section R9-3-301

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

R18-2-302.01. Source Registration Requirements

- A. Application.** An application for registration shall be submitted on the form specified by the Director and shall include the following information:
1. The name of the applicant.
 2. The physical location of the source, including the street address, city, county, zip code and latitude and longitude coordinates.
 3. The source's uncontrolled potential to emit each regulated minor NSR pollutant calculated in accordance with R18-2-327(C).
 4. Identification of any elective limits or controls adopted under subsection (F).
 5. In the case of a modification, each increase in the source's potential to emit that exceeds the applicable threshold in subsection (G)(1)(a).
 6. Identification of the method used to determine the potential to emit or change in potential to emit specified under R18-2-302(B)(4)(a) or (d) or subsection (G)(1)(a) of this Section.
 7. Process information for the source, including a list of emission units, design capacity, operations schedule, and identification of emissions control devices.
- B. Registration Processing Procedures.**
1. The Department shall complete a review of a registration application for administrative completeness within 30 calendar days, calculated in accordance with A.A.C. R18-1-503, after its receipt.
 2. The Department shall complete a substantive review and take final action on a registration application within 60 calendar days if no hearing is requested, and 90 calendar days if a hearing is requested, calculated in accordance with A.A.C. R18-1-504, after the application is administratively complete.
 3. Public Participation.
 - a. Except as provided in subsection (B)(3)(b), a registration for construction of a source shall be subject to the public notice and participation requirements of R18-2-330. The materials relevant to the registration decision made available to the public under R18-2-330(D)(11) shall include any determination made or modeling conducted by the Director under subsection (C).
 - b. A registration for construction of a source shall not be subject to the public notice and participation requirements of R18-2-330, if the source's uncontrolled potential to emit each regulated minor NSR pollutant is less than the applicable permitting exemption threshold.
- C. Review for NAAQS Compliance; Requirement to Obtain a Permit.**
1. The Director shall review each application for registration of a source with the uncontrolled potential to emit any regulated minor NSR pollutant in an amount equal to or greater than the permitting exemption threshold. The purpose of the review shall be to determine whether the new or modified source may interfere with attainment or maintenance of a standard imposed in Article 2 of this Chapter. In making the determination required by this subsection, the Director shall take into account the following factors:
 - a. The source's emission rates, including fugitive emission rates, taking into account any elective limits or controls adopted under subsection (F).
 - b. The location of emission units within the facility and their proximity to the ambient air.
 - c. The terrain in which the source is or will be located.
 - d. The source type.
 - e. The location and emissions of nearby sources.
 - f. Background concentrations of regulated minor NSR pollutants.
 2. The Director may undertake the review specified in subsection (C)(1) for a source with the uncontrolled potential to emit regulated minor NSR pollutants in an amount less than the permitting exemption threshold.
 3. If the Director determines under subsection (C)(1) or (C)(2) that a source's emissions may interfere with attainment or maintenance of a standard imposed in Article 2 of this Chapter, the Director shall perform a SCREEN model run for each regulated minor NSR pollutant for which that determination has been made.
 4. If the Director determines, based on performance of the SCREEN model pursuant to subsection (C)(3), that a source's emissions, taking into account any elective limits or controls adopted under subsection (F), will interfere with attainment of a standard imposed in Article 2 of this Chapter, the Director shall deny the application for registration. Notwithstanding R18-2-302(B)(4), the owner or operator of the source shall be required to obtain a permit under R18-2-302 and shall comply with R18-2-334 before beginning actual construction of the source or modification.
- D. Notwithstanding R18-2-302(B)(4)(b) and (c), the Director shall deny an application for registration for a source subject to a standard under section 111 or 112 of the Act and require the owner or operator to obtain a permit under R18-2-302, if the Director determines based on the following factors that the requirement to obtain a permit is warranted:**
1. The size and complexity of the source.
 2. The complexity of the section 111 or 112 standard applicable to the source.
 3. The public health or environmental risks posed by the pollutants subject to regulation under the section 111 or 112 standard.
- E. Registration Contents.** A registration shall contain the following elements:
1. Identification of each emission unit subject to an applicable requirement and all applicable requirements that apply to the unit, including any testing, monitoring, recordkeeping and reporting obligations imposed by the applicable requirement or by R18-2-312.
 2. Any elective limits or controls and associated operating, maintenance, monitoring and recordkeeping requirements adopted pursuant to subsection (F).

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3. A requirement to retain any records required by the registration at the source for at least three years in a form that is suitable for expeditious inspection and review.
 4. For any source that has adopted elective limits or controls under subsection (F), a requirement to submit an annual compliance report on the form provided by the Director in the registration.
- F. Elective Limits or Controls.** The owner or operator of a source requiring registration may elect to include any of the following emission limitations in the registration, provided the registration also includes the operating, maintenance, monitoring and recordkeeping requirements specified below for the limitation.
1. A limitation on the hours of operation of any process or combination of processes. The owner or operator shall maintain a log or readily available business records showing actual operating hours through the preceding operating day for the process or processes subject to the limitation.
 2. A limitation on the production rate for any process or combination of processes. The owner or operator shall maintain a log or readily available business records showing the actual production rate through the preceding operating day for the process or processes subject to the limitation.
 3. A requirement to operate a fabric filter for the control of particulate matter emissions.
 - a. The owner or operator shall operate the fabric filter at all times that the emission unit controlled by the fabric filter is operated.
 - b. The owner or operator shall inspect the fabric filter at least once per month for tears and leaks and shall promptly repair any tears or leaks identified.
 - c. The owner or operator shall operate and maintain the fabric filter in substantial compliance with the manufacturer's operation and maintenance recommendations.
 - d. The owner or operator shall keep a log or readily available business records of the inspections required by subsection (F)(3)(b) and the maintenance activities required by subsection (F)(3)(c).
 4. Limitations on the concentration of VOC or hazardous air pollutants in process materials. The owner or operator shall maintain a log or readily available business records showing the VOC or hazardous air pollutant concentration in each material subject to such a limitation used during the current calendar year.
- G. Revised Registrations.**
1. Unless a Class II permit is required under R18-2-302(B)(2)(b), the owner or operator of a registered source shall file a revised registration on the occurrence of any of the following:
 - a. A modification to the source that would result in an increase in the source's uncontrolled potential to emit exceeding any of the following amounts:
 - i. 2.5 tons per year for NO_x, SO₂, PM₁₀, PM_{2.5}, VOC or CO.
 - ii. 0.3 tons per year for lead.
 - b. Relocation of a portable source.
 - c. The transfer of the source to a new owner.
 2. The requirements of subsection (B) shall not apply to a revised registration. The owner or operator may begin actual construction and operation of the modified, relocated or transferred source on filing the revised registration.
- H. Registration Term.**
1. A source's registration shall expire five years after the date of issuance of the last registration for the source or any modification to the source.
 2. A source shall submit an application for renewal of a registration not later than six months before expiration of the registration's term.
 3. If a source submits a timely and complete application for renewal of a registration, the source's authorization to operate under its existing registration shall continue until the Director takes final action on the application.
 4. The Director may terminate a registration under R18-2-321(C). If the Director terminates a registration under R18-2-321(C)(3), the owner or operator shall be required to apply for a permit for the source under R18-2-302.
- I. Delayed Effective Date.** This Section shall take effect on the effective date of the Administrator's action approving it as part of the state implementation plan.

Historical Note

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

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

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

Historical Note

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

R18-2-304. 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 or R18-2-306.02.
- C.** A timely application is:
1. For a source, that becomes subject to the permit program as a result of a change in regulation and not as a result of construction or a physical or operational change, one that is submitted within 12 months after the source becomes subject to the permit program.
 2. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration.
 3. Any source under R18-2-326(A)(3) which becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act shall, within 12 months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.
- 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 permit revision shall contain an assessment of the applicability of Minor New Source Review requirements in R18-2-334. If the applicant determines that the proposed new source is subject to R18-2-334, or the proposed permit revision constitutes a Minor NSR Modification, then the application shall comply with all applicable requirements of R18-2-334.
 4. An application for a new permit or a permit revision shall contain an assessment of the applicability of the requirements established under Article 17 of this Chapter. If the applicant determines that the proposed new source permit or permit revision is subject to the requirements of Article 17 of this Chapter, the application shall comply with all applicable requirements of that Article.
 5. 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.
 6. 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.
 7. If, while processing an application that has been determined or deemed to be complete, the Director determines that additional information is necessary to evaluate or take final action on that application, the Director may request such information in writing and set a reasonable deadline for a response. Except for minor permit revisions as set forth in R18-2-319, a source's ability to continue operating without a permit, as set forth in subsection (J), shall be in effect from the date the application is determined to be complete until the final permit is issued, provided that the applicant submits any requested additional information by the deadline specified by the Director.
 7. The completeness determination shall not apply to revisions processed through the minor permit revision process.
 9. Activities which are insignificant pursuant to the definition of insignificant activities in R18-2-101 shall be listed in the application. The application need not provide emis-

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- sions data regarding insignificant activities. If the Director determines that an activity listed as insignificant does not meet the requirements of the definition of insignificant activities in R18-2-101, the Director shall notify the applicant in writing and specify additional information required.
10. 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.
 11. 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 within 45 days of receipt.
- f.** For permits to which the Administrator has objected to issuance pursuant to a petition filed under 40 CFR 70.8(d), the Administrator's objection has been resolved.
- g.** For a Class II permit that contains voluntary emission limitations, controls, or other requirements established pursuant to R18-2-306.01, the Director shall have complied with the requirement of R18-2-306.01(C) to provide the Administrator with a copy of the proposed permit.
3. If the Director denies a permit under this Section, a notice shall be served on the applicant by certified mail, return receipt requested. The notice shall include a statement detailing the grounds for the denial and a statement that the permit applicant is entitled to a hearing.
 4. The Director shall provide a statement that sets forth the legal and factual basis for the proposed permit conditions including references to the applicable statutory or regulatory provisions. The Director shall send this statement to any person who requests it and, for Class I permits, to the Administrator.
 5. Priority shall be given by the Director to taking action on applications for construction or modification submitted pursuant to Title I, Parts C (Prevention of Significant Deterioration) and D (New Source Review) of the Act.
- 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(A)(3) submits a timely and complete application for continued operation under a permit revision or renewal, the source's failure to have a permit is not a violation of this Article until the Director takes final action on the application. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Director, any additional information identified as being needed to process the application. This subsection does not affect a source's obligation to obtain a permit revision before making a modification to the source.

Historical Note

Amended effective August 7, 1975 (Supp. 75-1). Former Section R9-3-304 repealed, new Section R9-3-304 formerly Section R9-3-305 renumbered and amended effective August 6, 1976 (Supp. 76-4). Former Section R9-3-304 repealed, new Section R9-3-304 adopted effective May 14, 1979 (Supp. 79-1). Amended effective October 2, 1979 (Supp. 79-5). Former Section R9-3-304 repealed, new Section R9-3-304 adopted effective May 28, 1982 (Supp. 82-3). Former Section R9-3-304 renumbered without change as Section R18-2-304 (Supp. 87-3). Amended effective September 26, 1990 (Supp. 90-3). Section repealed, new Section adopted effective November 15, 1993 (Supp. 93-4). Amended effective October 7, 1994 (Supp. 94-4). Amended effective August 1, 1995 (Supp. 95-3). The reference to R18-2-101(54) in subsection (E)(8) corrected to reference R18-2-101(57) (Supp. 99-3). Amended by final rulemaking at 6 A.A.R. 343, effective December 20, 1999 (Supp. 99-4). Amended by final

rulemaking at 12 A.A.R. 1953, effective January 1, 2007 (Supp. 06-2). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

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;

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- 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;

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- 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

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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 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).
Amended by final rulemaking at 12 A.A.R. 1953, effective January 1, 2007 (Supp. 06-2).

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

R18-2-310.01. Reporting Requirements

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

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 insure 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.

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

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

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

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

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

Historical Note

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

R18-2-311. Test Methods and Procedures

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

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

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

Historical Note

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

R18-2-312. Performance Tests

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

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

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

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

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

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

Historical Note

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

R18-2-311. Test Methods and Procedures

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

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

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

Historical Note

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

R18-2-312. Performance Tests

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

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

Historical Note

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

R18-2-313. Existing Source Emission Monitoring

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

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

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

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

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

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

5. Combined effluents: When the effluents from two or more affected facilities of similar design and operating characteristics are combined before being released to the atmosphere through more than one point, separate monitors shall be installed.
 6. Zero and drift: Owners or operators of all continuous emission monitoring systems installed in accordance with the requirements of this Section shall record the zero and span drift in accordance with the method prescribed by the manufacturer's recommended zero and span check at least once daily, using calibration gases specified in subsection (C) as applicable, unless the manufacturer has recommended adjustments at shorter intervals, in which case such recommendations shall be followed; shall adjust the zero span whenever the 24-hour zero drift or 24-hour calibration drift limits of the applicable performance specifications in Appendix B of Part 60, Chapter 1, Title 40 CFR are exceeded.
 7. Span: Instrument span should be approximately 200% of the expected instrument data display output corresponding to the emission standard for the source.
- E. Minimum data requirement: The following subsections set forth the minimum data reporting requirements for sources employing continuous monitoring equipment as specified in this Section. These periodic reports do not relieve the source operator from the reporting requirements of R18-2-310.01.
1. The owners or operators of facilities required to install continuous emission monitoring systems shall submit to the Director a written report of excess emissions for each calendar quarter and the nature and cause of the excess emissions, if known. The averaging period used for data reporting shall correspond to the averaging period specified in the emission standard for the pollutant source category in question. The required report shall include, as a minimum, the data stipulated in this subsection.
 2. For opacity measurements, the summary shall consist of the magnitude in actual percent opacity of all six-minute opacity averages greater than any applicable standards for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced, instantaneous opacity measurements per minute. Any time periods exempted shall be deleted before determining any averages in excess of opacity standards.
 3. For gaseous measurements the summary shall consist of emission averages in the units of the applicable standard for each averaging period during which the applicable standard was exceeded.
 4. The date and time identifying each period during which the continuous emission monitoring system was inoperative, except for zero and span checks and the nature of system repair or adjustment shall be reported. The Director may require proof of continuous emission monitoring system performance whenever system repairs or adjustments have been made.
 5. When no excess emissions have occurred and the continuous emission monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.
 6. Owners or operators of affected facilities shall maintain a file of all information reported in the quarterly summaries, and all other data collected either by the continuous emission monitoring system or as necessary to convert

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

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

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

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

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

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

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

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

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

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

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

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

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

C = pollutant concentration, g/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each hourly period by 4.16×10^{-5} M g/dscm per ppm (2.64×10^{-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 4.15×10^{-5} M lb/wscm per ppm (2.59×10^{-5} M lb/wscf per ppm) where M = pollutant molecular weight, g/g mole (lb/lb mole), $M = 64$ for sulfur dioxide and 46 for nitrogen oxides.

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

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

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

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

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

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

4. The Director may allow data reporting or reduction procedures varying from those set forth in this Section if the owner or operator of a source shows to the satisfaction of the Director that his procedures are at least as accurate as those in this Section. Such procedures may include but are not limited to the following:
 - a. Alternative procedures for computing emission averages that do not require integration of data (e.g., some facilities may demonstrate that the variability of their emissions is sufficiently small to allow accurate reduction of data based upon computing averages from equally spaced data points over the averaging period).
 - b. Alternative methods of converting pollutant concentration measurements to the units of the emission standards.

Historical Note

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

R18-2-314. Quality Assurance

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

Historical Note

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

R18-2-315. Posting of Permit

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

Historical Note

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

R18-2-316. Notice by Building Permit Agencies

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

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

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

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

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

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

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

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

2. For sulfuric acid plants as defined in R18-2-101, the owner or operator shall:
 - a. Establish a conversion factor three times daily according to the procedures of 40 CFR 60.84(b) (Chapter 1),
 - b. Multiply the conversion factor by the average sulfur dioxide concentration in the flue gases to obtain average sulfur dioxide emissions in Kg/metric ton (lb/short ton), and
 - c. Report the average sulfur dioxide emission for each averaging period in excess of the applicable emission standard in the quarterly summary.
3. For nitric acid plants, the owner or operator shall:
 - a. Establish a conversion factor according to the procedures of 40 CFR 60.73(b) (Chapter 1),
 - b. Multiply the conversion factor by the average nitrogen oxides concentration in the flue gases to obtain the nitrogen oxides emissions in the units of the applicable standard,
 - c. Report the average nitrogen oxides emission for each averaging period in excess of applicable emission standard in the quarterly summary.
4. The Director may allow data reporting or reduction procedures varying from those set forth in this Section if the owner or operator of a source shows to the satisfaction of the Director that his procedures are at least as accurate as those in this Section. Such procedures may include but are not limited to the following:
 - a. Alternative procedures for computing emission averages that do not require integration of data (e.g. some facilities may demonstrate that the variability of their emissions is sufficiently small to allow accurate reduction of data based upon computing averages from equally spaced data points over the averaging period).
 - b. Alternative methods of converting pollutant concentration measurements to the units of the emission standards.

Historical Note

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

R18-2-314. Quality Assurance

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

Historical Note

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

R18-2-315. Posting of Permit

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

Historical Note

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

R18-2-316. Notice by Building Permit Agencies

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

- 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. Are not minor NSR modifications subject to R18-2-334, except that minor NSR modifications subject to R18-2-334(G) may be processed as minor permit revisions; and

8. Are not required to be processed as a significant permit revision under R18-2-320.
- B. Minor permit revision procedures shall be used for the following changes at a Class II source:
1. A change that triggers a new applicable requirement if all of the following apply:
 - a. The change is not a minor NSR modification subject to R18-2-334, except that minor NSR modifications subject to R18-2-334(G) may be processed as minor permit revisions;
 - b. A case-by-case determination of an emission limitation or other standard is not required; and
 - c. The change does not require the source to obtain a Class I permit;
 2. A change that increases emissions above the permitted level unless the increase otherwise creates a condition that requires a significant permit revision;
 3. A change in fuel from fuel oil or coal, to natural gas or propane, if not authorized in the permit;
 4. A change that results in emissions subject to monitoring, recordkeeping, or reporting under R18-2-306(A)(3),(4), or (5) and that cannot be measured or otherwise adequately quantified by monitoring, recordkeeping, or reporting requirements already in the permit;
 5. A decrease in the emissions permitted under an emissions cap unless the decrease requires a change in the conditions required to enforce the cap or to ensure that emissions trades conducted under the cap are quantifiable and enforceable; and
 6. Replacement of an item of air pollution control equipment listed in the permit with one that does not have the same or better efficiency.
- C. As approved by the Director, minor permit revision procedures may be used for permit revisions involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that the minor permit revision procedures are explicitly provided for in an applicable implementation plan or in applicable requirements promulgated by the Administrator.
- D. An application for minor permit revision shall be on the standard application form contained in Appendix I 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. 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

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review period, whichever is later, the Director shall do one or more of the following:

1. Issue the permit revision as proposed,
 2. Deny the permit revision application,
 3. Determine that the proposed permit revision does not meet the minor permit revision criteria and should be reviewed under the significant revision procedures, or
 4. Revise the proposed permit revision and transmit to the Administrator the new proposed permit revision as required in R18-2-307.
- G.** The source may make the change proposed in its minor permit revision application immediately after it files the application. After a Class I source makes a change allowed by the preceding sentence, and until the Director takes any of the actions specified in subsection (F), the source shall comply with both the applicable requirements governing the change and the proposed revised permit terms and conditions. During this time period, the Class I source need not comply with the existing permit terms and conditions it seeks to modify. However, if the Class I source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to revise may be enforced against it.
- H.** The permit shield under R18-2-325 shall not extend to minor permit revisions.
- I.** Notwithstanding any other part of this Section, the Director may require a permit to be revised under R18-2-320 for any change that, when considered together with any other changes submitted by the same source under this Section or R18-2-317.02 over the life of the permit, do not satisfy subsection (A) for Class I sources or subsection (B) for Class II sources.
- J.** The Director shall make available to the public monthly summaries of all applications for minor permit revisions.

Historical Note

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

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 that is a minor NSR modification subject to R18-2-334, except for a minor modification subject to R18-2-334(G);

4. A change that relaxes monitoring, recordkeeping, or reporting requirements, except when the change results from:
 - a. Removing equipment that results in a permanent decrease in actual emissions, if the source keeps onsite records of the change in a log that satisfies Appendix 3 of this Chapter and if the requirements that are relaxed are present in the permit solely for the equipment that was removed; or
 - b. A change in an applicable requirement.
 5. A change that will cause the source to violate an existing applicable requirement including the conditions establishing an emissions cap;
 6. A change that will require any of the following:
 - a. A case-by-case determination of an emission limitation or other standard;
 - b. A source-specific determination of ambient impacts, or 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. Notwithstanding R18-2-330(C), the Director may provide notice for changes requiring a significant permit revision solely under subsection (B)(2), (4) or (6)(c) by posting a notice on the Department's web site, sending e-mails to persons who have requested electronic notification of the Department's proposed air quality permit actions and by mailing a copy of the notice as provided in R18-2-330(C)(1).
- E.** When an existing source applies for a significant permit revision to revise its permit from a Class II permit to a Class I permit, it shall submit a Class I permit application in accordance with R18-2-304. The Director shall issue the entire permit, and not just the portion being revised, in accordance with Class I permit content and issuance requirements, including requirements for public, affected state, and EPA review, contained in R18-2-307 and R18-2-330.

Historical Note

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

R18-2-321. Permit Reopenings; Revocation and Reissuance; Termination

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

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

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

Historical Note

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

R18-2-322. Permit Renewal and Expiration

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

Historical Note

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

R18-2-323. Permit Transfers

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

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

Historical Note

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

R18-2-324. Portable Sources

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

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

Historical Note

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

R18-2-325. Permit Shields

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

Historical Note

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

- 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 under R18-2-507 and R18-2-1705.
- B. The Director shall provide public notice of receipt of complete applications for permits or permit revisions subject to Article 4 of this Chapter by publishing a notice in a newspaper of general circulation in the county where the source is or will be located.
- C. The Director shall provide the notice required pursuant to subsection (A) as follows:
1. The Director shall publish the notice once each week for two consecutive weeks in two newspapers of general circulation in the county where the source is or will be located.
 2. The Director shall mail a copy of the notice to persons on a mailing list developed by the Director consisting of those persons who have requested in writing to be placed on such a mailing list.
- 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 under R18-2-1708;
 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.
 12. The Director shall include a statement in the public notice if the permit or permit revision would result in the generation of emission reduction credits under R18-2-1204, or the utilization of emission reduction credits under R18-2-1206.
- 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 to receive comments and requests for a hearing. The Director shall keep a record of the commenters and of the issues raised during the public participation process and shall prepare written responses to all comments received. At the time a final proposed permit is submitted to EPA, in the case of a Class I permit, or a final decision is made, in the case of a Class II permit, the record and copies of the Director's responses shall be made available to the applicant and all commenters.

Historical Note

Adopted effective November 15, 1993 (Supp. 93-4).
Amended by final rulemaking at 8 A.A.R. 1815, effective March 18, 2002 (Supp. 02-1). R18-2-330 has been corrected to include subsection (D)(12), which was omitted when the Section was amended in the 02-1 supplement (Supp. 05-1). Amended by final rulemaking at 12 A.A.R. 1953, effective January 1, 2007 (Supp. 06-2). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (supp. 12-2).

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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 under Article 17 of this Chapter;
 - 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). Amended by final rulemaking at 12 A.A.R. 1953, effective January 1, 2007 (Supp. 06-2).

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, $H_g = 2.5H$;
3. For all other stacks, $H_g = H + 1.5L$, where
 - H_g = good engineering practice stack height, measured from the ground-level elevation at the base of the stack;
 - H = height of nearby structure measured from the ground-level elevation at the base of the stack;
 - L = lesser dimension (height or projected width) of nearby structure;
 provided that the EPA, the Director, or local control agency may require the use of a field study or fluid model to verify GEP 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 sub-

section (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, adopted as of July 1, 2006, (and no future amendments) are incorporated by reference as applicable requirements. These standards are on file with the Department and shall be applied by the Department. These standards can be obtained from the U.S. Government Printing Office, Superintendent of Documents, Mail Stop SSOP, Washington D.C. 20402-9328.
- 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 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). Amended by final rulemaking at 10 A.A.R. 3281, effective September 27, 2004 (Supp. 04-3). Amended by final rulemaking at 11 A.A.R. 5504, effective February 4, 2006 (Supp. 05-4). Amended by final rulemaking at 13 A.A.R. 4199, effective January 5, 2008 (Supp. 07-4).

R18-2-334. Minor New Source Review

- A. Applicability.
 - 1. Except as provided in subsection (A)(4), this Section shall apply to the following activities:
 - a. Construction of any new Class I or Class II source, including the construction of any source requiring a Class II permit under R18-2-302.01(C)(4); or
 - b. Any minor NSR modification to a Class I or Class II source.
 - 2. This Section shall apply to a regulated minor NSR pollutant emitted by a new stationary source, if the source will have the potential to emit that pollutant at an amount equal to or greater than the permitting exemption threshold.
 - 3. This Section shall apply to an increase in emissions of a regulated minor NSR pollutant from a minor NSR modification, if the modification would increase the source's potential to emit that pollutant by an amount equal to or greater than the permitting exemption threshold.
 - 4. This Section shall not apply to the emissions of a pollutant from any of the activities identified in this subsection, if the emissions of that pollutant are subject to Article 4 of this Chapter.
- B. No person shall begin actual construction of a new stationary source, or minor NSR modification, subject to this Section without first obtaining a permit, a permit revision, a proposed final permit, or a proposed final permit revision from the Director in accordance with R18-2-304.
- C. The Director shall not issue a proposed final Class I permit or permit revision or a Class II permit or permit revision subject to this Section to a person proposing to construct a new source or make a minor NSR modification unless the source or modification meets one of the following conditions for each regulated minor NSR pollutant subject to this section:
 - 1. The owner or operator elects to implement RACT.

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- a. In the case of a new source, the owner or operator shall implement RACT for each emissions unit that has the potential to emit a regulated minor NSR pollutant in an amount equal to or greater than 20% of the permitting exemption threshold.
 - b. In the case of a minor NSR modification, the owner or operator shall implement RACT for each emissions unit that will experience an increase in the potential to emit a regulated minor NSR pollutant equal to or greater than 20% of the permitting exemption threshold.
 - c. When it is technically feasible and otherwise consistent with the definition of RACT to apply the same devices, systems, process modifications, work practices or other apparatus or techniques to a group of emissions units, that group of emissions units shall be treated as a single emissions unit for purposes of subsections (C)(1)(a) and (b). The following are examples of situations to which this subsection may apply:
 - i. Emissions from a group of emissions units can be vented to a single control device.
 - ii. A low-VOC coating can be used in several spray-painting booths.
2. An ambient air quality assessment demonstrates that emissions from the source or minor NSR modification will not interfere with attainment or maintenance of a standard imposed in Article 2 of this Chapter.
 - a. An owner or operator may elect to have the Director perform a SCREEN model of its emissions. If the results of the SCREEN model indicate that the source or minor NSR modification will interfere with attainment or maintenance of a standard imposed in Article 2 of this Chapter, the owner or operator may perform a more refined model to make the demonstration required by this subsection.
 - b. The requirements of this subsection shall be satisfied, if the results of the SCREEN or more refined modeling conducted pursuant to subsection (B)(2)(a) demonstrate either of the following:
 - i. Ambient concentrations resulting from emissions from the source or modification combined with existing concentrations of regulated minor NSR pollutants will not cause or exacerbate the violation of a standard imposed in Article 2 of this Chapter.
 - ii. Emissions from the source or minor modification will have an ambient impact below the significance levels as defined in R18-2-401.
 - c. The assessment required by this subsection shall take into account any limitations, controls or emissions decreases that are or will be enforceable in the permit or permit revision for the source.
- D. RACT Determinations.**
1. Except as otherwise provided in this subsection, the Director shall determine RACT on the basis of a case-by-case analysis performed by the permit applicant of the emission reduction methods available for each emission unit subject to the RACT requirement under subsection (C)(1).
 2. The Director shall accept a requirement proposed by a permit applicant as RACT under subsection (C)(1) if it complies with the most recently adopted of the following guidelines or standards in effect at the time of the application:
 - a. A control technique guideline issued by the Administrator under section 108(f)(1) of the Act.
 - b. An emissions standard established or revised by the Administrator for the same type of source under section 111 or 112 of the Act after November 15, 1990.
 - c. An applicable requirement of this Chapter or of air quality control regulations adopted by a County under A.R.S. § 49-479 that has been specifically identified as constituting RACT.
 - d. A RACT standard imposed on the same type of source by a general permit.
 - e. A RACT standard imposed on the same type of source under this Section no more than 10 years before submission of the application by the permit applicant. To facilitate identification of previously imposed RACT standards, the Director shall establish an online database of RACT determinations made under this Section.
- E.** Notwithstanding an election to adopt RACT under subsection (C)(1), a permit applicant subject to this Section shall conduct an ambient air quality impact assessment under subsection (C)(2) upon the Director's request. The Director shall make such a request, if there is reason to believe that a source or minor NSR modification could interfere with attainment or maintenance of a standard imposed in Article 2 of this Chapter. In making that determination, the Director shall take into consideration:
1. The source's emission rates.
 2. The location of emission units within the facility and their proximity to the ambient air.
 3. The terrain in which the source is or will be located.
 4. The source type.
 5. The location and emissions of nearby sources.
 6. Background concentrations of regulated minor NSR pollutants.
- F.** The Director shall deny an application for a Class I permit or permit revision or a Class II permit or permit revision subject to this Section, if an assessment conducted pursuant to subsection (C)(2) demonstrates that the source or modification will interfere with attainment or maintenance of a standard imposed in Article 2 of this Chapter.
- G.** An application for a permit or permit revision subject to this Section may be processed as a minor permit revision if one of the following conditions is satisfied for each pollutant subject to subsection (C):
1. A RACT standard is imposed under subsection (D)(2) on each emissions unit that requires such a standard under subsection (C)(1).
 2. The results of the SCREEN model for a regulated minor NSR pollutant show expected concentrations, including background concentrations, that are less than 75% of the applicable standard imposed in Article 2 of this Chapter.
- H.** A copy of the notice required by R18-2-330 for permits or significant permit revisions subject to this Section must also be sent to the Administrator through the appropriate regional office, and to all other state and local air pollution control agencies having jurisdiction in the region in which the source subject to the permit or permit revision will be located. The notice also must be sent to any other agency in the region having responsibility for implementing the procedures required under this subpart.
- I.** All modeling required pursuant to this Section shall be conducted in accordance with 40 CFR 51, Appendix W.
- J.** The Director shall specify those conditions in the permit that are implemented pursuant to this Section. The specified condi-

tions shall be included in subsequent permit renewals unless modified pursuant to this Section or Article 4 of this Chapter.

- K. The issuance of a permit or permit revision under this Section shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state, or federal law.
- L. Delayed Effective Date. This Section shall take effect on the effective date of the Administrator's action approving it as part of the state implementation plan.

Historical Note

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

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

R18-2-401. Definitions

The following definitions apply to this Article:

1. "Adverse impact on visibility" means visibility impairment that interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of a Class I area, as determined according to R18-2-410.
2. "Baseline actual emissions" means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with subsections (2)(a) through (c).
 - a. For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the five-year period immediately preceding when the owner or operator begins actual construction of the project. The Director shall allow the use of a different time period upon a determination that it is more representative of normal source operation.
 - i. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
 - ii. The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.
 - iii. For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.
 - iv. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subsection (2)(a)(ii).
 - b. For any existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the Administrator for a permit required under 40 CFR 52.21 or by the Director for a permit required under the state implementation plan, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.
 - i. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
 - ii. The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period. This provision applies to excess emissions associated with a malfunction.
 - iii. The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major source must currently comply, had such major source been required to comply with such limitations during the consecutive 24-month period. However, if an emission limitation is part of a maximum achievable control technology standard that the Administrator proposed or promulgated under 40 CFR 63, the baseline actual emissions need only be adjusted if the state of Arizona has taken credit for such emissions reductions in an attainment demonstration or maintenance plan submitted to the Administrator pursuant to section 110(a)(1) of the Act.
 - iv. For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units affected by the project. A different consecutive 24-month period may be used for each regulated NSR pollutant.
 - v. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subsection (2)(b)(ii) or (iii).
3. "Basic design parameter" means:
 - a. Except as provided in subsection (3)(c), for a process unit at a steam electric generating facility, the owner or operator may select as its basic design parameters either maximum hourly heat input and maximum hourly fuel consumption rate or maxi-

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- 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). Amended by final rulemaking at 10 A.A.R. 4767, effective November 4, 2004 (Supp. 04-4). Amended by final rulemaking at 13 A.A.R. 4379, effective December 4, 2007 (Supp. 07-4).

R18-2-326.01. Emissions-Based Fee Increase Related to Individual Permits for Fiscal Year 2011

In addition to the emissions-based fees required under R18-2-326(C) for Class 1 Title V sources for Calendar Year 2008, a one-time emissions based fee of \$20.82 per ton of actual emissions of all regulated pollutants emitted during Calendar Year 2008 shall be due within 30 days of the invoice postmark date for the increased fee.

Historical Note

New Section made by exempt rulemaking at 16 A.A.R. 844, effective July 1, 2010 (Supp. 10-2).

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 appen-

dices, 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).

tions shall be included in subsequent permit renewals unless modified pursuant to this Section or Article 4 of this Chapter.

- K. The issuance of a permit or permit revision under this Section shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state, or federal law.
- L. Delayed Effective Date. This Section shall take effect on the effective date of the Administrator's action approving it as part of the state implementation plan.

Historical Note

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

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

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

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- imum hourly electric output rate and maximum steam flow rate. When establishing fuel consumption specifications in terms of weight or volume, the minimum fuel quality based on Btu content shall be used for determining the basic design parameters for a coal-fired electric utility steam generating unit.
- b. Except as provided in subsection (3)(c), the basic design parameters for any process unit that is not at a steam electric generating facility are maximum rate of fuel or heat input, maximum rate of material input, or maximum rate of product output. Combustion process units will typically use maximum rate of fuel input. For sources having multiple end products and raw materials, the owner or operator should consider the primary product or primary raw material when selecting a basic design parameter.
 - c. If the owner or operator believes the basic design parameters in subsections (3)(a) and (b) are not appropriate for a specific industry or type of process unit, the owner or operator may propose to the Director an alternative basic design parameters for the source's process unit. If the Director approves of the use of an alternative basic design parameters, the Director shall issue a permit that is legally enforceable that records such basic design parameters and requires the owner or operator to comply with such parameters.
 - d. The owner or operator shall use credible information, such as results of historic maximum capability tests, design information from the manufacturer, or engineering calculations, in establishing the magnitude of the basic design parameters specified in subsections (3)(a) and (b).
 - e. If design information is not available for a process unit, then the owner or operator shall determine the process unit's basic design parameters using the maximum value achieved by the process unit in the five-year period immediately preceding the planned activity.
 - f. Efficiency of a process unit is not a basic design parameter.
 - g. The replacement activity shall not cause the process unit to exceed any emission limitation, or operational limitation that has the effect of constraining emissions, that applies to the process unit and that is legally enforceable.
4. "Complete" means, in reference to an application for a permit or permit revision, that the application contains all the information necessary for processing the application.
 5. "Dispersion technique" means any technique that attempts to affect the concentration of a pollutant in the ambient air by any of the following:
 - a. Using that portion of a stack that exceeds good engineering practice stack height;
 - b. Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or
 - c. Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams that increases the exhaust gas plume rise. This shall not include any of the following:
 - i. The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream.
 - ii. The merging of exhaust gas streams under any of the following conditions:
 - (1) The source owner or operator demonstrates that the facility was originally designed and constructed with the merged gas streams;
 - (2) After July 18, 1985, the merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant, applying only to the emission limitation for that pollutant; or
 - (3) Before July 8, 1985, the merging was part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the Department shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the Department shall deny credit for the effects of the merging in calculating the allowable emissions for the source.
 - iii. Smoke management in agricultural or silvicultural prescribed burning programs.
 - iv. Episodic restrictions on residential woodburning and open burning.
 - v. Techniques that increase final exhaust gas plume rise if the resulting allowable emissions of sulfur dioxide from the facility do not exceed 5,000 tons per year.
 6. "Existing emissions unit" is any emissions unit that is currently in existence and that is not a new emissions unit. A replacement unit is an existing emissions unit.
 7. "High terrain" means any area having an elevation of 900 feet or more above the base of the stack of a source.
 8. "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.
 9. "Low terrain" means any area other than high terrain.
 10. "Lowest achievable emission rate" (LAER) means, for any source, the more stringent rate of emissions based on one of the following:
 - a. The most stringent emissions limitation that is contained in any implementation plan approved or promulgated under sections 110 or 172 of the Act for the class or category of stationary source, unless the

- b. The most stringent emissions limitation that is achieved in practice by the class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. The application of this term shall not permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under applicable standards of performance in Articles 9 and 11 of this Chapter.
11. "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 regulated NSR pollutant, except that the following thresholds shall apply in areas subject to subpart 2, subpart 3 or subpart 4 of part D, Title I of the Act:

Pollutant Emitted	Nonattainment Pollutant and Classification	Quantity Threshold tons/year or more
Carbon Monoxide (CO)	CO, Serious, if stationary sources contribute significantly to CO levels in the area as determined under rules issued by the Administrator	50
VOC	Ozone, Serious	50
VOC	Ozone, Severe	25
PM ₁₀	PM ₁₀ , Serious	70
NO _x	Ozone, Serious	50
NO _x	Ozone, Severe	25

- 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 regulated NSR pollutant if the source is classified as a Categorical Source, or 250 tons per year or more of any regulated NSR pollutant if the source is not classified as a Categorical Source;
 - c. Any stationary source that emits, or has the potential to emit, five or more tons of lead per year;
 - d. A major source that is major for VOC or nitrogen oxides shall be considered major for ozone; or
 - e. The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this Section whether it is a major stationary source, unless the source belongs to a section 302(j) category.
12. "New emissions unit" means any emissions unit which is (or will be) newly constructed and which has existed for less than two years from the date such emissions unit first operated.
13. "Plantwide applicability limitation" or "PAL" means an emission limitation that is based on the baseline actual emissions of all emissions units at the stationary source that emit or have the potential to emit the PAL pollutant, expressed in tons per year, for a pollutant at a major source, that is enforceable as a practical matter and established source-wide in accordance with this Section.

14. "PAL allowable emissions" means "allowable emissions" as defined in R18-2-101, except that the allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit's potential to emit.
15. PAL effective date generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
16. "PAL effective period" means the period beginning with the PAL effective date and ending 10 years later.
17. "PAL major modification" means any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.
18. "PAL permit" means the permit issued by the Director that establishes a PAL for a major source.
19. "PAL pollutant" means the pollutant for which a PAL is established at a major source.
20. "Projected actual emissions" means:
- a. The maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant during any 12-month period in the 60 calendar months following the date the unit resumes regular operation after the project, or in any 12-month period in the 120 calendar months following that date if the project involves increasing the design capacity or potential to emit of any emissions unit for that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major source.
 - b. In determining the projected actual emissions before beginning actual construction, the owner or operator of the major source:
 - i. Shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the county, state or federal regulatory authorities, and compliance plans under these regulations; and
 - ii. Shall include fugitive emissions to the extent quantifiable;
 - iii. Shall include emissions associated with start-ups and shutdowns, except emissions from a shutdown associated with a malfunction; and
 - iv. Shall exclude, only for calculating any increase in emissions that results from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or
 - c. In lieu of using the method set out subsections (20)(b)(i) through (iv), the owner or operator may elect to use the emissions unit's potential to emit, in tons per year.
21. "Reconstruction" of sources located in nonattainment areas shall be presumed to have taken place if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new stationary

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- source, as determined in accordance with the provisions of 40 CFR 60.15(f)(1) through (3).
22. "Replacement unit" means an emissions unit for which all the criteria listed in subsections (22)(a) through (d) are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.
 - a. The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.
 - b. The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
 - c. The replacement does not alter the basic design parameters of the process unit.
 - d. The replaced emissions unit is permanently removed from the major source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.
 23. "Resource recovery project" means any facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse. Only energy conversion facilities that utilize solid waste that provides more than 50% of the heat input shall be considered a resource recovery project under this Article.
 24. "Significant emissions unit" means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit.
 25. "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 mg/m ³
PM ₁₀	1 µg/m ³	5 µg/m ³			
PM _{2.5} Class I area	0.06 µg/m ³	0.07 µg/m ³			
PM _{2.5} Class II area	0.3 µg/m ³	1.2 µg/m ³			
PM _{2.5} Class III area	0.3 µg/m ³	1.2 µg/m ³			

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

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

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). Amended by final rulemaking at 13 A.A.R. 1134, effective May 5, 2007 (Supp. 07-1). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

R18-2-402. General

- A. The preconstruction review requirements of this Article shall apply to the construction of any new major source or any project at an existing major source.
- B. The requirements of R18-2-403 through R18-2-410 apply to the construction of a major source or a major modification of any existing stationary source, except as this Article otherwise provides.
- C. No person shall begin actual construction of a new major source or a major modification subject to the requirements of R18-2-403 through R18-2-410 without first obtaining a proposed final permit from the Director, pursuant to R18-2-307(A)(2), stating that the major source or major modification shall meet those requirements.
- D. The requirements of this Article apply to projects at major sources in accordance with the following principles.
 1. Except as otherwise provided in subsection (E), a project is a major modification for a regulated NSR pollutant if it causes both a significant emissions increase and a significant net emissions increase. The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.
 2. The procedure for calculating before beginning actual construction whether a significant emissions increase will occur depends upon the types of emissions units being modified as set forth in subsections (D)(3) through (6). The procedure for calculating before beginning actual construction whether a significant net emissions increase will occur at the major source is set forth in the definition of net emissions increase in R18-2-101. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.
 3. Actual-to-projected-actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions and the baseline actual emissions, for each existing emissions unit, equals or exceeds the significant amount for that pollutant.
 4. Actual-to-potential applicability test for projects that only involve new emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit from each new emissions unit following completion of the project and the baseline actual emissions of these units before the project equals or exceeds the significant amount for that pollutant.
 5. [Reserved.]
 6. Hybrid applicability test for projects that involve both new emissions units and existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in

- subsection (D)(4), as applicable with respect to each emissions unit, equals or exceeds the significant amount for that pollutant.
- E. Any major source with a PAL for a regulated NSR pollutant shall comply with R18-2-412.
- F. This subsection applies with respect to any regulated NSR pollutant emitted from projects at existing emissions units at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility, within the meaning of subsection (F)(6) of this Section, that a project that is not a part of a major modification may result in a significant emissions increase of such pollutant and the owner or operator elects to use the method specified in R18-2-401(20)(b)(i) through (iv) of the definition of projected actual emissions for calculating projected actual emissions.
1. Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:
 - a. A description of the project;
 - b. Identification of the emissions unit(s) with emissions of a regulated NSR pollutant that could be affected by the project;
 - c. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under R18-2-401(20)(b)(iii) of the definition of projected actual emissions and an explanation for why such amount was excluded; and
 - d. Any netting calculations, if applicable.
 2. If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out subsection (F)(1) to the Director. Nothing in this subsection shall be construed to require the owner or operator of such a unit to obtain any determination from the Director before beginning actual construction.
 3. The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in subsection (F)(1)(b); and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit of that regulated NSR pollutant at such emissions unit. For purposes of this subsection, fugitive emissions (to the extent quantifiable) shall be monitored if the emissions unit is part of a section 302(j) category or if the emissions unit is located at a major stationary source that belongs to a section 302(j) category.
 4. The owner or operator shall submit a report to the Director if for a calendar year the annual emissions, in tons per year, from the project identified in subsection (F)(1)(a) exceed the sum of the baseline actual emissions, as documented and maintained under subsection (F)(1)(c), by a significant amount for that regulated NSR pollutant, and if the emissions differ from the preconstruction projection as documented and maintained under subsection (F)(1)(c). The owner or operator shall submit the report to the Director within 60 days after the end of the calendar year. The report shall contain the following:
 - a. The name, address and telephone number of the major source;
 - b. The annual emissions as calculated pursuant to subsection (F)(3); and
 - c. Any other information that the owner or operator wishes to include in the report, such as an explanation as to why the emissions differ from the preconstruction projection.
 5. Notwithstanding subsection (F)(4), if any existing emissions unit identified in subsection (F)(1)(b) is an electric utility steam generating unit, the owner or operator shall submit a report to the Director within 60 days after the end of each calendar year during which the owner or operator must generate records under subsection (F)(3). The report shall document the unit's post-project annual emissions during the calendar year that preceded submission of the report.
 6. A "reasonable possibility" under subsection (F) occurs when the owner or operator calculates the project to result in one of the following:
 - a. A projected actual emissions increase of at least 50% of the amount that is a significant emissions increase (without reference to the amount that is a significant net emissions increase) for the regulated NSR pollutant.
 - b. A projected actual emissions increase that, added to the amount of emissions excluded under subsection R18-2-401(20)(b)(iv) of the definition of projected actual emissions, sums to at least 50% of the amount that is a significant emissions increase (without reference to the amount that is a significant net emissions increase) for the regulated NSR pollutant. For a project for which a reasonable possibility occurs only within the meaning of subsection (F)(6)(b), and not also within the meaning of subsection (F)(6)(a), subsections (F)(2) through (5) do not apply to the project.
- G. An application for a permit or permit revision under this Article, other than a PAL permit pursuant to R18-2-412, shall not be considered complete unless the application demonstrates that:
1. The requirements in subsection (H) are met;
 2. The more stringent of the applicable new source performance standards in Article 9 of this Chapter or the existing source performance standards in Article 7 of this Chapter are applied to the proposed new major source or major modification of a major source;
 3. The visibility requirements contained in R18-2-410 are satisfied;
 4. All applicable provisions of Article 3 of this Chapter are met;
 5. The new major source or major modification will be in compliance with whatever emission limitation, design, equipment, work practice or operational standard, or combination thereof is applicable to the source or modification. The degree of emission limitation required for control of any pollutant under this Article shall not be affected in any manner by:
 - a. Stack height in excess of GEP stack height except as provided in R18-2-332; or
 - b. Any other dispersion technique, unless implemented prior to December 31, 1970;
 6. The new major source or major modification will not exceed the applicable standards for hazardous air pollutants contained in this Chapter;

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7. The new major source or major modification will not exceed the limitations, if applicable, on emission from nonpoint sources contained in Article 6 of this Chapter;
 8. A stationary source that will emit five or more tons of lead per year will not violate the ambient air quality standards for lead contained in R18-2-206;
 9. The new major source or major modification will not have an adverse impact on visibility, as determined according to R18-2-410.
- H.** Except for assessing air quality impacts within Class I areas, the air impact analysis required to be conducted as part of a permit application shall initially consider only the geographical area located within a 50 kilometer radius from the point of greatest emissions for the new major source or major modification. The Director, on his own initiative or upon receipt of written notice from any person shall have the right at any time to request an enlargement of the geographical area for which an air quality impact analysis is to be performed by giving the person applying for the permit or permit revision written notice thereof, specifying the enlarged radius to be so considered. In performing an air impact analysis for any geographical area with a radius of more than 50 kilometers, the person applying for the permit or permit revision may use monitoring or modeling data obtained from major sources having comparable emissions or having emissions which are capable of being accurately used in such demonstration, and which are subjected to terrain and atmospheric stability conditions which are comparable or which may be extrapolated with reasonable accuracy for use in such demonstration.
- I.** Unless the requirement has been satisfied pursuant to Article 3 of this Chapter, the 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 authority to construct and operate a new major source or major modification under a permit or permit revision issued under this Article shall terminate if the owner or operator does not commence the proposed construction or major modification within 18 months of issuance or if, during the construction or major modification, the owner or operator suspends work for more than 18 months. The Director may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

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

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

- A.** Except as provided in subsections (C) through (G) below, no permit or permit revision shall be issued under this Article to a person proposing to construct a new major source or make a major modification that is major for the pollutant for which the area is designated nonattainment unless:
1. The person demonstrates that the new major source or the major modification will meet an emission limitation which is the lowest achievable emission rate (LAER) for that source for that regulated NSR pollutant.
 2. The person demonstrates that all existing major sources owned or operated by that person (or any entity controlling, controlled by, or under common control with that person) in the state are in compliance with, or on a schedule of compliance for, all conditions contained in permits of each of the sources and all other applicable emission limitations and standards under the Act and this Chapter.
 3. The person demonstrates that emission reductions for the specific pollutant(s) from source(s) in existence in the allowable offset area of the new major source or major modification (whether or not under the same ownership) meet the offset requirements of R18-2-404.
- B.** No permit or permit revision under this Article shall be issued to a person proposing to construct a new major source or make a major modification to a major source located in a nonattainment area unless:
1. The person performs an analysis of alternative sites, sizes, production processes, and environmental control techniques for such new major source or major modification; and
 2. The Director determines that the analysis demonstrates that the benefits of the new major source or major modification significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

- C. At such time that a particular source or modification becomes a major source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as restriction on hours of operation, then the requirements of this Section shall apply to the source or modification as though construction had not yet commenced on the source or modification.
- D. Secondary emissions shall not be considered in determining the potential to emit of a new source or modification and therefore whether the new source or modification is major. However, if a new source or modification is subject to this Section on the basis of its direct emissions, a permit or permit revision under this Article to construct the new source or modification shall be denied unless the requirements of R18-2-403(A)(3) and R18-2-404 are met for reasonably quantifiable secondary emissions caused by the new source or modification.
- E. A permit to construct a new major source or major modification shall be denied unless the conditions specified in subsections (A)(1), (2), and (3) are met for fugitive emissions caused by the new source or modification. However, these conditions shall not apply to a new major source or major modification that would be a major source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential emissions of the source or modification, and the source does not belong to a section 302(j) category.
- F. The requirements of subsection (A)(3) shall not apply to temporary emissions units, such as pilot plants, portable facilities that will be relocated outside of the nonattainment area and the construction phase of a new source, if those units will operate for no more than 24 months in the nonattainment area, are otherwise in compliance with the requirement to obtain a permit under this Chapter and are in compliance with the conditions of that permit.
- G. A decrease in actual emissions shall be considered in determining the potential of a new source or modification to emit only to the extent that the Director has not relied on it in issuing any permit or permit revision under this Article or the state has not relied on it in demonstrating attainment or reasonable further progress.
- H. 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.
- I. The issuance of a permit or permit revision under this Article in accordance with this Section shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, state, or federal law.
- 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). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).
- R18-2-404. Offset Standards**
- A. Increased emissions by a major source or major modification subject to R18-2-403 shall be offset by real reductions in the actual emissions of each pollutant for which the area has been designated as nonattainment and for which the source or modification is classified as major. Except as provided in R18-2-405, emissions increases shall be offset by decreases at a ratio of at least 1 to 1.
- B. Except as provided in subsection (B)(1) or (2), for sources and modifications subject to this Section, the baseline for determining credit for emissions reductions is the emissions limit for the source generating the offset credit under the applicable implementation plan in effect at the time the application for a permit or permit revision is filed.
1. The offset baseline shall be the actual emissions of the source from which offset credit is obtained where either of the following conditions is satisfied:
 - a. The demonstration of reasonable further progress and attainment of ambient air quality standards is based upon the actual emissions of sources located within a designated nonattainment area for which the preconstruction review program was adopted.
 - b. The applicable implementation plan does not contain an emissions limitation for that source or source category.
 2. Where the emissions limit under the applicable implementation plan allows greater emissions than the potential to emit of the source, emissions offset credit will be allowed only for control below this potential.
- C. For an existing fuel combustion source, emissions offset credit shall be based on the allowable emissions under the applicable implementation plan for the type of fuel being burned at the time the application to construct is filed. If the existing source commits to switch to a cleaner fuel at some future date, emissions offset credit based on the allowable or actual emissions for the fuels involved is not acceptable, unless the permit for the existing source is conditioned to require the use of a specified alternative control measure which would achieve the same degree of emissions reduction should the source switch back to a fuel generating higher emissions. The owner or operator of the existing source must demonstrate that adequate long-term supplies of the new fuel are available before granting emissions offset credit for fuel switches.
- D. Offset Credit for Shutdowns.
1. Emissions reductions achieved by shutting down an existing emission unit or curtailing production or operating hours may be credited for offsets if they meet both of the following conditions.
 - a. The reductions are surplus, permanent, quantifiable, and federally enforceable.
 - b. The shutdown or curtailment occurred after the last day of the base year for the SIP planning process. For purposes of this subsection, the Director may choose to consider a prior shutdown or curtailment to have occurred after the last day of the base year if the projected emissions inventory used to develop the attainment demonstration explicitly includes the emissions from such previously shutdown or curtailed emission units. However, in no event may credit be given for shutdowns that occurred before August 7, 1977.
 2. Emissions reductions achieved by shutting down an existing emissions unit or curtailing production or operating hours and that do not meet the requirements in subsection (D)(1)(b) may be credited only if one of the following conditions is satisfied:
 - a. The shutdown or curtailment occurred on or after the date the construction permit application is filed.
 - b. The applicant can establish that the proposed new emissions unit is a replacement for the shutdown or curtailed emissions unit, and the emissions reduc-

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tions achieved by the shutdown or curtailment met the requirements of subsection (D)(1)(a).

- E. No emissions credit may be allowed for replacing one hydrocarbon compound with another of lesser reactivity, except for those compounds listed in Table 1 of EPA's "Recommended Policy on Control of Volatile Organic Compounds," 42 FR 35314 (July 8, 1977).
- F. All emission reductions claimed as offset credits shall be federally enforceable by the time a permit is issued to the owner or operator of the major source subject to this Section and shall be in effect by the time the new or modified source subject to the permit commences operation.
- G. The owner or operator of a major source or major modification subject to this Section must obtain offset credits from the same source or from other sources in the same nonattainment area, except that the Director may allow the owner or operator to obtain offset credits from another nonattainment area if both of the following conditions are satisfied:
 1. The other area has an equal or higher nonattainment classification than the area in which the source is located.
 2. Emissions from such other area contribute to a violation of the national ambient air quality standard in the nonattainment area in which the source is located.
- H. Credit for an emissions reduction can be claimed to the extent that the Director has not relied on it in issuing any permit under this Article or the state has not relied on it in a demonstration of attainment or reasonable further progress.
- I. The total tonnage of increased emissions, in tons per year, resulting from a major modification that must be offset under this Section shall be determined by summing the difference between the allowable emissions after the modification and the actual emissions before the modification for each emissions unit.
- J. In ozone nonattainment areas classified as marginal, total emissions of VOC and oxides of nitrogen from other sources shall offset those proposed or permitted from the major source or major modification by a ratio of at least 1.10 to 1. In ozone nonattainment areas classified as moderate, total emissions of VOC and oxides of nitrogen from other sources shall offset those proposed or permitted from the major source or major modification by a ratio of at least 1.15 to 1. New major sources and major modifications in serious and severe ozone nonattainment areas shall comply with this Section and R18-2-405.

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

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

- A. Applicability. The provisions of this Section only apply to stationary sources of VOC or nitrogen oxides in ozone nonattainment areas classified as serious or severe. Unless otherwise

provided in this Section, all requirements of Articles 3 and 4 of this Chapter apply.

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

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

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 regulated NSR pollutant unless the source or modification meets the following conditions:
1. A new major source shall apply best available control technology (BACT) for each regulated NSR pollutant for which the potential to emit is significant.
 2. A major modification shall apply BACT for each regulated NSR pollutant for which the project would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.
 3. For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of BACT for the source.
 4. BACT shall be determined on a case-by-case basis and may constitute application of production processes or 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 or by the applicable implementation plan. If the Director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice, or operation and shall provide for compliance by means which achieve equivalent results.
 5. The person applying for the permit or permit revision under this Article performs an air impact analysis and monitoring as specified in R18-2-407, and 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 nitrogen oxides and PM₁₀:
 - a. Would not cause or contribute to concentrations of conventional air pollutants in violation of any ambient air quality standard in Article 2 of this Chapter in any air quality control region or any applicable maximum allowable increase under R18-2-218 over the baseline concentration 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 nitrogen oxides, or a major modification to a major source of volatile organic compounds or nitrogen oxides 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 nitrogen oxides 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 40 CFR 51, Appendix W, "Guideline On Air Quality Models," as of July 1, 2011 (and no future amendments or editions), which shall be referred to hereinafter as "Guideline" and is adopted by reference and is on file with the Department.
 - b. Where an air quality impact model specified in the "Guideline" is not applicable, the model may be modified or another model substituted. Such a change shall be subject to notice and opportunity for public comment. 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 a major modification 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 1980 does not belong to a section 302(j) category.
- 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 will operate for no more than 24 months, 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

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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 would have an 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 the area in R18-2-218. 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:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
PM _{2.5} :	
Annual arithmetic mean	4
24-hr maximum	9
PM ₁₀ :	
Annual arithmetic mean	17
24-hr maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325
Nitrogen dioxide	
Annual arithmetic mean	25

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). Amended by final rulemaking at 12 A.A.R. 1953, effective January 1, 2007 (Supp. 06-2). Amended by final rulemaking at 18 A.A.R. 1542, effective August 7, 2012 (Supp. 12-2).

R18-2-407. 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:
 - a. Carbon Monoxide - $575 \mu\text{g}/\text{m}^3$, eight-hour average;
 - b. Nitrogen dioxide - $14 \mu\text{g}/\text{m}^3$, annual average;
 - c. ~~PM_{2.5} - $4 \mu\text{g}/\text{m}^3$, 24-hour average;~~
 - d. PM₁₀ - $10 \mu\text{g}/\text{m}^3$, 24-hour average;
 - e. Sulfur dioxide - $13 \mu\text{g}/\text{m}^3$, 24-hour average;
 - f. Lead - $0.1 \mu\text{g}/\text{m}^3$, 24-hour average;
 - g. Fluorides - $0.25 \mu\text{g}/\text{m}^3$, 24-hour average;
 - h. Total reduced sulfur - $10 \mu\text{g}/\text{m}^3$, one-hour average;
 - i. Hydrogen sulfide - $0.04 \mu\text{g}/\text{m}^3$, one-hour average;
 - j. Reduced sulfur compounds - $10 \mu\text{g}/\text{m}^3$, one-hour average;
 - k. Ozone - increased emissions of less than 100 tons per year of volatile organic compounds or oxides of nitrogen; or
 2. The concentrations of the pollutant in the area that the new source or modification would affect are less than the concentrations listed in subsection (H)(1) above.
- I.** Any application for permit or permit revision under this Article to construct a new major source or major modification to a source shall contain:
1. An analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the new source or modification and general commercial, residential, industrial, and other growth associated with the new source or modification. The applicant need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.
 2. An analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the new source or modification.

Historical Note

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

R18-2-408. Innovative Control Technology

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

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

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

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

Historical Note

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

R18-2-410. Visibility Protection

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

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

Historical Note

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

R18-2-411. Repealed

Historical Note

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

R18-2-412. PALs

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

1. A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, federal or state applicable requirements, emission limitations, or work practices apply to each unit.
 2. Calculations of the baseline actual emissions (with supporting documentation).
 3. The calculation procedures that the major source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by subsection (L)(1).
- C. General requirements for establishing PALs.**
1. The Director is allowed to establish a PAL at a major source, provided that at a minimum, the following requirements are met:
 - a. The PAL shall impose an annual emission limitation in tons per year, that is enforceable as a practical matter, for the entire major source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month sum, rolled monthly). For each month during the first 11 months from the PAL effective date, the major source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.
 - b. The PAL shall be established in a PAL permit that meets the requirements in subsection (D).
 - c. The PAL permit shall contain all the requirements of subsection (F).
 - d. The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major source.
 - e. Each PAL shall regulate emissions of only one pollutant.
 - f. Each PAL shall have a PAL effective period of 10 years.
 - g. The owner or operator of the major source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in subsections (K) through (M) for each emissions unit under the PAL through the PAL effective period.
 2. At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets under R18-2-404 unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.
- D. Action on PAL permit application.** A PAL permit application shall be processed in accordance with one of the following:
1. As an initial Class I permit pursuant to R18-2-304.
 2. As a renewal of a Class I permit pursuant to R18-2-322.
 3. As a significant revision to a Class I permit pursuant to R18-2-320.
- E. Setting the 10-year actuals PAL level.**
1. Except as provided in subsection (E)(2), the PAL level for a major source shall be established as the sum of the baseline actual emissions of the PAL pollutant for each emissions unit at the source; plus an amount equal to the applicable significant level for the PAL pollutant. When establishing the PAL level, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level. The Director shall specify a reduced PAL level(s) (in tons/yr) in the PAL permit to become effective on the future compliance date(s) of any applicable federal or state regulatory requirement(s) that the Director is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO_x to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).
 2. For newly constructed units (which do not include modifications to existing units) on which actual construction began after the 24-month period, in lieu of adding the baseline actual emissions as specified in subsection (E)(1), the emissions must be added to the PAL level in an amount equal to the potential to emit of the units.
- F. Contents of the PAL permit.** The PAL permit must contain, at a minimum, the following information:
1. The PAL pollutant and the applicable source-wide emission limitation in tons per year.
 2. The PAL permit effective date and the expiration date of the PAL (PAL effective period).
 3. Specification in the PAL permit that if a major source owner or operator applies to renew a PAL in accordance with subsection (I) before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the Director.
 4. A requirement that emission calculations for compliance purposes must include emissions from startups, shutdowns, and malfunctions.
 5. A requirement that, once the PAL expires, the major source is subject to the requirements of subsection (H).
 6. The calculation procedures that the major source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by subsection (L)(1).
 7. A requirement that the major source owner or operator monitor all emissions units in accordance with the provisions under subsection (K).
 8. A requirement to retain the records required under subsection (L) onsite. Such records may be retained in an electronic format.
 9. A requirement to submit the reports required under subsection (M) by the required deadlines.
 10. Any other requirements that the Director deems necessary to implement and enforce the PAL.
- G. PAL effective period and reopening of the PAL permit.**
1. PAL effective period. The Director shall specify a PAL effective period of 10 years.
 2. Reopening of the PAL permit.
 - a. During the PAL effective period, the Director must reopen the PAL permit to:
 - i. Correct typographical/calculation errors made in setting the PAL or reflect a more accurate

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- determination of emissions used to establish the PAL,
- ii. Reduce the PAL if the owner or operator of the major source creates creditable emissions reductions for use as offsets under R18-2-404, and
 - iii. Revise the PAL to reflect an increase in the PAL as provided under subsection (J).
- b. The Director shall have discretion to reopen the PAL permit for the following:
- i. Reduce the PAL to reflect new federal applicable requirements with compliance dates after the PAL effective date;
 - ii. Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the state may impose on the major source under the State Implementation Plan; and
 - iii. Reduce the PAL if the Director determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an air quality related value that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.
- c. Except for the permit reopening in subsection (G)(2)(a)(i) for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of subsection (D).
- H. Expiration of a PAL. Any PAL that is not renewed in accordance with the procedures in subsection (I) shall expire at the end of the PAL effective period, and the following requirements shall apply.
1. Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the following procedures.
 - a. Within the time-frame specified for PAL renewals in subsection (I)(2), the major source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate) by distributing the PAL allowable emissions for the major source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as would be required under subsection (I)(5), such distribution shall be made as if the PAL had been adjusted.
 - b. The Director shall decide how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the Director determines is appropriate.
 2. Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The Director may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.
 3. Until the Director issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under subsection (H)(1)(b),
 4. Any physical change or change in the method of operation at the major source will be subject to the applicability criteria set forth at subsection (C).
 5. The major source owner or operator shall continue to comply with any applicable requirements that may have applied during the PAL effective period. Emission limitations that were eliminated by the PAL in accordance with subsection (A)(2)(c) shall not be reinstated.
- I. Renewal of a PAL.
1. The Director shall follow the procedures specified in subsection (F) in approving any request to renew a PAL for a major source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the Director.
 2. Application deadline. A major source owner or operator shall submit a timely application to the Director to request renewal of a PAL. A timely application is one that is submitted at least six months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.
 3. Application requirements. The application to renew a PAL permit shall contain the following information.
 - a. The information required in subsections (B)(1) through (3).
 - b. A proposed PAL level.
 - c. The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).
 - d. Any other information the owner or operator wishes the Director to consider in determining the appropriate level for renewing the PAL.
 4. PAL adjustment. In determining whether and how to adjust the PAL, the Director shall consider the options outlined in subsections (I)(4)(a) and (b). However, in no case may any such adjustment fail to comply with subsection (I)(4)(c).
 - a. If the emissions level calculated in accordance with subsection (F) is equal to or greater than 80% of the PAL level, the Director may renew the PAL at the same level without considering the factors set forth in subsection (I)(4)(b); or
 - b. The Director may set the PAL at a level that the Director determines to be more representative of the source's baseline actual emissions, or that the Director determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Director in the Director's written rationale.
 - c. Notwithstanding subsections (I)(4)(a) and (b):
 - i. If the potential to emit of the major source is less than the PAL, the Director shall adjust the PAL to a level no greater than the potential to emit of the source; and

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- ii. The Director shall not approve a renewed PAL level higher than the current PAL, unless the PAL has been increased in accordance with subsection (J).
 - 5. If the compliance date for an applicable requirement that applies to the PAL source occurs during the PAL effective period, and if the Director has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or renewal of the source's Class I permit, whichever occurs first.
- J. Increasing a PAL during the PAL effective period.
 - 1. The Director may increase a PAL emission limitation only if the following requirements are met:
 - a. The owner or operator of the major source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major source's emissions to equal or exceed its PAL.
 - b. As part of this application, the major source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT or LAER equivalent controls, plus the sum of the PAL allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would result from BACT or LAER equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT or LAER analysis at the time the application is submitted, as applicable for the particular PAL pollutant, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.
 - c. The owner or operator obtains a major NSR permit for all emissions unit(s) identified in subsection (J)(1)(a), regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.
 - d. The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
 - 2. The Director shall calculate the new PAL level as the sum of the PAL allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT or LAER equivalent controls as determined in accordance with subsection (J)(1)(b), plus the sum of the baseline actual emissions of the small emissions units.
 - 3. The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of subsection (D).
- K. Monitoring requirements for PALs.
 - 1. General requirements.
 - a. Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.
 - b. The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in subsections (K)(2)(a) through (d) and must be approved by the Director.
 - c. Notwithstanding subsection (K)(1)(b), the owner or operator may also employ an alternative monitoring approach if approved by the Director as meeting the requirements of subsection (K)(1)(a).
 - d. Failure to use a monitoring system that meets the requirements of this Section renders the PAL invalid.
 - 2. Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in subsections (K)(3) through (9):
 - a. Mass balance calculations for activities using coatings or solvents,
 - b. CEMS,
 - c. CPMS or PEMS, and
 - d. Emission factors.
 - 3. Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:
 - a. Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;
 - b. Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and
 - c. Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Director determines there is site-specific data or a site-specific monitoring program to support another content within the range.
 - 4. CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
 - a. CEMS must comply with applicable Performance Specifications found in 40 CFR 60, Appendix B; and
 - b. CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.
 - 5. CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

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

Historical Note

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

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.

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ARTICLE 6. EMISSIONS FROM EXISTING AND NEW
NONPOINT SOURCES**R18-2-601. General**

For purposes of this Article, any source of air contaminants which due to lack of an identifiable emission point or plume cannot be considered a point source, shall be classified as a nonpoint source. In applying this criteria, such items as air-curtain destructors, heater-planners, and conveyor transfer points shall be considered to have identifiable plumes. Any affected facility subject to regulation under Article 7 of this Chapter or 9 A.A.C. 3, Article 8, shall not be subject to regulation under this Article.

Historical Note

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

R18-2-602. Unlawful Open Burning

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

1. "Agricultural burning" means burning vegetative materials related to producing and harvesting crops and raising animals for the purpose of marketing for profit, or providing a livelihood, but does not include burning of household waste or prohibited materials. A person may conduct agricultural burns in fields, piles, ditch banks, fence rows, or canal laterals for purposes such as weed control, waste disposal, disease and pest prevention, or site preparation.
2. "Approved waste burner" means an incinerator constructed of fire resistant material with a cover or screen that is closed when in use, and has openings in the sides or top no greater than one inch in diameter.
3. "Class I Area" means any one of the Arizona mandatory federal Class I areas defined in A.R.S. § 49-401.01.
4. "Construction burning" means burning wood or vegetative material from land clearing, site preparation, or fabrication, erection, installation, demolition, or modification of any buildings or other land improvements, but does not include burning household waste or prohibited material.
5. "Dangerous material" means any substance or combination of substances that is capable of causing bodily harm or property loss unless neutralized, consumed, or otherwise disposed of in a controlled and safe manner.
6. "Delegated authority" means any of the following:
 - a. A county, city, town, air pollution control district, or fire district that has been delegated authority to issue open burning permits by the Director under A.R.S. § 49-501(E); or
 - b. A private fire protection service provider that has been assigned authority to issue open burning permits by one of the authorities in subsection (A)(6)(a).
7. "Director" means the Director of the Department of Environmental Quality, or designee.
8. "Emission reduction techniques" means methods for controlling emissions from open outdoor fires to minimize the amount of emissions output per unit of area burned.
9. "Flue," as used in this Section, means any duct or passage for air or combustion gases, such as a stack or chimney.
10. "Household waste" means any solid waste including garbage, rubbish, and sanitary waste from a septic tank that is generated from households including single and multi-

ple family residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas, but does not include construction debris, landscaping rubble, or demolition debris.

11. "Independent authority to permit fires" means the authority of a county to permit fires by a rule adopted under Arizona Revised Statutes, Title 49, Chapter 3, Article 3, and includes only Maricopa, Pima, and Pinal counties.
 12. "Open outdoor fire or open burning" means the combustion of material of any type, outdoors and in the open, where the products of combustion are not directed through a flue. Open outdoor fires include agricultural, residential, prescribed, and construction burning, and fires using air curtain destructors.
 13. "Prohibited materials" means nonpaper garbage from the processing, storage, service, or consumption of food; chemically treated wood; lead-painted wood; linoleum flooring, and composite counter-tops; tires; explosives or ammunition; oleanders; asphalt shingles; tar paper; plastic and rubber products, including bottles for household chemicals; plastic grocery and retail bags; waste petroleum products, such as waste crankcase oil, transmission oil, and oil filters; transformer oils; asbestos; batteries; anti-freeze; aerosol spray cans; electrical wire insulation; thermal insulation; polyester products; hazardous waste products such as paints, pesticides, cleaners and solvents, stains and varnishes, and other flammable liquids; plastic pesticide bags and containers; and hazardous material containers including those that contained lead, cadmium, mercury, or arsenic compounds.
 14. "Residential burning" means open burning of vegetative materials conducted by or for the occupants of residential dwellings, but does not include burning household waste or prohibited material.
 15. "Prescribed burning" has the same meaning as in R18-2-1501.
- B. Unlawful open burning. Notwithstanding any other rule in this Chapter, a person shall not ignite, cause to be ignited, permit to be ignited, allow, or maintain any open outdoor fire in a county without independent authority to permit fires except as provided in A.R.S. § 49-501 and this Section.
- C. Open outdoor fires exempt from a permit. The following fires do not require an open burning permit from the Director or a delegated authority:
1. Fires used only for:
 - a. Cooking of food,
 - b. Providing warmth for human beings,
 - c. Recreational purposes,
 - d. Branding of animals,
 - e. Orchard heaters for the purpose of frost protection in farming or nursery operations, and
 - f. The proper disposal of flags under 4 U.S.C. 1, § 8.
 2. Any fire set or permitted by any public officer in the performance of official duty, if the fire is set or permission given for the following purpose:
 - a. Control of an active wildfire; or
 - b. Instruction in the method of fighting fires, except that the person setting these fires must comply with the reporting requirements of subsection (D)(3)(f).
 3. Fire set by or permitted by the Director of Department of Agriculture for the purpose of disease and pest prevention in an organized, area-wide control of an epidemic or infestation affecting livestock or crops.
 4. Prescribed burns set by or assisted by the federal government or any of its departments, agencies, or agents, or the

- state or any of its agencies, departments, or political subdivisions, regulated under Article 15 of this Chapter.
- D. Open outdoor fires requiring a permit.
1. The following open outdoor fires are allowed with an open burning permit from the Director or a delegated authority:
 - a. Construction burning;
 - b. Agricultural burning;
 - c. Residential burning;
 - d. Prescribed burns conducted on private lands without the assistance of a federal or state land manager, as defined under R18-2-1501;
 - e. Any fire set or permitted by a public officer in the performance of official duty, if the fire is set or permission given for the purpose of weed abatement, or the prevention of a fire hazard, unless the fire is exempt from the permit requirement under subsection (C)(3);
 - f. Open outdoor fires of dangerous material under subsection (E);
 - g. Open outdoor fires of household waste under subsection (F); and
 - h. Open outdoor fires that use an air curtain destructor, as defined in R18-2-101.
 2. A person conducting an open outdoor fire in a county without independent authority to permit fires shall obtain a permit from the Director or a delegated authority unless exempted under subsection (C). Permits may be issued for a period not to exceed one year. A person shall obtain a permit by completing an ADEQ-approved application form.
 3. Open outdoor fire permits issued under this Section shall include:
 - a. A list of the materials that the permittee may burn under the permit;
 - b. A means of contacting the permittee authorized by the permit to set an open fire in the event that an order to extinguish the open outdoor fire is issued by the Director or the delegated authority;
 - c. A requirement that burns be conducted during the following periods, unless otherwise waived or directed by the Director on a specific day basis:
 - i. Year-round: ignite fire no earlier than one hour after sunrise; and
 - ii. Year-round: extinguish fire no later than two hours before sunset;
 - d. A requirement that the permittee conduct all open burning only during atmospheric conditions that:
 - i. Prevent dispersion of smoke into populated areas;
 - ii. Prevent visibility impairment on traveled roads or at airports that result in a safety hazard;
 - iii. Do not create a public nuisance or adversely affect public safety;
 - iv. Do not cause an adverse impact to visibility in a Class I area; and
 - v. Do not cause uncontrollable spreading of the fire;
 - e. A list of the types of emission reduction techniques that the permittee shall use to minimize fire emissions;.
 - f. A reporting requirement that the permittee shall meet by providing the following information in a format provided by the Director for each date open burning occurred, on either a daily basis on the day of the fire, or an annual basis in a report to the Director or delegated authority due on March 31 for the previous calendar year:
 - i. The date of each burn;
 - ii. The type and quantity of fuel burned for each date open burning occurred;
 - iii. The fire type, such as pile or pit, for each date open burning occurred; and
 - iv. For each date open burning occurred, the legal location, to the nearest section, or latitude and longitude, to the nearest degree minute, or street address for residential burns;
 - g. A requirement that the person conducting the open burn notify the local fire-fighting agency or private fire protection service provider, if the service provider is a delegated authority, before burning. If neither is in existence, the person conducting the burn shall notify the state forester;.
 - h. A requirement that the permittee start each open outdoor fire using items that do not cause the production of black smoke;
 - i. A requirement that the permittee attend the fire at all times until it is completely extinguished;
 - j. A requirement that the permittee provide fire extinguishing equipment on-site for the duration of the burn;
 - k. A requirement that the permittee ensure that a burning pit, burning pile, or approved waste burner be at least 50 feet from any structure;
 - l. A requirement that the permittee have a copy of the burn permit on-site during open burning;
 - m. A requirement that the permittee not conduct open burning when an air stagnation advisory, as issued by the National Weather Service, is in effect in the area of the burn or during periods when smoke can be expected to accumulate to the extent that it will significantly impair visibility in Class I areas;
 - n. A requirement that the permittee not conduct open burning when any stage air pollution episode is declared under R18-2-220;
 - o. A statement that the Director, or any other public officer, may order that the burn be extinguished or prohibit burning during periods of inadequate smoke dispersion, excessive visibility impairment, or extreme fire danger; and
 - p. A list of the activities prohibited and the criminal penalties provided under A.R.S. § 13-1706.
 4. The Director or a delegated authority shall not issue an open burning permit under this Section:
 - a. That would allow burning prohibited materials other than under a permit for the burning of dangerous materials;
 - b. If the applicant has applied for a permit under this Section to burn a dangerous material which is also hazardous waste under 40 CFR 261, but does not have a permit to burn hazardous waste under 40 CFR 264, or is not an interim status facility allowed to burn hazardous waste under 40 CFR 265; or
 - c. If the burning would occur at a solid waste facility in violation of 40 CFR 258.24 and the Director has not issued a variance under A.R.S. § 49-763.01.
- E. Open outdoor fires of dangerous material. A fire set for the disposal of a dangerous material is allowed by the provisions of this Section, when the material is too dangerous to store and transport, and the Director has issued a permit for the fire. A permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and

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(D)(3)(f). The Director shall permit fires for the disposal of dangerous materials only when no safe alternative method of disposal exists, and burning the materials does not result in the emission of hazardous or toxic substances either directly or as a product of combustion in amounts that will endanger health or safety.

- F. Open outdoor fires of household waste. An open outdoor fire for the disposal of household waste is allowed by provisions of this Section when permitted in writing by the Director or a delegated authority. A permit issued under this subsection shall contain all provisions in subsection (D)(3) except for subsections (D)(3)(e) and (D)(3)(f). The permittee shall conduct open outdoor fires of household waste in an approved waste burner and shall either:
1. Burn household waste generated on-site on farms or ranches of 40 acres or more where no household waste collection or disposal service is available; or
 2. Burn household waste generated on-site where no household waste collection and disposal service is available and where the nearest other dwelling unit is at least 500 feet away.
- G. Permits issued by a delegated authority. The Director may delegate authority for the issuance of open burning permits to a county, city, town, air pollution control district, or fire district. A delegated authority may not issue a permit for its own open burning activity. The Director shall not delegate authority to issue permits to burn dangerous material under subsection (E). A county, city, town, air pollution control district, or fire district with delegated authority from the Director may assign that authority to one or more private fire protection service providers that perform fire protection services within the county, city, town, air pollution control district, or fire district. A private fire protection provider shall not directly or indirectly condition the issuance of open burning permits on the applicant being a customer. Permits issued under this subsection shall comply with the requirements in subsection (D)(3) and be in a format prescribed by the Director. Each delegated authority shall:
1. Maintain a copy of each permit issued for the previous five years available for inspection by the Director;
 2. For each permit currently issued, have a means of contacting the person authorized by the permit to set an open fire if an order to extinguish open burning is issued; and
 3. Annually submit to the Director by May 15 a record of daily burn activity, excluding household waste burn permits, on a form provided by the Director for the previous calendar year containing the information required in subsections (D)(3)(e) and (D)(3)(f).
- H. The Director shall hold an annual public meeting for interested parties to review operations of the open outdoor fire program and discuss emission reduction techniques.
- I. Nothing in this Section is intended to permit any practice that is a violation of any statute, ordinance, rule, or regulation.

Historical Note

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

R18-2-603. Repealed**Historical Note**

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

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

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

Historical Note

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

R18-2-605. Roadways and Streets

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



R18-2-612.01. Agricultural PM General Permit For Irrigation Districts; Moderate PM Nonattainment Areas Designated After June 1, 2009, Including Pinal County PM Nonattainment Area

R18-2-613. Yuma PM₁₀ Nonattainment Area; Agricultural Best Management Practices Definitions for R18-2-613.01

R18-2-613.01. Yuma PM₁₀ Nonattainment Area; Agricultural Best Management Practices

Appendix 2. Test Methods and Protocols

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

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

40 CFR 81.303 as amended as of July 1, 2014 (and no future amendments or editions) is incorporated by reference as an applicable requirement and on file with the Department of Environmental Quality. 40 CFR 81.303 is available from the U.S. Government Printing Office, Superintendent of Documents, bookstore.gpo.gov, Mail Stop: SSOP IDCC-SSOM, Washington, D.C. 20402-9328.

ARTICLE 6. EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES

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

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

1. "Access restriction" means reducing PM emissions by reducing the number of trips driven on agricultural aprons and access roads by restricting or eliminating public access to noncropland or commercial farm roads with signs or physical obstruction at locations that effectively control access to the area.
2. "Aggregate cover" means reducing PM emissions and wind erosion and stabilizing soil by applying and maintaining gravel, concrete, recycled road base, caliche, or other similar material applied to noncropland or commercial farm roads to a depth sufficient to reduce dust generated from vehicle movement, wind or other erosive forces. The aggregate should be clean, hard and durable, and should be applied and maintained to a depth sufficient to reduce PM emissions.
3. "Area A" means the area delineated according to A.R.S. § 49-541(1).
4. "Best management practice" (BMP) means a technique verified by scientific research, that on a case-by-case basis is practical, economically feasible, and effective in reducing PM₁₀ emissions from a regulated agricultural activity.
5. "Cessation of Night Tillage" means the discontinuation of night tillage tilling from sunset to sunrise on a day identified by the Maricopa or Pinal County Dust Control Forecast as being high risk of dust generation.
6. "Chemical irrigation" means reducing a minimum of one ground operation reducing the number of passes across a commercial farm by applying a fertilizer, pesticide, or other agricultural chemical to cropland through an irrigation system, which reduces soil disturbance and increases efficiency of application.
7. "Chips/ mulches" means reducing PM emissions and soil movement and preserving soil moisture by applying and maintaining nontoxic chemical or organic dust suppressants to a depth sufficient to reduce PM emissions. Materials shall meet all specifications required by federal, state, or local water agencies, and is not prohibited for use by any applicable regulations.
78. "Combining tractor operations" means reducing soil compaction and the number of passes a minimum of one tillage or ground operation across a commercial farm by using a tractor, implement, harvester, or other farming support vehicle to perform two or more tillage, cultivation, planting, or harvesting operations at the same time. If Equipment modification is also chosen as a BMP, and uses the same practices as described in this BMP, this action is considered one BMP.
89. "Commercial farm" means 10 or more contiguous acres of land used for agricultural purposes within the boundary of the Maricopa PM₁₀ nonattainment area and Maricopa County portion of Area A, or a PM₁₀ nonattainment area designated after June 1, 2009 as stated in A.R.S. § 49-457(P)(1)(f), or the Pinal County PM Nonattainment Area.
10. "Commercial farm road" means a road that is unpaved, owned by a commercial farmer, and is used exclusively to service a commercial farm.
91. "Commercial farmer" means an individual, entity, or joint operation in general control of a commercial farm.
1012. "Committee" means the Governor's Agricultural Best Management Practices Committee as established by A.R.S. § 49-457.
13. "Conservation Tillage" means a tillage system that reduces a minimum of three tillage operations. This system reduces soil and water loss by planting into existing plant stubble on the field after harvest as well as managing the stubble so that it remains intact during the planting season.
114. "Cover crop" means establishing cover crops that maintain a minimum of 60 percent ground cover. Native or volunteer vegetation that meets the minimum ground cover requirement is acceptable. Compliance shall be determined by the Line Transect Test Method, NRCS National Agronomy Manual, Subpart 503.51, Estimating Crop Residue Cover, amended through February 2011 (and no future editions), reducing wind erosion and PM₁₀ emissions by using plants or a green manure crop seasonally to protect soil surfaces between crops and control soil movement.
1215. "Critical area planting" means reducing PM₁₀ emissions and wind erosion by planting trees, shrubs, vines, grasses, or other vegetative cover on noncropland in order to maintain at least 60 percent adequate ground cover. Compliance shall be determined by the Line Transect Test Method, NRCS National Agronomy Manual, Subpart 503.51, Estimating Crop Residue Cover, amended through February 2011 (and no future editions).



1316. "Cropland" means land on a commercial farm that:
- Is within the time-frame of final harvest to plant emergence, but does not include tillage activities;
 - Has been tilled in a prior year and is suitable for crop production, but is currently fallow; or
 - Is a turn-row.
1417. "Cross-wind ridges" means stabilizing soil and reducing PM₁₀ emissions and wind erosion by creating soil ridges in a commercial farm by tillage or planting operations. Ridges should be at least four inches in height, and be aligned as perpendicular as possible to the prevailing wind direction. Soil should be stable enough to sustain effective ridges.
15. ~~"Cross-wind strip cropping" means stabilizing soil and reducing PM₁₀ emissions by growing strips of at least two crops: herbaceous cover or managing crop or herbaceous residue as a protective cover within the same field. Strips should be aligned as perpendicular as possible to the prevailing wind directions.~~
18. "Dust Control Forecast" means a forecast, which shall identify a low, moderate or high risk of dust generation for the next five consecutive days and shall be issued by noon on each day the forecast is generated. When developing these forecasts, the department shall consider all of the following:
- Projected meteorological conditions, including:
 - Wind speed and direction.
 - Stagnation.
 - Recent precipitation, and
 - Potential for precipitation.
 - Existing concentrations of air pollution at the time of the forecast; and
 - Historic air pollution concentrations that have been observed during meteorological conditions similar to those that are predicted to occur in the forecast.
1619. "Equipment modification" means reducing PM₁₀ emissions and soil erosion during tillage and or harvest ground operations by modifying and maintaining an existing piece of agricultural equipment, purchasing new equipment, increasing equipment size, installing shielding equipment, modifying land planting and land leveling, matching the equipment to row spacing, or grafting to new varieties or technological improvements. If combining tractor operations is also chosen as a BMP, and uses the same practices as described in this BMP, this action is considered one BMP.
1720. "Fallow Field" means an area of land that is routinely cultivated, planted and harvested and is unplanted for one or more growing seasons or planting cycles, but is intended to be placed back in agricultural production.
21. "Field Capacity" means the amount of water remaining in the soil two days after having been saturated and after free drainage has ceased.
1822. "Forage Crop" means a product grown for consumption by any domestic animal.
1923. "Genetically Modified" (GMO) means a living organism whose genetic material has been altered, changing one or more of its characteristics.
20. ~~"GMO: Genetically Modified Organism" means a plant that has been altered by a genetic exchange with another organism.~~
2124. "GPS: Global Position Satellite System" means using a satellite navigation system on farm equipment to calculate position in the field.
2225. "Green Chop chop" means reducing soil compaction, soil disturbance and the number of passes a minimum of one ground operation across a commercial farm by harvesting of a Forage Crop without allowing it to dry in the field.
26. "Ground operation" means an agricultural operation that is not a tillage operation, which involves equipment passing across the field. A ground operation includes harvest activities. A pass through the field may be a subset of a ground operation.
27. "Harvest" means the time after planting up through harvest, including gathering mature crops from a commercial farm, as well as all actions taken immediately after crop removal, such as cooling, sorting, cleaning, and packing.
2328. "Integrated Pest Management" means reducing soil compaction and the number of passes in a minimum of one ground operation across a commercial farm for spraying by using a combination of techniques including organic, conventional, and biological farming practices to suppress pest problems.
2429. ~~"Limited harvest activity during a high wind event" means performing no harvest or soil preparation activity ground operations on a day identified by the Maricopa or Pinal County Dust Control Forecast to be high risk for dust generation, when the measured wind speed as measured by a hand-held anemometer is more than 25 miles per hour at the commercial farm site.~~
2530. "Limited tillage activity during a high wind event" means performing no tillage operations or soil preparation activity on a day identified by the Maricopa or Pinal County Dust Control Forecast to be high risk for dust generation, when the measured wind speed as measured by a hand-held anemometer is more than 25 miles per hour at the commercial farm site.
2631. "Maricopa PM₁₀ nonattainment area" means the Phoenix planning area as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210.

27. "Muleching" means reducing PM₁₀ emissions and wind erosion and preserving soil moisture by applying a protective layer of plant residue or other material that is not produced onsite to a soil surface to reduce soil movement.
2832. "Multi-year crop" means reducing PM₁₀ emissions from wind erosion or and a minimum of one tillage and ground operation across a commercial farm, by protecting the soil surface by growing a crop, pasture, or orchard that is grown, or will be grown, on a continuous basis for more than one year.
2933. "Noncropland" means any commercial farm land that:
- Is no longer used for agricultural production;
 - Is no longer suitable for production of crops;
 - Is subject to a restrictive easement or contract that prohibits use for the production of crops; or
 - Includes a private farm road, ditch, ditch bank, equipment yard, storage yard, or well head.
34. "NRCS" means the Natural Resource Conservation Service.
30. "Night Tillage" means preparing the land for the raising of crops between the hours of 2:00 a.m. and 8:00 a.m.
31. "Organic farming practices" means using biological or non-chemical agricultural methods.
32. "Organic material application" means applying animal waste or biosolids to a soil surface.
35. "Organic material cover" means reducing PM emissions and wind erosion and preserving soil moisture by applying and maintaining cover material such as animal waste or plant residue, to a soil surface to reduce soil movement. Material shall be evenly applied and maintained to a depth sufficient to reduce PM emissions and coverage should be a minimum of 70 percent.
3336. "Permanent cover" means reducing PM₁₀ emissions and wind erosion by maintaining a long-term perennial vegetative cover on cropland that is temporarily not producing a major crop. Perennial species such as grasses and/or legumes shall be used to establish at least 60 percent cover. Compliance shall be determined by the Line Transect Test Method, NRCS National Agronomy Manual, Subpart 503.51, Estimating Crop Residue Cover, amended through February 2011 (and no future editions).
37. "Pinal County PM Nonattainment Area" means the West Pinal PM₁₀ planning area and the West Central PM_{2.5} planning area, as defined in 40 CFR 81.303, and incorporated by reference in R18-2-210.
38. "Plant stubble" means stubble on the soil surface, which insulates soil to reduce evaporation of moisture, and also protects the soil from wind and water erosion.
3439. "Planting based on soil moisture" means reducing PM emissions and wind erosion by applying water or having enough moisture in the soil to germinate the seed prior to planting. Soil must have a minimum soil moisture content of 60% of field capacity at planting depth. Compliance shall be determined by NRCS Estimating Soil Moisture by Feel and Appearance Method, amended through April 1998 (and no future editions).
40. "PM" includes both particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 CFR 50 Appendix L, or by an equivalent method designated according to 40 CFR 53; and particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method contained within 40 CFR 50 Appendix J or by an equivalent method designated in accordance with 40 CFR 53, as incorporated by reference in Appendix 2.
3541. "Precision Farming" means reducing the number of passes the number of passes across a commercial farm by at least 12 inches per pass by using GPS to precisely guide farm equipment in the field.
3642. "Reduce vehicle speed" means reducing PM₁₀ emissions and soil erosion from the operation of farm vehicles or farm equipment on noncropland or commercial farm roads at speeds not to exceed ~~20~~ 15. This can be achieved through installation of engine speed governors, signage, or speed control devices.
3743. "Reduced harvest activity" means reducing soil disturbance, soil and water loss, and the number of mechanical harvest passes by a minimum of one ground operation across a commercial farm, by means other than equipment modification or combining tractor operations.
3844. "Reduced tillage system" means reducing soil disturbance, soil and water loss, the number of by using a single piece of equipment that reduces a minimum of three tillage operations, by means other than equipment modification or combining tractor operations.
3945. "Regulated agricultural activity" means a regulated agricultural activity as defined in A.R.S. § 49-457(P)(1)(a) through (P)(1)(d)(5).
4046. "Regulated area" means a the regulated area as defined in A.R.S. § 49-457(P)(6).
4147. "Residue management" means reducing PM₁₀ emissions and wind erosion by managing the amount and distribution maintaining a minimum of 60 percent ground cover of crop and other plant residues on a soil surface between the time of harvest of one crop and the emergence of a commencement of tillage for a new crop. Compliance shall be determined by the Line Transect Test Method, NRCS National Agronomy Manual, Subpart 503.51, Estimating Crop Residue Cover, amended through February 2011 (and no future editions).
4248. "Sequential cropping" means reducing PM₁₀ emissions and wind erosion by growing crops in a sequence or close rotation that limits the amount of time bare soil is exposed on a commercial farm to 30 days or less.
4349. "Shuttle System/Larger Carrier" means reducing the one out of every four number of trips passes across a commercial farm by using multiple or larger bins/trailers per trip to haul commodity from the field.

4450. "Significant Agricultural Earth Moving Activities" means either leveling activities conducted on a commercial farm that disturb the soil more than 4 inches below the surface, or the creation, maintenance and relocation of: ditches, canals, ponds, irrigation lines, tailwater recovery systems (agricultural sumps) and other water conveyances, not to include activities performed on cropland for tillage, ground operations, crop preparation, cultivation or harvest.

51. "Silt content test method" means the test method as described in Appendix 2.

4552. "Stabilization of soil prior to plant emergence" means reducing PM₁₀ emissions by applying water to soil in between planting and prior to crop emergence in order to cause the soil to form a visible crust.

4653. "Surface roughening" means reducing PM₁₀ emissions and or wind erosion by manipulating a soil surface by means such as rough discing or tillage in order to produce or maintain clods on the land surface. Compliance shall be determined by NRCS Practice Code 609, Surface Roughening, amended through November 2008 (and no future editions).

47. "Stagnant Air Conditions" means a meteorological regime where warm air aloft overlies cooler air near the surface and little if any vertical mixing occurs.

4854. "Synthetic particulate suppressant" means reducing PM₁₀ emissions and wind erosion by providing a surface barrier or binding soil particles together stabilized soil surface on noncropland or commercial farm roads with a manufactured product such as lignosulfate, calcium chloride, magnesium chloride, an emulsion of a petroleum product, an enzyme product, or polyacrylamide that is used to control particulate matter.

49. "Tillage and harvest" means any mechanical practice that physically disturbs cropland or crops on a commercial farm.

55. "Tillage" means any mechanical practice that physically disturbs the soil, and includes preparation for planting, such as plowing, ripping, or discing.

5056. "Tillage based on soil moisture" means reducing PM₁₀ emissions by irrigating fields to the depth of the proposed cut prior to soil disturbances or conducting tillage to coincide with precipitation. Soil must have a minimum soil moisture content of 40-60% of field capacity at planting depth. Compliance shall be determined by NRCS Estimating Soil Moisture by Feel and Appearance Method, amended through April 1998 (and no future editions).

5157. "Timing of a tillage operation" means reducing wind erosion and PM emissions by performing tillage operations that minimize the amount of time within 45 days, the soil surface is susceptible to wind erosion resulting in PM₁₀.

58. "Tillage operation" means an agricultural operation that mechanically manipulates the soil for the enhancement of crop production. Examples include discing or bedding. A pass through the field may be a subset of a tillage operation.

5259. "Track-out control system" means reducing PM₁₀ emissions minimizing any and all material that adheres to and agglomerates on all vehicles and equipment from noncropland or commercial farm roads or and falls onto paved public roads or shoulders to paved public roads by using a device or system to remove mud or soil from a vehicle or equipment before the vehicle enters a paved public road. Devices such as a grizzly, a gravel pad or a wheel wash system can be used.

5360. "Transgenic Crops" means reducing the need a minimum of one for tillage or cultivation ground operations, the number of chemical spray applications, or soil disturbances by using plants that are genetically modified.

5461. "Transplanting" means reducing the number of passes in a minimum of one ground operation across a commercial farm and minimizing soil disturbance by utilizing plants already in a growth state as compared to seeding.

62. "VDT" (Vehicle trips per day) means trips per day made by one vehicle, in one direction.

5563. "Watering" means reducing PM₁₀ emissions and wind erosion by applying water to noncropland or commercial farm road bare soil surfaces during periods of high traffic until the surfaces are visibly moist.

64. "Watering on a high risk day" means reducing PM emissions and wind erosion by applying water to commercial farm road bare soil surfaces until the surfaces are visibly moist, on a day forecast to be high risk for dust generation by the Maricopa or Pinal County Dust Control Forecast.

5665. "Wind barrier" means reducing PM₁₀ emissions and wind erosion by constructing a fence or structure, or providing a woody vegetative barrier by planting a row of trees or shrubs, perpendicular or across the prevailing wind direction to reduce wind speed by changing the pattern of air flow over the land surface. For fences and structures, the wind barrier shall have a density of no less than 50% and the height of the wind barrier must be proportionate to the downwind protected area. The downwind protected area is considered ten times the height of the wind barrier. For vegetative barriers, compliance shall be determined by NRCS Conservation Practice Standard, Code 380, Windbreak/Shelterbelt Establishment, amended through August 21, 2009 (and no future editions).

~~R18-2-610.01. Agricultural PM₁₀ General Permit for Crop Operations; Maricopa County PM₁₀ Nonattainment Areas~~

~~A. A commercial farmer shall comply with this Section by January 1, 2012. Until the end of the transition period on March 31, 2013, 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 practice selected for tillage, harvest and ground operation activities, cropland, noncropland and commercial farm roads, and significant earth moving activities (if applicable).~~
- ~~G. Records of any changes to the Best Management Practices shall be noted on the Best Management Practices Program General Permit Record Form and shall be kept by the commercial farmer onsite and made available for review by the Director within two business days of notice to the commercial farmer.~~
- ~~H. A person may develop different practices to control PM emissions not contained in subsections (B), (C), (D), or (E) and may submit such practices that are proven effective through on-farm demonstration trials to the Committee. The proposed new practices shall not become effective unless submitted as described in A.R.S. § 49-457(L).~~
- ~~I. A commercial farmer shall maintain a record demonstrating compliance with this Section for three years. Records shall include a copy of the complete Best Management Practice Program General Permit Record Form to confirm implementation of each best management practice.~~
- ~~J. The Director shall not assess a fee to a commercial farmer for coverage under the agricultural PM general permit.~~
- ~~K. A commercial farmer shall ensure that the implementation of all selected best management practices does not violate any other local, state, or federal law.~~
- ~~L. The Director shall document noncompliance with this Section before issuing a compliance order.~~
- ~~M. A commercial farmer who is not in compliance with this Section is subject to the provisions in A.R.S. § 49-457(I), (J), and (K).~~

R18-2-610.03. Agricultural PM General Permit for Crop Operations; Pinal County PM Nonattainment Area

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



- b. Unless choosing limited harvest activity (subsection iv, below), on the day before and during the day that is forecast to be high risk for dust generation by the Pinal County Dust Control Forecast, a commercial farmer shall ensure implementation of at least one of the following:
 - i. Green chop,
 - ii. Integrated pest management,
 - iii. Multi-year crop, or
 - iv. Limited harvest activity.
- 3. Noncropland:
 - a. A commercial farmer shall implement at least one of the following best management practices:
 - i. Access restriction,
 - ii. Aggregate cover,
 - iii. Wind barrier,
 - iv. Critical area planting,
 - v. Organic material cover,
 - vi. Reduce vehicle speed,
 - vii. Synthetic particulate suppressant, or
 - viii. Watering.
 - b. Unless choosing watering on a high risk day (subsection vi, below), on the day before and during a day forecast to be high risk for dust generation by the Pinal County Dust Control Forecast, a on a noncropland area that experiences more than 20 VDT from 2 or more axle vehicles, commercial farmer shall ensure implementation of at least one of the following best management practices:
 - i. Aggregate cover,
 - ii. Wind barrier,
 - iii. Critical area planting,
 - iv. Organic material cover,
 - v. Synthetic particulate suppressant, or
 - vi. Watering on a high risk day.
- 4. Commercial farm roads:
 - a. A commercial farmer shall implement at least one of the following best management practices:
 - i. Access restriction,
 - ii. Reduce vehicle speed,
 - iii. Track-out control system,
 - iv. Aggregate cover,
 - v. Synthetic particulate suppressant,
 - vi. Watering, or,
 - vii. Organic material cover.
 - b. Unless choosing watering on a high risk day (subsection vi, below), on the day before and during a day forecast to be high risk for dust generation by the Pinal County Dust Control Forecast, on a road that experiences more than 20 VDT from 2 or more axle vehicles, a commercial farmer shall ensure implementation of at least one of the following best management practices:
 - i. Aggregate cover,
 - ii. Synthetic particulate suppressant,
 - iii. Wind barrier,
 - iv. Organic material cover,
 - v. Roads are stabilized as determined by the silt content test method,
 - vi. Watering on a high risk day.
- 5. Cropland:
 - a. A commercial farmer shall implement at least two of the following best management practices, one from subsection (i) through (vii), and one from subsection (viii) through (xi), to reduce PM emissions from cropland:
 - i. Wind barrier,
 - ii. Cover crop,
 - iii. Cross-wind ridges,
 - iv. Chips/mulches,
 - v. Sequential cropping
 - vi. Residue management,
 - vii. Surface roughening,
 - viii. Multi-year crop,
 - ix. Permanent cover, or
 - x. Stabilization of soil prior to plant emergence.

- b. On the day before and during the day that is forecast to be high risk for dust generation by the Pinal County Dust Control Forecast, a commercial farmer shall ensure implementation of at least one of the following:
 - i. Wind barrier,
 - ii. Cover crop,
 - iii. Cross-wind ridges,
 - iv. Chips/mulches,
 - v. Surface roughening,
 - vi. Multi-year crop,
 - vii. Permanent cover,
 - viii. Stabilization of soil prior to plant emergence, or
 - ix. Residue management.
- 6. A commercial farmer shall implement at least one of the following best management practices, when conducting Significant Agricultural Earth Moving Activities as defined in R18-2-610:
 - a. Apply water prior to conducting Significant Agricultural Earth Moving Activities and/or time Significant Agricultural Earth Moving Activities to coincide with precipitation. Soil must have a minimum soil moisture content of 50% of field capacity. Compliance shall be determined by NRCS Estimating Soil Moisture by Feel and Appearance Method, amended through April 1998 (and no future editions);
 - b. Apply water during Significant Agricultural Earth Moving Activities. Soil must have a minimum soil moisture content of 30% of field capacity. Compliance shall be determined by NRCS Estimating Soil Moisture by Feel and Appearance Method, amended through April 1998 (and no future editions);
 - c. Limit activities on a day identified by the Maricopa or Pinal County Dust Control Forecast to be high risk for dust generation; or
 - d. Conduct Significant Agricultural Earth Moving Activities in a manner to reduce a minimum of one ground operation across a commercial farm by using equipment that is the most efficient means of moving the soil.
- C. From and after December 31, 2015, a commercial farmer who engages in a regulated agricultural activity shall complete a Best Management Practices Program General Permit Record Form demonstrating compliance with this rule. Thereafter, a new Best Management Practices Program General Permit Record Form shall be completed every year by March 31. The Form shall be provided to the Director within two business days of notice to the commercial farmer. The Best Management Practice Program General Permit Record Form shall include the following information:
 - 1. The name of the commercial farmer, signature, and date signed;
 - 2. The mailing address or physical address of the commercial farm; and
 - 3. The best management practices selected for tillage, ground operations and harvest, cropland, noncropland, commercial farm roads, and significant earth moving activities (if applicable); and
 - 4. Any additional best management practices selected for high risk days as predicted by the Pinal County Dust Control Forecast.
- D. Beginning in calendar year 2017, and no more than once every subsequent three calendar years, the Director, in conjunction with the Arizona Department of Agriculture, shall provide the commercial farmer with a Best Management Practices Program 3-year Survey. The commercial farmer shall complete the Survey with data from the preceding calendar year and submit the Survey to the Arizona Department of Agriculture (ADA) by January 31, 2018, and every three years thereafter. The Survey information submitted to the ADA shall be compiled by the ADA without reference to a commercial farmer's name, shall aggregate the data from the Surveys received, and be submitted to the Department. The 3-year Survey shall include the following information:
 - 1. The name, business address, and phone number of the commercial farmer responsible for the preparation and implementation of the best management practices;
 - 2. The signature of the commercial farmer and the date the form was signed;
 - 3. The acreage of each crop type planted/growing during the calendar year that the survey is conducted;
 - 4. The total miles of commercial farm roads at the commercial farm;
 - 5. The total acreage of the noncropland at the commercial farm;
 - 6. The best management practices selected for tillage, ground operations and harvest, cropland, noncropland, commercial farm roads, and significant earth moving activities (if applicable); and
 - 7. Any additional best management practices selected for high risk days as predicted by the Pinal County Dust Control Forecast.
- E. Records of any changes to the Best Management Practices shall be noted on the Best Management Practices Program General Permit Record Form and shall be kept by the commercial farmer onsite and made available for review by the Director within two business days of notice to the commercial farmer.
- F. A person may develop different practices to control PM emissions not contained in subsections (B)(1) through (B)(6) and may submit such practices that are proven effective through on-farm demonstration trials to the Committee. The proposed new practices shall not become effective unless submitted as described in A.R.S. § 49-457(L).
- G. A commercial farmer shall maintain a record demonstrating compliance with this Section for three years. Records shall include a copy of the complete Best Management Practice Program General Permit Record Form to confirm implementation of each best management practice.
- H. The Director shall not assess a fee to a commercial farmer for coverage under the agricultural PM general permit.

- I. A commercial farmer shall ensure that the implementation of all selected best management practices does not violate any other local, state, or federal law.
- J. The Director shall document noncompliance with this Section before issuing a compliance order.
- K. A commercial farmer who is not in compliance with this Section is subject to the provisions in A.R.S. § 49-457(I), (J), and (K).

R18-2-611. Definitions for R18-2-611.01

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

- 1. The following definitions apply to a commercial dairy operation, a commercial beef feedlot, a commercial poultry facility, and commercial swine facility:
 - a. “Animal waste handling and transporting” means the processes by which any animal excretions and mixtures containing animal excretions are collected and transported.
 - b. “Arenas, corrals and pens” means areas where animals are confined for the purposes of, but not limited to, feeding, displaying, safety, racing, exercising, or husbandry.
 - c. “Commercial animal operation” means a commercial dairy operation, a commercial beef feedlot, a commercial poultry facility, and a commercial swine facility, as defined in this Section.
 - d. “Commercial animal operator” means an individual, entity, or joint operation in general control of a commercial animal operation.
 - e. “Dust Control Forecast” means a forecast, which shall identify a low, moderate or high risk of dust generation for the next five consecutive days and shall be issued by noon on each day the forecast is generated. When developing these forecasts, the department shall consider all of the following:
 - i. Projected meteorological conditions, including:
 - (1) Wind speed and direction,
 - (2) Stagnation,
 - (3) Recent precipitation, and
 - (4) Potential for precipitation;
 - ii. Existing concentrations of air pollution at the time of the forecast; and
 - iii. Historic air pollution concentrations that have been observed during meteorological conditions similar to those that are predicted to occur in the forecast.
 - f. “High traffic areas” means areas that experience more than 20 VDT from 2 or more axle vehicles.
 - g. “Maricopa PM nonattainment area” means the Phoenix planning area as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210.
 - h. “Paved Public Road” means any paved roadways that are open to public travel and maintained by a City, County, State, or Federal entities.
 - i. “Pinal County PM Nonattainment Area” means the West Pinal PM₁₀ planning area and the West Central PM_{2.5} planning area, as defined in 40 CFR 81.303, and incorporated by reference in R18-2-210.
 - j. “PM” includes both particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 CFR 50 Appendix L, or by an equivalent method designated according to 40 CFR 53; and particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method contained within 40 CFR 50 Appendix J or by an equivalent method designated in accordance with 40 CFR 53, as incorporated by reference in Appendix 2.
 - k. “Regulated agricultural activity” means a regulated agricultural activity as defined in A.R.S. § 49-457(P)(5).
 - l. “Regulated area” means the regulated area as defined in A.R.S. § 49-457(P)(6).
 - m. “Track-out control device” means minimizing any and all material that adheres to and agglomerates on all vehicles and equipment from unpaved access connections and falls onto paved public roads or shoulders to paved public roads by using a device or system to remove mud or soil from a vehicle or equipment before the vehicle enters a paved public road. Devices such as a grizzly, a gravel pad or a wheel wash system can be used.
 - n. “Unpaved access connections” means any unpaved road connection which connects to a paved public road.
 - o. “Unpaved roads or feed lanes” means roads and feed lanes that are unpaved, owned by a commercial animal operator, and used exclusively to service a commercial animal operation.
 - p. “VDT” (Vehicle trips per day) means trips per day made by one vehicle, in one direction.
- ±2. The following definitions apply to a commercial dairy operation:
 - a. “Aggregate cover” means reducing PM emissions, wind erosion and stabilizing soil by applying and maintaining gravel, concrete, recycled road base, caliche, or other similar material applied to unpaved roads or feed lanes to a depth sufficient to reduce dust generated from vehicle movement, wind or other erosive forces. The aggregate should be clean, hard and durable, and should be applied and maintained to a minimum of three inches deep.
 - b. “Apply a fibrous layer” means reducing PM₁₀ emissions and soil movement, and preserving soil moisture by spreading shredded or deconstructed plant materials to cover loose soil in high animal traffic areas. Material shall be consistently applied to a minimum depth of two inches above the soil surface and coverage should be a minimum of 70 percent.

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 PM10 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 2 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 PM10 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 timeframe 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 1 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 PM10 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 1 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 PM10 within the Maricopa PM10 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 PM10.
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.

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

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

mit such practices that are proven effective through on-operation demonstration trials to the Committee. The new best management practices shall not become effective unless submitted as described in A.R.S. § 49-457(L).

- L.** The Director shall not assess a fee to a commercial animal operator for coverage under the agricultural PM general permit.
- M.** A commercial animal operator shall ensure that the implementation of all selected best management practices does not violate any other local, state, or federal law.
- N.** The Director shall document noncompliance with this Section before issuing a compliance order.
- O.** A commercial animal operator who is not in compliance with this Section is subject to the provisions in A.R.S. § 49-457(I), (J), and (K).

R18-2-612. Definitions for ~~R18-2-613~~ R18-2-612.01

1. "Access restriction" means restricting or eliminating public access to noncropland with signs or physical obstruction.
2. "Aggregate cover" means gravel, concrete, recycled road base, caliche, or other similar material applied to noncropland.
3. "Artificial wind barrier" means a physical barrier to the wind.
4. "Bed row spacing" means increasing or decreasing the size of a planting bed area to reduce the number of passes and soil disturbance by increasing plant density.
5. "Best management practice" means a technique verified by scientific research, that on a case-by-case basis is practical, economically feasible, and effective in reducing PM₁₀ emissions from a regulated agricultural activity.
6. "Chemical irrigation" means applying a fertilizer, pesticide, or other agricultural chemical to cropland through an irrigation system.
7. "Combining tractor operations" means performing two or more tillage, cultivation, planting, or harvesting operations with a single tractor or harvester pass.
8. "Commercial farm" means 10 or more contiguous acres of land used for agricultural purposes within the boundary of the Yuma PM₁₀ nonattainment area.
9. "Commercial farmer" means an individual, entity, or joint operation in general control of a commercial farm.
10. "Conservation irrigation" means the use of drips, sprinklers, or underground lines to conserve water, and to reduce the weed population, the need for tillage, and soil compaction.
11. "Conservation tillage" means types of tillage that reduce the number of passes and the amount of soil disturbance.
12. "Cover crop" means plants or a green manure crop grown for seasonal soil protection or soil improvement.
13. "Critical area planting" means using trees, shrubs, vines, grasses, or other vegetative cover on noncropland.
14. "Cropland" means land on a commercial farm that:
 - a. Is within the time frame of final harvest to plant emergence;
 - b. Has been tilled in a prior year and is suitable for crop production, but is currently fallow; or
 - c. Is a turn-row.
15. "Cross wind ridges" means soil ridges formed by a tillage operation.
16. "Cross wind strip cropping" means planting strips of alternating crops within the same field.
17. "Cross wind vegetative strips" means herbaceous cover established in one or more strips within the same field.
18. "Equipment modification" means modifying agricultural equipment to prevent or reduce particulate matter generation from cropland.
19. "Limited activity during a high wind event" means performing no tillage or soil preparation activity when the measured wind speed at six feet in height is more than 25 mph at the commercial farm site.
20. "Manure application" means applying animal waste or biosolids to a soil surface.
21. "Mulching" means applying plant residue or other material that is not produced onsite to a soil surface.
22. "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.
23. "Night farming" means performing regulated agricultural activities at night when moisture levels are higher and winds are lighter.
24. "Noncropland" means any commercial farmland 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.
25. "Permanent cover" means a perennial vegetative cover on cropland.
26. "Planting based on soil moisture" means applying water to soil before performing planting operations.
27. "Precision farming" means use of satellite navigation to calculate position in the field, to reduce overlap during field operations, and allow operations to occur during nighttime and inclement weather, thus generating less PM₁₀.
28. "Reduce vehicle speed" means operating farm vehicles or farm equipment on unpaved farm roads at speeds not to exceed 20 mph.
29. "Reduced harvest activity" means reducing the number of harvest passes using a mechanized method to cut and remove crops from a field.



30. "Regulated agricultural activity" means a commercial farming practice that may produce PM₁₀ within the Yuma PM₁₀ nonattainment area.
31. "Residue management" means managing the amount and distribution of crop and other plant residues on a soil surface.
32. "Sequential cropping" means growing crops in a sequence that minimizes the amount of time bare soil is exposed on a field.
33. "Surface roughening" means manipulating a soil surface to produce or maintain clods.
34. "Synthetic particulate suppressant" means a manufactured product such as lignosulfate, calcium chloride, magnesium chloride, and polyacrylamide, an emulsion of a petroleum product, and an enzyme product that is used to control particulate matter.
35. "Tillage and harvest" means any mechanical practice that physically disturbs cropland or crops on a commercial farm.
36. "Tillage based on soil moisture" means applying water to soil before or during tillage, or delaying tillage to coincide with precipitation.
37. "Timing of a tillage operation" means performing tillage operations at a time that will minimize the soil's susceptibility to generate PM₁₀.
38. "Transgenic crops" means the use of genetically modified crops such as "herbicide ready" crops, which reduces the need for tillage or cultivation operations, and reduces soil disturbance.
39. "Track-out control system" means a device to remove mud or soil from a vehicle before the vehicle enters a paved public road.
40. "Tree, shrub, or windbreak planting" means providing a woody vegetative barrier to the wind.
41. "Watering" means applying water to noncropland.
42. "Yuma PM₁₀ nonattainment area" means the Yuma PM₁₀ planning area as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210.

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

1. "Access restriction" means reducing PM emission by reducing the number of trips driven on unpaved operation and maintenance and unpaved utility roads by restricting or eliminating public access by the used of signs or physical obstruction at locations that effectively control access to roads.
2. "Aggregate cover" means reducing PM emissions, wind erosion and stabilizing soil by applying and maintaining gravel, concrete, recycled road base, caliche, or other similar material to unpaved roads. The aggregate should be clean, hard and durable, and should be applied a depth sufficient to create soil stabilization in accordance with material specifications. A minimum depth of three inches is the standard in the absence of such specifications.
3. "Apply and maintain water" means reducing PM emissions and wind erosion by applying water to bare soil surfaces until the surfaces are visibly moist.
4. "Best management practice" means a technique verified by scientific research, that on a case-by-case basis is practical, economically feasible, and effective in reducing PM emissions from a regulated agricultural activity.
5. "Biological control of aquatic weeds" means reducing at least one trip, or to one trip if only one trip is needed, per treatment, made by vehicles for the purposes of removing aquatic weeds from canals by using fish, and other biologic means, within the canal through the use of to control the growth of aquatic weeds that reduce operating capacities and create debris that causes other operational issues.
6. "Canals" means facilities constructed for the sole purpose of the control, conveyance, and delivery of water. These facilities may be either open earthen channels, lined or unlined, or buried pipelines, which are used to convey water uphill and under obstructions, such as roadways and wash and river channels. These facilities include, but are not limited to, gate, inlet, outlet, safety, and measuring structures required to control water along the canals and deliver water to irrigation district customers, as well as compacted earthen banks constructed to protect these facilities from storm runoff events.
7. "Committee" means the Governor's Agricultural Best Management Practices Committee.
8. "Debris" means trash, rubble, and other non-soil materials.
9. "Dredge canals" means reducing PM emissions by mechanically removing muck, debris, and other foreign objects from canals while material is still wet or damp.
10. "Dust Control Forecast" means a forecast, which shall identify a low, moderate or high risk of dust generation for the next five consecutive days and shall be issued by noon on each day the forecast is generated. When developing these forecasts, the department shall consider all of the following:
 - a. Projected meteorological conditions, including:
 - i. Wind speed and direction,
 - ii. Stagnation,
 - iii. Recent precipitation, and
 - iv. Potential for precipitation;
 - b. Existing concentrations of air pollution at the time of the forecast; and



- c. Historic air pollution concentrations that have been observed during meteorological conditions similar to those that are predicted to occur in the forecast.
11. "Earth materials" means natural materials covering the ground surface, which includes, but are not limited to, dirt, rocks, or soil.
 12. "Grading roadways" means mechanically smoothing and compacting the roadway surface.
 13. "Irrigation District" means a political subdivision, governed by title 48, chapter 19.
 14. "Limit activity" means performing only critical operational or emergency activity on a day forecast to be high risk for dust generation as forecasted by the Pinal County Dust Control Forecast.
 15. "Major earth moving activities" means the mechanical movement of earth materials to reconstruct, relocate, reshape, reconfigure canals, including operation and maintenance roads and utility access roads.
 16. "Maricopa PM nonattainment area" means the Phoenix planning area as defined in 40 CFR 81.303, which is incorporated by reference in R18-2-210.
 17. "Minor earth moving activities" means the mechanical movement of earth materials to repair and maintain the existing configuration, location, bank slopes, or inclines of canals.
 18. "Muck" means water that is saturated with mud, dirt, and soil, which accumulates over time along the bottom of canals.
 19. "Paved Public Road" means any paved roadways that are open to public travel and maintained by a City, County, or the State.
 20. "Pinal County PM Nonattainment Area" means the West Pinal PM₁₀ planning area and the West Central PM_{2.5} planning area, as defined in 40 CFR 81.303, and incorporated by reference in R18-2-210.
 21. "PM" includes both particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by a reference method based on 40 CFR 50 Appendix L, or by an equivalent method designated according to 40 CFR 53; and particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method contained within 40 CFR 50 Appendix J or by an equivalent method designated in accordance with 40 CFR 53, as incorporated by reference in Appendix 2.
 22. "Reduce vehicle speed" means reducing PM emissions and soil erosion from the use of vehicles owned or operated by the irrigation district on unpaved operation, maintenance, and utility access roads, at speeds not to exceed 25 mph. This can be achieved through worker behavior modifications, signage, or any other necessary means.
 23. "Regulated agricultural activity" means activities of an irrigation district, which affects those lands and facilities that are under the jurisdiction and control of an irrigation district, as described in § 49-457(P)(1)(f) and A.R.S. § 49-457(P)(5)(b).
 24. "Regulated area" means a regulated area as defined in A.R.S. § 49-457(P)(6)(c).
 25. "Sediment" means muck that has dried after removal from canals.
 26. "Supervisory control system" means a system that allows the irrigation district to control operational structures from a remote computer location in order to reduce at least one trip made by vehicles to access structures for operational purposes.
 27. "Synthetic or natural particulate suppressant" means reducing PM emissions and wind erosion by providing a stabilized soil surface with organic material, such as muck, animal waste or biosolids, or with a manufactured product such as lignosulfate, calcium chloride, magnesium chloride, an emulsion of a petroleum product, an enzyme product, or polyacrylamide.
 28. "Track-out control system" means minimizing any and all material that adheres to and agglomerates on all vehicles and equipment and falls onto paved public roads or shoulders to paved public roads by using a device or system to remove mud or soil from a vehicle or equipment before the vehicle enters a paved public road. Devices such as a grizzly, a gravel pad or a wheel wash system can be used.
 29. "Unauthorized use" means any travel or access by non-district personnel in non-district vehicles along roadways under the control of an irrigation district without the permission of the irrigation district.
 30. "Unpaved operation and maintenance roads" means unpaved roadways that lay adjacent to canals, which provide access for irrigation district personnel and equipment for direct operation and maintenance of canals, and are under the control of the irrigation district.
 31. "Unpaved utility access roads" means unpaved roadways used to provide access to canals, and also includes office and shop facilities, equipment yards, staging areas and other lands under the control of the irrigation district.
 32. "Weed management" means reducing at least one trip made by vehicles for the purposes of removing weeds by using a combination of techniques, including organic, chemical, or biological means, to control weeds along canal banks and land surfaces not used for conveying water, excluding unpaved roadways.
 33. "Wind barrier" means reducing PM₁₀ emissions and wind erosion by constructing a fence or structure, or providing a woody vegetative barrier by planting a row of trees or shrubs, perpendicular or across the prevailing wind direction to reduce wind speed by changing the pattern of air flow over the land surface. For fences and structures, the wind barrier shall have a density of no less than 50% and the height of the wind barrier must be proportionate to the downwind protected area. The downwind protected area is considered ten times the height of the wind barrier. For



vegetative barriers, compliance shall be determined by NRCS Conservation Practice Standard, Code 380, Wind-break/Shelterbelt Establishment, amended through August 21, 2009 (and no future editions).

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

- A.** An irrigation district within a PM Nonattainment Area, designated after June 1, 2009, shall implement at least one best management practice from each of the following categories to reduce PM emissions:
1. Unpaved operation and maintenance roads:
 - a. Access restriction.
 - b. Apply and maintain aggregate cover.
 - c. Install supervisory control system to limit vehicle travel.
 - d. Limit activity.
 - e. Install signage to limit vehicle speed to 25 mph.
 - f. Post warning signs for unauthorized use at point of entry to roads.
 - g. Reduce vehicle speed.
 - h. Install and maintain a track-out control system.
 - i. Apply and maintain synthetic or natural particulate suppressant.
 - j. Apply and maintain water before, during, and after major and minor earth moving activities.
 - k. Apply and maintain water when grading roadways.
 - l. Use paved non-district or paved public roads to access structures, or
 - m. Install wind barriers.
 2. Canals:
 - a. Dredge canals while muck or debris is still wet.
 - b. Dispose of muck or debris while still damp.
 - c. Weed management.
 - d. Biological control of aquatic weeds, or
 - e. Apply and maintain water before, during and after major and minor earth moving activities.
 3. Unpaved utility access roads:
 - a. Access restriction.
 - b. Apply and maintain aggregate cover.
 - c. Limit activity.
 - d. Install signage to limit vehicle speed to 25 mph.
 - e. Post warning signs for unauthorized use at points of entry to roads.
 - f. Reduce vehicle speed.
 - g. Install and maintain a track-out control system.
 - h. Apply and maintain pavement.
 - i. Apply and maintain synthetic or natural particulate suppressant.
 - j. Apply and maintain water before, during and after major and minor earth moving activities.
 - k. Apply and maintain water when grading roadways.
 - l. Use paved non-district or paved public roads to access structures, or
 - m. Install wind barriers.
- B.** From and after December 31, 2015, an irrigation district engaged in a regulated agricultural activity shall complete a Best Management Practices Program General Permit Record Form. Thereafter, a new Best Management Practices Program General Permit Record Form shall be completed every year by March 31. The Form shall be provided to the Director within two business days of notice to the irrigation district. The Best Management Practice Program General Permit Record form shall include the following information:
1. The name, business address, and of the of the irrigation district representative responsible for the preparation and implementation of the best management practices;
 2. The signature of the irrigation district representative and the date the form was signed; and
 3. The best management practice selected for unpaved operation and utility roads, canals, and unpaved utility access roads.
- C.** Beginning in calendar year 2017, and no more than once every subsequent three calendar years, the Director, in conjunction with the Arizona Department of Agriculture, shall provide the irrigation district with a Best Management Practices Program 3-year Survey. The irrigation district shall complete the Survey with data from the preceding calendar year and submit the Survey to the Arizona Department of Agriculture (ADA) by January 31, 2018, and every three years thereafter. The Survey information submitted to the ADA shall be compiled by the ADA then be submitted to the Department. The 3-year Survey shall include the following information:
1. The name, business address, and phone number of the irrigation district representative responsible for the preparation and implementation of the best management practices;
 2. The signature of the irrigation district representative and the date the form was signed;
 3. The total miles of canals that the irrigation district controls;
 4. The total miles of unpaved operation and maintenance roads;

- 5. The total miles of the unpaved utility access roads; and
- 6. The best management practices selected for unpaved operation and utility roads, canals, and unpaved utility access roads.
- D. Records of any changes to those Best Management Practices shall be noted on the Best Management Practices Program General Permit Record Form and shall be kept by the irrigation district onsite and made available for review by the Director within two business days of notice to the irrigation district by the Department.
- E. An irrigation district may develop different practices not contained in either of the categories of subsection (A)(1), (A)(2), or (A)(3) that reduce PM and may submit such practices that are proven effective through in-district trials. The proposed new practices shall not become effective unless submitted as described in A.R.S. § 49-457(L).
- E. An irrigation district shall maintain a record demonstrating compliance with this Section for three years. Records shall include a copy of the complete Best Management Practice Program General Permit Record Form to confirm implementation of each best management practice.
- G. The Director shall not assess a fee to an irrigation district for coverage under the agricultural PM general permit.
- H. An irrigation district shall ensure that the implementation of all selected best management practices does not violate any other local, state, or federal law.
- I. The Director shall document noncompliance with this Section before issuing a compliance order.
- J. An irrigation district that is not in compliance with this Section is subject to the provisions in A.R.S. § 49-457(I), (J), and (K).

~~R18-2-613. Yuma PM₁₀ Nonattainment Area; Agricultural Best Management Practices Definitions for R18-2-613.01~~

- ~~A. A commercial farmer shall comply with this Section by August 1, 2005.~~
- ~~B. A commercial farmer who begins a regulated agricultural activity after August 1, 2005, shall comply with this Section within 60 days after beginning the regulated agricultural activity.~~
- ~~C. A commercial farmer shall implement at least one of the best management practices from each of the following categories at each commercial farm:

 - 1. Tillage and harvest, subsection (E);
 - 2. Noneroiland, subsection (F); and
 - 3. Croiland, subsection (G).~~
- ~~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 PM₁₀ emissions from tillage and harvest:

 - 1. Bed row spacing;
 - 2. Chemical irrigation;
 - 3. Combining tractor operations;
 - 4. Conservation irrigation;
 - 5. Conservation tillage;
 - 6. Equipment modification;
 - 7. Limited activity during a high-wind event;
 - 8. Multi-year crop;
 - 9. Night farming;
 - 10. Planting based on soil moisture;
 - 11. Precision farming;
 - 12. Reduced harvest activity;
 - 13. Tillage based on soil moisture;
 - 14. Timing of a tillage operation; or
 - 15. Transgenic crops.~~
- ~~F. A commercial farmer shall implement at least one of the following best management practices to reduce PM₁₀ emissions from noneroiland:

 - 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 PM₁₀ emissions from croiland:

 - 1. Artificial wind barrier;~~

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

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).

R18-2-710. 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 1 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 1 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 1 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 7 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).

[Arizona Administrative Code, Title 18, Environmental Quality]

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).

[Arizona Administrative Code, Title 18, Environmental Quality]

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).

R18-2-725. 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).

R18-2-727. 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 conducted 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 1 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).

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 1st 10 minutes.

B. Off-road machinery shall include trucks, graders, scrapers, rollers, locomotives and other construction and mining machinery not normally riven 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 3 minutes' upset time in any 1 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 R18-2-803renumbered 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 1st 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).

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. "CID" means cubic inches displacement.
 - c. "CO" means carbon monoxide.
 - d. "CO₂" means carbon dioxide.
 - e. "EGR" means exhaust gas recirculation.
 - f. "GVWR" means gross vehicle weight rating.
 - g. "HC" means hydrocarbon.
 - h. "HP" means horsepower.
 - i. "LNG" means liquefied natural gas.
 - j. "LPG" means liquid petroleum gas.
 - k. "LVW" means loaded vehicle weight.
 - l. "MPH" means miles per hour.
 - m. "MVD" means the Motor Vehicle Division of the Arizona Department of Transportation.
 - n. "NDIR" means nondispersive infrared.
 - o. "NO_x" means the sum of nitrogen oxide and nitrogen dioxide.
 - p. "%" means percent.
 - q. "OEM" means original equipment manufacturer.
 - r. "PROM" means programmable read-only memory.
 - s. "PCV" means positive crankcase ventilation.
 - t. "PPM" means parts per million by volume.
 - u. "RPM" means revolutions per minute.
 - v. "VIN" means vehicle identification number.
 - w. "VIR" means vehicle inspection report.
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 same meaning as in A.R.S. § 49-541.

5. "Area A vehicle" means a motor vehicle subject to emission 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 governmental 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 same meaning as in A.R.S. § 49-541.
7. "Area B vehicle" means a motor vehicle subject to emission 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 governmental 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 emission test and evaporative system tests required under R18-2-1006(E)(2).
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 certificate issued by the Director exempting a vehicle 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 Title 28 of the Arizona Revised Statutes 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 with 4 wheels and that cannot be converted to 2-wheel drive except by disconnecting 1 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 1 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 \pm 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 special circumstances that the Director deems inappropriate 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 both uses electricity as the means of propulsion and does not require the combustion of fossil fuel within the confines of the vehicle in order to generate electricity.
25. "Emissions compliance expiration date" means:
 - a. Each registration expiration date for vehicles subject to annual tests; and
 - b. The registration expiration date in the 2nd year after the initial biennial test required under this Article or R18-2-1005(B) for vehicles subject to biennial tests.
26. "Emissions inspection station permit" means a certificate issued by the Director authorizing the holder to perform vehicle inspections under this Article.
27. "Exhaust emissions" means products of combustion emitted into the atmosphere from any opening 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, \pm 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 emission testing system that logically determines whether a vehicle will pass or fail the biennial test before the test is over.
31. "Fleet emissions inspection station" or "fleet station" means any 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 2 revolutions of the crankshaft for each piston power stroke.
34. "Golf cart" means a motor vehicle that has not less than 3 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 the 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 emission 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 1st 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 3 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. "Opacity" means the degree of absorption of transmitted light.
49. "Operational air pump" means an air injection system (AIS) to supply additional oxygen (air) into the exhaust system to promote further oxidation of HC and CO gases and to assist in catalytic reaction.
50. "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.
51. "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.
52. "Recognized repair facility" means a business with an Arizona transaction privilege (sales) tax license whose primary purpose is vehicle repair, and having at least 1 employee with a nationally recognized certification for emissions-related diagnosis and repair.
53. "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.
54. "Standard gases" means gases maintained as a primary standard for determining the composition of working gases, calibration gases, or the accuracy of emissions analyzers.
55. "State inspector" means an employee of the Department designated to perform quality assurance or waiver functions under this Article.
56. "State station" means an official emissions inspection station operated by a contractor.
57. "Tampering" means removing, defeating, or altering an emissions control device installed 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.
58. "Two-stroke vehicle" means a vehicle equipped with an engine that requires 1 revolution of the crankshaft for each power stroke.
59. "Unloaded fast idle test" means an exhaust emissions test conducted with the engine of the vehicle running at 2,500 RPM.
60. "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.
61. "Vehicle emissions inspector" means an individual who is licensed by the Director to perform vehicle emissions inspections under this Article.
62. "Working gases" means gases maintained to perform periodic calibration of emissions analyzers.

R18-2-1003. Vehicles to be Inspected by the Mandatory Vehicle Emissions Inspection Program

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).

- 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 retail purchasers 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 required fees 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 has been issued;
 10. A diesel-powered vehicle in area A applying for registration or reregistration 33 months or less after the date of initial registration as a new vehicle; and
 11. Vehicles of a model year the same as, or newer than, the current calendar year and vehicles of the prior 4 model years, except:
 - a. Reconstructed vehicles;
 - b. Vehicles requiring emissions testing under R18-2-1015; and
 - c. Vehicles failing an emissions inspection the owner chooses to have under A.R.S. § 49-543.
- 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.

R18-2-1005. Time of Inspection

- A. All area B vehicles, area A vehicles subject to an annual test, 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 vehicles not covered by a fleet station permit, within 90 days before each registration expiration date.
 2. For vehicles 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 consignment vehicles offered for sale by a dealer licensed to sell used motor vehicles under Title 28 whose place of business is located in area A or area B, before delivery of the vehicle to the retail purchaser. Such consignment vehicles shall be inspected at a state station according to R18-2-1006.
 4. For government vehicles:
 - a. For vehicles not exempt under R18-2-1003(B)(10) or (11), within 12 months after acquisition by the operating entity and annually thereafter, on or before the anniversary date of the previous inspection; and
 - b. For vehicles temporarily exempt under R18-2-1003(B)(10) or (11), within 90 days after the vehicle becomes subject to testing, and annually thereafter, on or before the anniversary date of the previous inspection.
 5. For vehicles 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 vehicles to be registered in area A or area B under conditions not specified in subsections (A)(1) through (5), within 90 days before registration.
 7. For vehicles 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 vehicles owned by persons 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.
 9. For vehicles 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 was submitted with the request for exemption.
- B. Area A vehicles subject to the biennial test shall be inspected at the following times:
1. For vehicles not covered by a fleet station permit, within 90 days before the vehicle's emissions compliance expiration date.
 2. For government vehicles:
 - a. For vehicles not exempt under R18-2-1003(B)(10) or (11), within 12 months after acquisition by the operating entity, and biennially thereafter, on or before the anniversary date of the previous inspection; and
 - b. For vehicles temporarily exempt under R18-2-1003(B)(10) or (11), within 90 days after the vehicle becomes subject to testing, and biennially thereafter, on or before the anniversary date of the previous inspection.
 3. For vehicles 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 vehicles 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 vehicles owned by persons 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 vehicles to be registered as area A vehicles under conditions not specified in subsections (B)(1) through (5), upon initial registration and within 90 days before the vehicle's emissions compliance expiration date thereafter.
 7. For vehicles 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. Vehicles registered in the portion of area A within Pinal County are exempt from the requirements of this Article until January 1, 2001.
- D. Unless exempted by R18-2-1003(B), 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.
- E. 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.
- F. New vehicles that are temporarily exempt from emission testing under R18-2-1003(B)(11), 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 5 years.
- G. 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 motor vehicles failing 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 the Arizona Department of Transportation Motor Vehicle Division within 30 days of the initial test.
- H. A vehicle subject to subsection (A)(1), (A)(6), (B)(1) or (B)(6), may be submitted for a voluntary inspection more than 90 days before the emissions compliance expiration date on payment of the inspection fee. A voluntary inspection is not compliance with 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).

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 unstable 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 has overheated or may overheat within a short time;
 4. The vehicle has 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. An exhaust pipe on a diesel-powered vehicle that does not allow for safe exhaust probe insertion and attachment of opacity meter sensor units;
 6. Improperly operating brakes;
 7. Any vehicle modification or mechanical condition that prevents dynamometer operation; and
 8. Any other condition deemed unsafe 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. Vehicle owners or drivers shall be notified of all unsafe conditions found on rejected vehicles. A fee shall not be charged if the vehicle is rejected at a state station. The emissions test shall not be conducted 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 procedure required by this Section, both of the following requirements shall be met:

1. All vehicles 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. Vehicles designed to operate with more than 1 fuel shall be tested on the fuel in use when the vehicle is presented for inspection.
- E. In area A, the inspection test procedures for all vehicles other than diesel-powered vehicles and vehicles held for resale by fleet-licensed motor vehicle dealers shall conform to the following:
1. Vehicles manufactured with a model year of 1967 through 1980, all nonexempt vehicles with a GVWR greater than 8,500 pounds, and all reconstructed vehicles, except motorcycles and constant 4-wheel drive vehicles, are 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 2nd 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 1st. After exhaust emissions have been 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 1st. A CO₂ plus CO reading of 6% or greater shall be registered to establish test validity. A CO₂ 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.
 2. Vehicles with a 1981 or newer model year and a GVWR of 8,500 pounds or less, except motorcycles, reconstructed vehicles, and until January 1, 2002, constant 4-wheel drive vehicles, are required to biennially take and pass a transient loaded emissions test and an evaporative system integrity test as follows:
 - a. The transient loaded emission test shall consist of 147 seconds of mass emission 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 fast pass or fast fail algorithms. 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 2 additional tests may be performed on a failing vehicle. Drive shall be used for automatic transmissions and 1st gear shall be used to begin for manual transmissions. Exhaust emissions concentrations in grams per mile for HC, CO, NO_x and CO₂ shall be recorded continuously beginning with the 1st second. The inspector shall reject from testing vehicles with audible or visible exhaust leaks.
 - b. The evaporative system integrity test shall consist of the following steps in sequence:
 - i. Connect the test equipment to either the fuel tank venthose at the canister or the fuel tank filler neck. The gas cap shall be checked to ensure that it is properly tightened, and shall be tightened if necessary.
 - 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 2 minutes.
3. For vehicles required to take a biennial emissions test, all testing and test equipment shall conform to "IM240 & Evap Technical Guidance", EPA420-R-98-010, EPA, August 1998, except that the transient driving cycle in Table 4 of this Article shall be used, 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 EPA's National Vehicle and Fuel Emissions Laboratory, 2565 Plymouth Road, Ann Arbor, MI 48105-2498. Exhaust sampling for vehicles required to take an annual emissions test shall comply with subsection (F)(6).
 4. All motorcycles and constant 4-wheel drive vehicles shall take and pass only a curb idle test according to subsection (F)(1).
 5. The emissions pass-fail determination for all vehicles tested under subsection (E) shall be made as follows:
 - a. Vehicles tested under subsection (E)(1) that do not exceed the loaded cruise mode or curb idle mode HC and CO emissions standards listed in Table 2 for the vehicle, comply with the emissions standards contained in Table 2. The loaded cruise test standards in Table 2 apply to fleet vehicles tested with the 2,500 RPM unloaded fast idle test under R18-2-1019(E).
 - b. Vehicles tested under subsection (E)(2) shall meet the standards in Table 3 and pass the evaporative system integrity 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 testing algorithms for fast pass, fast fail, or both, provided that the algorithms are reliable in accurately predicting the final outcome of the entire cycle. Vehicles not meeting either the composite or phase 2 standard shall fail the emissions test.
 - ii. Evaporative System Integrity. A vehicle fails the emissions test if the evaporative system cannot maintain a system pressure above 8 inches of water for at least 2 minutes after being pressurized to 14 ± 0.5 inches of water. Additionally, vehicles fail the evaporative test if the canister is missing or damaged, if hoses or electrical connections are missing, routed incorrectly, or disconnected, according to the

vehicle emissions control information label, or if the gas cap is missing.

- c. Vehicles that operate on compressed natural gas comply with HC emissions standards if the HC emissions value multiplied by 0.19 does not exceed the applicable standard in subsection (E)(5)(a) or (b).
- d. Motorcycles and constant 4-wheel drive vehicles that do not exceed the curb idle mode HC and CO emissions standards listed in Table 2 on either the 1st curb idle test or the 2nd curb idle test shall comply with the emissions standards in Table 2.
- e. A vehicle exceeding the applicable emissions standards for the tests described in subsections (E)(1) and (E)(2)(a) fail 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 test described in subsection (E)(2)(b) shall not be reinspected until repaired as required in R18-2-1010(D)(1) and (2).

6. Each nondiesel vehicle required to take an annual emission 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 emission system requirements shall be verified by the "VEHICLE EMISSION CONTROL INFORMATION" label under the hood. Vehicles that fail any portion of the tampering inspection shall be repaired according to R18-2-1009 before reinspection or shall provide the written statement required in R18-2-1008(B). "Original configuration" for foreign manufactured vehicles 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. All nondiesel vehicles emission tested, except those with non-pressurized, vented systems, 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. Nondiesel vehicles with non-pressurized, vented systems shall be checked for the presence of a properly fitting gas cap.
- b. For 1975 and newer model year vehicles:
 - i. A visual inspection to determine the presence of properly installed catalytic converters;
 - ii. An examination to determine the presence of an operational air pump; and
 - iii. A visual inspection to determine the presence of an operational positive crankcase ventilation system and evaporative control system.

In area B, the inspection test procedures for all vehicles other than diesel-powered vehicles shall consist of the following:

1. Area B vehicles 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 vehicles with automatic transmissions or in neutral for vehicles with manual transmissions. Engine RPM shall be within ± 100 RPM of the manufacturer's specified idle RPM. HC and CO exhaust emissions shall be recorded after readings have stabilized, or at the end of 30 seconds, whichever occurs 1st. A CO₂ plus CO reading of 6% or greater shall be registered to establish test validity. A CO₂ 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. If the vehicle fails the curb idle test, and if permitted by the

vehicle operator, the vehicle shall be conditioned according to 1 of the following conditioning procedures:

- a. For the 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 1st. 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 2nd idle test. The fast idle conditioning procedure may be used on a vehicle at state stations 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. For the loaded conditioning procedure, for all vehicles other than motorcycles and constant 4-wheel-drive vehicles, 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 2nd 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 1st. 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 2nd idle test.
 - c. Following 1 of the conditioning procedures in subsection (F)(1)(a) or (b), the vehicle shall be retested according to the curb idle test procedure in subsection (F)(1).
2. Area B vehicles with a 1981 or newer model year, except motorcycles and constant 4-wheel drive vehicles, 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 2nd or higher gear for manual transmission. Overdrive shall not be used. All front wheel drive vehicles shall be driven by the inspector. Exhaust emissions, HC and CO concentrations, shall be recorded after readings have stabilized, or at the end of 90 seconds, whichever occurs 1st. After exhaust emissions have been recorded, engine speed shall be returned to idle for a curb idle test.

- b. The 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 1st. A CO₂ plus CO reading of 6% or greater shall be registered to establish test validity. A CO₂ 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. All motorcycles and constant 4-wheel drive vehicles shall take and pass only a curb idle test according to subsection (F)(1). 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 (F)(1)(a). Following conditioning, the vehicle shall be retested according to the curb idle test procedure in subsection (F)(1).
4. The emissions pass-fail determination shall be made as follows:
- Vehicles with a model year of 1967 through 1980, except motorcycles and constant 4-wheel drive vehicles, that do not exceed the curb idle mode HC and CO emissions standards in Table 2 on either the 1st or 2nd curb idle test, comply with the minimum emission standards contained in Table 2.
 - Vehicles with a 1981 or newer model year, except motorcycles and constant 4-wheel drive vehicles, that do not exceed the loaded cruise mode or curb idle mode HC and CO emissions standards listed in Table 2, comply 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.
 - Vehicles that operate on compressed natural gas comply with HC emissions standards if the HC emissions value multiplied by 0.19 does not exceed the applicable standard in subsection (F)(4)(a) or (b).
 - Motorcycles and constant 4-wheel drive vehicles that do not exceed the curb idle mode HC and CO emissions standards in Table 2 on either the 1st or 2nd curb idle test comply with the minimum emissions standards in Table 2.
 - Any vehicle exceeding the appropriate emissions standards fails the emissions test and shall have a low emissions tune-up as described in R18-2-1010 before reinspection.
5. A nondiesel vehicle required to take an emissions test in area B shall at the time of the test undergo a tampering inspection based on the original configuration of the vehicle as manufactured, as follows: The applicable emission system requirements shall be verified by the "VEHICLE EMISSION CONTROL INFORMATION" label under the hood. Vehicles that fail any portion of the tampering inspection shall be repaired according to R18-2-1009 before reinspection or shall provide the written statement required in R18-2-1008(B). "Original configuration" for foreign manufactured vehicles 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:
- Vehicles that have pressure holding gas caps 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. Vehicles with non-sealing gas caps shall be checked for the presence of a properly fitting gas cap.
 - For 1975 and newer model year vehicles:
 - A visual inspection to determine the presence of properly installed catalytic converters; and
 - An examination to determine the presence of an operational air pump.
6. Exhaust sampling in area B shall comply with the following:
- All CO and HC emission 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.
 - All vehicles, other than diesel-powered vehicles, shall be inspected with NDIR analyzers capable of determining concentrations of CO and HC within the ranges and tolerances specified in Table 5.
 - Vehicles with multiple exhaust pipes shall be inspected by collecting and averaging samples by 1 of the following methods:
 - Collect separate samples from each exhaust pipe and use the average concentration to determine the test result;
 - Use manifold exhaust probes to simultaneously sample approximately equal volumes from each pipe; or
 - Use manifold exhaust pipe adapters to collect approximately equal volume samples from each pipe.
- G. The following apply to all testing under subsections (E) or (F):
- A rotary piston engine shall be inspected as a 4-stroke engine with 4 cylinders or less;
 - A turbine engine shall be inspected as a 4-stroke engine having more than 4 cylinders; and
 - 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:
- 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:
 - Vehicles powered by a 1991 or later model year diesel engine fail if the J1667 final test result is greater than 40%, unless the engine family is exempted from the 40% standard under subsection (H)(1)(e);
 - Vehicles powered by a pre-1991 model year diesel engine fail if the J1667 final test result is greater

- than 55%, unless the engine family is exempted from the 55% standard under subsection (H)(1)(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 (H)(1)(a) or (b) fails the emission 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 subsection (H)(1)(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 (H)(1)(e)(i) shall be based on data from at least 3 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, \pm 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 10 consecutive seconds with the engine under applicable loading shall be compared to the opacity standard in R18-2-1030(B). Vehicles that do not exceed the opacity standards in R18-2-1030(B) comply with the minimum emission standards.
 - ii. A vehicle that exceeds the appropriate standard fails the emission 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 appropriate emission standard.
 - ii. Vehicles shall be inspected with a full-flow, direct reading, continuous reading light extinction opacity meter using a collimated light source and photo-electric cell, accurate to a value within \pm 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 1 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 1 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 and 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, \pm 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, \pm 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 10 consecutive seconds with the engine under applicable loading specified in subsections (H)(1) through (4) shall be compared to the opacity standard specified in R18-2-1030(B). Vehicles that do not exceed the opacity standards in R18-2-1030(B) comply with the minimum emission standards.
 - b. A vehicle that exceeds the standard in R18-2-1030(B) fails the emission 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. Vehicles shall be inspected with either a full-flow or sampling-type opacity meter. The opacity meter shall be direct reading, continuous reading light extinction-type using a collimated light source and photo-electric cell, accurate to a value within \pm 5% of filter value.
- J. Diesel-powered area A or B vehicles that are equipped with catalytic converters or PCV systems shall undergo a tampering inspection for those devices under subsection (E)(6).
- K. Diesel-powered area B vehicles that are equipped with catalytic converters shall undergo a tampering inspection for those devices under subsection (F)(5).

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).

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. Complete and unaltered certificates of inspection dated within 12 months of registration for annually tested vehicles and 24 months for biennially tested vehicles 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.
- 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 rule-making at 6 A.A.R. 382, effective December 20, 1999 (Supp. 99-4).

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 2 times the pass-fail standard in R18-2-1006, unless the vehicle is repaired so that each emission level is less than 2 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 rule-making 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)(5)(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).

R18-2-1010. Low Emissions Tune-up, Emissions and Evaporative System Repair

A. A low emissions tune-up on nondiesel-powered vehicles consists of the following procedures:

1. Emissions Failure Diagnosis. For computer-controlled vehicles, the on-board-diagnostics shall be accessed and any stored trouble codes recorded. The following instruments or equipment are required to complete a low emissions tune-up: tachometer, timing light, or an engine analyzer or oscilloscope, and if specified by the manufacturer, a HC/CO NDIR analyzer to make final A/F adjustments. Final adjustment shall be made on the vehicle engine only after the engine is at normal operating temperature. All adjustments shall be made according to the manufacturer's specifications and procedures.
2. 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.

3. Dwell and Basic Timing Check. Dwell and basic engine timing shall be checked and adjusted, if necessary, according to manufacturer's specifications.
 4. 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.
 5. Inspection of Vacuum Hoses. The vacuum hoses shall be inspected for leaks, obstruction, and proper routing and connection. Repair or replace as required.
 6. Perform a visual inspection for leaking fuel lines or system components. Repair or replace as required.
 7. 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. If a vehicle fails the CO only, the vehicle shall be checked for proper canister purge system operation, high float setting, leaky power valve, faulty or worn needles, seats, jets or improper jet size. If applicable, the following shall also be checked: computer, engine and computer sensors, engine solenoids, engine thermostats, engine switches, coolant switches, throttle body or port fuel injection system, fuel injectors, fuel lines (routing and integrity), air in fuel system (for example, line, pump), fuel return system, injection pump, fuel injection timing, routing of vacuum hoses and electrical connections. Repair or replace as required.
 2. If a vehicle fails HC, or HC and CO, the vehicle shall be checked for faulty spark plugs and faulty, open, crossed, or disconnected plug wires, distributor module, vacuum hose routing and electrical connections, distributor component malfunctions including vacuum advance, faulty points or condenser, and distributor cap crossfire, catalytic converter efficiency, and catalytic converter air supply, vacuum leaks at intake manifold, carburetor base gasket, EGR, and vacuum-operated components. Repair or replace as required.
 3. If a vehicle fails NO_x, the vehicle shall be checked for removed, plugged, or malfunctioning EGR valve, exhaust gas ports, lines, and passages, EGR valve electrical and vacuum control circuitry, components, and computer control, as applicable, above normal engine operating temperature, proper air management, lean A/F mixture, catalytic converter efficiency and over advanced off-idle timing. Repair or replace as required.
- D.** For Evaporative System Failures, the following procedures apply:
1. If a vehicle fails the evaporative system integrity 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, mis-routed 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 costs to repair the vehicle for failing an evaporative system integrity test due to tampering, or other tampering repair costs, 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 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 and fifty dollars for a vehicle manufactured in or after the 1980 model year.
 3. 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 repair receipts available when requesting a certificate of waiver.
- F.** The maximum required repair cost for vehicles in area B, not including tampering repair costs, 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 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.
 3. 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 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 air-fuel 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 subsections (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 emer-
gency 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 Sec-
tion 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).

R18-2-1011. Vehicle Inspection Report

- A. A vehicle inspected at a state station shall be provided a serially numbered vehicle inspection report of a design approved by the Director that contains the following information at a minimum:
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. Emission standards and measurements for the transient loaded test, and the evaporative system integrity test, if applicable;
 12. Tampering inspection results;
 13. Repair requirements;
 14. Final test results;
 15. Repairs performed;
 16. Cost of emissions related repairs;
 17. Cost of tampering related repairs;
 18. Name, address, and telephone number of the business or person making repairs;
 19. Signature and certification number of person certifying repairs;
 20. Date of inspection;
 21. Test results of the previous inspection if the inspection is a reinspection;
 22. Inspection station, lane locators; and
 23. 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).

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 registration renewal notice is used as the accompanying document, it shall be stamped by the test lane inspector. 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 costs 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. Fees collected by the contractor to defray the costs of the inspection shall be retained by the contractor. The fee amount collected to defray the costs 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 setting forth the number of inspections performed and the amount of fees collected.
- D. Subsequent inspections, 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. State station emissions inspectors 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).

R18-2-1013. Reinspections

- A. A vehicle failing the initial inspection or any subsequent paid inspection is entitled to 1 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).

R18-2-1016. 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 7 days of such 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).

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. All government vehicles except federally owned vehicles that are excluded from the definition of motor vehicles 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 the date of the vehicle's next annual or biennial inspection. The vehicle emission 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 emission inspection is performed at a fleet station, the emission 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" (Form IPS 4008). Presence of a current Government Vehicle Certificate of Inspection indicates a government vehicle has met the state of Arizona emission inspection requirements.
2. Government vehicles, with the exception of motorcycles and undercover law enforcement vehicles 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. Government motorcycles 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 Certifi-

cate 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).

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.

Only a person who meets the requirements of R18-2-1019(D)(1) 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).

1019. Fleet Station Procedures and Permits

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 areas 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.
2. Application forms for fleet station permits shall be obtained from the Department. All completed applications shall be submitted to the Department. Applications shall be considered "administratively complete" when:
 - a. The Department has received 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 has conducted a site inspection.
3. Before an application for a fleet station permit may be approved, an inspection of the premises to determine compliance with subsections (B) and (C) shall be made by a state inspector.
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 1 address, the fleet owner or lessee shall apply for a permit for each facility.
6. Fleet station permits issued by the Director are non-transferable.
7. When a permit 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. Any fleet that loses a fleet station permit issued by the Director, and, after obtaining a duplicate, finds the original, shall immediately surrender the original permit to the Department.

A fleet station permit applicant or fleet station permit holder, or its employees, shall own or lease the following equipment and maintain it in good working condition:

1. If the permit is for the inspection of nondiesel-powered vehicles:
 - a. Ignition timing light with timing advance tester;
 - b. Ignition-operated tachometer;
 - c. Dwell meter;
 - d. Socket tool for replacing spark plugs;
 - e. Spark-plug gap setting tool;
 - f. Tools for replacing or adjusting carburetors or fuel injection systems, distributors, fuel pumps, and ignition coils;
 - g. At least 1 NDIR CO and HC emissions analyzer that complies with the requirements of R18-2-1006 to conduct the emissions inspections. Only the equipment necessary to test the types of vehicles in the fleet inventory is required at the fleet stations;
 - h. Digital Volt/Ohm Meter;
 - i. Scan Tool capable of communications with OBD data stream of the fleet vehicles; and
 - j. Pressure test equipment for the gas cap integrity test.
 2. If the permit is for the inspection of diesel-powered vehicles:
 - a. Tools for removing fuel pumps and injectors;
 - b. Fuel pressure gauge;
 - c. Opacity meter. The meter shall meet J1667 specifications for vehicles with a GVWR greater than 8,500 lbs. in area A;
 - d. Tools required by the vehicle manufacturer for field setting of fuel injectors, inlet and exhaust valve clearance, governors, and throttle controls; and
 - e. A dynamometer for testing light duty diesel vehicles.
 3. If the permit is for a non-dealer fleet in area A, in addition to the requirements in subsections (1) and (2):
 - a. Equipment to perform a steady-state loaded emission test as required in R18-2-1006(E)(1)(a);
 - b. Equipment to perform a transient loaded emission test as required in R18-2-1006(E)(2)(b);
 - c. Equipment to perform the evaporative system integrity as required in R18-2-1006(E)(2)(c); and
 - d. Equipment to perform the maintenance and quality control requirements of R18-2-1006(E)(2) and "IM240 and Evap Technical Guidance".
- 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 1 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 1 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 1 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 administra-

tion 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, vehicles owned by or leased to a holder of a fleet emissions inspection station permit shall be inspected according to R18-2-1006(E) through (I), except as follows:
1. Dealer fleet vehicles in area A held for resale and all area B fleet vehicles, 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)(1) and a 2,500 RPM unloaded fast idle test as follows:
 - a. The vehicle's engine shall be operated at 2,500, \pm 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.
 2. Dealer fleet vehicles in area A and area B held for resale, 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 loaded cruise test standards in Table 2 shall apply to fleet vehicles tested under the 2,500 RPM unloaded fast idle test.
 3. Dealer fleet vehicles 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. Dealer fleet vehicles 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)(5).
 5. Consignment vehicles shall be tested at a state inspection station in accordance with R18-2-1005(A)(3).
- F. The vehicle emissions inspector shall complete and process the forms for vehicle inspection as follows, except government entity fleets shall issue and process government vehicle certificates of inspection under R18-2-1017:
1. Certificates 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. Only the vehicle emissions inspector performing the inspection may sign a certificate of inspection and the inspector shall initial all corrections. Certificates shall be issued in numerical order;
 - b. For all inspections that do not include a biennial test, the expiration date shall be 1 year from the date the vehicle passes the mandatory vehicle emissions inspection. For vehicles required to pass a biennial test, the expiration date shall be 2 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. \S 49-542(Q), the original completed certificate shall be presented to the Arizona Department of Transportation Motor Vehicle Division for processing of the vehicle's application for title and registration or the Arizona registration card. The Arizona Department of Transportation Motor Vehicle Division 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 2nd copy of each completed certificate of inspection, along with the 2nd copy of the "Fleet Vehicle Inspection Report/Monthly Summary", to the Department monthly, not later than 2 weeks after the last day of the month in which the inspection is conducted;
 - f. The 3rd copy of each completed certificate of inspection, along with the original "Fleet Vehicle Inspection Report/Monthly Summary", shall be retained for 2 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. \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.
 - i. Only the Department shall sell or otherwise transfer certificates 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 all the owner's certificates;
 - k. If any certificates are 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 the serial numbers. The Department may revoke a fleet station permit for refusal or failure to report lost or stolen certificates 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 2nd or 3rd 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. \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 Director's certificates. 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 3rd copy of the certificate and retained at the fleet station for 2 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;
 - d. The CO content of the undiluted exhaust recorded at idle;
 - e. The HC content of the undiluted exhaust recorded at 2,500 rpm;
 - f. The CO content of the undiluted exhaust recorded at 2,500 rpm;
 - g. If applicable, results of a tampering check;
 - h. The vehicle model year;
 - i. The vehicle make;
 - j. The date of inspection;
 - k. The license number of the vehicle emissions inspector conducting the inspection;
 - l. The signature of the inspector making the entry;
 - m. The serial number of the certificate of inspection, recorded in numerical order;
 - n. For vehicles required to take the transient loaded emission test, the inspector shall record the total HC, CO, CO₂ and NO_x measured in grams/mile, and the evaporative system integrity test result rather than the items in (c) through (g);
 - o. The registration number of the registered analyzer or opacity meter used to perform the inspection.
 - p. For light duty diesel vehicles, the inspector shall record opacity rather than undiluted HC and CO;
 - q. For heavy duty diesel vehicles, 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.
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 have been 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 3 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 2 years from the date that the waiver is issued for vehicles required to take the transient loaded emission test, and 1 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 the Arizona Department of Transportation Motor Vehicle Division for processing of either the vehicle's application for title and registration or the Arizona registration card. The Arizona Department of Transportation Motor Vehicle Division may accept the signed certificate of waiver as evidence that the vehicle is a fleet inspected vehicle and has met the inspection requirements of this Article if the certificate is complete and the expiration date has not passed.
 - g. The 2nd copy of each completed certificate of waiver shall accompany the completed fleet inspection waiver report.
 - h. The 3rd 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 2 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 costs to the state of administering and enforcing the provisions of this Article as they apply to issuance of certificates of waivers. 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 certificates 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 all the owner's certificates.
 - l. If any certificates are 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 their serial numbers. The Department may revoke a fleet station permit for refusal or failure to report lost or stolen certificates 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 2nd or 3rd 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 costs to the state of administering and enforcing

the provisions of this Article as they apply to issuance of Director's certificates. 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 3rd copy of the certificate and retained by the fleet for 2 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 2nd copy of certificates 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 vehicles 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. Instruments requiring periodic calibration shall be calibrated according to instructions and recommendations of the instrument or equipment manufacturer. NDIR emission analyzers shall be registered and calibrated according to R18-2-1027. Calibration records for each instrument, except NDIR emission analyzers, 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 subsections (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 7 days of the end of employment of any vehicle emissions inspector. 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 7 days in writing. All unused vehicle certificates of inspection shall be returned to the Department within 7 days after operations cease for a refund.
 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 7 days in writing unless the permit applicant or other designated employee has taken and passed the examination required in subsection (D)(4) and assumes responsibility for the day-to-day operation of the fleet station. The fleet owner shall notify the Department within 7 days of the designation of a new fleet agent.

- 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 vehicles 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. Fleet vehicles are subject to inspection by state inspectors.
 5. Surrender of a permit under subsection (A)(8) or (G)(4) shall not prevent the Department from carrying out investigative or disciplinary proceedings against the permit holder for violations prior to 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).

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).

R18-2-1025. 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 2 times each month.
 - b. Opacity meters shall be inspected for accuracy using a neutral density filter at least 2 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 emission 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 integrity analysis systems 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 2nd 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 7 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 2 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 performance 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 2nd 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).

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 6 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 $\pm 5\%$ 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 2 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 Emission 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 Department. 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 1st vehicle emissions inspection in any month.
- C. A registered analyzer shall meet the requirements of R18-2-1006(F)(6)(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 2 business days after accuracy is verified.
- F. An owner of a registered emission analyzer or opacity meter shall notify the Department within 7 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).

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 1 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 7 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 1 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 after-market 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 2-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 2 minutes.
 8. At the end of the 2-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 $\pm 2\%$ 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 $\pm 2.0\%$ 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 $\pm 2.5\%$.

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 I. 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**

Vehicle Engine Type	Vehicle Model Year	Gross Vehicle Weight Rating (Pounds)	Number of Cylinders	Conditioning Mode		Curb Idle Mode Test		Loaded Cruise Mode Test	
				HC PPM	CO %	HC PPM	CO %	HC PPM	CO %
4-stroke Motorcycles	All	All	All	500	5.00	1,800	5.50		
4-stroke	1981 and newer	8500 or less	All	100	0.50	220	1.20	220	1.20
4-stroke	1980	8500 or less	All	100	.50	220	1.20	220	1.20
4-stroke	1979	8500 or less	4 cylinders or less	120	1.00	220	2.20	220	1.65
4-stroke	1979	8500 or less	More than 4 cylinders	120	1.00	220	2.00	220	1.50
4-stroke	1981 and newer	Greater than 8500	All	300	3.00	300	4.00	300	3.00
4-stroke	1979 and 1980	Greater than 8500	All	300	3.00	300	4.00	300	3.00
4-stroke	1975-1978	6000 or less	4 cylinders or less	120	1.00	250	2.20	250	1.65
4-stroke	1975-1978	6000 or less	More than 4 cylinders	120	1.00	250	2.00	250	1.50
4-stroke	1975-1978	Greater than 6000	All	300	3.00	350	4.00	350	3.00
4-stroke	1972-1974	All	4 cylinders or less	380	3.50	400	5.50	400	4.20
4-stroke	1972-1974	All	More than 4 cylinders	300	3.00	400	5.00	400	3.75
4-stroke	1967-1971	All	4 cylinders or less	450	3.75	500	5.50	500	4.20
4-stroke	1967-1971	All	More than 4 cylinders	380	3.00	450	5.00	450	3.75
4-stroke	Reconstructed 1981 and newer	All	All	700	5.25	1,200	7.50	700	5.25
4-stroke	Reconstructed All 1980 and older	All	All	700	5.25	1,200	7.50	1,200	5.60
2-stroke	1981 and newer	All	All	18,000	5.00	18,000	5.00	18,000	5.00
2-stroke	1980 and older	All	All	18,000	5.00	18,000	5.00	18,000	5.00

Historical Note

Renumbered 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).

TABLE 3. EMISSION STANDARDS - BIENNIAL 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 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).

ARIZONA ADMINISTRATIVE CODE
TITLE 18. ENVIRONMENTAL QUALITY
CHAPTER 2. AIR POLLUTION CONTROL

ARTICLE 14. CONFORMITY DETERMINATIONS

R18-2-1438. General Conformity for Federal Actions

The following subparts of 40 CFR Part 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.

1. Subpart B - Determining Conformity of General Federal Actions to State or Federal Implementation Plans (58 FR 63253, November 30, 1993).

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- 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, wildemess 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-

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- 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.
- 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).

R18-2-1502. 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.

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).

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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

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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 unmerchandiseable material, multi-product timber sales, or public firewood access, when economically feasible;

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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:

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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).

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.

Editor's Note: The following Table was adopted under an exemption from the provisions of A.R.S. Title 41, Chapter 6, pursuant to Laws 1997, Chapter 117, § 3. Exemption from A.R.S. Title 41, Chapter 6 means the Department did not submit this Table to the Governor's Regulatory Review Council for review and approval. Although exempt from certain provisions of the Administrative Procedure Act, the Department was required to publish this Table in the Arizona Administrative Register and provide reasonable notice and at least 1 public hearing on the Table (Supp. 97-3). The exempt rules expired when the Section was permanently adopted with changes (Supp. 98-3).

Table 1. Type 1 Gasoline Standards

Performance Standard/Fuel Property**	Non-averaging Option	Averaging Option		
	A	B	C	D
	Per-Gallon (minimum)	Average	Minimum (per-gallon)	Maximum (per-gallon)
VOC Emission Reduction (%) May 1 - Sept. 15	≥ 27.5	≥ 29.0	≥ 25.0	N/A
NOx Emission Reduction (%) May 1 - Sept. 15	≥ 5.5	≥ 6.8	N/A	N/A
NOx Emission Reduction (%) Sept. 16 - Nov. 1 and April 1 - April 30***	≥ 0.0	N/A	N/A	N/A
Oxygen content: ethanol, (% by weight unless otherwise noted) Nov. 2 - March 31*** April 1 - Nov. 1	N/A 0.0*	N/A N/A	N/A 0.0	N/A 4.0
Oxygen content: other than ethanol, (% by weight) Nov. 2 - March 31*** April 1 - Nov. 1	N/A 0.0	N/A N/A	N/A 0.0	N/A 2.7

* Maximum oxygen content must comply with the EPA oxygenate waiver requirements.
 ** Dates represent compliance dates for service stations and fleet owners.
 *** Registered suppliers shall certify all Arizona CBG as Type 2 gasoline meeting the standards in Table 2 beginning November 2 through March 31.

Historical Note

Adopted effective under an exemption from the provisions of A.R.S. Title 41, Chapter 6, with an interim effective date of September 12, 1997 (Supp. 97-3). Interim adoption expired and was automatically repealed on the date the permanent rules became effective pursuant to Laws 1997, Ch. 117; Table 1 permanently adopted with changes October 1, 1998; filed in the Office of the Secretary of State September 9, 1998 (Supp. 98-3). Amended by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 7 A.A.R. 1025, effective February 9, 2001 (Supp. 01-1).

Editor's Note: The following Table was adopted under an exemption from the provisions of A.R.S. Title 41, Chapter 6, pursuant to Laws 1997, Chapter 117, § 3. Exemption from A.R.S. Title 41, Chapter 6 means the Department did not submit this Table to the Governor's Regulatory Review Council for review and approval. Although exempt from certain provisions of the Administrative Procedure Act, the Department was required to publish this Table in the Arizona Administrative Register and provide reasonable notice and at least 1 public hearing on the Table (Supp. 97-3). The exempt rules expired when the Section was permanently adopted with changes (Supp. 98-3).

Table 2. Type 2 Gasoline Standards

Fuel Property	Averaging Option		Non-averaging Option	Units of Standard
	A	B	C	
	Maximum Standard (per gallon)	Averaging Standard*	Flat Standard * (per gallon maximum)	
Sulfur Content	80	30	40	Parts per million by weight
Olefin Content	10.0	4.0	6.0	% by volume
90% Distillation Temperature (T90)	330	290	300	Degrees Fahrenheit
50% Distillation Temperature (T50)	220	200	210	Degrees Fahrenheit
Aromatic Hydrocarbon Content	30.0	22.0	25.0	% by volume
Oxygen content: ethanol**** Nov. 2 - March 31 April 1 - Nov. 1	10% ethanol 2.7	-- --	10% ethanol 2.7**	% by vol. % by weight
Oxygen content: other than ethanol**** Nov. 2 - March 31 April 1 - Nov. 1	3.5*** 2.7	-- --	3.5*** 2.7**	% by weight % by weight

* Instead of the standards in columns B and C, a registered supplier may elect to comply with the standards contained in column A, and R20-2-751(F), (G), and (H) for the use of the PM.
 ** Maximum oxygen content shall comply with the EPA oxygenate waiver requirements.
 *** Non-ethanol oxygenate is allowed only if approved by the Director under A.R.S. § 41-2124(D). Maximum oxygen content shall comply with the EPA oxygenate waiver requirements.
 **** A registered supplier shall certify all Arizona CBG using ethanol as the oxygenate beginning November 2 through March 31. Alternative oxygenates may be used if approved by the Director under A.R.S. § 41-2124(D).
 NOTE: Dates represent compliance dates for service stations and fleet owners.

Historical Note

Adopted effective under an exemption from the provisions of A.R.S. Title 41, Chapter 6, with an interim effective date of September 12, 1997 (Supp. 97-3). Interim adoption expired and was automatically repealed on the date the permanent rules became effective pursuant to Laws 1997, Ch. 117; Table 2 permanently adopted with changes October 1, 1998; filed in the Office of the Secretary of State September 9, 1998 (Supp. 98-3). Amended by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 7 A.A.R. 1025, effective February 9, 2001 (Supp. 01-1).

9/21/09

~~Article 2, consisting of Sections R4-31-901 through R4-31-909, adopted again by emergency action effective February 27, 1992, pursuant to A.R.S. § 41-1026 (Supp. 93-1). Emergency expires...~~

~~Article 2, consisting of Sections R4-31-901 through R4-31-909, adopted by emergency action effective November 23, 1992, pursuant to A.R.S. § 41-1026 (Supp. 92-4).~~

~~Section~~

~~R20-2-901. Material Incorporated by Reference~~

~~R20-2-902. Exemptions~~

~~R20-2-903. Equipment and Installation~~

~~R20-2-904. Application Requirements and Process for Authority to Construct Plan Approval~~

~~R20-2-905. Initial Inspection and Testing~~

~~R20-2-906. Fees~~

~~R20-2-907. Operation~~

~~R20-2-908. Training and Public Education~~

~~R20-2-909. Recordkeeping and Reporting~~

~~R20-2-910. Annual Inspection and Testing~~

~~R20-2-911. Compliance Inspections~~

ARTICLE 1. ADMINISTRATION AND PROCEDURES

R20-2-101. Definitions

The definitions in A.R.S. §§ 41-2051, 41-2065, 41-2085, 41-2121, and 41-2131 and the following definitions apply to this Chapter:

1. "ADEQ" means the Arizona Department of Environmental Quality.
2. "Administrative order" means a corrective action notice that the Department issues for a violation of A.R.S. Title 41, Chapter 15, or this Chapter, that orders a person to:
 - a. Remove from use or sale, or dispose of, a commercial device, commodity, or liquid fuel;
 - b. Stop selling a commodity or liquid fuel until the person provides documentation to the Department that the weight, measure, fuel quality, or price posting complies with the requirements of A.R.S. Title 41, Chapter 15, and this Chapter;
 - c. Stop using a commercial device, commodity, liquid fuel, vapor recovery system, or vapor recovery system component, until the person provides documentation to the Department that the weight, measure, fuel, vapor recovery system, or component complies with the requirements of A.R.S. Title 41, Chapter 15, and this Chapter;
 - d. Stop performing weighmaster, deputy weighmaster, registered service agency, or registered service representative licensed duties until the person provides documentation to the Department that the person is complying with the requirements of A.R.S. Title 41, Chapter 15, and this Chapter;
 - e. Maintain labeling, policies, and cash register indicator displays according to A.R.S. Title 41, Chapter 15, and this Chapter;
 - f. Stop constructing or modifying a vapor recovery system until the person complies with A.R.S. Title 41, Chapter 15, and this Chapter;
 - g. Excavate a vapor recovery site according to R20-2-104(L);
 - h. Comply with scheduling a test according to R20-2-104(L); or
 - i. Retake a competency examination under A.R.S. § 41-2094.
3. "Application" means, for purposes of R20-2-108, forms designated as applications and all documents and addi-

4. "ASTM" means American Society for Testing and Materials.
5. "CARB" means the California Air Resources Board.
6. "CARB certified" means, with respect to a vapor recovery system, that the system has been certified in an executive order of the CARB.
7. "Certified prover" means a calibrated device, traceable to the National Institute of Standards and Technology, used for measuring liquid volume.
8. "Completion of construction" means the point when a gasoline dispensing site is placed into or returned into service following installation or modification of an approved vapor recovery system.
9. "Construction commenced" means the point in time when construction of a gasoline dispensing site begins:
 - a. At a location where there was not one previously;
 - b. To replace all gasoline storage tanks; or
 - c. To replace, repair, or modify at least 75% of the facility's gasoline dispensing equipment.
10. "EPA" means the United States Environmental Protection Agency.
11. "Gasoline vapors" means volatile organic compounds in a gaseous state.
12. "Handbook 44" means the United States Department of Commerce, Technology Administration, National Institute of Standards and Technology (NIST) Handbook 44, *Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, Government Printing Office, Superintendent of Documents, Mail Stop SSOP, Washington, D.C. 20402-0001 (2003 edition), incorporated by reference and on file with the Department. This incorporation by reference contains no future editions or amendments.
13. "Handbook 112" means the United States Department of Commerce, Technology Administration, National Institute of Standards and Technology (NIST) Handbook 112, *Examination Procedure Outlines for Commercial Weighing and Measuring Devices*, Government Printing Office, Superintendent of Documents, Mail Stop SSOP, Washington, D.C. 20402-0001 (2002 edition), incorporated by reference and on file with the Department. This incorporation by reference contains no future editions or amendments.
14. "Handbook 130" means the United States Department of Commerce, Technology Administration, National Institute of Standards and Technology (NIST) Handbook 130, *Uniform Laws and Regulations*, Government Printing Office, Superintendent of Documents, Mail Stop SSOP, Washington, D.C. 20402-0001 (2003 edition), incorporated by reference and on file with the Department. This incorporation by reference contains no future editions or amendments.
15. "Handbook 133" means the United States Department of Commerce, Technology Administration, National Institute of Standards and Technology (NIST) Handbook 133, *Checking The Net Contents of Packaged Goods*, Government Printing Office, Superintendent of Documents, Mail Stop SSOP, Washington, D.C. 20402-0001 (January 2003 edition), incorporated by reference and on file with the Department. This incorporation by reference contains no future editions and amendments.
16. "NCWM" means the National Conference on Weights and Measures.

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17. "Malfunction" means any failure of gasoline vapor recovery equipment to operate in the normal and usual manner.
18. "Modification" means adding to, replacing, or upgrading a site's stage II vapor recovery system, but does not include the repair or replacement of like parts.
19. "Monthly throughput" means the total amount of gasoline transferred into or dispensed from a gasoline dispensing site during one calendar month.
20. "Motor vehicle" means any vehicle equipped with a spark-ignited internal combustion engine, except vehicles that run on or are guided by rails, and vehicles that are designed primarily for travel through air or water.
21. "NIST" means the National Institute of Standards and Technology.
22. "Operator" means a person in control of, or having responsibility for, the daily operation of a gasoline dispensing site.
23. "Out-of-service tag" means a red rejection tag that signifies that a commercial device does not meet the requirements of A.R.S. Title 41, Chapter 15, Handbook 44, or this Chapter.
24. "Person" as defined in A.R.S. § 41-2051, means an owner or operator of a commercial device or vapor recovery system, retail seller, wholesaler, registered supplier, pipeline distributor, packer, manufacturer, licensee, transporter, or consignee.
25. "Placed-in-service" means the certification by a registered service agency or representative that a commercial device may be used, unless the Department orders otherwise.
26. "Placed-In-Service Report" means the form that a registered service representative completes and submits to the Department after placing a commercial device in service.
27. "Product transfer document" means the bill of lading, loading ticket, manifest, delivery receipt, invoice, or other customarily used documentation to denote delivery information for motor fuel.
28. "Retail" means the sale of a commodity to a consumer for profit by someone in the business of selling the commodity.
29. "Seal of authority" means a stamp or press of the Department's official mark, issued to a public weighmaster, certifying the weighmaster's authority to issue weight certificates.
30. "Seizure" means taking into physical possession, or otherwise securing for evidence, a commodity, liquid fuel, weight, measure, commercial device, or component of a device by the Department.
31. "Stop-sale, stop-use tag" means a blue tag or blue tape that signifies that a commercial device, including a vapor recovery system or vapor recovery component, or a commodity or liquid fuel, does not meet the requirements of A.R.S. Title 41, Chapter 15, Handbook 44, Handbook 130, Handbook 133, CARB Executive Orders, or this Chapter.
32. "Underground storage tank" means a tank as described in A.R.S. § 49-1001(18).
33. "Unit" means a quantity adopted as a standard of measurement.
34. "Warning tag" means a yellow tag that signifies a commercial device, vapor recovery system, or vapor recovery component does not comply with A.R.S. Title 41, Chapter 15, Handbook 44, CARB Executive Orders, or this Chapter.
35. "Weight certificate" means a document, issued by a public weighmaster in a form approved by the Department,

that certifies the accuracy of the weight of the commodity measured.

Historical Note

Adopted effective July 27, 1983 (Supp. 83-4). Section repealed, new Section adopted effective May 31, 1991 (Supp. 91-2). Emergency amendments adopted effective July 17, 1991, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 91-3). Emergency amendments adopted again without change effective October 16, 1991, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 91-4). Emergency amendments adopted again without change effective January 9, 1992, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 92-1). Emergency expired. Emergency amendments adopted again without change effective April 22, 1992, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 92-2). Adopted effective June 22, 1992 (Supp. 92-2). R20-2-101 recodified from R4-31-101 (Supp. 95-1). Citations referencing the former Title (A.A.C. Title 4, Chapter 31, recodified) corrected to 20 A.A.C. 2 (Supp. 97-2). Amended effective October 8, 1998 (Supp. 98-4). Amended by final rulemaking at 5 A.A.R. 4312, effective October 18, 1999 (Supp. 99-4). Amended by final rulemaking at 10 A.A.R. 1690, effective June 5, 2004 (Supp. 04-2).

Fees

- The Department's Metrology Laboratory charges the following fees for services:
- A. \$24.00 for the first hour, or fraction of an hour; and
 - B. \$40.00 an hour, or fraction of an hour, after the first hour.
- In addition to the charges in subsection (A), the Department shall charge for travel and per diem at the rates established by A.R.S. §§ 38-623(D) and 38-624(C) for tests or calibrations conducted outside the Metrology Laboratory.

Historical Note

Adopted effective July 27, 1983 (Supp. 83-4). Amended by adding a new subsection (A) and renumbering accordingly effective February 3, 1989 (Supp. 89-1). Amended subsection (A) effective May 3, 1990 (Supp. 89-2). Amended and subsection (D) renumbered to R4-31-117 effective June 14, 1990 (Supp. 90-7). Amended effective July 3, 1991 (Supp. 91-3). Amended effective April 22, 1992 (Supp. 92-2). R20-2-102 recodified from R4-31-102 (Supp. 95-1). Section repealed; new Section R20-2-102 renumbered from R20-2-101 and amended effective October 8, 1998 (Supp. 98-4). Amended by final rulemaking at 10 A.A.R. 1690, effective June 5, 2004 (Supp. 04-2).

R20-2-103. Licensing and Fees

- A. A license is effective on the first day of the month following the date that the license application is filed with the Department. If an application is filed on the first of a month and is complete and accurate, the license is effective on the first day of that month.
- B. A payment is delinquent if the Department does not receive the payment by the due date. The Department shall not process a license or renewal application for which payment is delinquent.
- C. The Department shall prorate a license renewal fee if the licensee's first renewal is fewer than 12 months from the date that license is issued.
- D. The Department shall issue a full refund to a licensee for a

*Editor's Note: The following Section was amended un-
der an exemption from the provisions of A.R.S. Title 41, Chapter 6,
pursuant to Laws 1997, Chapter 117, § 3. Exemption from
Title 41, Chapter 6 means the Department did not submit these
rules to the Governor's Regulatory Review Council for review and
approval. Although exempt from certain provisions of the
Administrative Procedure Act, the Department was required to
publish these rules in the Arizona Administrative Register and
provide reasonable notice and at least 1 public hearing on the
rules (Supp. 97-3). The exempt amendment expired when the
Section was permanently adopted with changes (Supp. 98-3).*

R20-2-701. Definitions

In addition to the definitions in R20-2-101, the following definitions apply to this Article unless the context otherwise requires:

1. "Area A" has the same meaning as in A.R.S. § 49-541.
2. "Area B" has the same meaning as in A.R.S. § 49-541.
3. "Arizona Cleaner Burning Gasoline" or "Arizona CBG" means a gasoline blend that meets the requirements of this Article for gasoline produced and shipped to or within Arizona and sold or offered for sale for use in motor vehicles within the CBG covered area, except as provided under A.R.S. § 41-2124(K).
4. "AZRBOB" or "Arizona Reformulated Blendstock for Oxygenate Blending" means a petroleum-derived motor fuel that is intended to be or is represented to constitute Arizona CBG upon the addition of a specified type and percentage (or range of percentages) of oxygenate after the fuel has been supplied from the production or import facility at which it was produced or imported.
5. "Batch" means a quantity of gasoline that is homogeneous for those fuel properties that are specified for Arizona CBG certified under R20-2-751.
6. "Beginning of transport" means the point at which:
 - a. A registered supplier relinquishes custody of Arizona CBG or AZRBOB to a transporter or a 3rd-party terminal; or
 - b. A registered supplier who retains custody commences transfer of Arizona CBG or AZRBOB into a vessel, tanker, or other container for transport to the CBG covered area.
7. "Blendstock" means any liquid compound that is blended with other liquid compounds to produce Arizona CBG. Deposit control additives or other similar additives registered under 40 CFR 79 are not considered blendstocks.
8. "CBG covered area" means a county with a population of 1,200,000 or more persons according to the most recent United States decennial census and any portion of a county contained in area A.
9. "Conventional gasoline" means gasoline that conforms with the requirements of this Chapter for sale or use in Arizona, but does not meet the requirements of Arizona CBG or AZRBOB.

10. "Co-solvent" means a chemical compound soluble in, and added to, a methanol-gasoline blend to prevent phase separation, reduce corrosion, and improve lubrication. A co-solvent may be any 1 or a mixture of the following:
 - a. Ethanol,
 - b. Any propanol,
 - c. Any butanol, or
 - d. Gasoline grade tertiary butyl alcohol.
11. "Designated alternative limit" means a fuel property specification, expressed in the nearest part per million by weight for sulfur content, nearest 10th percent by volume for aromatic hydrocarbon content, nearest 10th percent by volume for olefin content, and nearest degree Fahrenheit for T90 and T50, that is assigned by a registered supplier to a final blend of Type 2 CBG or AZRBOB for purposes of compliance with the Predictive Model.
12. "Diesel" or "diesel fuel" means a refined middle distillate for use as a fuel in a compression ignition internal combustion engine.
13. "Downstream oxygenate blending" means combining AZRBOB and an oxygenate to produce fungible Arizona CBG.
14. "EPA waiver" means a waiver granted by the Environmental Protection Agency as described in "Waiver Requests under Section 211(f) of the Clean Air Act", which is incorporated by reference in R20-2-702.
15. "Final distribution facility" means a stationary gasoline transfer point from which motor fuel or AZRBOB is transferred into a cargo tank truck, pipeline, or other delivery vessel from which the motor fuel will be delivered to a gasoline dispensing site. A cargo tank truck is a final distribution facility if the cargo tank truck transports motor fuel or AZRBOB and carries documentation that the type and amount or range of amounts of oxygenates designated by the registered supplier will be or have been blended directly into the cargo tank truck before delivery of the resulting motor fuel to the gasoline dispensing site.
16. "Fuel" means any material capable of releasing energy or power by combustion or other chemical or physical reaction.
17. "Fuel property" means any characteristic listed in R20-2-751(A)(1) through (A)(7), R20-2-751(B)(1) through (B)(7), or Table 2.
18. "Importer" means any person who assumes title or ownership of Arizona CBG or AZRBOB produced by an unregistered supplier.
19. "Motor fuel" means petroleum or a petroleum based substance that is motor gasoline, aviation gasoline, number one or number two diesel fuel, or any grade of oxygenated gasoline typically used in the operation of a motor engine.
20. "Motor vehicle" means any vehicle equipped with a spark-ignited or compression-ignition internal combustion engine except:
 - a. Vehicles that run on, or are guided by, rails; or
 - b. Vehicles that are designed primarily for travel through air or water.
21. "MTBE" means methyl tertiary butyl ether.
22. "NOx" means oxides of nitrogen.
23. "Octane", "octane number", or "octane rating" mean the anti-knock characteristic of gasoline as determined by the resultant arithmetic test average of ASTM D2699 and ASTM D2700.
24. "Oxygenate" means any oxygen-containing ashless, organic compound, including aliphatic alcohols and aliphatic ethers, which is able to be used as a fuel or as a gasoline blending component and is approved as a blending agent under a waiver issued by the EPA under 42 USC 7545(f).
25. "Oxygenate blending facility" means any location (including a truck) where oxygenate is added to Arizona CBG or AZRBOB, and the quality or quantity of Arizona CBG is not altered in any other manner, except for the addition of deposit control additives or other similar additives registered under 40 CFR 79.
26. "Oxygenate blender" means any person who owns, leases, operates, controls, or supervises an oxygenate blending facility, or who owns or controls the blendstock or gasoline used, or the gasoline produced, at an oxygenate blending facility.
27. "Oxygenated Arizona CBG" means Arizona CBG with a minimum oxygen content of 3.5% that is produced and shipped to or within Arizona and sold or offered for sale for use in motor vehicles in the CBG covered area from November 1 through March 31 of each year.
28. "Oxygen content" means the percentage by weight of oxygen contained in a gasoline oxygenate blend as calculated by ASTM D4815-94a.
29. "Performance standard" means the VOC and NOx emission reduction percentages in R20-2-751(A)(8), R20-2-751(A)(9), and Table 1.
30. "Pipeline" means a transporter who owns or operates an interstate common-carrier pipe to transport motor fuels into Arizona.
31. "PM" or "Predictive Model Procedures" means the California Predictive Model, California Air Resources Board's "California Procedures for Evaluating Alternative Specification for Phase 2 Reformulated Gasoline Using the California Predictive Model," as adopted April 20, 1995, and which is incorporated by reference in R20-2-758.
32. "PM alternative gasoline formulation" means a final blend of Arizona CBG or AZRBOB that is subject to a set of PM alternative specifications.
33. "PM alternative specifications" means the specifications for the following fuel properties, as determined under R20-2-759:
 - a. Maximum RVP, expressed in the nearest 100th of a pound per square inch;
 - b. Maximum sulfur content, expressed in the nearest part per million by weight;
 - c. Maximum olefin content, expressed in the nearest 10th of a percent by volume;
 - d. Minimum and maximum oxygen content, expressed in the nearest 10th of a percent by weight;
 - e. Maximum T50, expressed in the nearest degree Fahrenheit;
 - f. Maximum T90, expressed in the nearest degree Fahrenheit; and
 - g. Maximum aromatic hydrocarbon content, expressed in the nearest 10th of a percent by volume.
34. "PM averaging compliance option" means, with reference to a specific fuel property, the compliance option for PM alternative gasoline formulations by which final blends of Arizona CBG and AZRBOB are assigned designated alternative limits under R20-2-751 (F), (G), and (H).
35. "PM averaging limit" means a PM alternative specification that is subject to the PM averaging compliance option.
36. "PM flat limit" means a PM alternative specification that is subject to the PM flat limit compliance option.

37. "PM flat limit compliance option" means, with reference to a specific fuel property, the compliance option that each gallon of gasoline must meet for the specified fuel property contained in the PM alternative specifications.
38. "Produce" means:
- a. Except as otherwise provided in subsections (b) or (c), to convert a liquid compound that is not Arizona CBG or AZRBOB into Arizona CBG or AZRBOB. If a person blends blendstocks that are not Arizona CBG or AZRBOB with Arizona CBG or AZRBOB acquired from another person, and the resulting blend is Arizona CBG or AZRBOB, the person conducting the blending produces only the portion of the blend not previously Arizona CBG or AZRBOB. If a person blends Arizona CBG or AZRBOB with other of Arizona CBG or AZRBOB in accordance with this Article, without the addition of blendstocks that are not Arizona CBG or AZRBOB, that person is not a producer of Arizona CBG or AZRBOB.
 - b. If a person supplies Arizona CBG or AZRBOB to a refiner who agrees in writing to further process the Arizona CBG or AZRBOB at the refiner's refinery and be treated as the producer of the Arizona CBG or AZRBOB, the refiner is deemed the producer of the Arizona CBG or AZRBOB.
 - c. If an oxygenate blender blends oxygenates into AZRBOB supplied from a gasoline production facility or import facility, and does not alter the quality or quantity of the AZRBOB or the quality or quantity of the resulting Arizona CBG certified by a registered supplier in any other manner except for the addition of deposit control additives or other similar additives, then the oxygenate blender is not a producer of any portion of the resulting Arizona CBG, and the producer or importer of the AZRBOB is considered the producer or importer of the full volume of the resulting Arizona CBG.
39. "Producer" means a refiner or other person who produces Arizona CBG or AZRBOB.
40. "Production facility" means a facility where Arizona CBG or AZRBOB is produced. Upon request of a producer, the Director may designate, as part of the producer's production facility, a physically separate bulk storage facility that:
- a. Is owned or leased by the producer,
 - b. Is operated by or at the direction of the producer, and
 - c. Is used to store or distribute Arizona CBG or AZRBOB that is supplied only from the production facility.
41. "Refiner" means any person who owns, leases, operates, controls, or supervises a refinery in the United States, including its trust territories.
42. "RVP" means Reid vapor pressure.
43. "Refinery" means a facility that produces liquid fuels, including Arizona CBG or AZRBOB, by distilling petroleum.
44. "Registered supplier" means any producer or importer who supplies Arizona CBG or AZRBOB and is registered with the Director under R20-2-750.
45. "Reproducibility" means the testing method margin of error as provided in the ASTM or other testing method required under this Article.
46. "Service station" means a retail business operated for the purpose of dispensing motor fuel into the fuel tanks of motor vehicles.
47. "Supply" means to provide or transfer motor fuel to a physically separate facility, vehicle, or transportation system.
48. "Third-party terminal" or "3rd-party terminal" means an owner or operator of a gasoline storage tank facility who accepts custody, but not ownership, of Arizona CBG or AZRBOB from a registered supplier and relinquishes custody of Arizona CBG or AZRBOB to a transporter for interstate transport into Arizona.
49. "Transmix" means a mixture of petroleum distillate fuel and gasoline that does not meet the Arizona standards for either petroleum distillate fuels or gasoline.
50. "Transporter" means any person who is not a producer or importer and who:
- a. Causes transport of Arizona CBG or AZRBOB into Arizona; and
 - b. Does not acquire title or assume ownership of the Arizona CBG or AZRBOB.
51. "Type 1 gasoline" means a gasoline that meets the standards contained in R20-2-751(A) and Table 1.
52. "Type 2 gasoline" means a gasoline that meets the standards contained in Table 2, or is certified using the PM according to the requirements of R20-2-751(F), (G), and (H), and:
- a. Meets the requirements in R20-2-751(A) beginning April 1 through October 31 of each year; and
 - b. Meets the requirements in R20-2-751(B) beginning November 2 through March 31 of each year.
53. "VOC" means volatile organic compound.

Historical Note

Former Section R4-31-204(K) and Section R4-31-205(A)(1) through (5) renumbered without change as Section R4-31-701 (Supp. 89-1). Amended as R4-31-204(O) and incorporated into R4-31-701 effective September 29, 1989 (Supp. 89-3). Amended effective October 12, 1990 (Supp. 90-4). Amended by emergency amendment effective September 20, 1991, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 91-3). Emergency amendments adopted again without change effective December 20, 1991, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 91-4). Emergency amendments adopted again without change effective March 20, 1992, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 92-1). Emergency expired. Amended with changes effective August 17, 1992 (Supp. 92-3). R20-2-701 recodified from R4-31-701 (Supp. 95-1). Amended effective under an exemption from the provisions of A.R.S. Title 41, Chapter 6, with an interim effective date of September 12, 1997 (Supp. 97-3). Interim amendment expired and was automatically repealed on the date the permanent rules became effective pursuant to Laws 1997, Ch. 117; Section permanently amended October 1, 1998; filed in the Office of the Secretary of State September 9, 1998 (Supp. 98-3). Amended by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 7 A.A.R. 1025, effective February 9, 2001 (Supp. 01-1).

R20-2-716. Sampling and Access to Records

- A. The Department shall obtain motor fuel samples for testing from:
1. The same dispenser used for sales to customers;
 2. The same dispenser used for dispensing motor fuel into fleet vehicles;
 3. A bulk storage facility;
 4. A common carrier having custody of motor fuel, including Arizona CBG or AZRBOB;
 5. A transporter of Arizona CBG or AZRBOB;
 6. A final distribution facility;
 7. A 3rd-party terminal having custody of Arizona CBG or AZRBOB; or
 8. An oxygenate blender or registered supplier.
- B. A person required by this Article to maintain records relating to the production, importation, blending, transport, distribution, or delivery of Arizona CBG or AZRBOB shall ensure that the records are available for Department inspection.

Historical Note

Adopted as R4-31-204(N) and renumbered as R4-31-716 effective September 29, 1989 (Supp. 89-3). Repealed effective October 12, 1990 (Supp. 90-4). New Section R4-31-716 adopted effective August 17, 1992 (Supp. 92-3). R20-2-716 recodified from R4-31-716 (Supp. 95-1). Former Section R20-2-716 renumbered to R20-2-712; new Section R20-2-716 renumbered from R20-2-721 and amended by final rulemaking at 5 A.A.R. 4312, effective October 18, 1999 (Supp. 99-4).

Editor's Note: The following Section was adopted under an exemption from the provisions of A.R.S. Title 41, Chapter 6, pursuant to Laws 1997, Chapter 117, § 3. Exemption from A.R.S. Title 41, Chapter 6 means the Department did not submit these rules to the Governor's Regulatory Review Council for review and approval. Although exempt from certain provisions of the Administrative Procedure Act, the Department was required to publish these rules in the Arizona Administrative Register and provide reasonable notice and at least 1 public hearing on the rules (Supp. 97-3). The exempt rules expired when the Section was permanently adopted with changes (Supp. 98-3).

R20-2-750. Registration Relating to Arizona CBG or AZRBOB

- A. Each of the following shall register with the Director prior to the 1st date that the person will produce, import, or obtain custody of Arizona CBG or AZRBOB:
 - 1. A refiner who produces Arizona CBG or AZRBOB;
 - 2. An importer who imports Arizona CBG or AZRBOB;
 - 3. An oxygenate blender who blends oxygenate with AZRBOB to produce Arizona CBG; or
 - 4. A pipeline or 3rd-party terminal who has custody of Arizona CBG or AZRBOB.
- B. A person listed in subsection (A) shall register on a form prescribed by the Director and shall include the following information:
 - 1. Business name, business address, and contact name and telephone number;
 - 2. For each separate refinery and oxygenate blending facility, the facility name, physical location, contact name, telephone number, and type of facility;
 - 3. For each separate refinery and oxygenate blending facility, and for each importer:
 - a. The location of the records required under this Article. If records are kept off-site, the primary off-site storage facility name, physical location, contact name, and telephone number; and
 - b. If an independent laboratory is used to meet the requirements of R20-2-752(F), the name, address, contact name, and telephone number of the independent laboratory.
 - 4. If required under 40 CFR 80.76(d), the EPA registration number; and
 - 5. A statement of the registrant's consent permitting the Department or its authorized agent to collect samples and access records as provided in R20-2-716.
- C. Changes to any information in subsection (B) shall be sent to the Director not later than 10 days after the effective date of the change.
- D. If a refiner, importer, or oxygenate blender fails to register under this Section, all Arizona CBG or AZRBOB transported to the CBG covered area is presumed noncomplying from the date that the registration should have occurred.
- E. The Department shall maintain a listing of all registered suppliers.

Historical Note

Adopted effective under an exemption from the provisions of A.R.S. Title 41, Chapter 6, with an interim effective date of September 12, 1997 (Supp. 97-3). Interim adoption expired and was automatically repealed on the date the permanent rules became effective pursuant to Laws 1997, Ch. 117; Section permanently adopted with changes October 1, 1998; filed in the Office of the Secretary of State September 9, 1998 (Supp. 98-3). Amended by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3).

8. Federal Complex Model VOC Emissions Reduction Percentage
May 1 through September 15: $\geq 25.0\%$ (Federal Complex Model settings: Summer, Area Class B, Phase 2)

- B. Wintertime requirements. In addition to the other requirements of this Article, beginning November 2 through March 31 of each year, all Arizona CBG shall meet the following requirements. The dates in this subsection are compliance dates for service station operators and fleet owners.

Fuel Property	Limits
1. Sulfur	80 ppm by weight (max)
2. Aromatics	30% by volume (max)
3. Olefins	10% by volume (max)
4. 90% Distillation Temp. (T90)	330° F (max)
5. 50% Distillation Temp. (T50)	220° F (max)
6. Vapor Pressure	9.0 psi (max)
7. Oxygenate - Ethanol	
a. Minimum oxygenate content	- 10% ethanol by volume
b. Maximum oxygen content	- 4.0% oxygen by weight, and shall comply with the requirements of A.R.S. § 41-2123.
c. Alternative oxygenates may be used if approved by the Director	under A.R.S. § 41-2124(D).

- C. General Elections. Except as provided in subsection (D), all registered suppliers shall make an initial election, and a subsequent election each time a change occurs, before the beginning of transport of the Arizona CBG or AZRBOB. Registered suppliers shall make the election with the Director on a form or in a format prescribed by the Director. The election shall state:

1. Whether the registered supplier (at each point where the Arizona CBG or AZRBOB is certified) will supply Arizona CBG or AZRBOB that complies with Type 1, Type 2, or the PM alternative gasoline formulation requirements; and
2. For each applicable fuel property or performance standard for the election in subsection (C)(1), whether the Arizona CBG or AZRBOB will comply with the average standards or per-gallon standards. A registered supplier shall not elect to comply with average standards unless the registered supplier is in compliance with R20-2-760. A registered supplier shall not elect to comply with Type 1 average standards in Table 1, columns B and C, from September 16 through November 1 and April 1 through April 30.

- D. Winter elections. Beginning November 2 through March 31 of each year, all Arizona CBG or AZRBOB shall comply with Type 2 gasoline requirements or the PM alternative gasoline formulation requirements under Table 2. All registered suppliers shall make an initial election, and a subsequent election each time a change occurs, before the beginning of transport of the Arizona CBG or AZRBOB. Registered suppliers shall make the election with the Director on a form or in a format prescribed by the Director. The election shall state:

1. Whether the registered supplier (at each point where the Arizona CBG or AZRBOB is certified) will supply Arizona CBG or AZRBOB that complies with the Type 2 gasoline or the PM alternative gasoline formulation requirements; and
2. For each applicable fuel property, whether the Arizona CBG or AZRBOB will comply with the average standards or per gallon standards.

- E. Certification as Type 1 or Type 2. Registered suppliers shall certify Arizona CBG or AZRBOB under R20-2-752 as meeting all requirements of the election made in subsection (C) or (D). Type 1 gasoline shall comply with the requirements in

Editor's Note: The following Section was adopted under an exemption from the provisions of A.R.S. Title 41, Chapter 6, pursuant to Laws 1997, Chapter 117, § 3. Exemption from A.R.S. Title 41, Chapter 6 means the Department did not submit these rules to the Governor's Regulatory Review Council for review and approval. Although exempt from certain provisions of the Administrative Procedure Act, the Department was required to publish these rules in the Arizona Administrative Register and provide reasonable notice and at least 1 public hearing on the rules (Supp. 97-3). The exempt rules expired when the Section was permanently adopted with changes (Supp. 98-3).

R20-2-751. Arizona CBG Requirements

- A. General requirements. In addition to the other requirements of this Article and except as provided in subsection (B), all Arizona CBG shall meet the following requirements. The dates in this subsection are compliance dates for service station operators and fleet owners.

Fuel Property/Performance Standard - Limits

1. Sulfur: 500 ppm by weight (max)
2. Aromatics: 50% by volume (max)
3. Olefins: 25% by volume (max)
4. E200: 70-30% volume
5. E300: 100-70% volume
6. Maximum Vapor Pressure
 - a. October 1 - March 31: 9.0 pounds per square inch (psi)
 - b. April: 10.0 psi
 - c. May: 9.0 psi
 - d. June 1 - September 30: 7.0 psi
7. Oxygen and Oxygenates
 - a. Minimum Content:
 - i. November 1 - March 31: 10% ethanol by volume
If A.R.S. § 41-2124(E) petition in effect: 2.7% oxygen by weight (other than ethanol)
 - ii. April 1 - October 31: 0% by weight (any oxygenate)
 - b. The maximum oxygen content shall not exceed 4.0% by weight for ethanol and 3.5% by weight for other oxygenates, and shall comply with the requirements of A.R.S. § 41-2123.

either column A, or columns B through D of Table 1, and shall be certified using the Federal Complex Model. For each fuel property, Type 2 gasoline shall comply with the requirements of columns A and B (averaging option), or column C in Table 2. The PM alternative gasoline formulation shall meet the requirements of subsections (F), (G), and (H), and column A of Table 2.

F. Certification and Use of Predictive Model for Alternative PM Gasoline Formulations.

1. Except as provided in subsections (F)(4) and (H), the use of the PM shall be as provided in the Predictive Model Procedures.
2. A registered supplier shall certify a PM alternative gasoline formulation with the Director by either:
 - a. Submitting to the Director a complete copy of the documentation provided to the executive officer of the California Air Resources Board according to 13 California Code of Regulations, Section 2264 and subsection (H); or
 - b. Notifying the Director, on a form prescribed by or in a format acceptable to the Director, of:
 - i. The PM alternative specifications that apply to the final blend, including for each specification whether it is a PM flat limit or a PM averaging limit; and
 - ii. The numerical values for percent change in emissions for oxides of nitrogen and hydrocarbons determined in accordance with the Predictive Model Procedures.
3. The registered supplier shall deliver the certification to the Director before the beginning of transport of the PM alternative gasoline formulation.
4. Restrictions for elections to sell or supply final blends as PM alternative gasoline formulations.
 - a. A registered supplier may not make a new election to sell or supply from its production or import facility a final blend of Arizona CBG as a PM alternative gasoline formulation if the registered supplier has any outstanding requirements to provide offsets for fuel properties at the same production or import facility under subsection (I).
 - b. If a registered supplier elects to sell or supply from its production or import facility a final blend of Arizona CBG as a PM alternative gasoline formulation subject to a PM averaging compliance option for 1 or more fuel properties, the registered supplier may not elect any other compliance option, including another PM alternative gasoline formulation, if outstanding requirements to provide offsets for fuel properties exist under the provisions of subsection (I). This subsection shall not preclude a registered supplier from electing another PM alternative gasoline formulation if:
 - i. The PM flat limit for 1 or more fuel properties is changed to a PM averaging limit, or a single PM averaging limit for which there are no outstanding requirements to provide offsets, is changed to a PM flat limit;
 - ii. There are no changes to the PM alternative specifications for remaining fuel properties; and
 - iii. The new PM alternative formulation meets the criteria in the Predictive Model Procedures.
 - c. Once a registered supplier elects to sell or supply from its production or import facility a final blend of Arizona CBG as a PM alternative gasoline formula-

tion, the registered supplier may not use a previously assigned designated alternative limit for a fuel property to provide offsets under subsection (I).

- d. If a registered supplier notifies the Director under subsection (C) or (D) that a final blend of Arizona CBG is sold or supplied from a production or import facility as a PM alternative gasoline formulation, all final blends of Arizona CBG or AZRBOB subsequently sold or supplied from that production or import facility are subject to the same PM alternative specifications until the registered supplier either:
 - i. Designates a final blend at that facility as a PM alternative gasoline formulation subject to different PM alternative specifications, or
 - ii. Elects, under subsection (C) or (D), a final blend at that facility subject to a flat limit compliance option or an averaging compliance option.

G. Prohibited activities regarding PM alternative gasoline formulations.

1. A registered supplier shall not sell, offer for sale, supply, or offer to supply from its production or import facility Arizona CBG that is reported as a PM alternative gasoline formulation under R20-2-752 if any of the following occur:
 - a. The elected PM alternative specifications do not meet the criteria for approval in the Predictive Model Procedures;
 - b. The registered supplier is prohibited by subsection (F)(4)(a) from electing to sell or supply the gasoline as a PM alternative gasoline formulation;
 - c. The gasoline fails to conform with any PM flat limit in the PM alternative specifications election; or
 - d. With respect to any fuel property for which the registered supplier elects a PM averaging limit,
 - i. The gasoline exceeds the applicable PM average limit in Table 2, column B, and no designated alternative limit for the fuel property is established for the gasoline in accordance with subsection (F)(2); or
 - ii. A designated alternative limit for the fuel property is established for the gasoline in accordance with subsection (F)(2), and either of the following occur: the gasoline exceeds the designated alternative limit for the fuel property; or when the designated alternative limit for the fuel property exceeds the PM averaging limit, the exceedance is not fully offset in accordance with subsection (I).
- H. Oxygen content requirements for PM alternative gasoline formulations. All alternative PM gasoline formulations from November 1 through March 31 shall comply with oxygen content requirements for the CBG covered area. Regardless of the oxygen content, the final alternative PM gasoline formulation shall be certified using the PM with a minimum oxygen content of 2.0% by weight.
- I. Offsetting Fuel Properties and Performance Standards. Each registered supplier who elects to comply with the averaging standards for any of the fuel properties or performance standards contained in Tables 1 or 2, or the PM, shall complete physical transfer from the same production or import facility of certified Arizona CBG or AZRBOB in sufficient quantity to offset the amount by which the gasoline exceeds the averaging standard according to the following schedule:

1. Registered suppliers electing averaging standards contained in Table 2 or the PM shall offset each exceeded average standard within 90 days before or after the beginning of transport of any final blend of Arizona CBG or AZRBOB from a production or import facility;
 2. Registered suppliers electing to comply with the averaging standard for the VOC Emission Reduction Percentage in Table 1, column B, shall offset an exceedance of the standards that occurs from May 1 to September 15 of each calendar year during that same time period; and
 3. Registered suppliers electing to comply with the averaging standard for the NOx Emission Reduction Percentage contained in Table 1, column B, shall offset an exceedance of the summer standard that occurs from May 1 to September 15 of each calendar year during that same time period.
- J. Consequence of failure to comply with averages.
1. In addition to a penalty, if any, under R20-2-762, a registered supplier who fails to comply with the requirements of subsection (I) shall meet the applicable per-gallon standards contained in Table 1, Table 2, or for any alternative PM gasoline formulation, for a probationary period as follows:
 - a. For registered suppliers electing to comply with the standards contained in Table 1, the probationary period begins on the 1st day of the next corresponding averaging season and ends on the last day of that averaging season if the conditions of subsection (2) are met;
 - b. For registered suppliers electing to comply with the standards contained in Table 2 or the PM, the probationary period begins no later than 90 days after the registered supplier determines, or receives a notice from the Director, that the registered supplier did not comply with the requirements of subsection (I). Before the probationary period begins, the registered supplier shall notify the Director in writing of the beginning date of the probationary period. The probationary period shall be 90 days.
 2. A registered supplier may not produce or import Arizona CBG or AZRBOB under an averaging compliance election until:
 - a. The registered supplier submits a compliance plan to the Director that includes:
 - i. An implementation schedule for actions to correct noncompliance, and
 - ii. Reporting requirements that document the plan implementation;
 - b. The Director approves the plan;
 - c. The registered supplier implements the plan; and
 - d. The registered supplier achieves compliance.
 3. If a registered supplier fails to comply with the requirements of subsection (I) within 1 year of the end of a probationary period under subsection (J)(1), the registered supplier shall comply with applicable per-gallon standards for a subsequent probationary period of 2 years, or until the conditions in subsection (J)(2) are satisfied, whichever is later.
 - a. If a registered supplier elects compliance with the Table 1 standards, the probationary period begins on the 1st day of the next corresponding averaging season.
 - b. If a registered supplier elects compliance with the Table 2 standards or the PM, the probationary period begins no later than 90 days after the registered supplier determines, or receives notice from the Director, that the registered supplier did not comply with the requirements of subsection (I). Before the probationary period begins, the registered supplier shall notify the Director in writing of the beginning date of the probationary period.
- K. Effect of VOC survey failure. Each time the CBG covered area fails a VOC survey conducted under R20-2-760, the VOC emissions performance reduction in R20-2-751(A)(8) and the minimum per-gallon VOC emission reduction percentage in Table 1, column C shall be increased by an absolute 1.0%, not to exceed the VOC percent emissions reduction percentage per-gallon standard in Table 1, column A.
- L. Effect of NOx survey failure. Each time the CBG covered area fails a NOx survey conducted under R20-2-760, the NOx average emission reduction percentage applicable to the period of May 1 through September 15 in Table 1, column B shall be increased by an absolute 1.0%.
- M. Subsequent survey compliance. If the minimum VOC emission reduction percentage or average NOx emissions reduction percentage has been made more stringent according to subsection (K) or (L) and the CBG covered area passes all emissions reduction surveys for VOC or NOx for 2 consecutive years, the applicable VOC or NOx emissions reduction percentage adjusted standard shall be reduced by an absolute 1.0% beginning in the year following the 2nd year of the compliant survey. Each standard adjusted under this subsection shall not be decreased below the following:
 1. >25.0% for the VOC Emission Reduction Percentage, May 1 - September 15, Table 1, column C; and
 2. >6.8% for the NOx Emission Reduction Percentage, May 1 - September 15, Table 1, column B.
- N. Subsequent survey failures. If a VOC or NOx emissions reduction percentage is made less stringent under subsection (M) and the CBG covered area fails a subsequent VOC or NOx survey:
 1. For a VOC survey failure, the Federal Complex Model VOC emissions reduction percentage in R20-2-751(A)(8) and the minimum per gallon VOC emission reduction percentage in Table 1, column C shall be increased by an absolute 1.0%, not to exceed the VOC percent emissions reduction percentage per gallon standard in Table 1, column A;
 2. For a NOx survey failure, the NOx average emission reduction percentage applicable to the period of May 1 through September 15 in Table 1, column B shall be increased by an absolute 1.0%; and
 3. The VOC or NOx emission reduction percentage for the performance standard shall not be made less stringent regardless of the results of subsequent surveys for that performance standard.
- O. Effective date for adjusted standards. If a performance standard is adjusted by operation of subsections (K), (L), (M) or (N), the effective date for the change shall begin with the next averaging season for which the standard is applicable.

Historical Note

Adopted effective under an exemption from the provisions of A.R.S. Title 41, Chapter 6, with an interim effective date of September 12, 1997 (Supp. 97-3). Interim adoption expired and was automatically repealed on the date the permanent rules became effective pursuant to Laws 1997, Ch. 117; Section permanently adopted with changes October 1, 1998; filed in the Office of the Secretary of State September 9, 1998 (Supp. 98-3). Amended by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3). Amended by final rulemaking at 7 A.A.R. 1025, effective February 9, 2001 (Supp. 01-1).

Editor's Note: The following Section was adopted under an exemption from the provisions of A.R.S. Title 41, Chapter 6, pursuant to Laws 1997, Chapter 117, § 3. Exemption from A.R.S. Title 41, Chapter 6 means the Department did not submit these rules to the Governor's Regulatory Review Council for review and approval. Although exempt from certain provisions of the Administrative Procedure Act, the Department was required to publish these rules in the Arizona Administrative Register and provide reasonable notice and at least 1 public hearing on the rules (Supp. 97-3). The exempt rules expired when the Section was permanently adopted with changes (Supp. 98-3).

R20-2-752. General Requirements for Registered Suppliers

- A. A registered supplier shall certify that each batch of Arizona CBG or AZRBOB transported for sale or use in the CBG covered area meets the standards in this Article.
- B. The registered supplier shall sign the certification on a form or in a format prescribed by the Director. The certification shall include information on the shipment volumes, fuel properties as determined under R20-2-759, and performance standards for each batch of Arizona CBG or AZRBOB. For each batch transported, the registered supplier shall submit the certification to the Director on or before the 15th day of each month for the Arizona CBG or AZRBOB transported during the previous month.
- C. Recordkeeping and Records Retention.
 1. Each registered supplier who samples and analyzes a final blend or shipment of Arizona CBG or AZRBOB under this Section shall maintain, for 5 years from the date of each sampling, records of the following:
 - a. Sample date;
 - b. Identity of blend or product sampled;
 - c. Container or other vessel sampled;
 - d. The final blend or shipment volume; and
 - e. The sulfur, aromatic hydrocarbon, olefin, oxygen, RVP, and as applicable, T50, T90, E200 and E300 as determined under R20-2-759.
 2. All Arizona CBG or AZRBOB produced or imported by a registered supplier, that is not tested as required by this Section, shall be deemed to have a RVP, sulfur, aromatic

hydrocarbon, olefin, oxygen, T50, and T90 exceeding the standards specified in R20-2-751, or exceeding the comparable PM averaging limits, unless the registered supplier demonstrates to the Director that the Arizona CBG or AZRBOB meets all applicable standards and limits for fuel properties and performance standards.

3. A registered supplier shall provide to the Director any records maintained by the registered supplier under this subsection within 20 days of a written request from the Director. If a registered supplier fails to provide records for a blend or shipment of Arizona CBG or AZRBOB under this Section, the final blend or shipment of Arizona CBG or AZRBOB shall be deemed supplied in violation of R20-2-751, unless the registered supplier demonstrates to the Director that the Arizona CBG or AZRBOB meets all applicable standards and limits for fuel properties and performance standards.
- D. Notification requirement. A registered supplier shall notify the Director by facsimile prior to the beginning of transport of Arizona CBG or AZRBOB into the CBG covered area by a means other than a pipeline.
- E. Quality Assurance and Quality Control (QA/QC) Program. A registered supplier shall develop a QA/QC program to demonstrate the accuracy and effectiveness of the registered supplier's laboratory testing of Arizona CBG or AZRBOB. The QA/QC program shall be submitted to the Director for approval at least 3 months before transport of Arizona CBG or AZRBOB. Instead of a QA/QC program, a registered supplier may opt to comply with the independent testing requirements of subsection (F).
- F. Independent testing.
 1. A registered supplier of Arizona CBG or AZRBOB who does not comply with subsection (E) shall conduct a program of independent sample collection and analyses for the Arizona CBG or AZRBOB produced or imported, that complies with 1 of the following:
 - a. Option 1. A registered supplier shall, for each batch of Arizona CBG or AZRBOB produced or imported, have an independent laboratory collect and analyze a representative sample from the batch using the methodology specified in R20-2-759 for compliance with each fuel property or performance standard for which the Arizona CBG or AZRBOB is certified.
 - b. Option 2. A registered supplier shall have an independent testing program for all Arizona CBG or AZRBOB produced or imported that consists of the following:
 - i. An independent laboratory shall collect a representative sample from each batch;
 - ii. The Director or designee shall identify up to 10% of the total number of samples collected under subsection (F)(1)(b)(i) for analysis; and
 - iii. The designated independent laboratory shall, for each sample identified by the Director or designee, analyze the sample using methodology specified in R20-2-759 for compliance with each fuel property or performance standard for which the batch is certified.
2. Designation of Independent Laboratory.
 - a. A registered supplier who does not comply with subsection (E) shall designate 1 independent laboratory

The Director or designee may request a portion of the batch sample collected under subsection (a) or (b) for analysis by a laboratory selected by the Director or designee. The registered supplier shall submit the sample to the Director within 24 hours of written request.

for each production or import facility at which Arizona CBG or AZRBOB is produced or imported. The independent laboratory shall collect samples and perform analyses according to subsection (F).

- b. A registered supplier shall identify the designated independent laboratory to the Director under the registration requirements of R20-2-750.
- c. A laboratory is considered independent if:
 - i. The laboratory is not operated by a registered supplier or the registered supplier's subsidiary or employee;
 - ii. The laboratory does not have any interest in any registered supplier; and
 - iii. The registered supplier does not have any interest in the laboratory.

Notwithstanding the restrictions in subsections (F)(2)(c)(i) through (iii), the Director shall consider a laboratory independent if it is owned or operated by a gasoline pipeline company owned or operated by 4 or more producers or importers.

- d. A registered supplier shall not use a laboratory that is debarred, suspended, or proposed for debarment according to the Government-wide Debarment and Suspension regulations, 40 CFR 32, or the Debarment, Suspension and Ineligibility provisions of the Federal Acquisition Regulations, 48 CFR 9(9.4).
3. A registered supplier shall cause its designated independent laboratory to:
- a. Record the following at the time the designated independent laboratory collects a representative sample from a batch of Arizona CBG or AZRBOB:
 - i. The producer's or importer's assigned batch number for the batch being sampled;
 - ii. The volume of the batch;
 - iii. The identification number of the gasoline storage tank or tanks in which the batch is stored at the time the sample is collected;
 - iv. The date and time the batch became Arizona CBG or AZRBOB, and the date and time the sample is collected;
 - v. The grade of the batch (for example, unleaded premium, unleaded mid-grade, or unleaded); and
 - vi. For Arizona CBG or AZRBOB produced by computer-controlled in-line blending, the date and time the blending process began and the date and time the blending process ended, unless exempt under subsection (G);
 - b. Retain each sample collected under this subsection for at least 45 days, except this time may be extended up to 180 days upon request by the Director;
 - c. Submit to the Director a quarterly report on the 15th day of January, April, July, and October of each year. The report shall include, for each sample of Arizona CBG or AZRBOB analyzed under subsection (F):
 - i. The results of the independent laboratory's analyses for each fuel property, and
 - ii. The information specified in subsection (F)(3)(a) for each sample; and
 - d. Supply to the Director, upon request, a portion of the sample.

G. Exemptions to QA/QC and Independent Laboratory Testing Requirements. A registered supplier who produces or imports Arizona CBG using computer-controlled in-line blending

equipment and is operating under an exemption from EPA under 40 CFR 80.65(f)(4), is exempt from the requirements of subsections (E) and (F), provided that reports of the results of the independent audit program of the refiner's computer-controlled in-line blending operation submitted to EPA under 40 CFR 80.65(f)(4), are submitted to the Director by March 1 of each year.

H. Use of Laboratory Analysis for Certification of Arizona CBG and AZRBOB.

- 1. If both a registered supplier and an independent laboratory collect a sample and perform a laboratory analysis to determine a fuel property for the same batch for compliance with subsection (F), the results of the analysis conducted by the registered supplier shall be used for certification of the Arizona CBG or AZRBOB under subsection (B), unless the absolute value of the difference between the 2 laboratory test results is larger than the following:

Fuel Property	Range
a. Sulfur content	25 ppm by weight
b. Aromatics	2.7% by volume
c. Olefins	2.5% by volume
d. Ethanol	0.4% by volume
e. Methanol	0.2% by volume
f. MTBE (and other methyl ethers)	0.6% by volume
g. ETBE (and other ethyl ethers)	0.6% by volume
h. TAME	0.6% by volume
i. t-Butanol content	0.6% by volume
j. RVP	0.3 psi
k. 50% distillation temperature	5° Fahrenheit
l. 90% distillation temperature	5° Fahrenheit
m. E200	2.5% by volume
n. E300	3.5% by volume
o. API gravity	0.3° API

- 2. If the absolute value of the differences of the results of the analyses conducted by the registered supplier and independent laboratory is larger than the values specified in subsection (H)(1), the registered supplier shall use the following laboratory testing results for certification of Arizona CBG or AZRBOB under subsection (B):
 - a. The larger of the 2 values for the fuel property, except that the smaller of the 2 values shall be used for oxygenates; or
 - b. The registered supplier shall have 1 additional independent laboratory analyze the Arizona CBG or AZRBOB for the fuel property. If the laboratory results obtained by the additional independent laboratory is within the range listed in this subsection as compared to the results obtained by the registered supplier, the registered supplier's laboratory analysis results shall be used for Arizona CBG or AZRBOB certification under subsection (B).

Historical Note

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Editor's Note: The following Section was adopted under an exemption from the provisions of A.R.S. Title 41, Chapter 6,

pursuant to Laws 1997, Chapter 117, § 3. Exemption from A.R.S. Title 41, Chapter 6 means the Department did not submit these rules to the Governor's Regulatory Review Council for review and approval. Although exempt from certain provisions of the Administrative Procedure Act, the Department was required to publish these rules in the Arizona Administrative Register and provide reasonable notice and at least 1 public hearing on the rules (Supp. 97-3). The exempt rules expired when the Section was permanently adopted with changes (Supp. 98-3).

R20-2-753. General Requirements for Pipelines and 3rd-party Terminals

- A.** A pipeline or 3rd-party terminal shall not accept Arizona CBG or AZRBOB for transport unless:
 - 1. The Arizona CBG or AZRBOB is physically transferred from an importer, refiner, oxygenate blender, pipeline, or 3rd-party terminal registered with the Department under R20-2-750; and
 - 2. The supplier provides written verification that the gasoline is Arizona CBG or AZRBOB and complies with the standards in R20-2-751(A) or (B), as applicable, without reproducibility or numerical rounding.
- B.** A pipeline or 3rd-party terminal that transports Arizona CBG or AZRBOB shall collect a sample of each incoming batch. The pipeline or 3rd-party terminal shall retain the sample for at least 30 days, except this time may be extended for individual samples up to 180 days upon request by the Director.
- C.** A pipeline shall conduct quality control testing of Arizona CBG or AZRBOB at a frequency of not less than 1 sample from 1 batch completing shipment per supplier per day at each input location.
- D.** A pipeline shall provide the Director with a report summarizing the laboratory testing results required in subsection (C) within 10 days of the end of each month. The report shall contain the quantity of Arizona CBG or AZRBOB, date tendered, whether the Arizona CBG or AZRBOB was transported by pipeline, present sample location, and laboratory analysis results.
- E.** If any batch does not meet the standards in R20-2-751(A) or (B), as applicable, but is within reproducibility, the pipeline shall notify the Director by facsimile within 48 hours with the batch volume and date tendered, proposed shipment date, whether the batch was transported by the pipeline, present batch location, and laboratory analysis results.
- F.** If any batch does not meet the standards in R20-2-751(A) or (B), as applicable, including reproducibility, the pipeline or 3rd-party terminal shall notify the Director by facsimile within 24 hours with the quantity and date tendered, proposed shipment date, whether the batch was transported by the pipeline, present batch location, and laboratory analysis results. If the batch is in the pipeline's or 3rd-party terminal's control, the pipeline or 3rd-party terminal shall stop the release of the batch from a distribution point until the batch is certified as meeting the standards in R20-2-751(A) or (B), as applicable.
- G.** The pipeline or 3rd-party terminal shall develop a QA/QC program to demonstrate the accuracy and effectiveness of the pipeline's or 3rd-party terminal's laboratory testing. The QA/QC program for 3rd-party terminals shall include a description of the laboratory testing protocol used to verify that Arizona CBG or AZRBOB transported to the CBG covered area, meets the standards in R20-2-751(A) or (B). The pipeline or 3rd party terminal shall submit the QA/QC to the Director for approval at least 3 months before the 1st date the pipeline or 3rd-party terminal transports Arizona CBG or AZRBOB.
- H.** A portion of a facility that a 3rd-party terminal uses for production, import, or oxygenate blending is exempt from this Section, but shall be operated in compliance with requirements

for registered suppliers in R20-2-752 and oxygenate blenders in R20-2-755, as applicable.

- I.** A pipeline is not liable under R20-2-761 if it follows all of the procedures in this Section.

Historical Note

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R20-2-754. Downstream Blending Exceptions for Transmix

- A. Pipelines may blend transmix into Arizona CBG or AZRBOB at a rate not to exceed 1/4 of 1% by volume. Each pipeline shall document the transmix blending (recording each batch and volume of transmix blended) and maintain the records at the terminal for 2 years from the date of blending.
- B. One of 2 methods shall be used to measure the transmix as it is blended into the product stream:
 - 1. Meters, calibrated at least twice each year; or
 - 2. Tank gauge as per API Manual of Petroleum Measurement Standards, Chapters 3.1A (1st edition, December 1994) and 3.1B (1st edition, April 1992), incorporated by reference and on file with the Department and the Office of the Secretary of State. A copy may also be obtained at American Petroleum Institute, 1220 L St., N.W., Washington, D.C. 20045-4070. This incorporation by reference contains no future editions or amendments.

Historical Note

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rules (Supp. 97-3). The exempt rules expired when the Section was permanently adopted with changes (Supp. 98-3).

R20-2-755. Additional Requirements for AZRBOB and Downstream Oxygenate Blending

A. Application of Arizona CBG standards to AZRBOB.

1. Determining whether AZRBOB complies with Arizona CBG standards.

a. If a registered supplier designates a final blend as AZRBOB and complies with the provisions of this Section, the fuel properties and performance standards of the final blend for purposes of compliance with Tables 1 or 2 are determined by adding the specified type and amount of oxygenate to a representative sample of the AZRBOB and determining the fuel properties and performance standards of the resulting gasoline according to the test methods in R20-2-759. If the registered supplier designates a range of amounts of oxygenate or more than 1 oxygenate type to be added to the AZRBOB, the minimum designated amount of the oxygenate having the smallest designated volume shall be added to the AZRBOB to determine the fuel properties and performance standards of the final blend. If a registered supplier does not comply with this subsection, compliance of the final blend with applicable fuel property standards, excluding requirements for RVP, shall be determined without adding oxygenate to the AZRBOB.

b. In determining whether AZRBOB complies with the Arizona CBG standards, the oxygenate added shall be representative of the oxygenate the registered supplier reasonably expects will be subsequently added to the final blend.

2. Calculating the volume of a final blend of AZRBOB. If a registered supplier designates a final blend as AZRBOB and complies this Section, the volume of a final blend is calculated for compliance purposes under R20-2-751 by adding the minimum designated amount of the oxygenate having the smallest volume designated by the registered supplier. If a registered supplier fails to comply with this subsection, the volume of the final blend for purposes of compliance with applicable fuel property standards shall be calculated without adding the amount of oxygenate to the AZRBOB.

B. Restrictions on transferring AZRBOB.

1. A person shall not transfer ownership or custody of AZRBOB to any other person unless the transferee notifies the transferor in writing that:

a. The transferee is a registered oxygenate blender and will add oxygenate of the types and amount (or within the range of amounts) designated in R20-2-757 before the AZRBOB is transferred from a final distribution facility, or

b. The transferee will take all reasonably prudent steps necessary to ensure that the AZRBOB is transferred to a registered oxygen blender who adds the type and amount (or within the range of amounts) of oxygenate designated in R20-2-757 to the AZRBOB before the AZRBOB is transferred from a final distribution facility.

2. A person shall not sell or supply AZRBOB from a final distribution facility if the type and amount or range of amounts of oxygenate designated in R20-2-757 have not been added to the AZRBOB.

Restrictions on blending AZRBOB with other products. A person shall not combine any AZRBOB supplied from the facility

at which it is produced or imported with any other AZRBOB, gasoline, blendstock, or oxygenate, except for:

1. Oxygenate of the type and amount (or within the range of amounts) specified by the registered supplier at the time the AZRBOB is supplied from the production or import facility, or

2. Other AZRBOB for which the same oxygenate type and amount (or range of amounts) is specified by the registered supplier at the time the AZRBOB is supplied from the production or import facility.

D. Quality Assurance Sampling and Testing requirements for a registered supplier supplying AZRBOB from a production or import facility. A registered supplier supplying AZRBOB from a production or import facility shall conduct a quality assurance sampling and testing program that meets the requirements of 40 CFR 80.69(a)(7), as it existed on July 1, 1996, except:

1. 40 CFR 80.69(a)(7). The word "RBOB" is changed to read "AZRBOB";

2. 40 CFR 80.69(a)(7). "...using the methodology specified in § 80.46..." is changed to read "...using the methodology specified in R20-2-759..."; and

3. 40 CFR 80.69(a)(7)(ii). "(within the correlation ranges specified in § 80.65(e)(2)(i))" is changed to read "(within the ranges of the applicable test methods)". 40 CFR 80.69(a)(7), as it existed on July 1, 1996, 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. A copy may be obtained at: U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328.

E. Requirements for oxygenate blenders.

1. Requirement to add oxygenate to AZRBOB. If an oxygenate blender receives AZRBOB from a transferor to whom the oxygenate blender has represented that oxygenate will be added to the AZRBOB, the oxygenate blender shall add to the AZRBOB oxygenate of the types and amount (or within the range of amounts) identified in the documentation accompanying the AZRBOB.

2. Additional requirements for oxygenate blending at terminals: An oxygenate blender who makes a final blend of Arizona CBG by blending an oxygenate with any AZRBOB in a motor fuel storage tank, other than a truck used for delivering motor fuel to retail outlets or bulk purchaser-consumer facilities, shall determine the oxygen content and volume of the Arizona CBG before shipping, by collecting and analyzing a representative sample, using the methodology in R20-2-759.

3. Additional requirements for oxygenate blending in trucks. An oxygenate blender who blends AZRBOB in a motor fuel delivery truck shall conduct quality assurance sampling and testing that meets the requirements in 40 CFR 80.69(e)(2), as it existed on July 1, 1996, except:

a. 40 CFR 80.69(e)(2). The word "RBOB" is changed to read "AZRBOB";

b. 40 CFR 80.69(e)(2)(iv). "... using the testing methodology specified at § 80.46 ..." is changed to read "... using the testing methodology specified in R20-2-759..."; and

c. 40 CFR 80.69(e)(2)(v). "(within the ranges specified in § 80.70(b)(2)(I),)" is changed to read "(within the ranges of the applicable test methods)". 40 CFR 80.69(e)(2), as it existed on July 1, 1996, is incorporated by reference and on file with the Department and the Office of the Secretary of State. This incor-

poration by reference contains no future editions or amendments. A copy may be obtained at: U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328.

4. Additional requirements for in-line oxygenate blending in pipelines using computer-controlled blending.
 - a. An oxygenate blender who produces Arizona CBG by blending oxygenate with AZRBOB into a pipeline using computer-controlled in-line blending shall, for each batch of Arizona CBG produced:
 - i. Obtain a flow proportional composite sample after the addition of oxygenate and before combining the resulting Arizona CBG with any other Arizona CBG;
 - ii. Determine the oxygen content of the Arizona CBG by analyzing the composite sample within 24 hours of blending using the methodology in R20-2-759; and
 - iii. Determine the volume.
 - b. If the test results for the Arizona CBG indicate that it does not contain the specified type and amount of oxygenate within the ranges of the applicable test methods the oxygenate blender shall:
 - i. Notify the pipeline to downgrade the Arizona CBG to conventional gasoline or transmix upon arrival in Arizona;
 - ii. Begin an investigation to determine the cause of the noncompliance;
 - iii. Collect spot samples every 2 hours during each in-line blend of AZRBOB and oxygenate, and analyze the samples with 12 hours of collection, until the cause of the noncompliance is determined and corrected; and
 - iv. Notify the Director in writing within 1 business day that the Arizona CBG does not comply with the requirements of this Article.

The oxygenate blender shall comply with this subsection until the Director approves the corrective action taken under subsection (iii).

5. Recordkeeping and Records Retention.
 - a. An oxygenate blender shall maintain, for 5 years from the date of each sampling, records of the following:
 - i. Sample date,
 - ii. Identity of blend or product sampled,
 - iii. Container or other vessel sampled,
 - iv. The final blend or shipment volume, and
 - v. The oxygen content as determined under R20-2-759.
 - b. Arizona CBG blended by an oxygenate blender that is not tested as required by this Section shall be deemed to have an oxygen content exceeding the standards specified in R20-2-751, or exceeding the comparable PM averaging limits, if applicable, unless the oxygenate blender demonstrates to the Director that the Arizona CBG meets the standards in R20-2-751.
 - c. Within 20 days of the Director's written request, an oxygenate blender shall provide any records maintained by the oxygenate blender under R20-2-755. If an oxygenate blender fails to provide records for a blend or shipment of Arizona CBG under this Section, the final blend or shipment of Arizona CBG shall be deemed in violation of R20-2-751, or deemed to exceed the comparable PM averaging

limits if applicable, unless the oxygenate blender demonstrates to the Director that the Arizona CBG meets the standards and limits under R20-2-751.

6. Notification requirement. An oxygenate blender shall notify the Director by facsimile prior to the beginning of transport of Arizona CBG or AZRBOB into the CBG covered area by a means other than a pipeline.
7. Quality Assurance and Quality Control (QA/QC) Program. An oxygenate blender conducting laboratory sampling and analysis under subsection (E) in the oxygenate blender's own laboratory shall develop a QA/QC program to demonstrate the accuracy and effectiveness of the oxygenate blender's laboratory testing of Arizona CBG or AZRBOB. The blender shall submit the QA/QC program to the Director for approval at least 3 months before transport of Arizona CBG. Instead of a QA/QC program, an oxygenate blender may opt to comply with the independent testing requirements of R20-2-752 (F), except that, for sampling and analysis conducted under subsection (E)(3), the minimum number of samples collected and analyzed by the independent laboratory shall be 10% of the number of samples required to be analyzed under subsection (E)(3).
8. An oxygenate blender not conducting laboratory sampling and analysis required under subsection (E) in its own laboratory shall designate an independent laboratory, as required in R20-2-752(F), to conduct all of the laboratory sampling and analysis required under subsection (E).
9. Within 24 hours of the Director or designee's written request, an oxygenate blender shall submit a portion of any sample collected under subsections (7) or (8).

Historical Note

Adopted effective under an exemption from the provisions of A.R.S. Title 41, Chapter 6, with an interim effective date of September 12, 1997 (Supp. 97-3). Interim adoption expired and was automatically repealed on the date the permanent rules became effective pursuant to Laws 1997, Ch. 117; Section permanently adopted with changes October 1, 1998; filed in the Office of the Secretary of State September 9, 1998 (Supp. 98-3). Amended by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3).

Editor's Note: The following Section was adopted under an exemption from the provisions of A.R.S. Title 41, Chapter 6, pursuant to Laws 1997, Chapter 117, § 3. Exemption from A.R.S. Title 41, Chapter 6 means the Department did not submit these rules to the Governor's Regulatory Review Council for review and approval. Although exempt from certain provisions of the Administrative Procedure Act, the Department was required to publish these rules in the Arizona Administrative Register and provide reasonable notice and at least 1 public hearing on the rules (Supp. 97-3). The exempt rules expired when the Section was permanently adopted with changes (Supp. 98-3).

R20-2-756. Downstream Blending of Arizona CBG with Nonoxygenate Blendstocks

- A. A person shall not combine Arizona CBG supplied from a production or import facility with any nonoxygenate blendstock, other than vapor recovery condensate, unless the person demonstrates to the Director:
 - 1. The blendstock added to the Arizona CBG meets all of the Arizona CBG standards regardless of the fuel properties and performance standards of the Arizona CBG to which the blendstock is added; and
 - 2. The person meets the requirements in this Article applicable to producers of Arizona CBG.
- B. Notwithstanding subsection (A), a person may add nonoxygenate blendstock to a previously certified batch or mixture of certified batches of Arizona CBG that does not comply with 1 or more of the applicable per-gallon standards contained in R20-2-751(A) or (B) if the person obtains prior written approval from the Director based on a demonstration that adding the blendstock will bring the previously certified Arizona CBG into compliance with the applicable per-gallon standards for Arizona CBG. The oxygenate blender or registered supplier shall certify the re-blended Arizona CBG to the Department.

Historical Note

Adopted effective under an exemption from the provisions of A.R.S. Title 41, Chapter 6, with an interim effective date of September 12, 1997 (Supp. 97-3). Interim adoption expired and was automatically repealed on the date the permanent rules became effective pursuant to Laws 1997, Ch. 117; Section permanently adopted with changes October 1, 1998; filed in the Office of the Secretary of State September 9, 1998 (Supp. 98-3). Amended by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3).

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R20-2-757. Product Transfer Documentation; Records Retention

- A. If a person transfers custody or title to any Arizona CBG or AZRBOB, other than when Arizona CBG is sold or dispensed at a service station or fleet vehicle fueling facility, the transferor shall provide to the transferee documents that include the following:
 - 1. The name and address of the transferor;
 - 2. The name and address of the transferee;
 - 3. The volume of Arizona CBG or AZRBOB being transferred;
 - 4. The location of the Arizona CBG or AZRBOB at the time of the transfer;
 - 5. The date of the transfer;
 - 6. Product transfer document number;
 - 7. Identification of the gasoline as Arizona CBG or AZRBOB;
 - 8. The minimum octane rating;
 - 9. The applicable Federal Complex Model VOC and NOx reduction percentage standards contained in R20-2-751(A) to which the Arizona CBG or AZRBOB conforms;
 - 10. For oxygenated Arizona CBG designated for sale for use in motor vehicles from November 1 through March 31, the type and minimum quantity of oxygenate contained in the Arizona CBG; and
 - 11. In the case of AZRBOB for which oxygenate blending is intended:
 - a. Identification of the fuel as AZRBOB, and a statement that the "AZRBOB does not comply with the

- standards for Arizona CBG without the addition of oxygenate";
 - b. The designation of the AZRBOB as suitable for blending with:
 - i. Any oxygenate;
 - ii. Ether only; or
 - iii. A specified oxygenate type or types and amount or amounts;
 - c. The oxygenate type or types and amount or amounts that the AZRBOB requires to meet the fuel properties or performance standards claimed by the registered supplier of the AZRBOB, and the applicable volume percent oxygenate and weight percent oxygen content specifications; and
 - d. Instructions to the transferee that the AZRBOB may not be combined with any other AZRBOB unless it has the same requirements for oxygenate type or types and amount or amounts.
- B. A registered supplier, 3rd-party terminal, or pipeline may comply with subsection (A) by using standardized product codes on pipeline tickets if the codes are specified in a manual distributed by the pipeline to transferees of the Arizona CBG or AZRBOB, and the manual sets forth all required information for the Arizona CBG or AZRBOB.
 - C. Any transferee in subsection (A), other than a registered supplier, oxygenate blender, 3rd-party terminal, pipeline, service station operator, or fleet owner shall retain product transfer documents for each shipment of Arizona CBG or AZRBOB transferred during the 24-month period preceding the most recent transfer or delivery. The transferee shall maintain transfer or delivery documents for the 30-day period preceding the most recent transfer or delivery at the business address listed on the product transfer document. The transferee may retain all remaining transfer or delivery documents for the preceding 24 months elsewhere but shall make them available to the Director within 2 working days from the time of request by the Director or designee.
 - D. A service station operator or fleet owner shall retain product transfer documents for each shipment of Arizona CBG delivered during the 12 months preceding that shipment. The documentation for the 3 most recent deliveries shall be maintained on the service station or fleet owners' premises. A service station operator or fleet owner may maintain documentation for the remainder of all deliveries for the 12-month period elsewhere but shall make it available to the Director within 2 working days from the time of request by the Director.
 - E. A registered supplier, oxygenate blender, 3rd-party terminal, or pipeline shall retain product transfer documents for each shipment of Arizona CBG or AZRBOB transferred during the 60-month period preceding the most recent transfer or delivery. Transfer or delivery documents made during the 30-day period preceding the most recent transfer or delivery shall be maintained at the business address listed on the product transfer document. Documents for the remainder of all transfers or deliveries for the preceding 60 months shall be available within 2 working days from the time of request by the Director or designee.
 - F. Upon request by the Director or designee, a person shall present product transfer documents to the Department. Legible photocopies shall be acceptable.

Historical Note

Adopted effective under an exemption from the provisions of A.R.S. Title 41, Chapter 6, with an interim effective date of September 12, 1997 (Supp. 97-3). Interim adoption expired and was automatically repealed on the date the permanent rules became effective pursuant to

Laws 1997, Ch. 117; Section permanently adopted with changes October 1, 1998; filed in the Office of the Secretary of State September 9, 1998 (Supp. 98-3). Amended by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3).

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R20-2-758. Adoption of Fuel Certification Models

The following documents are 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.

1. The California Predictive Model (PM), California Air Resources Board's "California Procedures for Evaluating Alternative Specification for Phase 2 Reformulated Gasoline Using the California Predictive Model", as adopted April 20, 1995 (Predictive Model Procedures). A copy may be obtained at: California Air Resources Board, P.O. Box 2815, Sacramento, CA 95812.
2. The Federal Complex Model as contained in 40 CFR 80.45, January 1, 1999. A copy may be obtained at: U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328.

Historical Note

Adopted effective under an exemption from the provisions of A.R.S. Title 41, Chapter 6, with an interim effective date of September 12, 1997 (Supp. 97-3). Interim adoption expired and was automatically repealed on the date the permanent rules became effective pursuant to Laws 1997, Ch. 117; Section permanently adopted with changes October 1, 1998; filed in the Office of the Secretary of State September 9, 1998 (Supp. 98-3). Amended by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3).

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R20-2-759. Testing Methodologies

- A. Except as provided in subsections (C) and (D), a person certifying Arizona CBG or AZRBOB as meeting standards under Table 1 shall test the fuel with the methods under 13 California Code of Regulations, Section 2263, incorporated by reference as of January 1, 1997 and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments. A copy may be obtained at: California Air Resources Board, P.O. Box 2815, Sacramento, CA 95812.
- B. Except as provided in subsection (C), a person certifying Arizona CBG or AZRBOB as meeting standards under Table 2 shall test the fuel with methods under 13 California Code of Regulations, Section 2263, as incorporated by reference in subsection (A).
- C. A registered supplier, oxygenate blender, or 3rd-party terminal certifying Arizona CBG or AZRBOB before transport to the CBG covered area shall measure oxygenate using ASTM D4815-94a procedures and RVP using ASTM D4814-99 standards. For Arizona CBG located in the CBG covered area, oxygenate shall be measured using ASTM D4815-94a, and RVP shall be measured using ASTM D5191-99. ASTM D4814-99, ASTM D4815-94a and ASTM D5191-99 are 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. Copies may be obtained at American Society for Testing and Materials, 100 Bar Harbor Drive, West Conshohocken, PA 19428-2959.
- D. Except as required in subsection (C), a registered supplier of Arizona CBG or AZRBOB may certify Type 1 Arizona CBG produced or imported at any facility using the federal test methods contained in 40 CFR 80.46 (a) through (g), incorporated by reference as of July 1, 1996, provided these are the only test methods used by that registered supplier to certify Arizona CBG or AZRBOB at that facility. 40 CFR 80.46(a) through (g) is on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments. A copy may be obtained at: U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328.

Historical Note

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R20-2-760. Compliance Surveys

- A. A registered supplier who elects to certify that Arizona CBG or AZRBOB meets any averaging standard under R20-2-751 shall conduct compliance surveys in accordance with a survey program plan approved by the Director. The Director shall approve a survey program plan if it:
1. Consists of 4 VOC and NOx surveys during the period May 1 through September 15 of each year; and
 2. Complies with subsection (C).
- B. If a registered supplier fails to conduct an approved survey program, the Director shall issue an order requiring compliance with all applicable standards on a per-gallon basis for at least 6 months, extending through the end of the survey period identified in subsection (A)(1) and ending after the 6-month period. The requirement for compliance with per-gallon standards applies from the beginning of the survey period during which the failure occurs, regardless of when the failure to survey occurs during that period.
- C. General survey requirements.
1. A survey shall consist of all samples collected under the applicable survey design during any consecutive 7-day period and that are not excluded under subsection (C)(4).
 2. A survey shall be representative of all Arizona CBG being dispensed in the CBG covered area as provided in subsection (F).
 3. Each sample included in a survey shall be analyzed for oxygenate type and content, olefins, sulfur, aromatic hydrocarbons, E200, E300, and RVP according to the methodologies specified in R20-2-759. RVP shall be analyzed during the time period of May 1 through September 15.
 4. The results of each survey shall be based upon the results of the analysis of each sample collected during the course of the survey, unless a sample does not comply with the applicable per gallon maximum or minimum standards for the fuel property being evaluated in addition to any reproducibility that applies to the fuel property.
 5. A survey sample that does not comply with R20-2-751, or that constitutes evidence of noncompliance with a standard or requirement under this Article, may be used by the Director in an enforcement action.
 6. Each laboratory that analyzes survey samples shall participate in a correlation program with the Director to ensure the validity of analysis results.
- D. The results of each VOC and NOx survey shall be determined as follows:
1. For each sample from the survey, the VOC and NOx emissions reduction percentage is determined based upon the tested fuel properties for that sample using the applicable methodology for calculating VOC and NOx emissions reductions at 40 CFR 80.45, as incorporated by reference in R20-2-758;
 2. The CBG covered area fails the VOC survey if the VOC emissions reduction percentage average of all samples collected during that survey is less than the per-gallon standard for VOC emissions reduction percentage in Table 1, column A.
 3. The CBG covered area fails the NOx survey if the NOx emissions reduction percentage average of all samples collected during that survey is less than the per-gallon standard for NOx emissions reduction percentage in Table 1, column A.
- E. The results of each NOx survey series shall be determined as follows:
1. For each sample from a survey series, the NOx emissions reduction percentage is determined based upon the tested fuel properties for that sample using the applicable methodology for calculating NOx emissions reduction under 40 CFR 80.45 as incorporated by reference in R20-2-758; and
 2. The CBG covered area fails the NOx survey series if the NOx emissions reduction percentage average for all survey samples collected during that survey series is less than the Federal Complex Model per-gallon standard for the NOx emissions reduction percentage in Table 1, column A.
- F. Each survey program shall:
1. Be designed and conducted by a person independent of the registered supplier (the surveyor). To be considered independent:
 - a. The surveyor shall not be an employee of any registered supplier;
 - b. The surveyor shall not have any obligation to or interest in any registered supplier; and
 - c. The registered supplier shall not have any obligation to or interest in the surveyor.
 2. Be designed to include enough samples to ensure that the average levels of oxygen, RVP, aromatic hydrocarbons, olefins, T50, T90, and sulfur are determined with a 95% confidence level, with error of less than 0.1 psi for RVP, 0.1% for oxygen (by weight), 0.5% for aromatic hydrocarbons (by volume), 0.5% for olefins (by volume), 5°F for T50 and T90, and 10 ppm for sulfur;
 3. Require that the surveyor:
 - a. Except as provided in subsection (G), not inform anyone, in advance, of the date or location of any survey;
 - b. Upon request of the Director, provide a duplicate of any sample taken during the survey within 30 days following submission of the survey report:
 - i. To a location specified by the Director;
 - ii. Identified by the name and address of the facility where the sample was collected; and
 - iii. Showing the date of collection.
 - c. Permit a Department official at any time to monitor the conduct of the survey, including sample collection, transportation, storage, and analysis.
 4. Require the surveyor to submit a report of each survey, within 30 days following completion of the survey, to the Director. The report shall include:
 - a. The name of the person conducting the survey;
 - b. An attestation by an officer of the surveying company that the survey was conducted according to the survey program plan and the survey results are accurate;
 - c. If the survey was conducted for 1 registered supplier, the identification of that supplier;
 - d. The identification of the area from which gasoline samples were selected;
 - e. The dates on which the survey was conducted;
 - f. The address of each facility at which a gasoline sample was collected, and the date of collection;
 - g. The results of the analyses of samples for oxygenate type and oxygen weight percent, aromatic hydrocarbon, and olefin content, E200, E300, and RVP, the calculated VOC or NOx emissions reduction percentage, as applicable, for each survey conducted during the period identified in subsection (A)(1);
 - h. The name and address of each laboratory where gasoline samples were analyzed;
 - i. A description of the methodology used to select the locations for sample collection and the numbers of samples collected;
 - j. For any samples that were excluded from the survey, a justification for the exclusion; and
 - k. The average VOC and NOx emissions reduction percentage.

- G. Each survey shall be commenced on a date selected by the Director. The Director shall notify the surveyor of the date selected at least 10 business days before the beginning date of the survey.
- H. The procedure for seeking Director approval for a survey program plan is:
 - 1. The person seeking survey program plan approval shall submit the plan to the Director for the Director's approval no later than January 1 to cover the survey period of May 1 through March 31 of each year; and
 - 2. The survey program plan shall be signed by a corporate officer of the registered supplier, or in the case of a comprehensive survey program plan, by an officer of the organization coordinating the survey program.
- I. No later than April 1 of each year, the registered supplier's contract with the surveyor to carry out the entire survey plan for the next summer and winter season shall be in effect, and the registered supplier shall pay an amount of money necessary to carry out the entire survey plan to the surveyor or place the money into an escrow account with instructions to the escrow agent to pay the money over to the surveyor during the course of the conduct of the survey plan. No later than April 15 preceding the period in which a survey will be conducted, the registered supplier shall give the Director a copy of the contract with the surveyor, proof that the money necessary to carry out the plan has either been paid to the surveyor or placed into an escrow account, and if placed into an escrow account, a copy of the escrow agreement.

Historical Note

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1. A person who is otherwise liable under subsection (A) is not liable if that person demonstrates:
 - a. That the violation was not caused by the person or person's employee or agent;
 - b. That product transfer documents account for all of the noncompliant Arizona CBG or AZRBOB and indicate that the Arizona CBG or AZRBOB complied with this Article; and
 - c. That the person had a quality assurance sampling and testing program, as described in subsection (C) in effect at the time of the violation; except that any person who transfers Arizona CBG or AZRBOB, but does not assume title, may rely on the quality assurance program carried out by another person, including the person who owns the noncompliant Arizona CBG or AZRBOB, provided the quality assurance program is properly administered.
2. If a violation is found at a facility that operates under the corporate, trade, or brand name of a registered supplier, that registered supplier must show, in addition to the defense elements in subsection (B)(1), that the violation was caused by:
 - a. A violation of law other than A.R.S. Title 41, Chapter 15, Article 6, this Article, or an act of sabotage or vandalism;
 - b. A violation of a contract obligation imposed by the registered supplier designed to prevent noncompliance, despite periodic compliance sampling and testing by the registered supplier; or
 - c. The action of any person having custody of Arizona CBG or AZRBOB not subject to a contract with the registered supplier but engaged by the registered supplier for transportation of Arizona CBG or AZRBOB, despite specification or inspection of procedures and equipment by the registered supplier designed to prevent violations.
3. To show that the violation was caused by any of the actions in subsection (B)(2), the person must demonstrate by reasonably specific showings, by direct or circumstantial evidence, that the violation was caused or must have been caused by another person.
- C. Quality assurance sampling and testing program. To demonstrate an acceptable quality assurance program for Arizona CBG or AZRBOB, at all points in the gasoline distribution network, other than at a service station or fleet owner facility, a person shall present evidence:
 1. Of a periodic sampling and testing program to determine compliance with the maximum or minimum standards in R20-2-751; and
 2. That each time Arizona CBG or AZRBOB is noncompliant with 1 of the requirements in R20-2-751:
 - a. The person immediately ceases selling, offering for sale, dispensing, supplying, offering for supply, storing, transporting, or causing the transportation of the noncompliant Arizona CBG or AZRBOB; and
 - b. The person remedies the violation as soon as practicable.

Historical Note

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by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3).

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R20-2-761. Liability for Noncompliant Arizona CBG or AZRBOB

- A. Persons liable. If motor fuel designated as Arizona CBG or AZRBOB does not comply with R20-2-751, the following are liable for the violation:
 1. Each person who owns, leases, operates, controls, or supervises a facility where the noncompliant Arizona CBG or AZRBOB is found;
 2. Each registered supplier whose corporate, trade, or brand name, or whose marketing subsidiary's corporate, trade, or brand name, appears at a facility where the noncompliant Arizona CBG or AZRBOB is found; and
 3. Each person who manufactured, imported, sold, offered for sale, dispensed, supplied, offered for supply, stored, transported, or caused the transportation of any gasoline in a storage tank containing Arizona CBG or AZRBOB found to be noncompliant.
- B. Defenses.

Editor's Note: The following Section was adopted under an exemption from the provisions of A.R.S. Title 41, Chapter 6, pursuant to Laws 1997, Chapter 117, § 3. Exemption from A.R.S. Title 41, Chapter 6 means the Department did not submit these rules to the Governor's Regulatory Review Council for review and approval. Although exempt from certain provisions of the Administrative Procedure Act, the Department was required to publish these rules in the Arizona Administrative Register and provide reasonable notice and at least 1 public hearing on the rules (Supp. 97-3). The exempt rules expired when the Section was permanently adopted with changes (Supp. 98-3).

R20-2-762. Penalties

Any person who violates any provision of this Article is subject to the following:

1. Prosecution for a Class 2 misdemeanor under A.R.S. § 41-2113(B)(4);
2. Civil penalties in the amount of \$500 per violation under A.R.S. § 41-2115; and
3. Stop-use, stop-sale, hold, and removal orders under A.R.S. § 41-2066(A)(2).

Historical Note

Adopted effective under an exemption from the provisions of A.R.S. Title 41, Chapter 6, with an interim effective date of September 12, 1997 (Supp. 97-3). Interim adoption expired and was automatically repealed on the date the permanent rules became effective pursuant to Laws 1997, Ch. 117; Section permanently adopted with changes October 1, 1998; filed in the Office of the Secretary of State September 9, 1998 (Supp. 98-3). Amended by final rulemaking at 5 A.A.R. 4214, effective September 22, 1999 (Supp. 99-3).

9/21/09

ARTICLE 9. GASOLINE VAPOR CONTROL

R20-2-901. Material Incorporated by Reference

The following documents are incorporated by reference and on file with the Department. The documents incorporated by reference contain no later amendments or editions:

1. Appendix J.5 of Technical Guidance -- Stage II Vapor Recovery Systems for Control of Vehicle Refueling Emissions at Gasoline Dispensing Facilities, Vol. II: Appendices, November 1991 edition (EPA-450/3-91-022b), published by the U.S. Environmental Protection Agency, Office of Air Quality, Planning and Standards, Research Triangle Park, North Carolina 27711.
2. *San Diego County Air Pollution Control District Test Procedure TP-96-1*, March 1996, Third Revision, Air Pollution Control District, 9150 Chesapeake Drive, San Diego, CA 92123-1096.
3. The following CARB test procedures:
 - a. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.A, Determination of Dynamic Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, April 12, 1996 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
 - b. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.S, Determination (by Volume Meter) of Air to Liquid Volume Ratio of Vapor Recovery Systems of Dispensing Facilities, April 12, 1996 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
 - c. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.2C, Determination of Spillage of Phase II Vapor Recovery Systems of Dispensing Facilities, April 12, 1996 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
 - d. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.6, Determination of Liquid Removal of Phase II Vapor Recovery Systems of Dispensing Facilities, April 12, 1996 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
 - e. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.2B, Determination of Flow Versus Pressure for Equipment in Phase II Vapor Recovery Systems of Dispensing Facilities, April 12, 1996 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.

Historical Note

Emergency rule adopted effective November 23, 1992, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 92-4). Emergency rule adopted again effective

February 22, 1993 (Supp. 93-1). Emergency expired. Emergency rule adopted again effective June 1, 1993 (Supp. 93-1). Permanent rule adopted with changes effective August 31, 1993 (Supp. 93-3). R20-2-901 recodified from R4-31-901 (Supp. 93-1). Section R20-2-901 repealed; new Section R20-2-901 renumbered from R20-2-902 and amended effective October 8, 1998 (Supp. 98-4). Amended by final rulemaking at 10 A.A.R. 1690, effective June 5, 2004 (Supp. 04-2).

9/21/09

R20-2-902. Exemptions

- A. To obtain an exemption from this Article, a person shall submit a written request to the Department and attest that gasoline throughput at the gasoline dispensing site is not in excess of that specified in A.R.S. § 41-2132(C). By the 15th of each month, beginning the month after the Department approves the exemption, the person shall submit a written throughput report to the Department. If a person does not timely file a monthly throughput report or if a monthly throughput report reflects that the exemption limit is exceeded, the Department deems the exemption void.
- B. To obtain an independent small business marketer exemption, a person shall derive at least 50 percent of the person's annual income from the sale of gasoline at each gasoline dispensing site for which an exemption is requested. The person shall submit a written request for exemption to the Department. The Department shall determine the percentage of total annual income represented by the sale of gasoline on the basis of the person's state and federal gross income for the preceding year for income tax purposes. The following items are excluded from income computations:
 - 1. Purchase and sale of diesel fuel, and
 - 2. State lottery sales net commissions and incentives.
- C. Motor raceways, motor vehicle proving grounds, and marine and aircraft fueling facilities are exempt from stage II vapor recovery requirements.

Historical Note

Emergency rule adopted effective November 23, 1992, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 92-4). Emergency rule adopted again effective February 22, 1993 (Supp. 93-1). Emergency expired. Emergency rule adopted again effective June 1, 1993 (Supp. 93-1). Permanent rule adopted with changes effective August 31, 1993 (Supp. 93-3). R20-2-902 recodified from R4-31-902 (Supp. 95-1). R20-2-902 renumbered to R20-2-901; new Section R20-2-902 renumbered from R20-2-903 and amended effective October 8, 1998 (Supp. 98-4). Amended by final rulemaking at 10 A.A.R. 1690, effective June 5, 2004 (Supp. 04-2).

9/21/09

R20-2-903. Equipment and Installation

- A. The Department shall reject a vapor recovery system or component from future installation if:
1. Federal regulations prohibit its use;
 2. The vapor recovery system or component does not meet the manufacturer's specifications as certified by CARB using test methods approved in R20-2-901; or
 3. The vapor recovery system or component fails greater than 20% of Department inspections for that system or component or the Department receives equivalent failure results from a vapor recovery registered service agency or from another jurisdiction's vapor recovery program, and the Department provides at least 30 days public notice of its proposed rejection.
- B. The piping of both a stage I and stage II vapor recovery system shall be designed and constructed as certified by CARB for that specific vapor recovery system. A person shall not alter a stage I and stage II vapor recovery system or component from the CARB-certified configuration without obtaining Department approval under R20-2-904.
- C. If Department inspection or test data reveal a deficiency in a fitting, assembly, or component that cannot be permanently corrected, the deficient fitting, assembly, or component shall not be used in Arizona.
- D. A stage I spill containment may have a plugged drain rather than a drain valve if a hand-operated pump is kept onsite for draining entrapped liquid. A stage II vapor recovery system shall have pressure/vacuum (P/V) threaded valves on top of the vent lines for gasoline storage tanks.

Historical Note

Emergency rule adopted effective November 23, 1992, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 92-4). Emergency rule adopted again effective February 22, 1993 (Supp. 93-1). Emergency expired. Emergency rule adopted again effective June 1, 1993 (Supp. 93-1). Permanent rule adopted with changes effective August 31, 1993 (Supp. 93-3). R20-2-903 recodified from R4-31-903 (Supp. 95-1). R20-2-903 renumbered to R20-2-902; new Section R20-2-903 renumbered from R20-2-904 and amended effective October 8, 1998 (Supp. 98-4). Amended by final rulemaking at 10 A.A.R. 1690, effective June 5, 2004 (Supp. 04-2).

9/21/09

R20-2-904. Application Requirements and Process for Authority to Construct Plan Approval

- A. A person shall not begin to construct a site requiring a vapor recovery system or to make a major modification of an existing vapor recovery system or component before obtaining approval of an authority to construct plan application. A major modification is:
1. Adding or replacing a gasoline storage tank that is equipped with a Department approved stage II vapor recovery system;
 2. Adding or replacing underground piping, vapor piping within a dispenser, or a dispenser at an existing vapor recovery site unless the dispenser replacement is necessary due to unforeseen damage to the existing dispenser; or
 3. Replacing a Department-approved stage II vapor recovery system of one certified configuration with an approved stage II vapor recovery system of a different certified configuration.
- B. A person shall file with the Department a written change order to an authority to construct plan approval on a form provided by the Department if a modification of the approved vapor recovery system or component is needed after the Department issues an authority to construct plan approval. The person shall not make any modification until the Department approves the change order.
- C. To obtain an authority to construct plan approval, a person shall submit to the Department, on a form provided by the Department, the following:
1. The name, address, and phone number of any owner, operator, and proposed contractor, if known;
 2. The name of the stage I or stage II vapor recovery system or component to be installed along with the CARB certification for that system or component;
 3. The street address of the site where construction or major modification will take place with an estimated timetable for construction or modification;
 4. A copy of a blueprint or scaled site plan for the vapor recovery system or component including all equipment and piping detail; and
 5. An application fee.
- D. After review and approval of the authority to construct plan, the Department shall issue the authority to construct plan approval and mail the plan approval to the address indicated on the application.
1. A copy of the authority to construct plan approval shall be maintained at the facility during construction so that it is accessible for Department review.
 2. Construction of a stage II vapor recovery system or component at a site not having an approved authority to construct plan, shall be stopped and no further installation work shall be done until an authority to construct plan approval is obtained.
 3. An authority to construct plan approval is not transferable.
- E. The Department shall deny an authority to construct plan for any of the following reasons:
1. Providing incomplete, false, or misleading information; or
 2. Failing to meet the requirements stated in this Chapter.
- F. If excavation is involved, the Department may visually inspect the stage II underground piping of a gasoline dispensing site before the pipeline is buried, for compliance with the authority to construct plan approval. A person who owns or operates a vapor recovery system or component shall give the Department notice by facsimile at least two business days before the underground piping is complete. The Department shall require the owner or operator to excavate all piping not inspected before burial if the owner or operator does not give the required two business days' notice.

- G. After construction is complete, a person who has a valid authority to construct plan approval may dispense gasoline for up to 90 days before final approval, if an initial inspection is scheduled according to R20-2-905.
- H. An authority to construct plan approval expires one year from the date of issue or the completion of construction, whichever is sooner.

Historical Note

Emergency rule adopted effective November 23, 1992, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 92-4). Emergency rule adopted again effective February 22, 1993 (Supp. 93-1). Emergency expired. Emergency rule adopted again effective June 1, 1993 (Supp. 93-1). Permanent rule adopted effective August 31, 1993 (Supp. 93-3). R20-2-904 recodified from R4-31-904 (Supp. 93-1). R20-2-904 renumbered to R20-2-903; new Section R20-2-904 renumbered from R20-2-905 and amended effective October 8, 1998 (Supp. 98-4). Amended by final rulemaking at 10 A.A.R. 1690, effective June 5, 2004 (Supp. 04-2).

9/21/09

R20-2-905. Initial Inspection and Testing

- A. Within 10 days after beginning the dispensing of gasoline at a site that requires an authority to construct plan approval, a person shall provide the Department with a written certification of completion by the contractor and schedule an inspection that includes tests and acceptance criteria specified in the authority to construct plan approval. The inspection shall be witnessed by the Department at a time approved by the Department and include any of the following relevant to the specific vapor recovery system installed:
1. A dynamic pressure performance test from each dispenser for each product grade to its associated underground storage tank;
 2. A pressure decay test for each vapor control system including nozzles, underground storage tanks, and tank vents. This test shall be performed with caps removed from stage I fill and vapor risers. If the pressure decay test in R20-2-901(1) is used, the Department shall fail the vapor recovery system if gasoline storage tanks have less than 10 percent or greater than 60 percent vapor space. If the pressure decay test in R20-2-901(2) is used, the Department shall fail the vapor recovery system if gasoline storage tanks have less than 15 percent or more than 30,000 gallons vapor space. The Department shall compute combined tank vapor space for manifolded systems;
 3. Communication from dispenser to tanks for each product, using the San Diego TP-96-1 and CARB TP-201.4 test procedures;
 4. Air to liquid volume ratio by volume meter of a vapor recovery system, using CARB TP-201.5 or CARB-endorsed equivalent procedures to determine air to liquid (A/L) ratios;
 5. Spillage of a stage II vapor recovery system, using the CARB TP-201.2C procedure;
 6. Liquid removal of a stage II vapor recovery system, using the CARB TP-201.6 procedure;
 7. Flow versus pressure for components in a stage II vapor recovery system, using the CARB TP-201.2B procedure; and
 8. Procedures specified by a manufacturer for testing the vapor recovery system.
- B. If there is a difference between a testing contractor's and the Department's test results, the Department's test results prevail.
- C. If a site fails to pass any of the tests required by subsection (A), the affected vapor recovery system or component shall remain out-of-service until the vapor recovery system and component pass all the appropriate tests in subsection (A).
- D. A person who cancels an initial inspection shall notify the Department by calling the Department's designated telephone number at least one hour before the scheduled inspection and shall reschedule the inspection within 10 business days after this notification. The Department shall take enforcement action if a person fails to comply with this Section.
- E. A person shall notify the Department when a vapor recovery system or component is repaired after failing an initial inspection. A registered service representative shall not proceed with a reinspection until the Department approves the reinspection date and time.
- F. If a registered service representative does not start an initial inspection pressure decay test within 30 minutes of the scheduled start time, the Department shall fail the initial inspection of that site.
- G. If a person cancels an initial inspection, the person shall reschedule the inspection within 90 days from the date gasoline was first dispensed.
1. The Department shall take enforcement action if the person fails to timely reschedule the inspection.
 2. The registered service agency shall notify the Department in writing at least 10 business days before the inspection of the time, date, and location of the inspection.
 3. The Department shall notify the registered service agency within five business days, by facsimile or electronic mail, whether it approves the inspection date and time.

Historical Note

Emergency rule adopted effective November 23, 1992, pursuant to A.R.S. § 41-1026, valid for only 90 days

(Supp. 92-4). Emergency rule adopted again effective February 22, 1993 (Supp. 93-1). Emergency expired. Emergency rule adopted again effective June 1, 1993 (Supp. 93-1). Permanent rule adopted with changes effective August 31, 1993 (Supp. 93-3). R20-2-905 recodified from R4-31-905 (Supp. 95-1). R20-2-905 renumbered to R20-2-904; new Section R20-2-905 adopted effective October 8, 1998 (Supp. 98-4). Amended by final rulemaking at 10 A.A.R. 1690, effective June 5, 2004 (Supp. 04-2).

9/21/09

R20-2-907. Operation

- A. The owner or operator of a gasoline dispensing site with stage II vapor recovery shall not transfer or permit the transfer of gasoline into any motor vehicle fuel tank unless stage II vapor recovery equipment is installed, maintained, operating, and being used according to the requirements of A.R.S. Title 41, Chapter 15, Article 7, and this Article.
 - B. The owner or operator shall operate a stage II vapor recovery system and associated components in compliance with the CARB certification for that system and these rules.
 - C. The owner or operator of a gasoline dispensing site with stage II vapor recovery shall inspect the system and its components daily. Daily inspections shall include all nozzles, hoses with connecting hardware, Stage I fittings, and spill containment.
 - D. The owner or operator shall immediately stop using a Stage II vapor recovery system or component if one or more of the following system or component defects occur:
 1. A faceplate or facecone of a balance system nozzle does not make a good seal with a vehicle fill tube, or the accumulated damage to the faceplate or facecone is 1/4 or more of its circumference. These conditions also apply to a vacuum assist system that has a nozzle with a bellows and faceplate that seal with a vehicle fill pipe;
 2. When more than 1/4 of the cone is missing for vapor assist systems having bellowless nozzles with flexible vapor deflecting cones;
 3. A nozzle bellows has a triangular tear measuring 1/2 inch or more to a side, a hole measuring 1/2 inch or more in diameter, or a slit or tear measuring one inch or more in length;
 4. A nozzle bellows is loosely attached to the nozzle body, attached by means other than that approved by the manufacturer, or a vapor check valve is frozen in the open position due to impaired motion of the bellows;
 5. Any nozzle liquid shut-off mechanism malfunctions in any manner, the spring or latching knurl for holding the nozzle in place during vehicle fueling is damaged or missing, or a nozzle is without a functioning hold-open latch;
 6. Any nozzle with a defective vapor check valve, or hose having a disengaged breakaway, when all other nozzles are capable of delivering the same grade of fuel from the same turbine pump;
 7. Any vacuum assist nozzle having less than the acceptable number of open vapor collection holes specified by CARB for the particular model of nozzle in service, the nozzle spout rocks or rotates more than 1/8 inch, the spout shows heavy wear with the tip damaged in a way that the largest axis exceeds .84 inch, or the plastic insert in the tip of the spout is loose;
 8. Any nozzle with a dispensing rate greater than 10 gallons per minute when only one nozzle associated with the product supply pump is operating, or a flow restrictor is improperly installed, leaking, or non-CARB approved;
 9. Any nozzle with a physically damaged breakaway or a breakaway showing evidence of product leakage, or a breakaway not approved for the installed system;
 10. A dispenser mounted vacuum pump that is not functioning;
11. Any vapor recovery hose and, as applicable, the accompanying whip hose, that:
 - a. Is crimped, kinked, flattened, or damaged in any manner that constricts the return flow of vapor;
 - b. For a balance hose, has any slits or tears greater than 1/4 inch in length, perforations greater than 1/8 inch in diameter, or assist system hoses that are cut, torn, or badly worn so as to cause a possible fuel leak;
 - c. Does not fully retract, for approved dispenser configurations using hose retractors, or a balance system hose that exceeds the 10-inch loop requirement where required, or for a hose length that allows a balance hose to touch the ground, or for a vacuum assist hose having more than 6 inches in contact with the ground;
 - d. Does not swivel at the hose/nozzle connection; or
 - e. Does not have a required internal liquid pick-up or the hose with liquid pick-up is improperly assembled for the pick-up to properly function;
 12. Tank vent pipes that are not the proper height, or are not properly capped with approved pressure and vacuum vent valve settings, or where required, vent pipes that do not meet the CARB-specified paint color code for the installed system;
 13. The Stage I installation is not properly installed or maintained, in that:
 - a. Spill containment buckets are cracked, rusted, the sidewalls are not attached or otherwise improperly installed, or spill containment buckets are not clean and empty of liquid, or there are non-functioning drain valves, or drain valves that do not seal;
 - b. A fill adaptor collar or vapor poppet (drybreak) that is loose or damaged, or with a fill or vapor cap that is not installed, is missing, broken, or without gaskets;
 - c. Coaxial Stage I that is not equipped with a functioning CARB-approved poppeted fill tube, or the coaxial cap is not installed, is missing, broken, or without gaskets; or
 - d. A fill tube is missing, not sealed, has holes, broken or damaged overfill preventors, or if the high point of the bottom opening is more than 6 inches above the tank bottom;
 14. The tank rise cap with instrument lead wire for an electronic monitoring system is not tightly installed, or any other tank riser is not securely sealed and capped;
 15. The under-dispenser vapor recovery piping is not securely intact or is crimped, does not slope to the underground vapor pipe riser, hoses used for connection are deteriorated or not approved for use with gasoline, resettable impact type shear valves are closed, or there is any other valve or restriction to impede the vapor path;
 16. An above-ground storage tank that does not display a permanently attached UL approval plaque;
 17. A vacuum assist system with an inoperative central vacuum unit;
 18. A vacuum assist system with an inoperative vapor processing (burner) unit;
 19. A vacuum assist system with a monitoring system certified by CARB or the Authority to Construct that is not operational or malfunctions; or
 20. Any other component identified in the diagrams, exhibits, attachments or other documents that are certified by CARB or required by the Authority to Construct for that system is missing, disconnected, or malfunctioning.

9/21/09

- E. The owner or operator shall also inspect for the presence and proper placement of public information signs required by A.R.S. § 41-2132(F) and this Article.
- F. For a stage II vacuum-assist vapor recovery system, the owner or operator shall immediately place damaged or malfunctioning equipment out of service and shall notify the Department by facsimile no more than one day after the malfunction of a central vacuum or processor unit. Once the equipment or system is repaired, the owner or operator shall provide written notice within five days of the repair to the Department.
- G. Proper operation of the stage I system, pursuant to A.R.S. § 41-2132(D)(4), shall include the requirement to recover vapors during pump-out from a gasoline storage tank to a mobile transporter.
- H. Any underground tank tightness test shall be conducted in a manner so that gasoline vapors are not emitted to the atmosphere.

Historical Note

Emergency rule adopted effective November 23, 1992, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 92-4). Emergency rule adopted again effective February 22, 1993 (Supp. 93-1). Emergency expired. Emergency rule adopted again effective June 1, 1993 (Supp. 93-1). Permanent rule adopted effective August 31, 1993 (Supp. 93-3). R20-2-907 recodified from R4-31-907 (Supp. 95-1). R20-2-907 renumbered to R20-2-908; new Section R20-2-907 renumbered from R20-2-906 and amended effective October 8, 1998 (Supp. 98-4).

9/21/09

R20-2-908. Training and Public Education

- A. Each operator of a gasoline dispensing site using stage II vapor recovery shall obtain adequate training and written instructions to enable the system to be properly installed, operated and maintained in accordance with the manufacturer's specifications and CARB certification. The operator shall maintain documentation of this training for each operator on-site and documentation to the Department on request.
- B. In addition to the information required in A.R.S. § 41-2132(F), an operator of a gasoline dispensing site with stage II vapor recovery shall display a Department telephone number that the public can call to report nozzle or other equipment problems. The operator shall place the required information on each face of each gasoline dispenser. The headings shall be at least 3/8 inches and shall be readable from up to 3 feet away for decal signs, and from up to 6 feet away for permanent (non-decal) signs. Decals shall be located on the upper 60% of each face of the dispenser.

Historical Note

Emergency rule adopted effective November 23, 1992, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 92-4). Emergency rule adopted again effective February 22, 1993 (Supp. 93-1). Emergency expired. Emergency rule adopted again effective June 1, 1993 (Supp. 93-1). Permanent rule adopted effective August 31, 1993 (Supp. 93-3). R20-2-908 recodified from R4-31-908 (Supp. 95-1). R20-2-908 renumbered to R20-2-909; new Section R20-2-908 renumbered from R20-2-907 and amended effective October 8, 1998 (Supp. 98-4).

9/21/09

R20-2-909. Recordkeeping and Reporting

- A. The owner or operator of a gasoline dispensing site employing stage II vapor recovery shall maintain daily records of the inspections done pursuant to this Article.
- B. The owner or operator of a gasoline dispensing site employing stage II vapor recovery shall maintain a log and related records of all regularly scheduled maintenance and any repairs that have been made to stage II equipment.
- C. The owner or operator of a gasoline dispensing site that is exempt from requirements to install and operate stage II vapor recovery equipment, pursuant to A.R.S. § 41-2132(C), shall maintain a log at the site showing monthly throughputs. The owner or operator shall annually submit a copy of these logs representing the previous 12 months throughputs to the Department. If any throughput requirement provided in A.R.S. § 41-2132(C) and this Article is exceeded for any month, the owner or operator shall notify the Department in writing within 30 days. The owner or operator shall within six months after the end of the month the throughput is exceeded, install and operate a stage II vapor recovery system conforming to this Article.
- D. An owner or operator shall keep all records required by this Article at the gasoline dispensing site for at least one year and shall make these records available to the Department upon request.

Historical Note

Emergency rule adopted effective November 23, 1992, pursuant to A.R.S. § 41-1026, valid for only 90 days (Supp. 92-4). Emergency rule adopted again effective February 22, 1993 (Supp. 93-1). Emergency expired. Emergency rule adopted again effective June 1, 1993 (Supp. 93-1). Section R4-31-909 adopted as an emergency rule permanently adopted and renumbered to R4-31-910, new Section R4-31-909 adopted effective August 31, 1993 (Supp. 93-3). R20-2-909 recodified from R4-31-909 (Supp. 95-1). R20-2-909 renumbered to R20-2-210; new Section R20-2-909 renumbered from R20-2-908 and amended effective October 8, 1998 (Supp. 98-4).

9/21/09

R20-2-910. Annual Inspection and Testing

- A. A person shall ensure that an annual inspection, as required by A.R.S. § 41-2065(A)(15), is conducted by a registered service representative on or before the annual inspection date. The annual inspection date is the last day of the month in which the last scheduled annual inspection was performed. A registered service agency shall notify the Department in writing at least 10 business days before an annual inspection of the time, date, and location of the inspection. The Department shall notify the registered service agency within five business days, by facsimile or electronic mail, whether it approves the annual inspection date and time. The registered service agency shall not perform the annual inspection unless the Department approves the inspection date and time.
- B. The annual inspection shall include the tests defined in R20-2-905(A)(1) through (8) that pertain to the specific vapor recovery system installed.
- C. If there is a difference between a testing contractor's and the Department's test results, the Department's test results prevail.
- D. If a site fails to pass any of the tests required by subsection (B), the affected vapor recovery system or component shall remain out-of-service until the vapor recovery system and component pass all appropriate tests in subsection (B).
- E. After an annual inspection begins, a person shall not make a repair to the vapor recovery system or component until the results of the inspection are recorded.
- F. A registered service representative shall perform all tests according to Article 9 and any other vapor recovery procedure that the Department issues to registered service agencies.
- G. A person who cancels a witnessed inspection shall notify the Department by calling the Department's designated telephone number at least one hour before the scheduled inspection and shall reschedule the test to be completed by the annual inspection date. A registered service agency shall notify the Department in writing at least 10 business days before an annual inspection of the time, date, and location of the inspection. The Department shall notify the registered service agency within five business days, by facsimile or electronic mail, of its approval of the inspection date and time. The Department shall take enforcement action if a person does not comply with this subsection.

Historical Note

Section R4-31-910 renumbered from emergency rule R4-31-909 and permanently adopted with changes effective August 31, 1993 (Supp. 93-3). R20-2-910 recodified from

R4-31-910 (Supp. 95-1). R20-2-910 renumbered to R20-2-912; new Section R20-2-910 renumbered from R9-2-909 and amended effective October 8, 1998 (Supp. 98-4). Amended by final rulemaking at 10 A.A.R. 1690, effective June 5, 2004 (Supp. 04-2).

9/21/09

R20-2-911. Compliance Inspections

The Department shall not announce when it plans to conduct a compliance inspection of a stage I or stage II vapor recovery system or component. If results of a compliance inspection reveal a violation of A.R.S. Title 41, Chapter 15, or this Article, the Department shall require the vapor recovery system or component to undergo an appropriate test as specified in R20-2-910.

Historical Note

Adopted effective October 8, 1998 (Supp. 98-4).
Amended by final rulemaking at 10 A.A.R. 1690, effective June 5, 2004 (Supp. 04-2).

9/21/09

R20-2-912. Enforcement

If the Department finds that a stage II vapor recovery system or component is defective or non-compliant with one or more of the provisions of this Chapter or A.R.S. Title 41, Chapter 15, the Department shall issue to the owner or operator an administrative order and place a stop-sale, stop-use tag on the non-compliant vapor recovery system or component. The owner or operator may be required to schedule an inspection for a stage II vapor recovery system or component to ensure that it meets all requirements of A.R.S. Title 41, Chapter 15 and this Chapter before the vapor recovery system or component is placed in service.

Historical Note

Section R20-2-912 renumbered from R20-2-910 and amended effective October 8, 1998 (Supp. 98-4).
Amended by final rulemaking at 10 A.A.R. 1690, effective June 5, 2004 (Supp. 04-2).