

## CHAPTER 1. GENERAL PROVISIONS AND DEFINITIONS

### ARTICLE 1. PROVISIONS

#### **1-1-010. Declaration of policy**

A. The Board of Supervisors of Pinal County finds and declares that air pollution exists with varying degrees of severity within Pinal County. Such air pollution is potentially and in some cases actually dangerous to the health of the citizenry, often causes physical discomfort, injury to property and property values, discourages recreational and other uses of the state's resources and is aesthetically unappealing. The Board of Supervisors of Pinal County by this act intends to exercise the police power of the county in a coordinated county-wide program to control present and future sources of emissions of air contaminants to the end that air polluting activities of every type shall be regulated in a manner that insures the health, safety and general welfare of all of the citizens of the county, protects property values and protects the health of plant and animal life. The Board of Supervisors of Pinal County further intends to place primary responsibility for air pollution control and abatement in the Pinal County Air Quality Control District and the Hearing Board created herein.

B. Those industries emitting pollutants in the excess of the emission standards set by this Code shall bring their operations into conformity with the standards with all due speed. A new industry hereinafter established, which industry is subject to a permit requirement under this Code, shall not begin normal operation until it has secured a permit attesting that its operation will not cause pollution in excess of the standards set by this Code.

C. No person shall cause, suffer or allow to be discharged either directly or indirectly into the open air, air contaminants from any source whatever, either in quantity of, or of a shade or appearance which is in excess of that specified in this Code, provided that nothing in this Code shall be interpreted to prevent the discharge of uncontaminated aqueous steam into the open air.

D. Nothing in this Code shall be construed as permitting the preventable degradation of air quality in any area of Pinal County.

[Adopted effective June 29, 1993. Amended February 22, 1995.]

## **CHAPTER 1. GENERAL PROVISIONS AND DEFINITIONS**

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#### **1-1-020. Air Quality Control District**

The Pinal County Air Pollution Control District, having been created pursuant to Article 4, Section 401 of the Pinal County Air Pollution Control Ordinance (last amended on June 6, 1969) in accordance with A.R.S. § 49-473.B. (1992) and consisting of an operating division of the Pinal County Department of Health and Human Services, is hereby continued and shall be known as the Pinal County Air Quality Control District.

[Adopted effective June 29, 1993.]

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#### **1-1-030. Executive head**

The Director of the Pinal County Air Quality Control District shall be the air pollution Control Officer and the executive head of the Pinal County Air Quality Control District. He shall perform such duties and exercise such powers as prescribed by law.

[Adopted effective June 29, 1993.]

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#### **1-1-040. Investigative authority**

In order to conserve and promote the public health, safety, and general welfare within its territorial limits, or any portion thereof, the Board of Supervisors authorizes the Pinal County Air Quality Control District to enforce this Code and to carry out the necessary investigations and inspections to determine the degree to which the atmosphere of the county is contaminated by air pollution and the causes, sources, and extent of such air pollution.

[Adopted effective June 29, 1993.]

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#### **1-1-060. Authority to study, cooperate and hold public hearings**

The Pinal County Air Quality Control District is authorized to:

1. Study the problem of air pollution in the county.
2. Study possible effects on adjoining counties.
3. Cooperate with the chambers of commerce, industry, agriculture, public officials and all other interested persons or organizations.
4. Hold public hearings if in its discretion such action is necessary.

[Adopted effective June 29, 1993.]

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#### **1-1-070. Severability clause**

Should any chapter, article, section, subsection, subdivision, paragraph, subparagraph or item of this Code be declared unconstitutional or invalid for any reason, the remainder of this Code shall not be affected thereby, with all remaining portions of this Code continuing in full force.

[Adopted effective June 29, 1993.]

## **CHAPTER 1. GENERAL PROVISIONS AND DEFINITIONS**

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#### **1-1-080. Preservation of rights**

It is the purpose of this Code to provide additional and cumulative remedies to prevent, abate, and control air pollution in the county. Nothing contained in this Code shall be construed to abridge or alter rights of action or remedies in equity under the common law or statutory law, criminal or civil, nor shall any provisions of this Code, or any act done by virtue thereof, be construed as estopping the state or any municipality, or owners of land from the exercise of their rights in equity or under the common law or statutory law to suppress nuisances or to abate pollution.

[Adopted effective June 29, 1993.]

## **CHAPTER 1. GENERAL PROVISIONS AND DEFINITIONS**

### **ARTICLE 1. PROVISIONS**

#### **1-1-090. Copies and effective date**

- A. Copies of this Code are available for sale to the public, at a charge not to exceed a reasonable estimate of the actual costs of preparation, reproduction, and publication, in the office of the Pinal County Air Quality District.
- B. This Code shall become effective immediately upon its adoption, replacing its predecessor, the Pinal-Gila Counties Air Quality Control District Amended Rules and Regulations (1987).
- C. Permits issued under this Code shall be effective and enforced according to the provisions of this Code in force at the time the permit was issued.
- D. Those provisions of this Code regarding the issuance, administration and enforcement of permits for new major sources of air pollution or permit revisions for major modifications of existing major sources shall take effect and have the force of law upon a delegation of corresponding authority from ADEQ or the EPA to the District.

[Adopted effective June 29, 1993. Amended Subsection D. effective November 3, 1993.]



## **CHAPTER 1. GENERAL PROVISIONS AND DEFINITIONS**

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#### **1-1-100. Selecting interpretations**

Where the nature of a process operation or activity allows regulation under more than one provision of this Code, the most restrictive shall apply.

[Adopted effective June 29, 1993.]

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#### **1-1-106. Jurisdictional Statement**

The original regulatory jurisdiction of the District is defined by the provisions of A.R.S. § 49-402 (Supp. 1994), and may be supplemented or amended pursuant to other provisions of law, including A.R.S. §§ 11-952 and 49-107 (Supp. 1994).

[Adopted effective June 29, 1993. Amended February 22, 1995.]

**1-2-110. Adopted document(s)**

The following documents are incorporated herein by reference:

1. The Arizona Department of Environmental Quality's "Arizona Testing Manual for Air Pollutant Emissions", amended as of March 1992.
2. All ASTM test methods referenced in this Code are those adopted as of the date specified.
3. All parts of the C.F.R. referenced in this Code amended as of July 1, 1992.
4. The U.S. Government Printing Office's "Standard Industrial Classification Manual, 1987".

[Adopted effective June 29, 1993.]

## CHAPTER 1. GENERAL PROVISIONS AND DEFINITIONS

### ARTICLE 2. INCORPORATED MATERIALS

#### 1-2-120. Adoptions by reference

- A. When parts of the A.A.C. are adopted by reference herein, the following terms shall have the corresponding meanings as shown below:

<u>Term in A.A.C. Rules</u>	<u>Meaning in this Code of Regulations</u>
Director	Control Officer
Department	Pinal County Air Quality Control District
Hearing Board	Pinal County Air Quality Hearing Board

- B. References to the U.S. Code of Federal Regulations refer sequentially to title, Code of Federal Regulations, part, section and paragraph, *e.g.*, 40 C.F.R. §52.01(a) means Title 40, Code of Federal Regulations, Part 52, Section.01 Paragraph (a).
- C. References to the Arizona Revised Statutes refer sequentially to Arizona Revised Statutes, title, section and subsection, *e.g.*, A.R.S. §49-480.F. means Arizona Revised Statutes, Title 49, Section 480, Subsection F.
- D. References to the Arizona Administrative Code refer sequentially to Arizona Administrative Code, title, chapter, article section and subsection *e.g.*, A.A.C. R1 8-2-216B. means Arizona Administrative Code, Title 18, Chapter 2, Article 2, Section 16, Subsection B.
- E. References to the Federal Register refer sequentially to volume, Federal Register and page number, *e.g.*, 56 F.R. 40978 means Volume 56, Federal Register, page 40978.
- F. Where there is a difference between State, County or federal standards, regulations, rules, codes or statutes applicable to a source, the most stringent shall apply to that source.
- G. To the extent no specific date is identified in conjunction with any adoption by reference within this Code, the version adopted shall be that version in effect on the adoption date of that specific section of this Code.

[Adopted effective June 29, 1993. Amended Subsection F. and added Subsection G. effective November 3, 1993.]

65. FUGITIVE DUST - Naturally occurring particles uncontaminated by pollutants resulting from industrial activity. Fugitive dust may include emissions from unpaved roads, paved roads, tilled farm land, exposed surface construction sites, mining activities associated with overburden removal, blasting, haul road truck transport and native soil or overburden material which becomes airborne naturally or from any other source.
66. FUGITIVE EMISSIONS - Those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.
67. GAS TIGHT - Having no leak of gaseous organic compound(s) exceeding 10,000 ppm above background when measurements are made using EPA Method 21 (40 C.F.R. Part 60, Appendix A) with a methane calibration standard.
68. GASOLINE - Any petroleum distillate or petroleum distillate/alcohol blend or alcohol having a vapor pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions and which is used as a fuel for internal combustion engines.
69. GASOLINE VAPORS - Organic compounds in gas-phase gasoline including displaced vapors and any entrained liquid gasoline.
70. HAUL ROAD - A road constructed for the principal purpose of hauling construction materials, or to provide access to one or more construction sites, mining activities, or industrial operations.
71. HAZARDOUS AIR POLLUTANT. Any federally listed hazardous air pollutant and any state hazardous air pollutant.
72. HAZARDOUS AIR POLLUTANT REASONABLY AVAILABLE CONTROL TECHNOLOGY (HAPRACT) - An emissions standard for hazardous air pollutants which the Control Officer, acting pursuant to §49-480.04(C), determines is reasonably available for a source. In making the foregoing determination, the Control Officer shall take into consideration the estimated actual air quality impact of the standard, the cost of complying with the standard, the demonstrated reliability and widespread use of the technology required to meet the standard, and any non-air quality health and environmental impacts and energy requirements. For purposes of this definition, an emissions standard may be expressed as a numeric emissions limitation or as a design, equipment, work practice, or operational standard.
73. HAZARDOUS WASTE - A hazardous waste as defined in 40 C.F.R. §261 Subpart A (1992).
74. HEARING BOARD - The Air Quality Control District Hearing Board established pursuant to A.R.S. §49-478 (1992) shall consist of five members. The five members shall be knowledgeable in the field of air pollution. At least one member of the board shall be an attorney licensed to practice law in this state. At least three members shall not have a substantial interest, as defined in A.R.S. §38-502, in any person required to obtain a permit or subject to enforcement orders issued under Pinal County Air Quality Control District Code of Regulations. Each Board member shall serve for a term of three years. The hearing board shall select a chairman and vice-chairman and such other officers as it deems necessary. The Board of Supervisors may authorize compensation for hearing board members, and may authorize reimbursement for subsistence and travel, including travel from and to their respective places of residence when on official business.
75. ~~HEREIN - When used anywhere in this Code, refers to the complete set of rules and regulations contained in this Code.~~
- 75a. ~~INSIGNIFICANT ACTIVITY - With respect to sources required to obtain a permit, an activity in an emission unit that is not otherwise subject to any applicable requirement and which meets any of the following requirements:~~
- ~~a. The activity accounts for less than 1% of the source's total existing emissions of conventional air pollutants or less than 200 pounds per year of regulated air pollutants, whichever is less.~~

### **1-3-140. Definitions**

Definitions used in this Code shall have the following meanings except where any narrative portion specifically indicates otherwise:

1. **ACID MIST** - Sulfuric acid mist as measured by Method 8 in the Arizona Testing Manual for Air Pollutant Emissions (ADEQ, 1992).
- 1.a **ACT** - The Clean Air Act (1990).
2. **ACTIVITY EQUIPMENT** - Any mechanized equipment used for the purpose of clearing land, earthmoving, trenching, road construction or maintenance, mining and extraction of minerals prior to crushing and/or screening, and any equipment used in the demolition or renovation of manmade facilities.
3. **ACTUAL EMISSIONS** - The actual rate of emissions of a pollutant from an emissions unit as determined in accordance with paragraphs a. through c.
  - a. In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The reviewing authority shall allow the use of a different time period upon a determination that 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. Lacking data sufficient to satisfy the requisites of Paragraph a., the Control Officer may presume that the source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
  - c. For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.
4. **ADEQ DIRECTOR** - Director of the Arizona Department of Environmental Quality.
5. **ADMINISTRATOR** - The Administrator of the United States Environmental Protection Agency.
6. **ADVISORY COUNCIL** - The Pinal County Air Quality Control Advisory Council appointed by the Pinal County Board of Supervisors.
7. **AFFECTED FACILITY** - With reference to a stationary source, any equipment or combination of equipment to which a standard is applicable.
8. **AIR CONTAMINANTS** - Smoke, vapors, charred paper, dust, soot, grime, carbon, fumes, gases, sulfuric acid mist, aerosols, aerosol droplets, odors, particulate matter, windborne matter, radioactive materials, noxious chemicals, or any other material in the outdoor atmosphere which may adversely impact human health or the environment.
9. **AIR POLLUTANT** - An air contaminant.
10. **AIR POLLUTION** - 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 interferes with the comfortable enjoyment of life or property of a substantial part of a community, or obscures visibility, or which in any way degrades the quality of the ambient air below the standards established by the ADEQ Director.
11. **AIR POLLUTION CONTROL EQUIPMENT** - Equipment used to eliminate, reduce or control the emission of air pollutants into the ambient air.
  12. **ALLOWABLE EMISSIONS** - 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, or both, and the most stringent of the following:
    - a. The applicable new source performance standards as contained in Chapter 6; or
    - b. The applicable national emission standards for hazardous air pollutants, as contained in Chapter 7; or
    - c. The applicable existing source performance standard, as approved for the SIP and contained in Chapter 5; or
    - d. The emissions rate specified in any federally promulgated rule or federally enforceable permit condition applicable to Pinal
  13. **AMBIENT AIR** - That portion of the atmosphere, external to buildings, to which the general public has access.
  14. **APPLICABLE IMPLEMENTATION PLAN** - Those provisions of the Arizona state implementation plan approved by the Administrator or a federal implementation plan promulgated in accordance with Title I of the Clean Air Act (1990).
  15. **APPLICABLE REQUIREMENT** - Any federal applicable requirement and any other requirement established pursuant to this Code or A.R.S. Title 49, Chapter 3.
  16. **APPROVED** - Approved in writing by the Pinal County Air Quality Control Officer.
  - 16.a **AREA SOURCE**  
 Depending upon context:
    1. Any stationary source of hazardous air pollutants that is not a major source as defined in §1-3-140.79.b.; or
    2. A non-point source of any regulated pollutant.
  17. **ARIZONA STATE IMPLEMENTATION PLAN** - A plan adopted by the state of Arizona and submitted to and approved by the Administrator which provides for the implementation, maintenance and enforcement of the national primary and secondary ambient air quality standards in each air quality control region (or portion thereof) within the state of Arizona as designated under the Clean Air Act §107(c) (1990). Such plan, referred to in this Code as "the SIP", is identified in 40 C.F.R. §§52.120 - 52.146 (1992).
  18. **ARIZONA TESTING MANUAL** - The Arizona Testing Manual for Air Pollutant

Emissions (ADEQ 1992).

19. **ATTAINMENT AREA** - Any area in this county that has been identified by the Administrator acting pursuant to the Clean Air Act §107 (1990) as being in compliance with national ambient air quality standards.
- 19.a. **BEGIN ACTUAL CONSTRUCTION** - In general, initiation of physical onsite construction activities on an emissions unit which are of a permanent nature. With respect to a change in method of operation, initiation of those on-site activities, other than preparatory activities, which mark the initiation of the change.
20. **BEST AVAILABLE CONTROL TECHNOLOGY (BACT)** - An emissions limitation (including a visible emission standard), based on the maximum degree of reduction for each pollutant subject to regulation under the Clean Air Act (1990) which would be emitted from any proposed major stationary source or major modification which the Control Officer, on a case-by-case basis, taking into account energy, environmental, economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques, for control of such pollutant. Under no circumstances shall BACT be determined to be less stringent than the emission control required by the most restrictive applicable provision of District, State or federal laws or regulations. If the Control Officer 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.
21. **BUILDING, STRUCTURE, FACILITY or INSTALLATION** - 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 (*i.e.*, which have the same two-digit code) as described in the "Standard Industrial Classification Manual, 1987" (U.S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).
22. **BOARD** - The Board of Supervisors of Pinal County.
23. **BULK PLANT** - Any loading facility at which gasoline or other organic liquids with a true vapor pressure of 1.5 psia (77.5 mm Hg) or greater under any actual storage conditions are received from delivery vessels for storage in on-site stationary tanks, and



- from which such liquids also are transferred to delivery vessels.
24. **BULK TERMINAL** - Any primary distributing facility for delivering organic liquids to bulk plants, service stations and other distribution points and where delivery to the facility is by means other than truck.
- 24a. **CAPACITY FACTOR** - 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.
25. **CATEGORICAL SOURCE** - The following classes of sources:
- a. Carbon black plants using the furnace process;
  - b. Charcoal production plants;
  - c. Chemical process plants;
  - d. Coal cleaning plants with thermal dryers;
  - e. Coke oven batteries;
  - f. Fossil fuel boilers, or combination thereof, totaling more than 250 million Btus (73 MW) per hour heat input;
  - g. Fossil fuel-fired steam electric plants of more than 250 million Btus (73 MW) per hour heat input;
  - h. Fuel conversion plants;
  - i. Glass fiber processing plants;
  - j. Hydrofluoric, sulfuric, or nitric acid plants;
  - k. Iron and steel mills;
  - l. Kraft pulp mills;
  - m. Lime plants;
  - n. Municipal incinerators capable of charging more than 250 tons of refuse per day;
  - o. Petroleum refineries;
  - p. Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
  - q. Phosphate rock processing plants;
  - r. Portland cement plants;
  - s. Primary aluminum ore reduction plants;
  - t. Primary copper smelters;
  - u. Primary lead smelters;
  - v. Primary zinc smelters;
  - w. Secondary metal production plants;
  - x. Sintering plants;
  - y. Sulfur recovery plants;
  - z. Taconite preprocessing plants.
26. **CODE** - The Pinal County Air Quality Control District Code of Regulations.
27. **COMMENCE** (used as a verb) - As applies to construction of a source:
- a. For purposes other than Title IV of the Clean Air Act (1990), that the owner or

- operator has obtained all necessary preconstruction approval or permits required by federal law and this Code and has done either of the following:
- i. Begun or caused to begin a continuous program of physical on-site construction of the source to be completed within a reasonable time.
  - ii. Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed within a reasonable time.
- b. For purposes of Title IV of the Clean Air Act (1990), that the owner or operator has undertaken a continuous program of construction or that an owner or operator has entered into a contractual obligation to undertake and complete within a reasonable time a continuous program of construction.
28. **CONSTRUCTION** - Any physical change in a source or change in the method of operation of a source including fabrication, erection, installation or demolition of a source that would result in a change in actual emissions.
  29. **CONTIGUOUS GEOGRAPHICAL AREA** - A geographical area owned, leased, or under common control of the same proprietor, in which all portions are in contact by land surfaces (other than public roads or a body of water), and the outside boundary of such area can be circumscribed by a single unbroken boundary line.
  30. **CONTROL** - Air pollution control or control of air pollution emissions.
  31. **CONTROL DEVICE** - Air pollution control equipment.
  32. **CONTROL OFFICER** - The director and executive head of the Pinal County Air Quality Control District responsible for performing duties and exercising powers prescribed by law.
  33. **CONVENTIONAL AIR POLLUTANT** - A criteria pollutant.
  34. **COUNTY** - Pinal County, Arizona.
  35. **CRITERIA POLLUTANT** - A pollutant for which a national ambient air quality standard (NAAQS) has been established under the Clean Air Act §109 (1990).
  36. **DAY** - A period of 24 consecutive hours beginning at midnight.
  37. **DE MINIMIS AMOUNT** - For the purposes of this Code, the *de minimis* amount is the lesser of:
    - a. The potential of a source to emit 1 ton per year of any air pollutant; or
    - b. The potential of a source to emit 5.5 lbs/day of any air pollutant.
  38. **DELIVERY VESSELS** - Any vehicular-mounted container(s) such as railroad tank cars, tanker trucks, tank trailers or any other mobile container used to transport gasoline, petroleum, petroleum distillates, or other organic compounds.
  39. **DEPARTMENT** - The Pinal County Department of Health and Human Services.
  40. **DEPUTY CONTROL OFFICER** - A person designated to carry out such duties as may be delegated by the Control Officer.

41. **DEVICE, MACHINE, EQUIPMENT or OTHER ARTICLES** - Equipment.
42. **DISCHARGE** - The release, escape or emission of an air contaminant into the atmosphere.  
**DISPENSING TANK** - Any stationary tank which dispenses organic liquid fuel directly into the fuel tanks of motor vehicles including aircraft.
44. **DISTRICT** - The Pinal County Air Quality Control District, comprising an administrative branch of Pinal County, a political subdivision of the State of Arizona.
45. **DOWNWASH** - A phenomenon whereby emissions from a stack are trapped in the wake or eddy produced by the stack itself, a nearby building or terrain features such as
43. hills or sharp drops in elevation.
46. **DRY WASH** - The dry bed of a stream or river.
47. **DUST** - Airborne finely divided solid particulate matter.
48. **DUST SUPPRESSANT** - Water or a chemical compound or mixture of chemical compounds added with or without water to a dust source for purposes of preventing air entrainment.
49. **EMERGENCY ELECTRICAL ENERGY EQUIPMENT** - Any emergency power equipment serving only as a secondary source of electric power or any other equipment intended for and used only in a backup system or for use in emergencies and whose annual operating hours never exceed 72.
50. **EMISSION** - An air contaminant or gas stream vented to the atmosphere or the act of discharging into the atmosphere an air contaminant or gas stream, visible or invisible.
51. **EMISSION LIMITATION and EMISSION STANDARD** - A requirement established by the State, the County 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.
52. **EMISSIONS UNIT** - Any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under this Code.
53. **EQUIPMENT** - Any machine, incinerator, activity equipment, devices, or other article including pollution control equipment that can or may contribute to or control emissions.
54. **EXCESS EMISSIONS** - Emissions of an air pollutant in excess of an emission standard as measured by the compliance test method applicable to such emission standard.
55. **EXCESS ORGANIC LIQUID DRAINAGE** - More than 10 milliliters (0.34 fluid ounces) per disconnect.
56. **EXISTING SOURCE** - Any source which possesses authority to operate, in the form of a permit issued by the District, ADEQ or other competent authority.
57. **FARM** - A properly zoned parcel of real estate used principally to grow crops or raise

animals, which real estate is further classified for property tax purposes as being used for agricultural uses.

- FEDERAL APPLICABLE REQUIREMENT** - Any of the following as they apply to emissions units covered by a Class A or B permit (including requirements that have
58. been promulgated or approved by EPA through rulemaking at the time of issuance but have future effective compliance dates):
- a. Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under Title I of the Clean Air Act (1990) that implements the relevant requirements of the Clean Air Act (1990), including any revisions to that plan promulgated in 40 C.F.R. Part 52 (1992);
  - 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 Clean Air Act (1990);
  - c. Any standard or other requirement under §111 of the Clean Air Act (1990), including §111(d);
  - d. Any standard or other requirement under §112 of the Clean Air Act (1990), including any requirement concerning accident prevention under §112(r)(7) of the Clean Air Act (1990);
  - e. Any standard or other requirement of the acid rain program under Title IV of the Clean Air Act (1990) or the regulations promulgated thereunder and incorporated pursuant to §3-6-565;
  - f. Any requirements established pursuant to §504(b) or §114(a)(3) of the Clean Air Act (1990);
  - g. Any standard or other requirement governing solid waste incineration, under §129 of the Clean Air Act (1990);
  - h. Any standard or other requirement for consumer and commercial products, under §183(e) of the Clean Air Act (1990);
  - i. Any standard or other requirement for tank vessels under §183(f) of the Clean Air Act (1990);
  - j. Any standard or other requirement of the program to control air pollution from outer continental shelf sources, under §328 of the Clean Air Act (1990);
  - k. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Clean Air Act (1990), unless the Administrator has determined that such requirements need not be contained in a Title V permit; and
  - l. Any national ambient air quality standard or increment or visibility requirement under Part C of Title I of the Clean Air Act (1990), but only as it would apply to temporary sources permitted pursuant to §504(e) of the Clean Air Act (1990).

59. **FEDERALLY ENFORCEABLE** - All limitations and conditions which are enforceable by the Administrator, under the Clean Air Act (1990), including those requirements developed pursuant to 40 C.F.R. Parts 60 and 61 (1992), requirements within the SIP, any permit requirements established pursuant to 40 C.F.R. §52.21 (1992) or under regulations approved pursuant to 40 C.F.R. Part 51, Subpart I (1992), including permits issued under a permit program approved by the Administrator under Clean Air Act (1990) §112 or under Title V of the Clean Air Act Amendments of 1990, or issued under a permit program that is incorporated into the SIP.
60. **FEDERALLY LISTED HAZARDOUS AIR POLLUTANT** - Any air pollutant adopted pursuant to A.R.S. §49-426.03, Subsection A. (1992) and not deleted pursuant to that subsection.
61. **FLOATING ROOF** - A storage-vessel cover consisting of a pontoon, single-deck, double-deck, or internal floating solid material which rests upon the surface of and is supported by the liquid contents, and is equipped with a seal to close the space between the edge of the solid material and tank wall.
62. **FLUE** - A duct or passage, such as a stack or chimney, for air contaminants.
63. **FOSSIL FUEL-FIRED STEAM GENERATOR** - A furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.
64. **FUEL** - Any material which is burned for the purpose of producing energy.
65. **FUGITIVE DUST** - Naturally occurring particles uncontaminated by pollutants resulting from industrial activity. Fugitive dust may include emissions from unpaved roads, paved roads, tilled farm land, exposed surface construction sites, mining activities associated with overburden removal, blasting, haul road truck transport and native soil or overburden material which becomes airborne naturally or from any other source.
66. **FUGITIVE EMISSIONS** - Those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.
67. **GAS TIGHT** - Having no leak of gaseous organic compound(s) exceeding 10,000 ppm above background when measurements are made using EPA Method 21 (40 C.F.R. Part 60, Appendix A) with a methane calibration standard.
68. **GASOLINE** - Any petroleum distillate or petroleum distillate/alcohol blend or alcohol having a vapor pressure of 1.5 psia (77.5 mm Hg) or greater under actual loading conditions and which is used as a fuel for internal combustion engines.
69. **GASOLINE VAPORS** - Organic compounds in gas-phase gasoline including displaced vapors and any entrained liquid gasoline.
70. **HAUL ROAD** - A road constructed for the principal purpose of hauling construction materials, or to provide access to one or more construction sites, mining activities, or industrial operations.

71. **HAZARDOUS AIR POLLUTANT:** Any federally listed hazardous air pollutant and any state hazardous air pollutant.
72. **HAZARDOUS WASTE** - A hazardous waste as defined in 40 C.F.R. §261 Subpart A (1992).
74. **HEREIN** - When used anywhere in this Code, refers to the complete set of rules and regulations contained in this Code.
- 74a. **INSIGNIFICANT ACTIVITY** - With respect to sources required to obtain a permit, an activity in an emission unit that is not otherwise subject to any applicable requirement and which meets any of the following requirements:
- a. The activity accounts for less than 1% of the source's total existing emissions of conventional air pollutants or less than 200 pounds per year of regulated air pollutants, whichever is less.
  - b. The activity belongs to one of the following categories:
    - i. Normal landscaping, building maintenance or janitorial activities.
    - ii. Gasoline storage tanks with capacity of 500 gallons or less.
    - iii. Diesel and fuel oil storage tanks with capacity of 40,000 gallons or less.
    - iv. Batch mixers with rated capacity of 5 cubic feet or less.
    - v. Wet sand and gravel production facilities that obtain material from subterranean and subaqueous beds, whose design capacity rate is 25 tons/hour or less, and whose permanent in-plant roads are paved and cleaned to control dust. This does not include activities in emission units which are used to crush or grind any non-metallic minerals.
    - vi. Hand-held or manually operated equipment used for aerosol can spray painting, buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding or turning of ceramic art work, precision parts, leather, metals, plastics, fiber board, masonry, carbon, glass or wood, but not including sand blasting.
    - vii. Powder coating operations.
    - viii. Internal combustion (IC) engine driven compressors, IC engine driven electrical generator sets and IC driven water pumps of less than 325 brake horsepower, used only for emergency replacement or standby service and whose annual operating hours never exceed 72.
    - ix. Lab equipment used exclusively for chemical and physical analyses.
75. **LAND STRIPPING** or **LAND STRIPPING ACTIVITY** - Removal of all or any portion of existing vegetation from parcels of land with equipment which plows or scrapes the ground surface.
76. **LEAK FREE** - Having no organic liquid leak of more than three drops per minute from

any single leak source other than the disconnect operation of liquid fill line and vapor line.

- LOADING FACILITY** - Any operation or facility such as a gasoline storage tank farm,
77. pipeline terminal, bulk plant or loading dock or combination thereof, where organic liquids are transferred or loaded into or out of delivery vessels for future distribution. Included are all related pollutant-emitting activities which are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control).
78. **MAJOR MODIFICATION** - Any physical change in or change in the operation method of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under this Code.
- a. Any net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone.
  - b. Any net emissions increase that is significant for oxides of nitrogen shall be considered significant for ozone for ozone nonattainment areas classified as marginal, moderate, serious or severe.
  - c. For the purposes of this definition the following shall not be considered a physical change or change in the method of operation:
    - i. Maintenance, repair and replacement which the Control Officer determines to be routine.
    - ii. Use of an alternative fuel or raw material be 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 pursuant to the Federal Power Act, 16 U.S.C. §§792-825r;
    - iii. Use of an alternative fuel by reason of an order or rule under the Clean Air Act §125 (1990);
    - 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 which either:
      - (1) The source was capable of accommodating before December 12, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 12, 1976, pursuant to 40 C.F.R. §52.21 (1992) or under Chapter 3 of this Code; or
      - (2) The source is approved to use under any permit issued under 40 C.F.R. §52.21 (1992) or under Chapter 3 of this Code.
    - vi. An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after December 12, 1976, pursuant to 40 C.F.R. §52.21, or under Chapter 3 of this Code.

- vii. Any change in ownership at a stationary source.
79. **MAJOR SOURCE (MAJOR STATIONARY SOURCE)** - Any of the following stationary sources or group of stationary sources of air pollution:
- A major source as defined in §3-3-203;
  - b. A major source under §112 of the Clean Air Act (1990):
    - i. For pollutants other than radionuclides, any stationary source that emits or has the potential to emit, in the aggregate and including fugitive emissions, 10 tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to §112(b) of the Clean Air Act (1990), 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as described in Chapter 7. of this Code. 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 §302(j) of the Clean Air Act (1990), that directly emits or has the potential to emit, 100 tpy or more of any air pollutant. The fugitive emissions of a stationary source shall not be considered in determining whether it is a major source for the purposes of §302(j) of the Act, unless:
    - i. The source is a categorical source; or
    - ii. The source belongs to a source category regulated by a standard promulgated under section 111 or 112 of the Act, but only with respect to those air pollutants that have been regulated for that category.
80. **MALFUNCTION** - Any sudden and unavoidable failure of air pollution control equipment or process equipment or a process to operate in a normal and usual manner. Failures that are caused by poor maintenance, or could have been prevented by the exercise of reasonable care shall not be considered a malfunction.
81. **MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT)** - An emission standard that requires the maximum degree of reduction in emissions of any hazardous air pollutant subject to regulation under this Code, including a prohibition of such emissions where achievable, that the Control Officer, taking into consideration the cost of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements, determines is achievable by a source to which such standard applies, through application of measures, processes, methods, systems or techniques including, but not limited to, measures which:
- a. Reduce the volume of, or eliminate emissions of, such pollutants through process



- changes, substitution of materials or other modifications.
- b. Enclose systems or processes to eliminate emissions.
  - c. Collect, capture or treat such pollutants when released from a process, stack, storage or fugitive emissions point.
  - d. Are design, equipment, work practice, or operational standards, including requirements for operator training or certification.
  - e. Are a combination of the above.
82. **MINING ACTIVITY** - An activity involving earthmoving operations, including blasting, for the primary purpose of extracting from the earth minerals such as but not limited to, sand, gravel, overburden, aggregate, limestone, rock, or ore.
83. **MINOR SOURCE** - A source of air pollution which is not a major source.
84. **MODIFICATION or MODIFY** - A physical change in or change in the method of operation of a source which increases the actual emissions of any air pollutant emitted by such source by more than an amount numerically equal to a corresponding *de minimis* amount or which results in the emission of any air pollutant not previously emitted by more than such *de minimis* amount. For the purposes of this definition the following shall not be considered a physical change or change in the method of operation:
- a. Maintenance, repair and replacement which the Control Officer determines to be routine.
  - b. An increase or decrease in production rate, providing such increase or decrease does not exceed the conditions contained in the source's permit.
  - c. An increase or decrease in the hours of operation, providing such increase or decrease does not exceed conditions contained in the source's permit.
  - d. The use of an alternative fuel or raw material by reason of an order in effect under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), or by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of any other forced curtailment or lack of supply of natural gas if such source can furnish to the District a certified copy of the finding of a state or federal governmental body having jurisdiction over such source that attests to the existence of a forced curtailment or lack of supply of natural gas.
  - e. The use of an alternative fuel or raw material, if prior to December 12, 1976, the source or facility was capable of accommodating such fuel or material.
  - f. The use of an alternative fuel by reason of an order or rule under the Clean Air Act §125 (1990).
  - g. The use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
  - h. Any change in ownership at a stationary source.

- 85. NET EMISSIONS INCREASE** - The amount by which the sum of Paragraphs a. and b. exceeds zero:
- a. Any increase in actual emissions from a particular physical change or change in the method of operation of a stationary source.
  - b. Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.
  - c. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
    - i. The date 5 years before construction on the particular change commences; and
    - ii. The date that the increase from the particular change occurs.
  - d. An increase or decrease in actual emissions is creditable only if neither the Control Officer nor any other permit-issuing authority has relied on it in issuing a permit, which is in effect when the increase in actual emissions from the particular change occurs. In addition, in nonattainment areas, a decrease in actual emissions shall be considered in determining net emissions increase due to modifications only if such decrease has not been relied upon to demonstrate attainment or reasonable further progress.
  - e. An increase or decrease in actual emissions of sulfur dioxide or PM<sub>10</sub> which occurs before the applicable baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
  - f. An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
  - g. A decrease in actual emissions is creditable only to the extent that:
    - i. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
    - ii. It is federally enforceable at and after the time that actual construction on the particular change begins; and
    - iii. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
  - h. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- 86. NEW SOURCE** - Any stationary source of air pollution which lacks existing authority to operate, in the form of a permit issued by the District, by ADEQ, or by other competent authority.
- 87. NONATTAINMENT AREA** - An area so designated by the Administrator acting pursuant to the Clean Air Act §107 (1990) as exceeding national ambient air quality standards for a particular pollutant or pollutants. As of November 15, 1990, the

nonattainment areas in Pinal County are geographically defined in 40 C.F.R. §81.303 (1991) as being:

Pollutant	Designated Area
TSP	Hayden: T5S, R15E
SO <sub>2</sub>	Hayden: T4S, R14E; T4S, R15E; T4S, R16E; T5S, R14E; T5S, R15E; T5S, R16E; T6S, R14E; T6S, R15E; T6S, R16E San Manuel: T8S, R16E; T8S, R17E; T8S, R18E; T9S, R15E; T9S, R16E; T9S, R17E; T9S, R18E; T10S, R15E; T10S, R16E; T10S, R17E
PM <sub>10</sub> *	Apache Junction: T1N, R8E Hayden: T4S, R16E; T5S, R16E; T6S, R16E and the portion of the rectangle that lies within the Pinal County line formed by and including T1N, R13E; T1N, R15E; T6S, R13E; T6S, R15E

\* Classified as moderate

88. **NONPOINT SOURCE** - A source emitting air contaminants from other than a flue.
89. **NON-PRECURSOR ORGANIC COMPOUND** - Those organic compounds which have negligible photochemical reactivity, namely:
- a. Methane.
  - b. Ethane.
  - c. Methylene chloride (dichloromethane).
  - d. 1,1,1-trichloroethane (methyl chloroform).
  - e. 1,1,1-trichloro-2,2,2-trifluoroethane (CFC-113).
  - f. Trichlorofluoromethane (CFC-11).
  - g. Dichlorodifluoromethane (CFC-12).
  - h. Chlorodifluoromethane (CFC-22).
  - i. Trifluoromethane (FC-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. perfluorocarbon compounds which fall into these classes:
    - i. Cyclic, branched, or linear, completely fluorinated alkanes;
    - ii. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;
    - iii. Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and
    - iv. Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
  - v. Volatile methyl siloxanes, also known as "VMS".
  - w. Parachlorobenzotrifluoride, also known as "PCBTF".
  - x. Acetone.
  - y. Perchloroethylene.
90. **NORMAL FARM OPERATIONS** - All activities by the owner, lessee, agent, independent contractor and supplier conducted for the production of crops, livestock, poultry, livestock products or poultry products on any parcel of real estate, which parcel is both zoned for agricultural use and is further classified as being used for agricultural purposes for purposes of real property taxation valuation.
91. **ODOR** - Smells, aromas or stenches commonly recognized as offensive, obnoxious or objectionable to a substantial part of a community so as to give rise to a public nuisance.
92. **OPACITY** - The degree to which emissions reduce the transmission of light and obscure the view of an object in the background.
93. **OPEN OUTDOOR FIRE** or **OPEN BURNING** - Any combustion of combustible material of any type outdoors, in the open, where the products of combustion are not directed through a flue, chimney, duct, vent, stack, or other restrictive device designed or installed for the principal purpose of discharging the emissions to the air.
94. **ORGANIC COMPOUND** - Any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and carbonates and ammonium carbonate.
95. **ORGANIC LIQUID** - Any organic compound which exists as a liquid under any actual conditions of use, transport or storage.
96. **ORGANIC SOLVENT** - Any liquid composed wholly or in part of a carbon compound which is capable of dissolving another substance or carrying it in suspension.
97. **OWNER** or **OPERATOR** - Any person who owns, leases, operates, controls, or

- supervises an affected facility or a stationary source of which an affected facility is a part.
98. **PARTICULATE MATTER** - Any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100  $\mu\text{m}$ .
  99. **PERMIT** (used as a verb) - To authorize, allow, make possible, or consent to, either formally or passively.
  100. **PERMIT SHIELD** - A provision in a permit which provides that compliance with the permit shall be deemed compliance with other applicable provisions of the Clean Air Act (1990).
  101. **PERSON** - Any public or private corporation, company, partnership, firm, association or society of persons, the federal government and any of its departments or agencies, the state and any of its agencies, departments, or political subdivisions, as well as a natural person.
  102. **PETROLEUM LIQUID** - Any crude petroleum or any finished or intermediate products which are manufactured by crude petroleum processing and finishing operations.
  103. **POTENTIAL TO EMIT** - 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 of the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.
  104. **PRIVATE DRIVEWAY** - A road constructed for the sole purpose of gaining access to a one- or two-family residence.
  105. **PROCESS** - One or more operations, including equipment and technology, used in the production of goods or services or the control of by-products or wastes.
  106. **PROCESS SOURCE** - The last operation or process which produces an air contaminant resulting from either:
    - a. The separation of the air contaminants from the process material; or
    - b. The conversion of constituents of the process materials into air contaminants which is not an air pollution abatement operation.
  107. **PROCESS WEIGHT** - The total weight of all materials, excluding air, introduced into a process source for a representative period of actual operation.
  108. **PROCESS WEIGHT RATE** - The process weight divided by the period over which the process weight was introduced.
  109. **PUBLIC OFFICER** - Any elected or appointed officer of a public agency established by charter, ordinance, resolution, state constitution or statute, but excluding members of the legislature.

110. **RECONSTRUCTION** - Reconstruction of sources located in nonattainment areas shall be presumed to have taken place where the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new stationary source, as determined in accordance with the provisions of 40 C.F.R. §§60.15(f)(1)-(3).
111. **REDUCTION** - Any heated process, including rendering, cooking, drying, dehydrating, digesting, evaporating and protein concentrating.
112. **REGULATED AIR POLLUTANT** - Any of the following:
  - a. Any conventional air pollutant as defined in §1-3-140.33.
  - b. Nitrogen oxides and volatile organic compounds.
  - c. Any air contaminant that is subject to a standard contained in Chapter 6. of this Code or promulgated under §111 of the Clean Air Act (1990).
  - d. Any hazardous air pollutant as defined in A.R.S. §49-401.01.11. (1992) or subject to a standard promulgated under §112 of the Clean Air Act (1990).
  - e. Any Class I or II substance listed in §602 of the Clean Air Act (1990).
113. **REID VAPOR PRESSURE** - The absolute vapor pressure of volatile crude oil and volatile non-viscous petroleum liquids, except liquified petroleum gases, as determined by ASTM D-323-82.
114. **RIVERBED** - The channel occupied or formerly occupied by a river.
115. **ROAD** - A path, trail, driveway, freeway, street, or access way which is constructed principally for use by vehicular traffic.
116. **ROAD CONSTRUCTION** - The construction of a new roadway or the conversion of an existing unpaved road to a paved road.
117. **SCRAP METAL FURNACE** - A furnace designed to melt metallic scrap for the principal purpose of separating and recovering the metal.
118. **SECONDARY EMISSIONS** - Emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purposes of this Code, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions may 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 stationary 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.
119. **SERVICE ROAD** - A road constructed for the principal purpose of providing maintenance or service of or to pipelines, power lines, farmland, public utilities, rights-of-way, or refuse collection.
120. **SHUTDOWN** - The cessation of operation of any air pollution control equipment or

process equipment for any purpose, except routine phasing out of process equipment.

121. SIGNIFICANT -

- a. In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any one of the following rates:

<u>Pollutant</u>	<u>Emissions Rate (TPY)</u>
Carbon Monoxide	100
Nitrogen Oxides	40
Sulfur Dioxide	40
Particulate Matter	25
PM <sub>10</sub>	15
Ozone (VOC)	40
Lead	0.6
Fluorides	3
Sulfuric Acid Mist	7
Hydrogen Sulfide	10
Total Reduced Sulfur (including H <sub>2</sub> S)	10
Reduced Sulfur Compounds (including H <sub>2</sub> S)	10
Municipal Waste Combustor Organics (measured as total tetra- through octa-chlorinated dibenzo- <i>p</i> -dioxins and dibenzofurans)	3.5x10 <sup>-6</sup>
Municipal Waste Combustor Metals (measured as particulate matter)	15
Municipal Waste Combustor Acid Gases (measured as sulfur dioxide and hydrogen chloride)	40
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	50 (45 megagrams)

- b. In ozone nonattainment areas classified as serious or severe, significant emissions of VOC shall be determined under §3-3-240.
- c. In reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under this article that is not listed in Paragraph a. of this subdivision and is not a hazardous air pollutant according to A.R.S. §49-401.01(11) (1992), any emission rate.
- d. Notwithstanding the emission amount listed in Paragraph a. of this subdivision, "significant" means any emission rate or any net emissions increase associated with a

- major stationary source or major modification subject to Chapter 3 which would be constructed within 10 km of a Class I area and have an impact on the ambient air quality of such area equal to or greater than  $1 \mu\text{g}/\text{m}^3/24\text{-hr}$  average.
122. **SMOKE** - Particulate matter resulting from incomplete combustion.
  123. **SOURCE** - 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.
  124. **SOURCE OPERATOR** - An originator, owner, operator, or lessee of an emission source.
  125. **STACK** - Any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.
  126. **STACK EMISSIONS** - Emissions which enter the air by passing through a vent, stack, flue, or other similar constraining or restrictive device designed or installed for the principal purpose of discharging the effluent.
  127. **STAGE I VAPOR COLLECTION SYSTEM** - A system where gasoline vapors are forced from a tank into a vapor-tight holding system or vapor control system through direct displacement by the gasoline being loaded.
  128. **STAGE II VAPOR COLLECTION SYSTEM** - A system where at least 90 percent by weight of the gasoline vapors that are displaced or drawn from a vehicle fuel tank during refueling are transferred to a vapor-tight holding system or vapor control system.
  129. **STANDARD CONDITIONS** - A gas temperature of 68°F (20°C) and a gas pressure of 14.7 psia (29.92 in. Hg). Unless otherwise specified, all analyses and tests shall be calculated and reported at standard gas temperatures and pressure values.
  130. **START-UP** - The setting into operation of any source for any purpose except routine phasing in of process equipment.
  131. **STATE** - The state of Arizona.
  132. **STATE HAZARDOUS AIR POLLUTANT** - Any air pollutant that the ADEQ Director has designated as a hazardous air pollutant pursuant to A.R.S. §49-426.04.A. (1992) and has not deleted pursuant to A.R.S. §49-426.04.B. (1992).
  133. **STATIONARY SOURCE** - Any building, structure, facility, or installation which, at a fixed location, emits or may emit any air pollutant subject to regulation under this Code.
  134. **STATIONARY STORAGE TANK** - Any tank, reservoir or other container used to store, but not transport, organic liquids.
  135. **SUBMERGED FILL PIPE** - Any discharge pipe or nozzle which meets either of the following conditions:
    - a. For top-filled or bottom-filled tanks, the end of the discharge pipe or nozzle is totally submerged when the liquid level is 6 inches (15 cm) from the bottom of the



- tank.
- b. For side-filled tanks, the discharge pipe or nozzle is totally submerged when the liquid level is 18 inches (46 cm) from the bottom of the tank.
136. **TRUE VAPOR PRESSURE (TVP)** - The equilibrium partial pressure exerted by a petroleum liquid.
137. **UNCLASSIFIED AREA** - 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 Code, is treated as an attainment area.
138. **UNPAVED PARKING LOT** - A contiguous geographical area that is regularly used for the parking of self-propelled vehicles and is not covered with dust-suppressing materials and maintained in such a manner that visible emissions of dust from the parking area are permanently prevented other than during times of normal cleaning or after flooding.
139. **UNPAVED ROAD** - A road which is not covered with dust-suppressing materials and maintained in such a manner that visible emissions of dust from the road surface are permanently prevented other than during times of normal cleaning or after flooding.
140. **VAPOR** - The gaseous form of a substance normally occurring in a liquid or solid state under standard conditions.
141. **VAPOR LOSS CONTROL DEVICE** - Any piping, hoses, equipment, and devices which are used to collect, store or process organic vapors at a bulk terminal, bulk plant, service station or other operation handling gasoline or other organic liquids.
142. **VAPOR PRESSURE** - The pressure exerted by the gaseous form of a substance in equilibrium with its liquid or solid form.
143. **VAPOR RECOVERY/DISPOSAL SYSTEM** - The portion of the vapor collection and recovery/disposal system which consists of one of the following:
- a. A system which processes the displaced vapor and recovers at least 90% by weight of the vapors being processed.
  - b. A vapor handling system which directs at least 90% by weight of the displaced vapors to a fuel gas system.
  - c. Other equipment with an efficiency equal to or greater than the systems described in Paragraphs a. and b. above and approved by the Control Officer.
144. **VAPOR TIGHT** - A condition where no organic vapor leak reaches or exceeds 100% of the lower explosive limit at a distance of one inch (2.5 cm) from a leak when measured with a combustible gas detector or an organic vapor analyzer, both calibrated with propane.
145. **VISIBLE EMISSIONS** - Any emissions which are visually detectable without the aid of instrumentation and which contain particulate matter.
146. **VOLATILE ORGANIC COMPOUND (VOC)** - Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and

**ammonium carbonate, which participates in atmospheric photochemical reactions, which includes any such organic compound other than those non-precursor organic compounds listed in §1-3-140.89.**

[Adopted effective June 29, 1993. Amended effective November 3, 1993. Amended February 22, 1995. Amended October 12, 1995. Tentatively revised as indicated on 5/14/97 and 5/27/98 as ratified on July 29, 1998; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96) and the District's Title V program as approved at 61 Fed. Reg. 55910 (10/30/96).]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 1. AIR QUALITY STANDARDS**

#### **2-1-010. Purpose**

The purpose of this article is to establish ambient concentrations for specific air pollutants which are necessary to protect human health and public welfare.

[Adopted effective June 29, 1993.]

## CHAPTER 2. AMBIENT AIR QUALITY STANDARDS

### ARTICLE 1. AIR QUALITY STANDARDS

#### 2-1-020. Particulate matter

- A. The primary ambient air quality standards for particulate matter are:
  - 1. 50 micrograms per cubic meter of PM10 annual arithmetic mean concentration.
  - 2. 150 micrograms per cubic meter of PM10 24-hour average concentration.
- B. The secondary ambient air quality standards for particulate matter are:
  - 1. 50 micrograms per cubic meter of PM10 annual arithmetic mean concentration.
  - 2. 150 micrograms per cubic meter of PM10 24-hour average concentration.
- C. The primary and secondary annual ambient air quality standards for PM10 shall be considered attained when the expected annual arithmetic mean concentration, as determined in accordance with 40 C.F.R. Part 50, Appendix K (1992), is less than or equal to 50 micrograms per cubic meter.
- D. The primary and secondary 24-hour ambient air quality standards for PM10 shall be considered attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter, as determined in accordance with 40 C.F.R. Part 50, Appendix K (1992), is less than or equal to one.

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 1. AIR QUALITY STANDARDS**

#### **2-1-030. Sulfur oxide (sulfur dioxide)**

- A. The primary ambient air quality standards for sulfur oxides, measured as sulfur dioxide, are:
1. 80 micrograms per cubic meter (0.03 ppm) annual arithmetic mean.
  2. 365 micrograms per cubic meter (0.14 ppm) maximum 24-hour concentration not to be exceeded more than once per year.
- B. The secondary ambient air quality standard for sulfur oxides, measured as sulfur dioxide, is 1300 micrograms per cubic meter (0.5 ppm) maximum 3-hour concentration not to be exceeded more than once per year.

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 1. AIR QUALITY STANDARDS**

#### **2-1-040. Ozone**

- A. The primary ambient air quality standard for ozone is 235 micrograms per cubic meter (0.12 ppm).
- B. The secondary ambient air quality standard for ozone is 235 micrograms per cubic meter (0.12 ppm).
- C. The standards are attained when the expected number of days per calendar year with maximum hourly average concentrations above 235 micrograms per cubic meter (0.12 ppm) is less than or equal to one, as determined by 40 C.F.R. Part 50, Appendix H (1992).

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 1. AIR QUALITY STANDARDS**

#### **2-1-050. Carbon monoxide**

- A. The primary ambient air quality standards for carbon monoxide are:
1. 10 milligrams per cubic meter (9 ppm) maximum 8-hour concentration not to be exceeded more than once per year.
  2. 40 milligrams per cubic meter (35 ppm) maximum 1-hour concentration not to be exceeded more than once per year.
- B. An 8-hour average shall be considered valid if at least 75 percent of the hourly averages for the 8-hour period are available. In the event that only six or seven hourly averages are available, the 8-hour average shall be computed on the basis of the hours available using six or seven as the divisor.
- C. When summarizing data for comparison with the standards, averages shall be stated to one decimal place. Comparison of the data with the levels of the standards in parts per million shall be made in terms of integers with fractional parts of 0.5 or greater rounding up.

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 1. AIR QUALITY STANDARDS**

#### **2-1-060. Nitrogen dioxide**

- A. The primary ambient air quality standard for nitrogen dioxide is 100 micrograms per cubic meter (0.053 ppm) annual arithmetic mean.
- B. The secondary ambient air quality standard for nitrogen dioxide is 100 micrograms per cubic meter (0.053 ppm) annual arithmetic mean.
- C. The standards are attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 ppm, rounded to three decimal places, with fractional parts equal to or greater than 0.0005 ppm rounded up. To demonstrate attainment, an annual mean shall be based upon hourly data that is at least 75 percent complete or upon data derived from the manual methods, that is at least 75 percent complete for the scheduled sampling days in each calendar quarter.

[Adopted effective June 29, 1993.]



## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 1. AIR QUALITY STANDARDS**

#### **2-1-070. Lead**

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

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 2. AMBIENT AIR QUALITY MONITORING METHODS AND PROCEDURES**

#### **2-2-080. Air quality monitoring methods**

Only those methods which have been either designated by the Administrator as reference or equivalent methods or approved by the Control Officer shall be used to monitor ambient air.

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 2. AMBIENT AIR QUALITY MONITORING METHODS AND PROCEDURES**

#### **2-2-090. Air quality monitoring procedures**

- A. Quality assurance, monitor siting, and sample probe installation procedures shall be in accordance with procedures described in the Appendices to 40 C.F.R. Part 58.
- B. The Control Officer may approve other procedures upon a finding that the proposed procedures are substantially equivalent or superior to procedures in the Appendices to 40 C.F.R. Part 58.

[Adopted effective June 29, 1993. Tentatively revised as indicated on 5/14/97; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96).]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 3. INTERPRETATION OF AMBIENT AIR QUALITY STANDARDS AND EVALUATION OF AIR QUALITY DATA**

#### **2-3-100. Interpretation of ambient air quality standards**

Unless otherwise specified, interpretation of all ambient air quality standards contained in this chapter shall be in accordance with 40 C.F.R. Part 50 (1992).

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 3. INTERPRETATION OF AMBIENT AIR QUALITY STANDARDS AND EVALUATION OF AIR QUALITY DATA**

#### **2-3-110. Evaluation of air quality data**

The evaluation of air quality data in terms of procedure, methodology, and concept is to be consistent with methods described in Appendix 10 of the A.A.C. Title 18, Chapter 2.

[Adopted effective June 29, 1993. Tentatively revised as indicated on 5/14/97; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96).]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 4. ATTAINMENT AREA CLASSIFICATION**

#### **2-4-120. Purpose**

The purpose of this article is to identify the federal classification status of the various geographic areas lying within the county.

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 4. ATTAINMENT AREA CLASSIFICATION**

#### **2-4-130. Adopted document(s)**

A.A.C. R18-2-217, is hereby adopted by reference and made a part of this Code.

[Adopted effective June 29, 1993. Tentatively revised as indicated on 5/14/97; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96).]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 4. ATTAINMENT AREA CLASSIFICATION**

#### **2-4-140. Area classifications within Pinal County**

- A. Pursuant to 40 C.F.R. § 81.403 (1992), that portion of the Superstition Wilderness lying within Pinal County is deemed a mandatory federal Class I area with respect to all criteria pollutants.
- B. For each of the criteria pollutants, each of those areas lying within Pinal County having an Administrator-approved designation as attainment or unclassified, and not otherwise having an area classification pursuant to Subsection A. of this section or reclassified pursuant to the Clean Air Act § 174 (1990) and A.A.C. R18-2-217, are deemed Class II areas pursuant to the Clean Air Act § 162 (1990) and A.A.C. R18-2-217.

[Adopted effective June 29, 1993. Tentatively revised as indicated on 5/14/97; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96).]



## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 4. ATTAINMENT AREA CLASSIFICATION**

#### **2-4-150. Attainment status in Pinal County**

Acting pursuant to the Clean Air Act § 107 (1990), the Administrator has identified all portions of Pinal County as being in compliance with the national ambient air quality standards for carbon monoxide, ozone and nitrogen dioxide as of November 15, 1990. Those portions of the county that have been designated nonattainment for total suspended particulates, sulfur dioxide and PM 10 are identified in 40 C.F.R. § 81.303 (1992).

[Adopted effective June 29, 1993.]

## CHAPTER 2. AMBIENT AIR QUALITY STANDARDS

### ARTICLE 5. LIMITATION OF POLLUTANTS IN CLASSIFIED ATTAINMENT AREAS

#### 2-5-160. Ambient air increment ceilings

Areas designated as Class I, II or III shall be limited to the following increases in air pollutant concentrations occurring over the base line 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 ( g/m3)
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	
	CLASS II	
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	
	CLASS III	
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	

[Adopted effective June 29, 1993. Amended February 22, 1995. Amended October 12, 1995.]

## CHAPTER 2. AMBIENT AIR QUALITY STANDARDS

### ARTICLE 5. LIMITATION OF POLLUTANTS IN CLASSIFIED ATTAINMENT AREAS

#### 2-5-170. Baseline concentration

- A. The baseline concentration shall be that ambient concentration level which exists in the baseline area at the time of the applicable minor source baseline date.
1. 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 Subdivision 2. of this section; and
    - b. The allowable emissions of major sources which commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.
  2. 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 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.
- B. The maximum allowable concentration of any air pollutant in any area to which § 2-5-160 applies shall not exceed a concentration for each pollutant equal to the concentration permitted under the ambient air quality standards contained in this chapter.

[Adopted effective June 29, 1993.]

## CHAPTER 2. AMBIENT AIR QUALITY STANDARDS

### ARTICLE 5. LIMITATION OF POLLUTANTS IN CLASSIFIED ATTAINMENT AREAS

#### 2-5-180. Baseline date

- A. The major source baseline date is:
  - 1. January 6, 1975 for sulfur dioxide and particulate matter; and
  - 2. February 8, 1988 for nitrogen dioxide.
- B. The minor source baseline date shall be the earliest date after August 7, 1977 for sulfur dioxide and particulate matter, and February 8, 1988 for nitrogen dioxide, that either:
  - 1. A major source or major modification submits a complete permit application to the Administrator under 40 C.F.R. § 52.21 (1992); or
  - 2. A major source or major modification submits a complete permit application to the ADEQ Director under A.A.C. R18-2-304; or
  - 3. A major source or major modification submits a complete permit application to the Control Officer under §3-3-250.
- C. The baseline date shall be established for each pollutant for which maximum allowable increases or other equivalent measures have been established if both:
  - 1. The area in which the proposed source or modification would construct is designated as attainment or unclassifiable for the pollutant on the date of its complete application under Subsection B.; and
  - 2. In the case of a major source, 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.

[Adopted effective June 29, 1993. Amended October 12, 1995. Tentatively revised as indicated on 5/14/97; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96).]

## CHAPTER 2. AMBIENT AIR QUALITY STANDARDS

### ARTICLE 5. LIMITATION OF POLLUTANTS IN CLASSIFIED ATTAINMENT AREAS

#### 2-5-190. Baseline area

For new major sources and major modifications located in, and which would establish the minor source baseline date in, Pinal County, the baseline area shall be the Central Arizona Intrastate Air Quality Control Region, as designated by the Administrator at 40 CFR §81.271 (7/1/93) and comprising Pinal and Gila Counties, at least insofar as any portion of that region is designated as attainment or unclassifiable for the pollutant for which the minor source baseline date is established. The baseline area shall also extend to any other air quality control region located in Arizona in which such a source establishing a minor source baseline date in Pinal County would have an air quality impact equal to or greater than 1 g/m<sup>3</sup> (annual average) of the pollutant for which the minor source baseline date is established. Redesignations of an air quality control region under §107(d)(3)(D) of the Act, or area attainment status under §107(d)(3)(E) of the Act, cannot intersect or be smaller than the 1 g/m<sup>3</sup> (annual average) area of impact of any new major source or major modification which either:

1. Establishes a minor source baseline date; or
2. Is subject to either 40 C.F.R. § 52.21 or § 3-2-250 and would be constructed in Pinal County.

[Adopted effective June 29, 1993. Amended February 22, 1995.]

## CHAPTER 2. AMBIENT AIR QUALITY STANDARDS

### ARTICLE 5. LIMITATION OF POLLUTANTS IN CLASSIFIED ATTAINMENT AREAS

#### 2-5-200. Exemptions

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. The 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 in effect under the provisions of the Energy Supply and Environmental Coordination Act §§ 2(a) and (b), 15 U.S.C. § 792 (1974), 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 when the following conditions are met:
  - a. The Permit to Operate issued to such sources specifies the time period during which the temporary emissions increase of sulfur dioxide, nitrogen oxides or particulate matter would occur. Such time period shall not be renewable and shall not exceed two years unless a longer period is specifically approved by the Control Officer.
  - 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 Permit to Operate issued to such sources specifies that at the end of the time period described in Paragraph a. of this subdivision, 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 Subdivisions 1. and 2. of this section shall not apply more than 5 years after the effective date of the order or natural gas curtailment plan on which the exception is based.

[Adopted effective June 29, 1993. Amended February 22, 1995.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 5. LIMITATION OF POLLUTANTS IN CLASSIFIED ATTAINMENT AREAS**

#### **2-5-210. Violations of maximum allowable increases**

- A. The Control Officer shall review the adequacy of these rules on a periodic basis, and within 60 days of such time as information becomes available that an applicable maximum allowable increase is being violated.
- B. If the Administrator or the Control Officer determines that these rules are substantially inadequate to prevent significant deterioration or that an applicable maximum allowable increase as specified in § 2-5-160 is being violated, these rules shall be revised to correct the inadequacy or violation. These rules shall be revised within 60 days of such a finding by the Control Officer or within 60 days following notification from the Administrator, or by such later date as may be allowed by the Administrator, after consultation with the Control Officer. Any revision effected pursuant to this section shall be followed within 60 days thereafter by a presentation of an application to amend the SIP to reflect such change to these rules.

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 6. VIOLATIONS**

#### **2-6-220. Violations of the national ambient air quality standards**

- A. One exceedance per year of the ambient air quality standards prescribed in this chapter of this Code shall be allowed for each pollutant at each monitoring site.
- B. Each additional exceedance at each site shall constitute a separate violation of ambient air quality standards.
- C. The provisions of Subsection A. of this section shall not apply to any of the following:
  - 1. The annual and quarterly standards.
  - 2. The standards for ozone prescribed in § 2-1-040.
  - 3. The primary and secondary 24-hour PM10 standards prescribed in § 2-1-020.

[Adopted effective June 29, 1993.]



## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 7. AIR POLLUTION EMERGENCY EPISODES**

#### **2-7-230. Purpose**

The purpose of this article is to establish criteria used to determine air pollution emergency episodes and the appropriate control actions. This article describes control and advisory procedures reached at each of the three episode levels.

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 7. AIR POLLUTION EMERGENCY EPISODES**

#### **2-7-240. Episode procedures guidelines**

Guidelines for the procedures and communication steps to be followed during an air pollution episode are described in "Procedures for Prevention of Emergency Episodes" (ADEQ, 1988).

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 7. AIR POLLUTION EMERGENCY EPISODES**

#### **2-7-250. Definitions**

For the purpose of this article, the following definition shall apply:

**EMERGENCY EPISODE PLAN** - A system designed to reduce the levels of air contaminants which may reach or have reached the level which may be harmful to health, and to protect that portion of the population at risk.

[Adopted effective June 29, 1993.]

## CHAPTER 2. AMBIENT AIR QUALITY STANDARDS

### ARTICLE 7. AIR POLLUTION EMERGENCY EPISODES

#### 2-7-260. Standards

- A. An air pollution alert, warning or emergency shall be declared when the following air pollutant concentrations are exceeded at any monitoring site and when meteorological conditions indicate that there will be a recurrence of those concentrations for the same pollutant(s) during the subsequent 24-hour period:

#### Episode Level Criteria

Pollutant	Averaging Time	Alert	Warning	Emergency	Significant Harm
Sulfur Dioxide ( g/m3)	24-hour	800	1,600	2,100	2,620
PM10 ( g/m3)	24-hour	350	420	500	600
Ozone ( g/m3)	1-hour	400	800	1,000	1,200
Nitrogen Dioxide( g/m3)	1-hour	1,130	2,260	3,000	3,750
Carbon Monoxide (mg/m3)	1-hr	--	--	--	144
	4-hr	--	--	--	86.3
	8-hr	17	34	46	57.5

- B. When an air pollution alert, warning or emergency has been declared, one or more of the control actions as applicable to the source emitting the pollutant of concern shall be implemented in the affected area.

1. Control Actions - Air Pollution Alert

- a. All permits to burn shall be suspended until further notice. The forest service shall be notified to postpone slash burning in the affected area.
- b. Incineration shall be limited to the hours of 12:00 P.M. - 4:00 P.M.
- c. Those manufacturing facilities with prearranged emission reduction plans as noted in the "Procedures for Prevention of Emergency Episodes" (ADEQ, 1988) shall be notified to initiate alert stage control actions. Other sources shall be notified to minimize emissions by curtailing or deferring operations not on a required schedule and by maximizing the collection efficiency of control equipment. Emissions from batch operations shall be limited to the hours of 12:00 P.M. - 4:00 P.M.
- d. The public shall be requested to voluntarily eliminate all unnecessary usage of motor vehicles.

2. Control Actions - Air Pollution Warning

- a. Burning of refuse, vegetation, trade wastes, and debris shall not be permitted by any person.
- b. Use of incinerators shall be prohibited.
- c. Those manufacturing facilities with prearranged emission reduction plans as noted in the "Procedures for Prevention of Emergency Episodes" (ADEQ, 1988) shall be notified to initiate warning stage control actions. Other sources shall be notified to initiate a 40 percent or greater reduction in emissions by curtailment or cessation of operations. All processing industries shall be requested to effect a maximum reduction in heat load demands.
- d. If possible, power plant generating loads shall be transferred outside the affected area. Power plant production shall be reduced by purchase of available energy from neighboring utilities.
- e. Highway construction and paving activities shall be halted. All soil removal or grading operations at other construction sites shall be postponed.

- f. Dust producing crop preparation and cultivation activities shall be postponed. A maximum reduction in agricultural processing and handling operations shall be effected.
  - g. The public shall be requested to voluntarily reduce motor vehicle usage by use of carpools and other means of transportation and elimination of unnecessary operation.
3. Control Actions - Air Pollution Emergency
- a. Those manufacturing facilities with prearranged emission reduction plans as noted in the "Procedures for Prevention of Emergency Episodes" (ADEQ, 1988) shall be notified to initiate emergency stage control actions. Other manufacturing establishments shall cease operations as directed by the Governor.
  - b. As directed by the Governor, all commercial, governmental, and institutional establishments, except those vital for public safety and welfare and enforcement of the emergency episode control actions, shall be closed.
  - c. Generating loads at power plants shall be reduced further, based upon reduced load from industrial and commercial cutbacks.
  - d. All construction shall be halted as directed by the Governor except that which must proceed to avoid emergent physical harm.
  - e. As directed by the Governor, use of motor vehicles shall be prohibited except in emergencies with approval of the local police.

[Adopted effective June 29, 1993.]

## **CHAPTER 2. AMBIENT AIR QUALITY STANDARDS**

### **ARTICLE 7. AIR POLLUTION EMERGENCY EPISODES**

#### **2-7-270. Administrative requirements**

- A. Once declared, any status reached by application of these criteria shall remain in effect until the criteria for that level are no longer met. At such time, the next lower status will be assumed.
- B. When the conditions justifying the proclamation of an air pollution alert, warning, or emergency are determined to exist in any place in Pinal County, the Control Officer shall be guided by the following criteria and cooperate directly with the ADEQ Director in all pertinent areas of control and surveillance.
  - 1. If the average wind speed for 24 hours is greater than 9.0 miles per hour, the criteria levels for particulates and sulfur dioxide and particulates combined shall not apply and no source control actions shall be taken.
  - 2. If, after an alert or warning episode level has been declared, and air pollution concentrations and meteorological conditions do not deteriorate further, or improve after 48 hours and control actions have been taken, the next higher episode shall be declared and its associated control actions implemented.

[Adopted effective June 29, 1993.]

**2-8-280. General**

- A. The purpose of this article is to limit the emission of air contaminants into the atmosphere by establishing standards for visible emissions and opacity.
- B. This article applies to visible emissions resulting from the discharge of any air contaminant except as otherwise provided in this article.

[Adopted effective June 29, 1993.]

**2-8-290. Definitions**

For the purpose of this article, the following definitions shall apply:

1. **INTERMITTENT SOURCE** - Reserved.
2. **SHUTDOWN** - The cessation of operation of any air pollution control equipment or process equipment for any purpose, except routine phasing out of process equipment.
3. **UNCOMBINED WATER** - Condensed water containing no more than analytical trace amounts of other chemical elements or compounds.

[Adopted effective June 29, 1993.]



## **2-8-300. Performance standards**

- A. The provisions of this Article shall only apply to a source that is all of the following:
1. An existing source, which for purposes of this rule means any source that does not have an applicable new source performance standard adopted under Chapter 6 of this Code;
  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, which, for purposes of this rule, 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".
- B. Except as otherwise provided in Chapter 5 of this code relating to opacity standards for 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 Control Officer and Administrator as provided in subsections (C) and (D), after June 2, 2005;
  2. Prior to April 23, 2006 greater than 40% in an area that is attainment or unclassifiable for each particulate matter standard; and
  3. On and 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 (C) and (D).
- C. A person owning or operating a source may petition the Control Officer for an alternative applicable opacity limit. The petition shall be submitted to the Control Officer by September 15, 2005.
1. The petition shall contain:
    - a. Documentation that the affected facility and any associated air pollution control equipment are incapable of being adjusted or operated to meet the applicable opacity standard. This includes:
      - i. Relevant information on the process operating conditions and the control devices operating conditions during the opacity or stack tests;
      - ii. A detailed statement or report demonstrating that the source investigated all practicable means of reducing opacity and utilized control technology that is reasonably available considering technical and economic feasibility; and

- iii. An explanation why the source cannot meet the present opacity limit although it is in compliance with the applicable particulate mass emission rule.
    - b. If there is an opacity monitor, any certification and audit reports required by all applicable subparts in 40 CFR 60 and in Appendix B, Performance Specification 1.
    - c. A verification by a responsible official of the source of the truth, accuracy, and completeness of the petition. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
  2. If the unit for which the alternative opacity standard is being applied is subject to a stack test, the petition shall also include:
    - a. Documentation that the source conducted concurrent EPA Reference Method stack testing and visible emissions readings or is utilizing a continuous opacity monitor. The particulate mass emission test results shall clearly demonstrate compliance with the applicable particulate mass emission limitation by being at least 10% below that limit. For multiple units that are normally operated together and whose emissions vent through a single stack, the source shall conduct simultaneous particulate testing of each unit. Each control device shall be in good operating condition and operated consistent with good practices for minimizing emissions.
    - b. Evidence that the source conducted the stack tests according to § 3-1-170, and that they were witnessed by the Control Officer or the Control Officer'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 C.1 and C.2, and in addition:
    - a. In subsection C.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 C.2.b, the stack tests shall be conducted with an opportunity for the Administrator or the Administrator's agent or representative to be present.
- D. If the Control Officer receives a petition under subsection C the Control Officer shall approve or deny the petition as provided below by February 15, 2006:
  1. If the petition is approved under subsection C.1 or C.2, the Control Officer shall include an alternative opacity limit in a proposed significant permit revision for the source under § 3-2-195 and § 3-1-107. 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 C.3, the Control Officer 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 3-1-083(A)(7)(c)(iii) by April 23, 2006.
  4. A source does not have to petition for an alternative opacity limit under subsection C to enter into a revised compliance schedule under 3-1-083 (A)(7)(c).
- E. The Control Officer, Administrator, source owner or operator, inspector or other interested party shall determine the process weight rate, as used in this section, 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.

[Adopted effective June 29, 1993. Amended May 18, 2005]

- ~~20. §5-24-1032 (2/22/95) Federally Enforceable Minimum Standard of Performance - Process Particulate Emissions~~
- ~~21. §5-24-1040 (2/22/95) Carbon Monoxide Emissions - Industrial Processes~~
- ~~22. §5-24-1045 (2/22/95) Sulfite Pulp Mills - Sulfur Compound Emissions~~
- ~~23. §5-24-1050 (2/22/95, as amended June 20, 1996) Reduced Sulfur Emissions - Default Limitation~~
- ~~24. §5-24-1055 (2/22/95) Pumps and Compressors - Organic Compound Emissions~~

Chapter 2. - Ambient Air Quality Standards  
Article 8 - Visibility Limiting Standard

**2-8-302. Performance Standards - Hayden PM10 Nonattainment Area**

- A. Subject to the exemption provided in subsection B, the provisions of this Section shall apply to new and existing sources of fugitive dust within the following a source categories:
  - 1. Construction;
  - 2. Roadway building, use and maintenance;
  - 3. Bulk material handling, storage and transport.
- B. These performance standards shall not apply to any source or source category that the Control Officer and the Administrator both find has been shown to not contribute significantly to PM10 levels in excess of the NAAQS.
- C. This section shall apply within the Hayden planning area PM10 nonattainment area, as defined at 40 CFR §81.303.
- D. The opacity of any plume or effluent, from a source described in subsection (A), shall not be greater than 20%.

**2-8-310. Exemptions**

The provisions of this article shall not apply to:

Emissions where the only reason for the exceedance of the opacity limitation is the presence of uncombined water.

[Adopted effective June 29, 1993.]

**2-8-320. Monitoring and records**

- A. Opacity observations of visible emissions shall be conducted in accordance with Reference Method 9 in the Arizona Testing Manual for Air Pollutant Emissions (ADEQ, 1992).
- B. Reserved.

[Adopted effective June 29, 1993.]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-010. Purpose**

The purpose of this article is to provide an orderly procedure for the review of new sources of air pollution and for the modification and operation of existing sources through the issuance of permits. The provisions of this article shall not apply to applicants for open burning permits.

[Adopted effective June 29, 1993. Amended effective November 3, 1993.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-030. Definitions

For the purpose of this chapter, the following definitions shall apply:

1. AFFECTED SOURCE - A source that includes one or more units which are subject to emission reduction requirements or limitations under Title IV of the Clean Air Act (1990).
2. AFFECTED STATE - Any state whose air quality may be affected and that is contiguous to Arizona; or that is within 50 miles of the permitted source.
3. ALTERNATIVE METHOD - 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 Control Officer's determination of compliance in accordance with §3-1-160.D.
4. COMPLETE - In reference to an application for a permit or permit revision, complete shall mean that the application contains all the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the Control Officer from requesting or accepting any additional information.
5. DISPERSION TECHNIQUE - Any technique which attempts to affect the concentration of a pollutant in the ambient air by:
  - 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.
  - c. Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, 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. The preceding sentence does not include:
    - 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 where:
      - (1) The source owner or operator demonstrates that the facility was originally designed and constructed with such merged gas streams.
      - (2) After July 8, 1983, 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. This exclusion from the definition of dispersion techniques shall apply only to the emission limitation for the pollutant affected by such change in operation; or
      - (3) Before July 8, 1985, such merging was part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the reviewing agency shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the reviewing agency shall deny credit for the effects of such merging in calculating the allowable emissions for the source.
    - iii. Smoke management in agricultural or silvicultural prescribed burning programs.
    - iv. Episodic restrictions on residential woodburning and open burning.
    - v. Techniques under paragraph (c) above 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.



- 5a. EMISSIONS ALLOWABLE UNDER THE PERMIT - An enforceable 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 enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.
6. EQUIPMENT USED IN NORMAL FARM OPERATIONS - Equipment used directly on farm property for tilling, disking, fertilizing, harvesting, feeding, weed and pest controlling, crop or animal handling, milking, sheep shearing, irrigating, or other direct farm operation for over 50% of its use. Fuel storage vessels are considered farm equipment if they meet all of the following conditions:
  - a. Contain diesel, unleaded or leaded gasoline, propane or butane.
  - b. Are located on farm property which is zoned for agricultural use and assessed for property tax purposes as being used for agricultural uses.
  - c. Have total capacities not more than 12,000 gallons for diesel, 8,000 gallons for gasoline, 2,000 gallons for propane or butane.
  - d. Are used to fuel equipment used on the same farm property on which they are located. Equipment used on a farm for a purpose which is normally done off farm property by a farm support company is not considered farm equipment for normal farm operations. Examples include but are not limited to long term grain storage, cotton ginning, repair services, and irrigation wells and equipment not located on the farm which they irrigate.
7. EXISTING STACK - The owner or operator had:
  - a. Begun, or caused to begin, a continuous program of physical on-site construction of the stack; or
  - b. Entered into binding agreements or contractual obligations, which could not be canceled 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.
8. FINAL PERMIT - The version of a permit issued by the District after completion of all review required by this Code.
9. GOOD ENGINEERING PRACTICE (GEP) STACK HEIGHT - A stack height meeting the requirements described in §3-1-177.
10. HIGH TERRAIN - Any area having an elevation of 900 feet or more above the base of the stack of a source.
11. INNOVATIVE CONTROL TECHNOLOGY - 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, and of achieving at least comparable reductions at lower cost in terms of energy, economics, or no nair quality environmental impacts.
12. LOW TERRAIN - Any area other than high terrain.
13. LOWEST ACHIEVABLE EMISSION RATE (LAER) - For any source, the more stringent rate of emissions based on the following:
  - a. The most stringent emissions limitation which is contained in the implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or
  - b. The most stringent emissions limitation which is achieved in practice by such class or category of stationary sources. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within a stationary source. In no event shall the application of the term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance or national emission standard for a hazardous air pollutant.
14. PORTABLE SOURCE - Any building, structure, facility or installation subject to regulation pursuant to A.R.S. §49-480 (1992) which emits or may emit any air pollutant and is capable of being operated at more than one location.
15. PROPOSED PERMIT - The version of a permit for which the control Officer offers public participation under §3-1-107 or affected state review pursuant to §3-1-065.E.
16. PROPOSED FINAL PERMIT - The version of a Class A permit that the District proposes to issue

and forwards to the Administrator for review in compliance with §3-1-065.A.

17. **REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT)** - For sources subject to Chapter 5. of this Code, the emissions limitation of the source performance standard. For sources not subject to Chapter 5. of this Code, the lowest emission limitation that a particular source is capable of achieving by the application of control technology that is reasonably available considering technological and economic feasibility. Such technology may previously have been applied to a similar, but not necessarily identical, source category. RACT for a particular source is determined on a case-by-case basis, considering the technological feasibility and cost-effectiveness of the application of the control technology to the source category.
18. **RESPONSIBLE OFFICIAL** - 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 Control Officer;
  - 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 Code, 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; or
  - d. For affected sources:
    - i. The designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the Clean Air Act (1990) or the regulations promulgated thereunder are concerned; and
    - ii. The designated representative for any other purposes under 40 C.F.R. Part 70 (1992).
19. **SIGNIFICANCE LEVELS** - The following ambient concentrations for the enumerated pollutants:

Pollutant	Averaging Time				
	Annual	24-hour	8-hour	3-hour	1-hour
SO <sub>2</sub>	1 g/m <sup>3</sup>	5 g/m <sup>3</sup>		25 g/m <sup>3</sup>	
NO <sub>2</sub>	1 g/m <sup>3</sup>				
CO			0.5 mg/m <sup>3</sup>		2 mg/m <sup>3</sup>
PM <sub>10</sub>	1 g/m <sup>3</sup>	5 g/m <sup>3</sup>			

Except for the annual pollutant concentrations, exceedance of significance levels shall occur when the ambient concentrations of the above pollutants will be exceeded more than once per year at any one location. Significance levels shall be deemed not to have been exceeded for any of the above-enumerated pollutants if such concentrations occur at a specific location and at a time when Arizona ambient air quality standards for such pollutant would not be violated.

[Adopted effective June 29, 1993. Amended effective November 3, 1993.]

### 3-1-040. Applicability and classes of permits

- A. Except as otherwise provided in this chapter, no person shall commence construction of, operate, or make a modification to any source subject to regulation under this chapter, without first obtaining a permit or permit revision from the Control Officer.
- B. There shall be two classes of permits as follows:
  1. Class A permits shall be required for persons proposing to commence construction of or operate any of the following sources :
    - a. Any major source.
    - b. Any source, including an area source, subject to a standard, limitation, or other requirement under §111 of the Clean Air Act (1990) that has been adopted as an element of this Code, provided that the obligation under this subparagraph does not extend to any source which has been exempted by the Administrator from a Title V permit requirement or for which the Administrator has allowed a deferral of a Title V permit requirement, but then only for the duration of the allowable deferral period.
    - c. Any source, including an area source, subject to a standard or other requirement under §112 of the Clean Air Act (1990) that has been adopted as an element of this Code, provided that the obligation under this subparagraph does not extend to any source which has been exempted by the Administrator from a Title V permit requirement or for which the Administrator has allowed a deferral of a Title V permit requirement, but then only for the duration of the allowable deferral period, and further provided that a source is not required to obtain a permit solely because it is subject to regulations or requirements under §112(r) of the Clean Air Act (1990).
    - d. An affected source.
    - e. Solid waste incineration units required to obtain a permit pursuant to §129(e) of the Clean Air Act (1990).
    - f. Any source in a source category designated by the Administrator and adopted by the Control Officer by rule.
  2. Unless a Class A permit is required, Class B permits shall be required for:
    - a. A person to commence construction of or operate any of the following:
      - i. Any source that has the potential to emit greater than *de minimis* amounts of regulated air pollutants.
      - ii. Any source, including an area source, subject to a standard, limitation, or other requirement under §111 of the Clean Air Act (1990).
      - iii. Any source, including an area source, subject to a standard or other requirement under §112 of the Clean Air Act (1990), further provided that a source is not required to obtain a permit solely because it is subject to regulations or requirements under §112(r) of the Clean Air Act (1990).
      - iv. Any source subject to a standard of performance under Chapter 5 of this Code.
      - v. Any source burning used oil, used oil fuel, hazardous waste or hazardous waste fuel.
      - vi. Incinerators.
      - vii. Fuel burning equipment, other than incinerators, fired with a fuel other than commercial natural gas or propane, and rated at more than 500,000 Btu per hour.
      - viii. Fuel burning equipment fired with commercial natural gas or propane, and rated at more than 2,500,000 BTU per hour.
    - b. A person to make a modification to a source which would cause it to emit, or have the potential to emit, quantities of regulated air pollutants greater than those specified in Paragraph a.i. of this subdivision, unless such modification is authorized by other

provisions of this Code.

C. Exemptions.

1. The provisions of this chapter shall not apply to:
  - a. Motor vehicles;
  - b. Agricultural vehicles;
  - c. Fuel burning equipment which, in the aggregate with other such equipment of the applicant at the same location or property other than a one- or two-family residence, is rated at less than 500,000 Btus per hour.
2. Unless the source is a major source, or unless operation without a permit would result in a violation of the Clean Air Act (1990), the provisions of this chapter shall not apply to the following sources:
  - a. Sources subject to 40 CFR Part 60, Subpart AAA, "Standards of Performance for New Residential Wood Heaters" (1992).
  - b. Sources and source categories that would be required to obtain a permit solely because they are subject to 40 CFR §61.145 (1992).
  - c. Agricultural equipment used in normal farm operations. "Agricultural equipment used in normal farm operations" does not include equipment that would be classified as a source that would require a permit under Title V of the Clean Air Act (1990), or would be subject to a standard under 40 CFR Parts 60 or 61 (1992).

[Adopted effective November 3, 1993. Amended February 22, 1995. Amended October 12, 1995.]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-042. Operating authority and obligations for a source subject to permit reopening**

In the event a permit issued under this Code must be reopened, such permit continues in effect and the source remains subject to the obligations of such permit. Such permit also constitutes continued authority to operate until final action is taken on the reopened permit. For purposes of this section, "final action" means the latest of the issuance of the reopened permit, the expiration of the appeal period following the a refusal to issue a reopened permit, or the conclusion of any appeal process regarding the refusal to issue, or terms of, the reopened permit.

[Adopted February 22, 1995.]

### **3-1-050. Permit application requirements**

- A. Unless otherwise noted, this section applies to each source requiring a Class A or B permit or permit revision.
- B. To apply for a Class A permit, applicants shall complete the "Permit Application Form" and supply all information required by the "Filing Instructions" as shown in Appendix A.
- C. Unless otherwise required by §3-1-045, a timely application is:
  - 1. For a source, other than a major source, applying for a permit for the first time, one that is submitted within 12 months after the source becomes subject to the permit program.
  - 2. For purposes of a Class A permit renewal, a timely application is one that is submitted at least 6 months, but not greater than 18 months prior to the date of permit expiration.
  - 3. For purposes of a Class B permit renewal, a timely application is one that is submitted at least 3 months, but not greater than 12 months prior to the date of permit expiration.
  - 4. For initial Phase II acid rain permits required pursuant to §3-6-565, one that is submitted to the Control Officer by January 1, 1996 for sulfur dioxide, and by January 1, 1998 for nitrogen oxides.
  - 5. Any existing source which becomes subject to a standard promulgated by the Administrator pursuant to §112(d) of the Clean Air Act (1990) shall, within twelve 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 alternate 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. Permit applications need not provide emissions data regarding insignificant activities. Activities which are insignificant pursuant to §1-3-140 need only be listed in Class A permit applications.
- F. 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.
- G. A source that has submitted information with a Class A permit application under a claim of confidentiality pursuant to A.R.S. §49-487 (1992) and §3-1-120 of this Code shall submit a copy of such claim and such information directly to the Administrator.
- H. 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.

[Adopted effective November 3, 1993. Amended February 22, 1995. Amended October 12, 1995.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-055. Completeness determination

- A. Unless otherwise noted, this section applies to each source requiring a Class A or B permit or permit revision.
- B. A complete application is one that satisfies all of the following:
1. To be complete, an application shall provide all information required pursuant to §3-1-050.B. Applications for permit revisions need supply such information only if it is related to the proposed change, unless the source's proposed permit revision will revise its permit from a Class B permit to a Class A permit. A responsible official shall certify the submitted information consistent with §3-1-175.
  2. An application for a new permit or permit revision shall contain an applicability assessment of the requirements of Article 3 of this chapter. If the applicant determines that the proposed new source is a major source as defined in §3-3-203, or the proposed permit revision constitutes a major modification as defined in §1-3-140.78., then the application shall comply with all applicable requirements of Article 3.
  3. An application for a new permit or a permit revision shall contain an applicability assessment of the requirements of Chapter 7 of this Code. If the applicant determines that the proposed new source permit or permit revision is subject to the requirements of Chapter 7 of this Code, the application shall comply with all applicable requirements of Chapter 7.
  4. Except for proposed new major sources or major modifications subject to the requirements of Article 3 of this chapter, an application for a new permit, a permit revision, or a permit renewal shall be deemed to be complete unless the Control Officer notifies the applicant by certified mail that the application is not complete within 60 days of receipt of the application. For purposes of sources subject to the requirements of Article 3 of this chapter, the Class A permit application will be deemed to be submitted on the date that the completeness determination is made pursuant to Article 3 of this chapter.
  5. If, while processing an application that has been determined or deemed to be complete, the Control Officer determines that additional information is necessary to evaluate or take final action on that application, the Control Officer may request such information in writing, delivered by certified mail and set a reasonable deadline for a response. Except for minor permit revisions as set forth in §3-2-190, a source's ability to operate without a permit, as set forth in this chapter, 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 Control Officer. If the Control Officer notifies an applicant that its application is not complete under Subdivision 3. above, the application may not be deemed automatically complete until an additional 60 days after the next submittal by the applicant. The Control Officer may, after one submittal by the applicant pursuant to this subdivision, reject an application that is determined to be still incomplete and shall notify the applicant of the decision by certified mail.
  6. The completeness determination shall not apply to revisions processed through the minor permit revision process.

[Adopted effective November 3, 1993. Revised May 27, 1998 and ratified July 29, 1998; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96) and the District's Title V program as approved at 61 Fed. Reg. 55910 (10/30/96).]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-060. Permit application review process

- A. Unless otherwise noted, this section applies to each source requiring a Class A or B permit or permit revision.
- B. Action on application.
1. The Control Officer shall issue or deny each permit according to the provisions of §3-1-070. The Control Officer 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 Control Officer for a permit, permit revision, or permit renewal shall be complete according to §3-1-055.
    - b. Except for revisions qualifying as administrative or minor under §§3-2-185 and 3-2-190, all of the requirements for public notice and participation under §3-1-107 shall have been met.
    - c. For Class A permits, the Control Officer shall have complied with the requirements of §3-1-065 for notifying and responding to affected States, and if applicable, other notification requirements of §§3-3-210.2.e. and 3-3-280.C.2.
    - d. For Class A and B 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 §3-1-065.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 Control Officer has revised and submitted a proposed final permit in response to the objection and EPA has not objected to this proposed final permit.
    - f. For permits to which the Administrator has objected to issuance pursuant to a petition filed under 40 CFR §70.8(d) (1992), the Administrator's objection has been resolved.
  3. Omitted from original.
  4. Omitted from original.
  5. The Control Officer 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. For Class A permits, the Control Officer shall send this statement to the Administrator and for both Class A and B permits, to any other person who requests it.
  6. Except as provided in 40 CFR §70.4(b)(11) (1992), §§3-1-045 and 3-3-210, regulations promulgated under Title IV or V of the Clean Air Act (1990), or the permitting of affected sources under the acid rain program, the Control Officer shall take final action on each permit application (and request for revision or renewal) within 18 months after receiving a complete application.
  7. Priority shall be given by the Control Officer to taking action on applications for construction or modification submitted pursuant to Title I, Parts C and D of the Clean Air Act (1990).
  8. A proposed permit decision shall be published within 9 months of receipt of a complete application and any additional information requested pursuant to §3-1-055.B.5. to process the application. The Control Officer shall provide notice of the decision as provided in §3-1-107 and any public hearing shall be scheduled as expeditiously as possible.
- C. Except as noted under the provisions in §§3-2-180, 3-2-185 and 3-2-190, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a properly issued permit. However, if a source submits a timely and complete application for permit issuance, revision or renewal, the source's failure to have a permit is not a violation of this Code until the Control Officer 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 Control Officer, any additional information identified as being needed to process the application.



[Adopted effective November 3, 1993. Amended February 22, 1995.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-065. Permit review by the EPA and affected states

- A. Except as provided in §3-1-050.G. and as waived by the Administrator, for each Class A permit, a copy of each of the following shall be provided to the Administrator as follows:
1. The applicant shall provide a complete copy of the application including any attachments, compliance plans and other information required by §3-1-055 at the time of submittal of the application to the Control Officer.
  2. The Control Officer shall provide the proposed final permit after public and affected state review.
  3. The Control Officer shall provide the final permit at the time of issuance.
- B. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator's national database management system.
- C. The Control Officer shall keep all records associated with all permits for a minimum of five years from issuance.
- D. No permit for which an application is required to be submitted to the Administrator under Subsection A. of this section shall be issued if the Administrator properly objects to its issuance in writing within 45 days of receipt of the proposed permit from the District and all necessary supporting information.
- E. Review by Affected States.
1. For each Class A permit, the Control Officer shall provide notice of each proposed permit to any affected state on or before the time that the Control Officer provides this notice to the public as required under §3-1-107 except to the extent §3-2-190 requires the timing of the notice to be different.
  2. If the Control Officer refuses to accept a recommendation of any affected state submitted during the public or affected state review period, the Control Officer shall notify the Administrator and the affected state in writing. The notification shall include the Control Officer's reasons for not accepting any such recommendation, and shall be provided to the Administrator as part of the submittal of the proposed final permit. The Control Officer shall not be required to accept recommendations that are not based on federal applicable requirements or requirements of State law.
- F. Any person who petitions the Administrator pursuant to 40 CFR §70.8(d) (1992) shall notify the District by certified mail of such petition as soon as possible, but in no case more than 10 days following such petition. Such notice shall include the grounds for objection and whether such objections were raised during the public comment period. A petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day administrative review period and prior to the Administrator's objection.
- G. If the Control Officer has issued a permit prior to receipt of the Administrator's objection under this section, and the Administrator indicates that it should be revised, terminated, or revoked and reissued, the Control Officer shall respond consistent with §3-1-087 and may thereafter issue only a revised permit that satisfies the Administrator's objection. In any case, the source shall not be in violation of the requirement to have submitted a timely and complete application.
- H. Prohibition on Default Issuance.
1. No Class A permit, including a permit renewal or revision, shall be issued until affected states and the Administrator have had an opportunity to review the proposed permit.
  2. No permit or renewal shall be issued unless the Control Officer has acted on the application.

[Adopted effective November 3, 1993.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-070. Permit application grant or denial

- A. The Control Officer shall deny a permit or permit revision if:
1. At a minimum, the Control Officer does not find that every such source described within the purview of the application, the use of which may cause or contribute to air pollution, or the use of which may eliminate or reduce or control the emission of air pollutants, 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 this Code, Arizona Revised Statutes as amended by the Arizona Session Laws 1992, Chapter 299, the Clean Air Act (1990), and the Arizona State Implementation Plan as set forth in 40 C.F.R. Part 52, Subpart D.
  2. In acting upon an application for a permit renewal, if the Control Officer finds that such source has not been constructed in accordance with any prior permit or revision issued pursuant to Article 2 of this chapter, he shall require the person to obtain a permit revision or deny the application for such permit. The Control Officer shall not accept any further application for a permit for such source so constructed until he finds that such source has been reconstructed in accordance with the prior permit or revision, or a revision to the permit has been obtained.
- B. After decision on a permit or permit revision, the Control Officer shall notify the applicant and any person who filed a comment on the permit or the revision pursuant to §3-1-107 in writing of the decision, and if the permit is denied, the reasons for such denial. Service of this notification may be made in person or by certified mail, and such service may be proven by the written acknowledgment of the persons served or affidavit of the person making the service. The Control Officer shall not accept a further application unless the applicant has corrected the reasons for the objections specified by the Control Officer as reasons for such denial.

[Adopted effective June 29, 1993. Amended November 3, 1993.]

### **3-1-081. Permit conditions**

- A. Each permit issued shall include the following elements:
1. The date of issuance and the permit term.
  2. Enforceable emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance.
    - 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, where an applicable requirement of the Clean Air Act (1990) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Clean Air Act (1990), 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 pursuant to §3-1-050.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 §1-3-140.
    - e. Emission limitations for batch processors shall be based on worst-case operational scenarios as adequately demonstrated by the permit applicant.
  3. Each permit shall contain the following requirements with respect to monitoring:
    - a. All emissions monitoring and analysis procedures or test methods required under the applicable requirements, including any procedures and methods promulgated pursuant to §§114(a)(3) or 504(b) of the Clean Air Act (1990);
    - b. Where 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 pursuant to Subdivision A.4. of this section. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. Recordkeeping provisions may be sufficient to meet the requirements of this paragraph; and
    - c. As necessary, requirements concerning the use, maintenance, and, where appropriate, installation of monitoring equipment or methods.
  4. With respect to recordkeeping, the permit shall incorporate all applicable recordkeeping requirements and require, where applicable, 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 measurements;
      - ii. The date(s) analyses were performed;
      - iii. The company or entity that performed the analyses;
      - iv. The analytical techniques or methods used;
      - v. The results of such analyses; and
      - vi. The operating conditions as 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 5 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. With respect to reporting, the permit shall incorporate all applicable reporting requirements and require the following:
    - a. Submittal of reports of any required monitoring at least every 6 months. All instances of deviations from permit requirements shall be clearly identified in such reports. All required reports shall be certified by a responsible official consistent with §§3-1-175 and 3-1-083.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 such deviations, and any corrective actions or preventive measures taken. Within a permit the Control Officer shall define "prompt" in relation to the degree and type of deviation likely to occur and the applicable requirements, provided that no report under this subparagraph shall be due sooner than two days after the upset event, nor later than ten days after the upset event.
  6. A permit condition prohibiting emissions exceeding any allowances that the source lawfully holds under Title IV of the Clean Air Act (1990) or the regulations promulgated thereunder and incorporated pursuant to §3-6-565.
    - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement.
    - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to non compliance with any other applicable requirement.
    - c. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Clean Air Act (1990).
    - d. Any permit issued pursuant to the requirements of this chapter and Title V of the Clean Air Act (1990) to a unit subject to the provisions of Title IV of the Clean Air Act (1990) 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 owners or operators of the unit or the designated representative of the owners or operators.
      - ii. Exceedances of applicable emission rates.
      - iii. The use of any allowance prior to the year for which it was allocated.
      - 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. The permit shall contain all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Clean Air Act (1990) and is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application.
    - 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 this 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.
  - e. The permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer 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 request, the permittee shall also furnish to the Control Officer copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records directly to the Administrator along with a claim of confidentiality.
9. A provision to ensure that the source pays fees to the Control Officer pursuant to Article 7 of this chapter.
  10. A provision stating that no permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. This provision shall not apply to emissions trading between sources as provided in the applicable implementation plan.
  11. Terms and conditions for reasonably anticipated operating scenarios identified by the source in its application as approved by the Control Officer. Such terms and conditions:
    - a. Shall 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. Shall extend the permit shield described in §3-1-102 to all terms and conditions under each such operating scenario; and
    - c. Shall 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, as approved by the Control Officer, for the trading of emissions increases and decreases in the permitted facility, to the extent that the applicable requirements provide for trading increases and decreases without a case-by-case approval of each emissions trade. Such terms and conditions:
    - a. Shall include all terms required under Subsections A. and C. of this section to determine compliance;
    - b. May extend the permit shield described in Subsection D. of this section to all terms and conditions that allow such increases and decreases in emissions; and
    - c. 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 Control Officer, setting forth intermittent operating scenarios including potential periods of downtime. If such terms and conditions are included, the county's emissions inventory shall not reflect the zero emissions associated with the periods of downtime.
  14. If a permit applicant requests it, the Control Officer shall issue permits that contain terms and conditions allowing for the trading of emissions 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. The Control Officer shall not be required to 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.
- B. Federally-enforceable requirements.
1. All terms and conditions in a Class A permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Clean Air Act (1990).
  2. Notwithstanding Subdivision B.1. of this section, the Control Officer shall specifically designate as not being federally enforceable under the Clean Air Act (1990) any terms and conditions included in the permit that are not required under the Clean Air Act (1990) or under any of its applicable requirements, provided that no such designation shall extend to any provision electively designated as federally enforceable pursuant to §3-1-084.
- C. All permits shall contain a compliance plan that meets the requirements of §3-1-083.
- D. Each permit shall include the applicable permit shield provisions set forth in §3-1-102.
- 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, which situation 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 such technology-based emission limitations if the conditions of Subdivision 3. of this subsection 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 that the permittee can identify the cause(s) of the emergency;
    - b. The permitted facility was at the time 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 Control Officer by certified mail or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of Paragraph A.5.b. of this section. The 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 A permit issued to a major source shall require that revisions be made pursuant to §3-1-087 to incorporate additional applicable requirements adopted by the Administrator pursuant to the Clean Air Act (1990) that become applicable to a source with a permit with a remaining permit term of three or more years. No revision shall 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 eighteen months after the promulgation of such standards and regulations. Any permit revision required pursuant to this section shall comply

with provisions in §3-1-089 for permit renewal and shall reset the permit term.

- G. Any permit issued by the Control Officer to any person burning used oil, used oil fuel, hazardous waste, or hazardous waste fuel under this subsection shall contain, at a minimum, conditions governing:
1. Limitations on the types, amounts and feed rates of used oil, used oil fuel, hazardous waste or hazardous waste fuel which may be burned.
  2. The frequency and type of fuel testing to be conducted by the person.
  3. The frequency and type of emissions testing or monitoring to be conducted by the person.
  4. Requirements for record keeping and reporting.
  5. Numeric emission limitations expressed in pounds per hour and tons per year for air contaminants to be emitted from the facility burning used oil, used oil fuel, hazardous waste or hazardous waste fuel.
- H. The Control Officer may waive specific requirements of this section for Class B permits if the Control Officer determines that the conditions would be unnecessary or unreasonable for a particular source or category of sources.

[Adopted effective November 3, 1993, Amended August 11, 1994. Amended February 22, 1995.]



## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-082. Emission standards and limitations**

Whenever applicable requirements apply different standards or limitations to a source for the same item, all applicable requirements shall be included in the permit. The Control Officer shall enforce the most stringent combination of the applicable requirements.

[Adopted effective November 3, 1993.]

### 3-1-083. Compliance provisions

- A. Subject only to the limitation of subsection C. of this section, all permits shall contain the following elements with respect to compliance:
1. The following monitoring requirements sufficient to assure compliance with the terms and conditions of the permit:
    - a. All emissions monitoring and analysis procedures or test methods required under the applicable requirements, including any procedures and methods promulgated pursuant to §§114(a)(3) or 504(b) of the Clean Air Act (1990);
    - b. Where 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 pursuant to Subdivision 3. of this subsection. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement;
    - c. As necessary, requirements concerning the use, maintenance, and, where appropriate, installation of monitoring equipment or methods.
  2. All applicable recordkeeping requirements and require, where applicable, 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 measurements;
      - ii. The date(s) analyses were performed;
      - iii. The company or entity that performed the analyses;
      - iv. The analytical techniques or methods used;
      - v. The results of such analyses; and
      - vi. The operating conditions as 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 5 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 or physical records for continuous monitoring instrumentation, and copies of all reports required by the permit.
  3. With respect to reporting, the permit shall incorporate all applicable reporting requirements and require the following:

- a. Submittal of reports of any required monitoring at least every 6 months. All instances of deviations from permit requirements shall be clearly identified in such reports. All required reports shall be certified by a responsible official consistent with Subdivision 5. of this subsection.
  - b. Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Within the permit, the Control Officer shall define "prompt" in relation to the degree and type of deviation likely to occur and the applicable requirements.
4. Requirements for compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. Permits shall include each of the following:
- a. The frequency for submissions of compliance certifications, which shall not be less than annually;
  - b. The means to monitor the compliance of the source with its emissions limitations, standards, and work practices;
  - c. A requirement that the compliance certification include the following:
    - i. The identification of each term or condition of the permit that is the basis of the certification;
    - ii. The compliance status;
    - iii. Whether compliance was continuous or intermittent;
    - iv. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
    - v. Other facts as the Control Officer may require to determine the compliance status of the source.
  - d. A requirement that all compliance certifications be submitted to the Control Officer, and for Class A permits, to the Administrator as well.
  - e. Such additional requirements as may be specified pursuant to §§114(a)(3) and 504(b) of the Clean Air Act (1990).
5. Any document required to be submitted by a permit, including reports, shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this chapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
6. Inspection and entry provisions which require that upon presentation of proper credentials, the permittee shall allow the Control Officer to:
- a. Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
  - b. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
  - c. Inspect, during normal business hours or while the source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
  - d. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
  - e. To record any inspection by use of written, electronic, magnetic and photographic media.
7. A compliance plan that contains all the following:
- a. A description of the compliance status of the source with respect to all applicable requirements.
  - b. A description as follows:
    - i. For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements.
    - ii. For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis.
    - iii. For requirements for which the source is not in compliance at the time of permit issuance, a narrative description of how the source will achieve compliance with such requirements.
  - c. A compliance schedule as follows:
    - i. For applicable requirements with which the source is in compliance, a statement that the source will continue to comply with such requirements.
    - ii. For applicable requirements that will become effective during the permit term, a statement that the source will meet such requirements on a timely basis. A statement that the source will meet in a timely manner applicable requirements that become effective during the permit term shall satisfy this provision, unless a more detailed schedule is expressly required by the applicable requirement.
    - iii. A schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance. Such a schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirement for which the source will be in noncompliance at the time of permit issuance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.
  - d. A schedule for submission of certified progress reports no less frequently than every 6 months for sources required to have a schedule of compliance to remedy a violation. Such schedule shall contain:
    - i. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
    - ii. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
  - e. The compliance plan content requirements specified in this subdivision shall apply and be included in the acid rain portion of a compliance plan for an affected source, except as specifically superseded by regulations promulgated under Title IV of the Clean

Air Act (1990) and incorporated pursuant to §3-6-565 with regard to the schedule and method(s) the source will use to achieve compliance with the acid rain emissions limitations.

8. If there is a Federal Implementation Plan (FIP) applicable to the source, a provision that compliance with the FIP is required.  
B. The Control Officer may develop special guidance documents and forms to assist certain sources applying for Class B permits in completing the compliance plan.

C. For a Class B source with an uncontrolled potential to emit that does not exceed fifty percent (50%) of any relevant major source threshold, the Control Officer may allow reporting of required monitoring on an annual basis.

[Adopted effective November 3, 1993. Amended February 22, 1995.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### **3-1-084. Voluntarily Accepted Federally Enforceable Emissions Limitations; Applicability; Re-opening; Effective Date.**

1. A permit may, for the purpose of creating federally enforceable conditions that limit the potential emissions of a source, designate as a "federally enforceable provision" ("FEP Limit") any emission limit in conjunction with a production limit and/or operational limit expressed in the permit. A FEP Limit must be permanent, quantifiable and enforceable as a practical matter, and shall be at least as stringent as otherwise applicable limitations and requirements under either the SIP or pertinent provision of the Clean Air Act (1990), and shall not operate to relieve any other legal restriction on emissions.
2. The Control Officer may include an FEP Limit in a permit pursuant to this section only if the signed application clearly requests inclusion of such a provision.
3. In every permit including a FEP Limit, the Control Officer shall also include provisions obligating the permittee to affirmatively demonstrate compliance with the FEP Limit. Every such compliance-related provision shall also constitute a FEP and be clearly designated as such in the permit. A compliance-related FEP must include such obligations regarding record-keeping, monitoring, testing, and reporting as may be required to obligate the permittee to objectively demonstrate compliance. At a minimum, the compliance-related FEP shall obligate the permittee to submit to the District semi-annual reports documenting compliance with or deviation from each FEP Limit throughout the period.
4. Every FEP shall:
  - a. be clearly identified as such;
  - b. to the extent the FEP Limit pertains to conventional pollutants, be enforceable by the Administrator pursuant to Clean Air Act §110 (1990); and
  - c. to the extent the FEP Limit pertains to hazardous air pollutants, be enforceable by the Administrator pursuant to Clean Air Act §112 (1990).
5. If a permit applicant requests inclusion of a FEP Limit within a permit, then, in addition to the other applicable procedural requirements, including the requirement to provide an opportunity for public participation pursuant to §3-1-107, the Control Officer shall provide to the Administrator by first-class mail:
  - a. a copy of the permit application, within ten (10) days of the filing of a request for such permit; **3-1-081 Permit conditions**
  - b. a copy of the draft permit, as made available to public at the time of publication of public notice, to be mailed no later than that publication date; and
  - c. a copy of the final permit.
6. If an applicant requests an authorization to operate under a general permit that includes a FEP Limit, then in addition to the other applicable procedural requirements, the Control Officer shall provide to the Administrator by first-class mail:
  - a. a copy of the application, within ten (10) days of filing; and
  - b. a copy of the authorization to operate.
7. The inclusion of a FEP Limit in a permit shall not affect the timing or manner of issuance of a permit, provided that no permit purporting to contain a FEP Limit designated pursuant to this section shall be issued if the Administrator gives notice prior to issuance of such permit that any FEP Limit defined in the permit should be deemed not "federally enforceable".
8. Subject to the limitation of paragraph 9 of this section, a FEP designated pursuant to this section shall be federally enforceable from and after the latter of the issuance of a permit containing such a provision, or:
  - a. with respect to the regulation of conventional pollutants, the date upon which the Administrator approves this section as an element of the Arizona State Implementation Plan;
  - b. with respect to the regulation of hazardous air pollutants, the date upon which Adminis-

trator approves this section pursuant to CAA §112(l).

9. If, prior to a relevant approval by or delegation from the Administrator contemplated under subsection 8 of this section, an applicant files an application requesting an individual permit containing an FEP or requesting authorization to operate under a general permit containing an FEP, or an individual permit containing an FEP is issued, or an authorization to operate under a general permit containing an FEP is issued, then at the time of such approval by or delegation from the Administrator, the Control Officer shall transmit to the Administrator each of the requisite documents identified in either subsection 5 or 6 of this section, and the federal enforceability of such an FEP shall arise upon the latter of:
  - a. the date specified under paragraph 8 of this section; or
  - b. thirty (30) days after such mailing as is contemplated under this paragraph.

[Adopted August 11, 1994. Amended February 22, 1995.]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-085. Notice by building permit agencies**

All agencies of Pinal County or political subdivisions of Pinal 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 be required, the agency or political subdivision shall give written notice to the applicant to contact the Control Officer and shall furnish a copy of the notice to the Control Officer.

[Adopted effective November 3, 1993]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-087. Permit reopenings, reissuance and 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 Clean Air Act (1990) 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 §3-1-089.C. Any permit revision required pursuant to this section shall comply with provisions in §3-1-089 for permit renewal and shall reset the permit term.  
§3-1-081 Permit conditions
  - 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 A permit.
  - c. The Control Officer 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 Control Officer 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 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 Subdivision A.1. of this section shall not be initiated before a notice of such intent is provided to the source by the Control Officer at least 30 days in advance of the date that the permit is to be reopened, except that the Control Officer 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 Control Officer may make appropriate revisions to the permit shield established pursuant to §3-1-102.

- ##### B.
- Within 10 days of receipt of notice from the Administrator that cause exists to reopen a Class A permit, the Control Officer shall notify the source. The source shall have 30 days to respond. Within 90 days of receipt of notice from the Administrator that cause exists to reopen a permit, the Control Officer shall forward to the Administrator and the source a proposed determination of termination, revision, revocation or reissuance of the permit. Within 90 days of an EPA objection to the Control Officer's proposal, the Control Officer shall resolve the objection and act on the permit.

[Adopted effective November 3, 1993.]



## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-089. Permit term, renewal and expiration**

- A. Permits issued pursuant to this chapter shall be issued for a period of five years.
- B. 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.
- C. Except as provided in §3-1-045, permit expiration terminates the source's right to operate unless a timely application for renewal, or a substitute application under §3-5-490, that is sufficient under A.R.S. §41-1064 has been submitted in accordance with §§3-1-050, 3-1-055 and 3-1-060. Any source relying on a timely and complete application as authority to operate after expiration of a permit shall be legally bound to adhere and conform to the terms of the expired permit, subject only to such permit revisions as may be allowed under this Code. A failure to adhere and conform to the terms of the expired permit, or such revisions as may have been allowed under this Code, shall constitute a violation. Any testing that is required for renewal shall be completed before the proposed permit is issued by the Control Officer.
- D. The Control Officer shall act on an application for a permit renewal within the same time frames as on an initial permit.

[Adopted effective November 3, 1993. Amended February 22, 1995.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-090. Permit transfer

- A. A permit shall not be transferable, whether by operation of law or otherwise, either from one location to another, or from one piece of equipment to another.
- B. The provisions of Subsection A. shall not apply to mobile or portable machinery or equipment which is transferred from one location to another after notification to the Control Officer of the transfer.
- C. A permit may be transferred, whether by operation of law or otherwise, from one person to another, provided that prior to the transfer, the person holding the permit notifies the Control Officer in writing at least 30 days before. 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 organization 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. The effective date of the proposed transfer.
  - 7. An agreement signed by the transferee stating a willingness to comply with all terms and conditions of the permit.
- D. If the Control Officer determines that the transferee is not capable of operating the source in compliance with the requirements of Article 3, Chapter 3, Title 49, Arizona Revised Statutes (1992), the provisions of this Code and the conditions established in the permit, the transfer shall be denied. In order for the denial to be effective, notice of the Control Officer's denial, including the reasons for the denial, shall be sent to the original permit holder by certified mail within 10 working days of the Control Officer's receipt of the notice of the proposed transfer. If the transfer is not denied within 10 working days after receipt of the notice, it shall be deemed approved.
- E. To appeal the transfer denial, both the transferor and the transferee shall petition the air pollution Hearing Board in the same manner as prescribed for denial of a permit in §3-1-080.

[Adopted effective November 3, 1993.]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-102. Permit shields**

- A. Each Class A or B 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 Control Officer 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 §303 of the Clean Air Act (1990) (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 §408(a) of the Clean Air Act (1990).
  4. The ability of the Administrator or the Control Officer to obtain information from a source pursuant to §114 of the Clean Air Act (1990), or any provision of state law.
  5. The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued.
- C. In addition to the provisions of § 3-1-087, a permit may be reopened by the Control Officer 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.

[Adopted effective November 3, 1993.]

PINAL COUNTY AIR QUALITY CONTROL DISTRICT

CODE OF REGULATIONS

“CLEAN COPY”

AS AMENDED JULY 1, 2020

PREPARED BY

AIR QUALITY CONTROL DISTRICT STAFF

### **3-1-103. Annual emissions inventory questionnaire and emissions statement**

#### **A. Emissions Inventory Questionnaire and Emissions Statement Requirements**

1. Each Class 1, Class II or Class III source subject to a permit requirement under this chapter, or who obtains an authorization to operate under this chapter, shall complete and submit to the Control Officer an annual emissions inventory questionnaire and emissions statement. The questionnaire and emissions statement shall be submitted each year by March 31 or ninety days after the Control Officer 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.
2. The emissions inventory questionnaire and emissions statement shall be on an electronic or paper form provided by the Control Officer and shall include the following information for the previous calendar year:
  - a. The source's name, description, mailing address, contact person and contact person phone number, and physical address and location, if different than the mailing address.
  - b. Process information for the source, including design capacity, throughput, operations schedule, and emissions control devices, their description and efficiencies.
  - c. The actual annual quantity of emissions, including documentation of the method of measurement, calculation or estimation, determined pursuant to subsection B, of the following regulated air pollutants:
    - i. Any single regulated air pollutant in a quantity greater than one ton.
    - ii. Any combination of regulated air pollutants in a quantity greater than 2½ tons.
  - d. A certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
3. An Amendment to an annual emissions inventory questionnaire, containing the documentation required by subsection (A)(2), shall be submitted to the Control Officer 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 Control Officer by a previous emissions inventory questionnaire. If the incorrect or insufficient information resulted in an incorrect annual emissions fee, the Control Officer shall require the additionally payment be made or shall apply an amount as credit to a future annual emissions fee. The submittal of an amendment under this subsection shall not subject the owner or operator to an enforcement action or a civil or criminal penalty if the original submittal of incorrect or insufficient information was not due to willful neglect.
4. The Control Officer may require submittal of supplemental emissions inventory questionnaires for air contaminants pursuant to A.R.S. §§49-476.01, 49-480.03 and 49-480.04.
5. The Control Officer may, with EPA approval, waive the emissions statement requirement for classes or categories of stationary sources with facility-wide actual emissions of less than 25 tons/year of NO<sub>x</sub> or VOC if the NO<sub>x</sub> or VOC emissions from such class or category is included in the ozone nonattainment Base Year and Periodic Ozone SIP Emission Inventories, and the actual emissions were calculated using EPA-approved emission factors or other methods acceptable to the EPA pursuant to CAA Section 182(a)(3)(B).

#### **B. Emissions Estimation Methodology**

1. Actual quantities of emissions shall be determined using the following emission factors or data.
  - a. Whenever available, emissions estimates shall either be calculated from continuous emissions monitors certified pursuant to 40 CFR Part 75, Subpart C and referenced appendices, or data quality assured pursuant to Appendix F of 40 CFR Part 60.

- b. When sufficient data pursuant to Subsection (B)(1)(a) is not available, emissions estimates shall be calculated from data from source performance tests conducted pursuant to §3-1-170 in the calendar year being reported or, when not available, conducted in the most recent calendar year representing the operating conditions of the year being reported.
- c. When sufficient data pursuant to subsection (B)(1)(a) or (b) is not available, emissions estimates shall be calculated using emissions factors from EPA Publication No. AP-42 "Compilation of Air Pollutant Emission Factors," Volume I: Stationary Point and Area Sources, Fifth Edition, 1995, U.S. Environmental Protection Agency, Research Triangle Park, NC, Including Supplements A through F and all updates published through July 1, 2011 (and no future editions). AP-42 is incorporated by reference and is on file with the Pinal County Air Quality Control District and can be obtained from the Government Printing Office, 732 North Capital Street, NW, Washington, D.C., 20401, telephone (202)512-1800, or by downloading the document from the web site for the EPA Clearinghouse for Emission Inventories and Emissions Factors.
- d. When sufficient data pursuant to subsections (B)(1)(a) through (c) is not available, emissions estimates shall be calculated from material balance using engineering knowledge of process.
- e. When sufficient data pursuant to (B)(1)(a) through (d) is not available, emissions estimates shall be calculated by equivalent methods approved by the Control Officer. The Control Officer shall only approve methods that are demonstrated as accurate and reliable as one of the methods in subsections (B)(1)(a) through (d).
- f. Actual quantities of emissions calculated under subsection (B) 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.

[Adopted effective November 3, 1993. Amended February 22, 1995. Amended October 27, 2004. Amended July 1, 2020]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-105. Permits containing the terms and conditions of federal delayed compliance orders (DCO) or consent decrees**

- A. The terms and conditions of either a 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 con-sent decree shall submit to the Control Officer 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 Control Officer may require additional reporting requirements and conditions in permits issued under this Article.
- C. For the purpose of this chapter, sources subject to a con-sent decree issued by a federal court shall meet the same requirements as those subject to a DCO.

[Adopted effective November 3, 1993.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-107. Public notice and participation

- A. The Control Officer 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. Conditional orders that would vary from a requirement of a permit.
- B. The Control Officer shall provide public notice of receipt of complete applications for major sources by publishing a notice in a newspaper of general circulation in Pinal County.
- C. The Control Officer shall provide notice of proposed permits required pursuant to Subsection A. of this section as follows:
1. The Control Officer shall publish the notice once each week for two consecutive weeks in two newspapers of general circulation in Pinal County.
  2. The Control Officer shall mail a copy of the notice to persons on a mailing list developed by the Control Officer consisting of those persons who have requested in writing to be placed on such a mailing list.
  3. When the Control Officer has objective evidence that the preceding notice may not provide adequate notice to the affected public, the Control Officer shall additionally give notice by such other means as may be necessary to assure adequate notice.
- D. The notice required by Subsection C. of this section 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. A statement that any person may submit written comments, or a written request for a public hearing, or both, on the proposed permit action.
  8. The name, address and telephone number of a person from the District from whom additional information may be obtained.
  9. Locations where copies of the permit or permit revision application, the proposed permit, and all other materials available to the Control Officer that are relevant to the permit decision may be reviewed, including the closest District office, and the times at which they shall be available for public inspection.
- E. The Control Officer 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 Control Officer shall hold a public hearing only upon written request. If a public hearing is requested, the Control Officer shall schedule the hearing and publish notice as described in §9-1-080 and Subsection C. of this section. The Control Officer shall give notice of any public hearing at least 30 days in advance of the hearing.
- F. At the time the Control Officer publishes the first notice, the applicant shall post a notice containing the information required in Subsection D. of this section at the site where the source is or may be located. Consistent with County 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 or such other location as may be approved by the Control Officer. 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 Control Officer shall provide a period of at least 30 days from the date of its first notice for public comment. The Control Officer shall keep a record of the commenters and of the issues raised during the



public participation process and shall prepare written responses to all comments received. At the time a final decision is made, the record and copies of the Control Officer's responses shall be made available to the applicant and all commenters.

[Adopted effective November 3, 1993. Amended February 22, 1995.]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-109. Material permit condition**

For the purposes of A.R.S. §49-514(G) (1992), a "material permit condition" shall mean a condition which satisfies all of the criteria established by the Director under A.A.C. R18-2-331.

[Adopted effective November 3, 1993. Amended February 22, 1995. Tentatively revised as indicated on 5/14/97; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96).]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-110. Investigative authority**

- A. When the Control Officer has reasonable cause to believe that any person is violating any provision of A.R.S. Title 49, Chapter 3, Article 3 (1992), any provision of this Code or any requirement of a permit issued pursuant to this Code he may request, in writing, that such person forthwith produce all existing books, records and other documents evidencing tests, inspections or studies which may reasonably relate to compliance or noncompliance with rules and regulations adopted pursuant to this Code.
- B. Any person violating the provisions of this section or knowingly submitting false information, reports or records to the Board of Supervisors or the Control Officer is guilty of a petty offense and a violation of this Code.

[Adopted effective June 29, 1993. Amended Subsection A. effective November 3, 1993]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-120. Confidentiality of records

- A. Any records, reports or information obtained from any person under this Code, including records, reports or information obtained or prepared by the Control Officer or a county employee, shall be available to the public, except that the information or any part of the information shall be considered confidential on either of the following:
1. A showing, satisfactory to the Control Officer, by any person that the information or a part of the information if made public would divulge the trade secrets of the person.
    - a. Any material which the applicant deems confidential shall be separately bound, and incorporated by reference into the actual permit application. To enable the Control Officer to make an informed decision with respect to honoring any claim of confidentiality, an applicant making such claim shall present such claim in writing, and include therein:
      - i. A definition of the type, character and quantity of the information sought to be protected.
      - ii. An explanation of the damage the applicant would suffer if the information were disclosed.
      - iii. An explanation of the measures that the applicant has previously taken to maintain the confidentiality of the information.
    - b. Within 30 days of receipt of a notice of confidentiality that complies with Paragraph 1.a. of this subsection, the Control Officer will review the claim and respond in writing, either accepting or denying the claim. The claim of confidence will be honored if the Control Officer finds the justification reasonable and adequate. A copy of any adverse response will be mailed to the applicant. In any case, both the claim and the response by the Control Officer will be included with the publicly available portions of the applicant's file.
    - c. The written response by the Control Officer denying the claim of confidentiality may be considered a final administrative action. To allow opportunity to seek judicial review, the claim, the response, and the information covered by the claim will be preserved in confidence for 30 days following the mailing of the response by the Control Officer.
  2. A determination by the County Attorney that disclosure of the information or a particular part of the information would be detrimental to an ongoing criminal investigation or to an ongoing or contemplated civil enforcement action under this Code in superior court.
- B. Notwithstanding Subsection A. of this section, the following information shall be available to the public:
1. The name and address of any permit applicant or permittee.
  2. The chemical constituents, concentrations and amounts of any emission of any air contaminant.
  3. The existence or level of a concentration of an air pollutant in the environment.

[Adopted June 29, 1993 and effective September 1, 1993. Amended Subsection A.1.b. effective November 3, 1993.]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-132. Permit imposed right of entry**

The Board hereby declares that an essential provision of any permit issued under this Code shall be the grant by the permit holder of a right of entry in favor of the Control Officer, provided that no such right of entry shall arise under the terms of this section with respect to the interior of any structure used as a private residence. Inspections under authority of the right of entry defined by this section shall be limited to purposes of verifying compliance with the terms of the permit and compliance with this Code. The right of entry shall extend to allow access to, upon or through any premises covered by a permit. The right of entry shall arise upon the presentation of the credentials of the Control Officer or his representative. Upon entering any premises covered by a permit, the Control Officer or his representative shall observe reasonable standard safety requirements, as set forth by the owner or operator of such source, such as donning a hard hat, safety glasses and safety shoes.

[Adopted effective June 29, 1993.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-140. Permit revocation

- A. Whereas the Board of Supervisors finds that an effective County permit program constitutes an essential element in the fulfillment of the Board's responsibility to control the release of contaminants into the atmosphere, and that any such permit program rests upon the candor of owners and operators in presenting applications, the Board hereby grants to the Control Officer the authority to revoke issued permits, for the causes and in the manner set forth in this section.
- B. The Control Officer may issue a notice of intent to revoke a permit issued pursuant to this Code if:
  - 1. The Control Officer has reasonable cause to believe that the permit was obtained by fraud or material misrepresentation.
  - 2. The person applying for the permit failed to disclose a material fact required by the permit application form or the regulation applicable to the permit, of which the applicant had or should have had knowledge at the time the application was submitted.
  - 3. The terms and conditions of the permit have been or are being violated.
- C. If the Control Officer discovers cause to revoke permit under this section, the Control Officer shall send the permittee a 30 day notice of intent to revoke the permit, which notice shall be served on the applicant or permittee either personally or by certified mail, return receipt requested. The notice shall be a statement detailing the grounds for the action sought and calling upon the permittee to refute the factual basis upon which the Control Officer proposes to revoke the permit. The notice shall be effective upon mailing. If, within the 30 day notice period, the permittee shall fail to refute or correct to the satisfaction of the Control Officer the grounds for the pending revocation, the Control Officer shall forthwith issue a notice of revocation which shall become effective upon the lapse of the appeal period specified in Subsection D.
- D. For a period of 15 days following the delivery of a notice of revocation to the permittee, the permittee shall be entitled to appeal the revocation to the Hearing Board, in the same manner as a denial of a permit application. The notice of revocation shall be served on the permittee by certified mail, return receipt requested. In the event of such an appeal, the revocation shall be held in abeyance pending a final decision by the Board.
- E. Such facts as will justify the revocation of a permit under this section shall also constitute a violation of this Code.

[Adopted effective June 29, 1993. Amended Subsections B. and C. effective November 3, 1993.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-150. Monitoring

- A. The Control Officer may require, as a permit condition or by order in the manner specified in subsections B. or C. of this section, any source of air contaminants to monitor, sample or perform other studies to quantify emissions of air contaminants or levels of air pollution that may reasonably be attributable to that source, if the Control Officer either:
1. Determines that monitoring, sampling or other studies are necessary to determine the effects of the facility on levels of air pollution.
  2. Has reasonable cause to believe a violation of this Code, rules adopted pursuant to this Code or a permit issued pursuant to this Code has been committed.
  3. Determines that those studies or data are necessary to accomplish the purposes of this article, and that the monitoring, sampling or other studies by the source are necessary in order to assess the impact of the source on the emission of air contaminants.
- §3-1-081 Permit conditions
- B. To the extent that a source may be reasonably expected to emit particulate matter, sulfur dioxide, VOCs, carbon monoxide, nitrogen dioxide, lead, or any other air contaminant subject to regulation under an existing source performance standard set forth in A.A.C. Title 18, Article 5, under a work-practice requirement set forth in A.A.C. Title 18, Article 4, under a new source performance standard set forth in A.A.C. Title 18, Article 8, or under a hazardous air pollutant standard set forth in A.A.C. Title 18, Article 9, the Control Officer may require such source of air contaminants to monitor, sample or otherwise quantify affected emissions. The Board of Supervisors expressly finds that the best means for considering the cost and effectiveness of any requirement for monitoring, sampling or other quantification method with respect to any specific source of air contaminants will be by having the Control Officer first review the need for such monitoring, sampling or other studies on a case-by-case basis. Before imposing any specific requirement upon a source, the Control Officer shall make a written need of justification, setting forth the scientific feasibility of the requirement, the costs expected to be incurred by the source, the nature and extent of the impact of the emissions from the specific source upon air quality within the District, the expected accuracy of the data to be produced, the use to be made of that data, and a finding that the cost of the method is reasonable in light of the use to be made of the data.
- C. For those sources of air contaminants not subject to mandatory requirements under subsection B. of this section, the Control Officer may require a source of air contaminants, by permit or order, to perform monitoring, sampling or other quantification of its emissions or air pollution that may reasonably be attributed to such a source. Before requiring such monitoring, sampling or other quantification by permit or order, the Control Officer shall consider the relative cost and accuracy of any alternatives which may be reasonable under the circumstances such as emission factors, modeling, mass balance analyses or emissions projections. The Control Officer may require such monitoring, sampling or other quantification by permit or order if the Control Officer determines in writing that all of the following conditions are met:
1. The actual or potential emissions of air pollution may adversely affect public health or the environment.
  2. An adequate scientific basis for the monitoring, sampling or quantification method exists.
  3. The monitoring, sampling or quantification method is technically feasible for the subject contaminant and the source.
  4. The monitoring, sampling or quantification method is reasonably accurate.
  5. The cost of the method is reasonable in light of the use to be made of the data.
- D. Orders issued or permit conditions imposed pursuant to this section shall be appealable to the Hearing Board in the same manner as that prescribed for orders of abatement in §§ 8-1-030 and 9-1-020 and for permit conditions in § 3-1-080.
- E. Unless a requirement to monitor, sample or perform other studies to quantify emissions of air contaminants or levels of air pollution is rescinded by the Hearing Board, the refusal of an owner or operator of a source to perform such monitoring, sampling or studies pursuant to this section constitutes a violation of this Code.
- F. When an existing, relevant EPA protocol exists, any monitoring, sampling or quantification requirement imposed under this section shall follow such protocol.

FR 15717 (4/9/96.)



## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-160. Test methods and procedures

- A. Except as otherwise specified in this Code, the applicable procedures and testing methods contained in the Arizona Testing Manual; 40 CFR Part 52, Appendices D and E; 40 CFR Part 60, Appendices A through F; and 40 CFR Part 61, Appendices B and C shall be used to determine compliance with the requirements established in this Code 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 Part 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 Chapters 6 and 7, alternate sampling techniques or other means to determine opacity, rate, composition, and/or concentration of emissions in any test plan submitted to the Control Officer may be approved by the Control Officer for the duration of that plan provided that the following four 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 Part 60 or other methods approved by the Control Officer.
  4. This approval does not include nondelegable functions of the EPA Administrator, including but not limited to approval of alternative or equivalent test methods. As used in 40 C.F.R. 60: Administrator means the Control Officer of the Pinal County Air Quality Control District, except that the Control Officer shall not be authorized to approve alternate or equivalent test methods, alternative standards or work practices, equivalency determinations or innovative technology waivers as covered in Section 111(h) Design, equipment, work practice, or operational standard; alternative emission limitation, and Section 111 (k) Innovative technological systems of continuous emission reduction of the FCAA.

[Adopted effective November 3, 1993; Tentatively revised as indicated on 5/14/97 and 12/13/00; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96).]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-170. Performance tests

- A. Within 60 days after a source subject to the permit requirements of this chapter 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 Control Officer, the owner or operator of such source shall conduct performance tests and furnish the Control Officer a written report of the results of the tests.
- B. Performance tests, whether required in support of a permit application or as permit conditions, shall be conducted at the source's or facility's maximum capacity, unless otherwise specified by the Control Officer, and data reduced in accordance with the test method and procedures contained in the Arizona Testing Manual for Air Pollutant Emissions unless the Control Officer:
  - 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 Control Officer's satisfaction that the source or facility is in compliance with the standard.
  - 5. Nothing in this section shall be construed to abrogate the Control Officer's authority to require testing.
- C. Performance tests shall be conducted under such conditions as the Control Officer shall specify to the plant operator based on representative performance of the source. The owner or operator shall make available to the Control Officer 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 Control Officer two weeks prior notice of the performance test to afford the Control Officer 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 Control Officer's approval, be determined using the arithmetic means of the results of the two other runs. If the Control Officer is present, tests may only be stopped with the Control Officer's approval. If the Control Officer 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 Code or as prescribed in permits issued pursuant to this Code 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 or any equivalent method approved by the EPA or Control Officer, 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.

[Adopted effective June 29, 1993. Amended effective November 3, 1995. Tentatively revised as indicated on 5/14/97; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96).]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-173. Quality assurance**

Facilities subject to the permit requirements of this chapter and those which are required to perform tests subject to the requirements of this Code shall submit a quality assurance plan to the Control Officer that meets the requirements of the Arizona Testing Manual, 40 C.F.R. Part 60 or other methods approved by the Control Officer within 12 months of the effective date of this section.

[Adopted effective November 3, 1993. Tentatively revised as indicated on 5/14/97; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96).]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS**

#### **3-1-175. Certification of truth, accuracy and completeness.**

Any application form, report or compliance certification submitted pursuant to this Code shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under this Chapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[Adopted effective November 3, 1993.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 1. GENERAL PROVISIONS RELATING TO PERMITS AND PERMIT REVISIONS

#### 3-1-177. 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 canceled 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 the Clean Air Act §118 (1990) 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 Subdivisions 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 C.F.R. Parts 51 and 52 (1992) and §3-3-220,  $H_g = 2.5H$ .
  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 or District 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 Control Officer, 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 Subdivisions 2. and 3. of this subsection, 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 (one half mile).
    - b. For conducting demonstrations under Subdivision 4. of this subsection, means not greater than 0.8 km (one half 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 ten times the maximum height ( $H_+$ ) of the feature, not to exceed two miles if such feature achieved a height ( $H_+$ ) 0.8 km from the stack. The height shall be at least 40 percent of the GEP stack height determined by the formula provided in Subdivision 3. of this subsection, 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 Subdivision 4. of this subsection:
    - a. For sources seeking credit for stack height exceeding that established under Subdivisions 2. and 3. of this subsection, 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 percent 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 3 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 percent 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 Chapter 2, Article 5 of this Code. The allowable emission rate to be used in making demonstrations under Subdivision 4. of this subsection 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 Control Officer, 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 Subdivisions 2. and 3. of this subsection, either:
  - i. A maximum ground-level concentration due in whole or in part to downwash, wakes, or eddy effects as provided in Paragraph a. of this subdivision, 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 Control Officer; and

§3-1-081 Permit conditions

- c. For sources seeking credit after January 12, 1979, for a stack height determined under Subdivisions 2. and 3. of this subsection, where the Control Officer 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 Subdivisions 2. and 3. of this subsection, a maximum ground-level concentration due in whole or in part to downwash, wakes, or eddy effects that is at least 40 percent 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. of this section 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 prevention of significant deterioration increments 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 modeling 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 the 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 District issues a permit or permit revision under this chapter to a source based on a good engineering practice stack height that exceeds the height allowed by Subsection B. of this section, the District shall notify the public of the availability of the demonstration study and provide opportunity for public hearing in accordance with the requirements of §3-3-210.

[Adopted effective June 29, 1993. Former Section 3-2-290 renumbered without change as Section 3-1-177 effective November 3, 1993.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 2. PERMIT AMENDMENTS AND REVISIONS

#### 3-2-180. Facility changes allowed without permit revisions

- A. A facility with a permit may make changes without a permit revision if all of the following apply:
1. The changes are not modifications under any provision of Title I of the Clean Air Act (1990) or §1-3-140.78.
  2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.
  3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.
  4. The changes meet all requirements for processing as a minor permit revision under §3-2-190.
  5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of Subsections A., D. and E. of this section.
- C. Except for sources with authority to operate under general permits, permitted sources may trade increases and decreases in emissions within the permitted facility, as established in the permit pursuant to §3-1-081.A.12., where an applicable implementation plan provides for such emissions trades, without applying for a permit revision and based on the 7 working days notice prescribed in Subsection D. of this section. This provision is available in those cases where the permit does not already provide for such emissions trading, and shall not include any emission units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades.
- D. For each such change under Subsections A. through C. of this section, a written notice by certified mail shall be received by the Control Officer and, for sources requiring Class A permits, the Administrator a minimum of 7 working days in advance of the change. Notification of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change as possible, or if advance notification is not practicable, within 3 working days of the change.
- E. Each notification shall include:
1. When the proposed change will occur.
  2. A description of each such change.
  3. Any change in emissions of regulated air pollutants.
  4. The pollutants emitted subject to the emissions trade, if any.
  5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.
  6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.
  7. Any permit term or condition that is no longer applicable as a result of the change.
- F. The permit shield described in §3-1-102 shall not apply to any change made pursuant to Subsections A. through C of this section. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the implementation plan authorizing the emissions trade.
- G. Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under §3-1-081.A.11. shall not require any prior notice under this section.
- H. Notwithstanding any other part of this section, the Control Officer may require a permit to be revised for any change that when considered together with any other changes submitted by the same source under this section over the term of the permit, do not satisfy Subsection A.
- I. The Control Officer shall make available to the public monthly summaries of all notices received under this section.

[Adopted effective November 3, 1993.]



## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 2. PERMIT AMENDMENTS AND REVISIONS

#### 3-2-185. Administrative permit amendments

- A. Except for provisions pursuant to Title IV of the Clean Air Act (1990), an administrative permit amendment is a permit revision that does any of the following:
1. Corrects typographical errors;
  2. Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  3. Requires more frequent monitoring or reporting by the permittee;
  4. Allows for a change in ownership or operational control of a source as approved under §3-1-090 where the Control Officer determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the Control Officer;
- B. Administrative permit amendments to Title IV provisions of the permit shall be governed by regulations promulgated by the Administrator under Title IV of the Clean Air Act (1990).
- C. The Control Officer 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 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 Control Officer shall submit a copy of Class A permits revised under this section to the Administrator.
- E. Except for administrative permit amendments involving a transfer under §3-1-090, the source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.

[Adopted effective November 3, 1993.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 2. PERMIT AMENDMENTS AND REVISIONS

#### 3-2-190. Minor permit revisions

- A. Minor permit revision procedures may be used only for those changes at a 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. Such terms and conditions include:
    - a. A federally enforceable emissions cap which the source would assume to avoid classification as a modification under any provision of Title I of the Clean Air Act (1990);
    - b. An alternative emissions limit approved pursuant to regulations promulgated under §112(i)(5) of the Clean Air Act (1990);
  5. Are not modifications under any provision of Title I of the Clean Air Act (1990) that would result in a significant net emissions increase of any pollutant subject to regulation under this Code;
  6. Are not modifications under Chapter 7., Article 2. of this Code;
  7. Are not changes in fuels not represented in the permit application or provided for in the permit;
  8. The increase in the source's potential to emit for any regulated pollutant is not significant as defined in §1-3-140.
  9. Are not required to be processed as a significant revision under §3-2-195.
- B. As approved by the Control Officer, 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 such minor permit revision procedures are explicitly provided for in an applicable implementation plan or in applicable requirements promulgated by the Administrator.
- C. An application for minor permit revisions shall be on the standard application form contained in Appendix A. 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 A sources, 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 such procedures be used.
- D. For Class A permits, within 5 working days of receipt of an application for a minor permit revision, the Control Officer shall notify the Administrator and affected states of the requested permit revision in accordance with §3-1-065.
- E. The Control Officer shall follow the following timetable for action on an application for a minor permit revision:
1. For Class A permits, the Control Officer shall not issue a final permit revision until after the Administrator's 45-day review period or until the Administrator has notified the Control Officer that the Administrator will not object to issuance of the permit revision, whichever is first, although the Control Officer may approve the permit revision prior to that time. Within 90 days of the Control Officer's receipt of an application under minor permit revision procedures, or 15 days after the end of the Administrator's 45-day review period, whichever is later, the Control Officer shall do one or more of the following:
    - a. Issue the permit revision as proposed.
    - b. Deny the permit revision application.
    - c. Determine that the proposed permit revision does not meet the minor permit revision criteria and should be reviewed under the significant revision procedures.
    - d. Revise the proposed permit revision and transmit to the Administrator the new proposed

- permit revision as required in §3-1-065.
2. Within 90 days of the Control Officer's receipt of an application for a revision of a Class B permit under this section, the Control Officer shall do one or more of the following:
    - a. Issue the permit revision as proposed.
    - b. Deny the permit revision application.
    - c. Determine that the permit revision does not meet the minor permit revision criteria and should be reviewed under the significant revision procedures.
    - d. Revise and issue the proposed permit revision.
  - F. The source may make the change proposed in its minor permit revision application immediately after it files the application. After the source makes the change allowed by the preceding sentence, and until the Control Officer takes any of the actions specified in Subsection E. of this section, the source shall comply with both the applicable requirements governing the change and the proposed revised permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to revise may be enforced against it.
  - G. The permit shield under §3-1-102 shall not extend to minor permit revisions.
  - H. Notwithstanding any other part of this section, the Control Officer may require a permit to be revised under §3-2-195 for any change that, when considered together with any other changes submitted by the same source under this section or §3-2-180 over the life of the permit, do not satisfy Subsection A.
  - I. The Control Officer shall make available to the public monthly summaries of all applications for minor permit revisions.

[Adopted effective November 3, 1993]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 2. PERMIT AMENDMENTS AND REVISIONS

#### 3-2-195. Significant permit revisions

- A. Significant revision procedures shall be used for applications requesting permit revisions that do not qualify as minor revisions or as administrative amendments. 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. All major modifications to major sources of conventional 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 revision procedures and shall meet the appropriate requirements of Chapter 3., Article 3. of this Code.
- C. All modifications to major sources of federally listed hazardous air pollutants shall follow significant revision procedures and shall meet the appropriate requirements of Chapter 7, Article 1. A physical change to a source or change in the method of operation of a source that complies with § 112(g)(1) of the Clean Air Act (1990) shall be a modification required to be processed under this section but not for the purposes of requiring maximum achievable control technology.
- D. All modifications to sources subject to Chapter 7, Article 2 shall follow significant revision procedures.
- E. Significant permit revisions shall meet all requirements of this article for applications, public participation, review by affected States and review by the Administrator as they apply to permit issuance and renewal.
- F. When an existing source applies for a significant permit revision to revise its permit from a Class B permit to a Class A permit, it shall submit a Class A permit application in accordance with the provisions of this Code. The Control Officer shall issue the entire permit, and not just the portion being revised, in accordance with Class A permit-content and permit-issuance requirements, including requirements for public, affected state, and EPA review, as set forth in this Code.
- G. The Control Officer shall process the majority of significant permit revision applications within 9 months of receipt of a complete permit application but in no case longer than 18 months.

[Adopted effective November 3, 1993. Revised May 27, 1998 and ratified July 29, 1998; Revised July 29, 1998; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approval at 61 FR 15717 (4/9/96) and the District's Title V program as approved at 61 Fed. Reg. 55910 (10/30/96).]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 3. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES**

#### **3-3-200. Purpose**

The purpose of this article is to provide an orderly procedure for the review of new major sources of air pollution and of the major modification of existing major sources through the issuance of permits. No person shall commence construction of a new major source or the major modification of a source without first obtaining a permit or a permit revision from the Control Officer.

[Adopted effective June 29, 1993. former Section 3-2-180 renumbered as Section 3-3-200 and amended effective November 3, 1993.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 3. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES

#### 3-3-203. Definitions

For purposes of this article, the following definitions shall apply:

1. **ADVERSE IMPACT ON VISIBILITY** - Visibility impairment which interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of a Class I area, as determined according to §3-3-280.
2. **MAJOR SOURCE** -
  - a. Any stationary source located in a nonattainment area which emits, or has the potential to emit, 100 tons per year or more of any conventional air pollutant, except as follows:

Pollutant Emitted	Nonattainment Pollutant and Classification	Quantity Threshold tons/year or more
Carbon Monoxide (CO)	CO, Serious, with stationary sources as more than 25% of source inventory	50
Volatile Organic Compounds (VOC)	Ozone, Serious	50
VOC	Ozone, Severe	25
PM10	PM10, Serious	70

or

- b. Any stationary source located in an attainment or unclassifiable area which emits, or has the potential to emit, 100 tons per year or more of any conventional air pollutant if the source is classified as a categorical source, or 250 tons per year or more of any pollutant subject to regulation under the Clean Air Act (1990) if the source is not classified as a categorical source; or
    - c. Any change to a minor source which would increase its emissions to the qualifying levels specified under Paragraphs a. or b. of this subdivision; or
    - d. Any stationary source which emits, or has the potential to emit, five or more tons of lead per year; or
    - e. Any source classified as major undergoing modification that meets the definition of reconstruction.
    - f. A major source that is major for volatile organic compounds shall be considered major for ozone.
    - g. A major source that is major for oxides of nitrogen shall be considered major for ozone in nonattainment areas classified as marginal, moderate, serious or severe.
3. **RESOURCE RECOVERY PROJECT** - 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 which provides more than 50 percent of the heat input shall be considered a resource recovery project under this article.

[Adopted effective November 3, 1993.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 3. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES

#### 3-3-205. Application requirements

- A. An application for every permit or permit revision under this article shall, in addition to meeting all other applicable requirements of Chapter 3 of this Code, clearly set forth how the person proposing to commence construction of a major source or make a major modification to a major source proposes to effect compliance with each applicable requirement of:
1. The more stringent of the applicable new source performance standards in Chapter 6 of this Code or any performance standard or emissions limitation applicable to Pinal County under the Arizona SIP;
  2. The visibility protection requirements contained in §3-3-280;
  3. The fugitive emission limitations set forth in Chapter 4 of this Code.
  4. Any emission limitation, design, equipment, work practice or operational standard, or combination thereof that is applicable to the source or modification provided that the degree of emission limitation required for control of any pollutant under this Code shall not be affected in any manner by:
    - a. Stack height in excess of GEP stack height except as provided in §3-1-177; or,
    - b. Any other dispersion technique, unless implemented prior to December 31, 1970.
  5. The applicable standards for hazardous air pollutants contained in Chapter 7 of this Code.
  6. 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 §2-1-070.
- B. 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 permit or permit revision shall initially consider only the geographical area located within a fifty (50) kilometer radius from the point of greatest emissions for the new major source or major modification. The Control Officer (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 fifty (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.

[Adopted effective June 29, 1993. Former Section 3-2-200 renumbered as Section 3-3-205 amended effective November 3, 1993.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 3. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES

#### 3-3-210. A pplication review process

In addition to or in lieu of the requirements of Article 1 of this chapter, the Control Officer shall comply with the following requirements:

1. Within sixty days after receipt of an application for a permit or permit revision subject to this article, or any addition to such application, the Control Officer shall advise the applicant of any deficiency by mail. The date of receipt of a the application shall be, for the purpose of this section, the date on which the Control Officer received all required information. The permit application shall not be deemed complete if the Control Officer fails to meet the requirements of this paragraph.
2. Within 6 months of the receipt of a complete permit or permit revision application, the Control Officer shall take preliminary action on the application. Such preliminary action shall include:
  - a. Making a preliminary determination whether construction should be approved, approved with conditions, or disapproved;
  - b. Making available in at least one location in the District a copy of all materials the applicant submitted, a copy of the preliminary determination, and a copy or summary of other materials, if any, considered in making the preliminary determination;
  - c. Scheduling at least one public hearing for interested persons to appear and submit written or oral comments on the air quality impact of the source, alternatives to it, the control technology required, and other appropriate considerations;
  - d. Notifying the public, by prominent advertisement in a newspaper of general circulation within the District, the availability of the application materials for review, the preliminary determination, the degree of increment consumption that is expected from the source or modification, and of the opportunity for the public to comment at the public hearing(s) as well as in writing within a time period of 30 days, or such longer duration as may be set forth in the notice;
  - e. Providing written notice, including each of the elements included in the published public notice, to the permit applicant, the Administrator, the ADEQ Director and to other officials and agencies having cognizance over the location where the proposed construction would occur, including at least:
    - i. The County Manager;
    - ii. The city or town managers of the city or town within which, and any city or town the boundaries of which are within 5 miles of the proposed or existing source that is the subject of the permit or permit revision application is located;
    - iii. 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
    - iv. Any state, Federal Land Manager, or Indian governing body whose lands may be affected by emissions from the proposed source or modification.
3. Within 12 months of the receipt of a complete permit or permit revision application, the Control Officer shall take final action on the application. A final action may be preceded by additional public hearings. Such final action shall include:
  - a. Considering all written comments received within the defined time period, as well as all oral comments received at the public hearing(s);
  - b. Making available, at the same location in the District where the applicant's materials were made available, all public comments received;
  - c. Preparing a written determination as to whether the application should be approved, approved with conditions, or disallowed;
  - d. Notifying the applicant, by copy of the written final determination;



- e. Making available, at the same location in the District where the applicant's materials were made available, a copy of the written final determination.
4. The Control Officer shall terminate a permit or permit revision issued under this section if the proposed construction or major modification is not begun within 18 months of issuance, or if during the construction or major modification, work is suspended for more than 18 months.

[Adopted effective June 29, 1993. Former Section 3-2-210 renumbered as Section 3-3-210 and amended effective November 3, 1993. Amended February 22, 1995.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 3. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES

#### 3-3-250. Permit and permit revision requirements for sources located in attainment and unclassifiable areas

A. Except as provided in Subsections B. through G. in this section and §3-3-270, Innovative Control Technology, no permit or permit revision under this article shall be issued to a person proposing to construct a new major source or make a major modification to a major source that would be constructed in an area designated as attainment or unclassifiable for any pollutant unless the source or modification meets the following conditions:

1. A new major source shall apply best available control technology (BACT) for each conventional air pollutant for which the potential to emit is significant.
2. A major modification shall apply BACT for each conventional air pollutant for which the modification would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.
3. For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source.
4. The person applying for the permit or permit revision under this article performs an air impact analysis and monitoring as specified in §3-3-260 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 §2-5-160, and minor and mobile sources for oxides of nitrogen and PM10:
  - a. Would not cause or contribute to air pollution in violation of any applicable maximum allowable increase over the baseline concentration in Chapter 2, Article 5 of this Code 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 Arizona primary or secondary ambient air quality standards for that pollutant are being violated. A new major source of volatile organic compounds or oxides of nitrogen, or a major modification to a major source of volatile organic compounds or oxides of nitrogen shall be presumed to contribute to violations of the Arizona ambient air quality standards for ozone if it will be located within fifty (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 Control Officer that emissions of volatile organic compounds or oxides of nitrogen from the new major source or major modification will not contribute to violations of the Arizona ambient air quality standards for ozone in adjacent nonattainment areas for ozone. Such a demonstration shall include a showing that topographical, meteorological or other physical factors in the vicinity of the new major source or major modification are such that transport of volatile organic compounds emitted from the source are not expected to contribute to violations of the ozone standards in the adjacent nonattainment areas.
5. Air quality models:
  - a. All estimates of ambient concentrations required under this section shall be based on the applicable air quality models, data bases, and other requirements specified in the "Guideline on Air Quality Models (Revised)" EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, July 1986), and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both

documents shall be referred to hereinafter as "Guideline" and are adopted by reference and on file with the District.

b. Where an air quality impact model specified in the "Guideline" is inappropriate, 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. 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 modification to a source with respect to a particular pollutant if the person applying for the permit or permit revision under this article demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment for the pollutant.

C. The requirements of this section shall not apply to a new major source or major modification of a source if such source or modification would be a major source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential emissions of the source or modification, and the source is not either among the categorical sources listed in §1-3-140.25. or belongs to the category of sources for which new source performance standards under 40 C.F.R. Part 60 (1992) or national emission standards for hazardous air pollutants under 40 C.F.R. Part 61 (1992) adopted by the Administrator prior to August 7, 1980.

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

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

F. Special rules applicable to Federal Land Managers:

1. Notwithstanding any other provision of this section, a Federal Land Manager may present to the Control Officer a demonstration that the emissions attributed to such new major source or major modification to a source will have significant adverse impact on visibility or other specifically defined air quality related values of any federal mandatory Class I area designated in Chapter 2, Article 4 of this Code regardless of the fact that the change in air quality resulting from emissions attributable to such new major source or major modification to a source in existence will not cause or contribute to concentrations which exceed the maximum allowable increases for a Class I area. If the Control Officer 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 Control Officer, the Control Officer may issue a permit or permit revision under this article notwithstanding the fact that the change in air quality resulting from emissions attributable to such new major source or major modification will cause or contribute to concentrations which exceed the maximum allowable increases for a Class I area. Such a permit or permit revision under this article shall require that such new major source or major modification comply with such emission limitations as may be necessary to assure that emissions will not cause increases in ambient concentrations greater than the following maximum allowable increases over baseline concentrations for such pollutants:

**Maximum Allowable Increase  
(Micrograms per cubic meter)**

Sulfur Oxide

Period of exposure

Low terrain areas:

24-hour maximum 36

3-hour maximum 130

High terrain areas:

24-hour maximum 62

3-hour maximum 221

- G. The issuance of a permit or permit revision under this article in accordance with this section shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under County, 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.

[Adopted effective June 29, 1993. Former Section 3-2-250 renumbered as Section 3-3-250, amended effective November 3, 1993, amended February 22, 1995.]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 3. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES

#### 3-3-260. 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 such air quality monitoring data as the Control Officer 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 Control Officer 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. For any application which becomes complete, except as to the requirements of Subsection C. of this section, prior to February 9, 1982, the data that Subsection C. of this section requires shall have been gathered over at least the period from February 9, 1981, to the date the application becomes otherwise complete, except that:
1. If the new source or modification would have been major for that pollutant under §3-3-250 as in effect on October 2, 1979, any monitoring data shall have been gathered over at least the period required by those regulations.
  2. If the Control Officer determines that a complete and adequate analysis can be accomplished with monitoring data over a shorter period (not to be less than four months), the data that Subsection C. requires shall have been gathered over that shorter period.
  3. If the monitoring data would relate exclusively to ozone and would not have been required under §3-3-250 as in effect on October 2, 1979, the Control Officer may waive the otherwise applicable requirements of this subsection to the extent that the applicant shows that the monitoring data would be unrepresentative of air quality over the full year.
- F. The owner or operator of a proposed stationary source or modification to a source of volatile organic compounds who satisfies all conditions of 40 C.F.R. 51, Appendix S §IV (1992), may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under Subsections B., C., and D. of this section.
- G. 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 Control Officer 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.
- H. The owner or operator of a new major source or major modification shall meet the requirements of 40 C.F.R. Part 58, Appendix B, during the operation of monitoring stations for purposes of satisfying Subsections B. through G. of this section.
- I. The requirements of Subsections B. through H. of this section shall not apply to a new major source or major modification to an existing source with respect to monitoring for a particular pollutant if:
1. The emissions increase of the pollutant from the new source or the net emissions increase of the pollutant from the modification would cause, in any area, air quality impacts less than the following amounts:

Carbon Monoxide - 575 g/m<sup>3</sup>, 8-hour average;  
Nitrogen Dioxide - 14 g/m<sup>3</sup>, annual average;  
PM10 - 10 g/m<sup>3</sup>, 24-hour average;  
Sulfur Dioxide - 13 g/m<sup>3</sup>, 24-hour average;  
Lead - 0.1 g/m<sup>3</sup>, 24-hour average;  
Fluorides - 0.25 g/m<sup>3</sup>, 24-hour average;  
Total Reduced Sulfur - 10 g/m<sup>3</sup>, 1-hour average;  
Hydrogen Sulfide - 0.04 g/m<sup>3</sup>, 1-hour average;  
Reduced Sulfur Compounds - 10 g/m<sup>3</sup>, 1-hour average;  
Ozone - increased emissions of less than 100 tons per year of volatile organic compounds or oxides of nitrogen; or,

2. The concentrations of the pollutant in the area that the new source or modification would affect are less than the concentrations listed in Subdivision 1. of this subsection.

J. Any application for a 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.

[Adopted effective June 29, 1993. Former Section 3-2-260 renumbered as Section 3-3-260 and amended effective November 3, 1993. Tentatively revised as indicated on 5/14/97; revisions remain contingent upon corresponding EPA-approval of a revision to the SIP as EPA-approved at 61 FR 15717 (4/9/96).]

## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 3. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES

#### 3-3-270. Innovative control technology

- A. Notwithstanding the provisions of §§3-3-250.A.1., 3-3-250.A.2. and 3-3-250.A.3. the owner or operator of a proposed new major source or major modification may request that the Control Officer 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 Control Officer shall approve the installation of a system of innovative control technology if the following conditions are met:
1. The owner or operator of the proposed source or modification satisfactorily demonstrates that the proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;
  2. The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under §3-3-250.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 permit or permit revision issuance under this article;
  3. The source or modification would meet requirements equivalent to those in § 3-3-250.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 portion of any Class I area; or
    - c. Impact any portion of any other area where an applicable ambient incremental standard is known to be violated in that portion.
  5. All other applicable requirements, including those for public participation contained in §3-3-210 have been met.
  6. The Control Officer receives the consent of the governors of other affected states.
- C. The Control Officer 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 Control Officer 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 Control Officer 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.

[Adopted effective June 29, 1993. Former Section 3-2-270 renumbered as Section 3-3-270 and amended effective November 3, 1993.]

## **CHAPTER 3. PERMITS AND PERMIT REVISIONS**

### **ARTICLE 3. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES**

#### **3-3-275. Air quality models**

- A. Where the Control Officer 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".
- B. Where the person requesting a permit or permit revision under this article can demonstrate that an air quality impact model specified in the Guideline is inappropriate, the model may be modified or another model substituted. However, before such modification or substitution can occur the Control Officer 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.

[Adopted effective June 29, 1993. Former Section 3-1-160 renumbered without change as Section 3-3-275 effective November 3, 1993.]



## CHAPTER 3. PERMITS AND PERMIT REVISIONS

### ARTICLE 3. PERMIT REQUIREMENTS FOR NEW MAJOR SOURCES AND MAJOR MODIFICATIONS TO EXISTING MAJOR SOURCES

#### 3-3-280. 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 area which may be affected by the emissions from that source; and
  2. Results of monitoring of visibility in any Class I area near the proposed source for such purposes and by such means as the Control Officer 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 Class I area.
  2. The frequency and timing of natural conditions in the Class I 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 Subdivision 3. of this subsection and the factors described in Subdivisions 1. and 2. of this subsection.
- C. The Control Officer shall not issue a permit or permit revision pursuant to this article or Article 1 of this chapter for any new major source or major modification subject to this Code unless the following requirements have been met:
1. The Control Officer shall notify the individuals identified in Subdivision 2. of this subsection within 30 days of receipt of any advance notification of any such permit or permit revision application under this article.
  2. Within 30 days after receipt of the permit or permit revision application under this article for a source whose emissions may affect a Class I area, the Control Officer 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 application under this article;
    - b. Include an analysis of the anticipated impacts of the proposed source on visibility in any Class I 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 Control Officer shall consider any analysis provided by the Federal Land Manager that is received within the comment period provided in Subdivision 2. of this subsection.
    - a. Where the Control Officer finds that the analysis provided by the Federal Land Manager does not demonstrate to the satisfaction of the Control Officer that an adverse impact on visibility will result in the Class I area, the Control Officer shall, within the public notice required by §3-3-210, either explain the decision or specify where the explanation can be obtained.
    - b. When the Control Officer finds that the analysis provided by the Federal Land Manager demonstrates to the satisfaction of the Control Officer that an adverse impact on visibility will result in the Class I area, the Control Officer 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 §3-3-210 and available for public review,

the Control Officer shall provide the individuals identified in Subdivision 2. of this subsection with a copy of the proposed permit decision and shall make available to them any materials used in making that determination.

[Adopted effective June 29, 1993. Former Section 3-2-280 renumbered as Section 3-3-280 and amended effective November 3, 1993.]

An applicant for a Class I or Class II permit or any revisions to such permits may request that the Control Officer provide accelerated processing of the application by providing the Control Officer written notice 60 days in advance of filing the application. Any such request shall be accompanied by the standard application fees as described in this article plus an additional 50% surcharge, which shall be nonrefundable if the Control Officer undertakes to provide the accelerated processing as described below:

1. When an applicant has requested accelerated permit processing, the Control Officer may request an additional surcharge fee based on the estimated cost of accelerating the processing of the application, or, to the extent practicable, may seek to process the permit or permit revision in accordance with the following schedule:
  - a. For applications for initial Class I and II permits governed by §3-1-040 or significant permit revisions governed by §3-2-195, final action on the permit or permit revision shall be taken within 120 days after receiving notice that the application is complete.
  - b. For minor permit revisions governed by §3-2-190, final action on the permit shall be taken within 60 days after receiving an application.
2. Before granting an application for a permit or permit revision pursuant to this section, the applicant shall pay to the District all permit processing and other fees due, and in addition, the difference between the actual cost of accelerating the permit application and the 50% surcharge submitted. Nothing in this section shall affect the public participation requirements of §3-1-107.
3. None of the surcharges for accelerated permit processing shall be applied toward the applicable maximum permit fee.

[Adopted effective November 3, 1993. Amended August 13, 2003.]

### 3-7-640. Review of final bill

- A. Any person who receives a final bill from the Control Officer for the processing of a permit or permit revision under this article may request an informal review of the hours billed and may pay the bill under protest. If the bill is paid under protest, the Control Officer shall issue the permit if it would be otherwise issuable after normal payment. The request shall specify the areas of dispute and be made in writing to the Control Officer within 30 days of the date of receipt of the final bill. Unless the Control Officer and applicant agree otherwise, the informal review shall take place within 30 days of the Control Officer's receipt of the request. Notice of the time and place of informal review shall be mailed to the requester at least ten working days prior to the informal review. The Control Officer shall review whether the amounts of time billed are correct and reasonable for the tasks involved. Disposition of the informal review shall be mailed to the requester within ten working days after the informal review.
- B. The Control Officer's decision after the informal review shall become final unless within thirty days after receipt of the decision the applicant requests in writing a hearing pursuant to §3-1-080.

[Adopted effective November 3, 1993. Revised July 12, 2000, with change coinciding upon EPA approval of interim Title V program approval at 61 FR 55910 (10/30/96).]

### 3-7-650. Late fee charge

Owners or operators of permitted sources shall owe a late charge of 1.5% per month for any fees which remain unpaid 30 days after they are due.

[Adopted effective November 3, 1993. Amended February 22, 1995. Amended August 13, 2003.]

### 3-7-660. Hearing Board appeal fee

Subject to the exception set forth in §3-1-080.D., the appeal fee for appealing the grant, denial or terms of a permit or permit revision, or an adverse applicability decision regarding eligibility for an authorization to operate under a general permit, to the Hearing Board shall be the greater of \$100.00 or 2% of the fee for the permit as approved by the Control Officer or otherwise provided by these rules, which the Board of Supervisors finds to be a reasonable and just estimate of the actual costs incurred by the District in conducting a hearing before the Hearing Board.

[Adopted effective November 3, 1993. Amended February 22, 1995.]

## ARTICLE 8. OPEN BURNING

### 3-8-700. General provisions

#### A. Applicability

1. General Prohibition  
Notwithstanding the provisions of any other rule in this Chapter, and subject to the exemptions set forth in this section, it is unlawful for any person to ignite, cause to be ignited, permit to be ignited, or suffer, allow or maintain any open outdoor fire.
2. Conditional Statutory Exemptions  
Provided a public officer, as defined in the subsections below, gives permission in writing for a fire, and immediately transmits a copy of such written permission to the Director of the Department of Environmental Quality and to the Control Officer, and further provided that the setting of any such fire shall be conducted in a manner and at such time as approved by the Control Officer, unless doing so would defeat the purpose of the exemption, the following fires are exempt from this Article:
  - a. Any fire set or permitted by any public officer in the performance of official duty, if such fire is set or permission given for the purpose of weed abatement, the prevention of a fire hazard, or instruction in the methods of fighting fires.
  - b. Fires set by or permitted by the state entomologist or county agricultural agents of the county for the purpose of disease and pest prevention.
  - c. Fires set by or permitted by the state or any of its agencies, departments or political subdivisions, for the purpose of watershed rehabilitation or control through vegetative manipulation.
3. Other Statutory Exemptions  
The following fires are exempt from regulation under this Article:
  - a. Fires used only for cooking of food or for providing warmth for human beings or for recreational purposes or the branding of animals. For purposes of this exemption, a "recreational purpose" fire is an outdoor fire, which burns material other than household waste or prohibited materials, and has a total fuel area of 3 feet or less in diameter and 2 feet or less in height.
  - b. Fires set by or permitted by the federal government or any of its departments, agencies or agents.
4. Regulatory Exemptions  
For the purposes of this rule and article, the following shall neither be regarded as nor deemed open burning:
  - a. The subterranean detonation of explosives.
  - b. The display of fireworks for recreational purposes or pyrotechnics for musical or cinematic/theatrical functions, provided any person detonating such fireworks or pyrotechnics has a permit approved by the Pinal County Board of Supervisors.
  - c. Fires for the ceremonial destruction of flags.
5. Default Emission Rate Assumption  
Unless specifically authorized under the preceding definitions of permit-authorized fires, fires set for the disposal of materials shall be presumed to have a potential to emit greater than "de minimis amounts" of regulated air pollutants and shall require a stationary source permit as specified under §3-1-040.

#### B. Definitions.

"Agricultural Burning" means burning of vegetative materials related to the production and harvesting of crops and raising of animals for the purpose of marketing for a profit, or providing a livelihood, but not including the burning of household waste or prohibited materials. Burning may be conducted in fields, piles, ditch banks, fence rows, or canal laterals for purposes such as weed control, disease and pest prevention, or site preparation.

"Air curtain destructor" means an incineration device which operates by forcefully projecting a curtain of air across an open chamber or open pit in which combustion occurs.

"Approved waste burner" means an incinerator constructed of fire resistant material with a top cover or screen, which is closed when in use having opening in the sides or top no greater than one inch in diameter.

"Class I Area" means any one of the Arizona mandatory Federal Class I Areas defined in A.R.S. §49-401.01.

"Control Officer" has the same meaning as in A.R.S. §49-471.

"Date of Issuance" the actual date that the open burning application is signed by the Control Officer or his/her representative.

"Dangerous material" is 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 safe and controlled manner.

"Delegated authority" means any of the following:

1. 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
2. A private fire protection service provider that has been assigned authority to issue open burning permits by one of the authorities listed in the preceding subsection of this definition.

"De Minimis amount" is the lesser of: the potential of a source to emit 1 ton per year of any air pollutant; or the potential of a source to emit 5.5 lbs/day of any air pollutant.

"Director" means the Director of the Department of Environmental Quality, or his/her designee.

"Effective date of Permit" is the actual date that open burning operations may commence, which will be no later than 10 days after the "Date of Issuance."

"Emission reduction techniques" are techniques for controlling emissions from open outdoor fires to minimize the amount of emissions output per unit of area burned.

"Household waste" means any solid waste including garbage, rubbish and sanitary waste from septic tanks that is generated from households including single and multiple family residences, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day use recreational areas, not including construction debris, landscaping rubble or demolition debris.

"Open outdoor fire", as used in this rule, means any combustion of combustible material of any type outdoors, in the open where the products of combustion are not directed through a flue. "Flue", as used in this rule, means any duct or passage for air, gases or the like, such as a stack or chimney. Open outdoor fires can include agricultural, residential, commercial, and prescribed burning. Purposes for fires can include prevention of a fire hazard, instruction in the methods of fighting fires, watershed rehabilitation, disease and pest prevention.

"Prescribed burning" means the burning of vegetative material in predominantly undeveloped land to improve forested, open range or watershed condition.

"Prohibited materials" means nonpaper garbage from the processing, storage, service, or consumption of food; chemically treated wood; 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.

"Residential burning" means open burning of vegetative materials that is generated only from that property and conducted by or for the occupants of residential dwellings, but does not include the burning of household waste or prohibited materials.

C. Permit-authorized fires.

Provided a permit is first obtained from the Control Officer, no prohibited wastes or household wastes are burned unless otherwise specified, and a site map of the burn site is provided, the following fires are allowed under this Section:

1. Permitted residential fires:

a. Generally Allowable Combustible Materials: Residential fires set for the disposal of leaves, lawn clippings, tree trimmings and other horticultural waste, provided that no materials that generate toxic fumes, such as oleander leaves or branches, may be burned. Residential burning must be conducted on a single contiguous property designed for and used exclusively as a private residence.

b. Conditional Approval to Burn Domestic Household Waste

Fires set in an approved waste burner for the disposal of those portions of domestic household waste generated at a private residence. Such fires are allowed:

- i. On farms and ranches of 40 acres or more where no refuse collection and disposal service is available; or
- ii. For 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.

Unless a permit is specifically endorsed by the Control Officer to verify that waste pickup service is not available, and to expressly allow burning of domestic household waste, burning of such waste is **PROHIBITED**.

c. Small Scale Residential Permit: Under a "small scale" residential open burning permit, the quantity of material that may be burned during the one-month permit shall not exceed 10 cubic yards of non-compacted material. A "small scale" residential permit may be renewed on a month-to-month basis, without limitation.

d. Large Scale Residential permit: Under a "large scale" residential open burning permit, the quantity of material that may be burned during the one-month permit term shall not exceed 20 cubic yards of non-compacted material. A "large scale" residential permit may only be issued for a single location, defined by an assessor's parcel number, twice in a calendar year.

2. Permitted commercial fires:

a. Generally Allowable Combustible Materials: Commercial Fires may be set for the disposal of leaves, lawn clippings, tree trimmings and other horticultural waste, provided that no materials that generate toxic fumes, such as oleander leaves or branches, may be burned. Commercial burning must be conducted on a single contiguous property designed for and used exclusively as a single business.

b. Small Scale Commercial Permit: Under a "small scale" commercial open burning permit, the quantity of material that may be burned during the one-month permit term shall not exceed 10 cubic yards of non-compacted material. A "small scale" commercial permit may be renewed on a month-to-month basis, without limitation.

c. Large Scale Commercial Permit: Under "large scale" commercial open burning permit, the quantity of material that may be burned during the one-month permit term shall not exceed 20 cubic yards of non-compacted material. A "large scale" commercial permit may only be issued for a single location, defined by assessor's parcel number, twice in a calendar year.

d. Commercial Land Clearing Permit:

1. Open burning activities which include one-time land-clearing operations that involve non-compacted vegetative materials greater than those allowed above in section 2.a. through 2.c.

2. Land clearing burns may be authorized by written permission from the Control Officer if the burning will not adversely affect public health or safety, and will not cause or contribute to a nuisance, traffic hazard, or to a violation of any air quality standard.

(a) The applicant shall submit a non-refundable application fee, as specified in Appendix C.

(b) The applicant shall also pay an additional non-refundable per-acre fee, as also specified in Appendix C.

3. Authorization for the land clearing burn may be revoked by the Control Officer if the burning causes nuisance conditions, is not conducted in accordance with the specified conditions, violates any provision of an applicable permit, or causes a violation of any air quality standard.

4. If the permittee wishes to use an air curtain destructor for land clearing, such device should be operated pursuant to the manufacturer's specifications and the following limitations:

(a) Air curtain destructors shall not be operated closer than 500 feet from the nearest dwelling.

(b) Air curtain destructors must also comply with the applicable requirements of 40 C.F.R. Section 60.2245 to 60.2260.

3. Permitted agricultural fires:  
Fires set for weed control or abatement, clearing fields or ditches of vegetation, or the disposal of other naturally grown products of horticulture, provided that no materials that generate toxic fumes, such as oleander leaves or branches, may be burned.
4. Permitted training exercise fires (non-governmental agencies/companies):  
Fires set for the instruction of fire fighting methods.
5. Permitted building-demolition, or building-material demolition fires:  
Fires set for the disposal of abandoned buildings or building materials, provided that no such permit shall be issued until after an on-site inspection by the District. Building demolition burns may be authorized by written permission from the Control Officer if there is no practical alternative, and if the burning will not adversely affect public health or safety, and will not cause or contribute to a nuisance, traffic hazard, or to a violation of any air quality standard.
  - (a) The applicant shall submit a non-refundable pre-permit inspection fee, as specified in Appendix C.
  - (b) The applicant shall pay an additional permit issuance fee, as also specified in Appendix C.
6. Permitted fires for the destruction of dangerous materials:  
Fires set for the destruction of dangerous or hazardous materials are allowed when the materials are too dangerous to store and transport, provided that no such permit shall be issued until after an on-site inspection by the District. Fires set for the destruction of dangerous materials shall only be allowed where there is no safe alternative method of disposal, and when the burning of such 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.
  - (a) The applicant shall submit a non-refundable pre-permit inspection fee, as specified in Appendix C.
  - (b) The applicant shall pay an additional permit issuance fee, as also specified in Appendix C.
7. Bonfire Permits:  
Provided no prohibited materials or household wastes, as defined in §3-8-700.B., are burned: a city, town, county statutory districts, or other political subdivision established by statute may obtain a no-cost bonfire permit for a community or civic event.
  - a. A written request from the public entity is required.
  - b. The quantity of material that may be burned during the permit term shall not exceed 20 cubic yards of non-compacted material.
- D. Permit conditions.  
All permits shall include the following:
  1. Contact Information  
A means of contacting the permittee.
  2. Permit term  
The term of the temporary open burning permit, which shall:
    - a. For a residential or commercial permit, not exceed one month from the effective date;
    - b. For an agricultural permit, not exceed one year from the effective date;
    - c. For a demolition permit or a destruction of hazardous materials permit, not exceed sixty (60) days from the effective date;
    - d. Not, regardless of term, authorize any violation of any burning ban that a local fire department/district may impose for purposes of public safety or other purposes.
    - e. For a training exercise permit, not exceed a permit specified 7-day period from the effective date.
    - f. For a commercial land clearing burn permit, not exceed sixty (60) days from the effective date, provided that the permittee may, upon application but without cost, be allowed one sixty (60) day extension of such a land clearing permit.
    - g. For a bonfire, not exceed a 3-day period, which dates shall be specified in the permit.
    - h. No person affected by a "no burn" restriction or permit suspension shall be entitled to an extension of the burn permit term.
  3. Permits subject to suspension orders.  
All permits shall note that all burning be extinguished at the discretion of the Control Officer or his authorized representative during periods of inadequate atmospheric smoke dispersion, including:
    - a. When an air stagnation advisory is issued by the Director of ADEQ or the National Weather Service;
    - b. When an air pollution emergency episode alert, warning, or emergency as required by §§2-7-230 to 2-7-720 is declared;
    - c. During periods of excessive visibility impairment which could adversely affect public safety or impair visibility in Class I areas; or
    - d. During periods of extreme fire danger, or during periods when smoke is blown into populated areas so as to create or threaten to create a public nuisance.
  4. Emission Reduction Techniques  
The permit applicant shall note on the permit application/permit form the types of emission reduction techniques that the permittee will use to minimize fire emissions.
  5. Burn Management Provisions  
All permits shall also contain the following conditions:
    - a. Materials that may be burned.
    - b. Allowable burn times are:  
8:00 a.m. to 4:00 p.m. April 1 through September 30  
9:00 a.m. to 4:30 p.m. October 1 through March 31
    - c. Wind speed while burning shall not be less than 5 miles per hour (mph) or greater than 15 mph. If the wind increases during burning, all fires/smoke must be extinguished completely until the wind speed is again in the range of 5 mph to 15 mph.
    - d. The fire must be constantly attended, with reasonable control tools (water or dirt) on hand at all times, and the person conducting the burn must have a copy of the burn permit on-site during open burning.
    - e. When the burn is completed, the fire must be completely extinguished. All burning must cease by the times noted above.
    - f. A requirement that each open burn be started using items that do not cause the production of black smoke.
    - g. A requirement that the burning pit, burning pile, or approved waste burner be at least 50 feet from the nearest other dwelling unit.
    - h. The person conducting the open burning must notify the local fire-fighting agency, fire district or municipal fire department, or if none in existence, the state forester, prior to commencement of open burning.
    - i. Open burning shall be conducted only during atmospheric conditions which:
      - 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 any adverse impact to visibility in a Class I area; and
      - v. Do not cause uncontrollable spreading of the fire.
    - j. The permittee shall not conduct open burning when:
      - i. The National Weather Service has issued an air stagnation advisory for the affected area;
      - ii. During periods when smoke can be expected to accumulate to the extent that it will significantly impair visibility in Class I areas; or
      - iii. When any stage air pollution episode is declared under Code §§2-7-230 to 2-7-720.
    - k. The permit shall include a copy of the activities prohibited and the criminal penalties for reckless burning included in A.R.S. §13-1706.
- E. Permit Reporting Requirements  
The following information shall be provided to the Control Officer for each date open burning occurred, either on a daily basis on the day of the fire, or after the burn permit period ends, or in an annual report prior to April 1. The

report shall be submitted in a format provided by the Director or Control Officer and include:

1. The date of the burn;
  2. The type and quantity of fuel burned for each date open burning occurred;
  3. The fire type, such as pile or windrow, for each date open burning occurred;
  4. For each date open burning occurred, the legal location, to the nearest township, range and section; or latitude and longitude, to the nearest degree minute; or street address; or parcel number.
- F. Permissible delegation of authority
1. The Control Officer may delegate the authority for the issuance of allowable open burning permits to responsible delegated authorities as defined in §3-8-700.B. Anyone delegated the authority for issuance of open burning permits shall maintain a copy of all currently effective permits issued including a means of contacting the person authorized by the permit to set an open fire in the event that an order for extinguishing of open burning is issued. This includes a no burn restriction when monitoring or forecasting indicates the carbon monoxide standard is likely to be exceeded in Area A, as defined in A.R.S. 49-541, and Chapter 4, Article 3, 4-3-060.C of the Pinal County Air Quality Control District (PCAQCD) Code of Regulations.
- G. Open Burn Permit Suspensions
1. A "no burn" restriction shall be imposed with respect to open burning regulated by Pinal County, whenever monitoring or forecasting indicates the carbon monoxide standard is likely to be exceeded. Such a "no burn" restriction applies to all burning regulated under this Code, even including burning by persons who may hold an otherwise valid open burning permit issued by Pinal County.
  2. That "no burn" restriction shall arise by operation of law whenever the Maricopa County Environmental Services or ADEQ declares such a "no burn" restriction in neighboring Maricopa County.
- H. Violations
- Failure to obtain a permit, or failure to comply with the conditions of a permit, shall be subject to civil and/or criminal penalties in any of the following statutes: A.R.S. §§13-1706, 49-502, 49-511, 49-512, 49-513, or 49-514.
- I. Limited scope of rule.
- Nothing in this rule shall authorize or permit any practice, which is a violation of any statute, ordinance, rule or regulation.

[Adopted effective June 29, 1993. Former Section 3-6-560 renumbered without change as Section 3-8-720 effective November 3, 1993. Revised effective February 22, 1995. Amended February 11, 2004. Amended October 27, 2004.]

#### ~~3-8-710. Permit provisions and administration~~

- ~~A. Burn permit fees~~
- ~~1. Required fees~~

~~A fee shall be charged for a Temporary Open Burning permit according to the fee schedules found in Appendix~~
  - ~~2. No Refunds~~

~~No person affected by a permit suspension or "no burn" restriction as allowed under these rules shall be entitled to a refund of any monies paid for an open burning permit.~~
- ~~B. Signature and acknowledgement~~
- ~~Every open burning permit shall be signed by the person obtaining the permit, and that signature shall constitute an acknowledgement that:~~
- ~~1. The person obtaining the permit bears responsibility for any failure to properly and adequately control any fire set pursuant to the permit;~~
  - ~~2. The issuance by the Control Officer of a Temporary Open Burning Permit does not release the permittee from any of the requirements of a fire department/district having jurisdiction, and a permit so issued must be validated by said fire department/district to be effective. The permittee is solely responsible for complying with such fire department/district requirements or restrictions.~~
  - ~~3. Even though burning may be separately restricted by a fire department/district, all fees paid are non-refundable, and burn permits will not be extended due to an open burning restriction.~~
  - ~~4. Open burning at a time or in a manner contrary to the terms of the permit or an order from the Control Officer shall constitute one or more violations as set forth in §3-8-700.~~
- ~~C. Storage of materials prone to spontaneous combustion~~
- ~~Outdoor disposal or deposition of any non-agricultural materials (100 cubic yards or greater) capable of igniting spontaneously, with the exception of fossil fuels (coal), shall not be allowed, without providing adequate fire-fighting materials, such as sand, dirt, or water.~~

~~[Adopted effective June 29, 1993. Former Section 3-6-570 renumbered as Section 3-8-730 and amended effective November 3, 1993. Amended February 22, 1995. Amended December 13, 2000. Amended February 11, 2004. Amended October 27, 2004.]~~

## CHAPTER 4. EMISSIONS FROM EXISTING AND NEW NON-POINT SOURCES

### ARTICLE 1. ADOPTED DOCUMENT(S)

#### 4-1-010. Adopted document(s)

A.A.C., Title 18, Chapter 2, Article 6 is hereby adopted by reference and made a part of this Code.

[Adopted effective June 29, 1993. Revised 1/14/97.]

### ARTICLE 2. FUGITIVE DUST

#### 4-2-020. General

The purpose of this article is to reasonably regulate operations which periodically may cause fugitive dust emissions into the atmosphere.

[Adopted effective June 29, 1993. Revised 12/4/2002.]

#### 4-2-030. Definitions

For the purpose of this article, the following definitions shall apply:

1. **MOTOR VEHICLE** - A self-propelled vehicle weighing less than six thousand pounds that is designed for carrying persons or property on a street or highway.
2. **REASONABLE PRECAUTION** - Measures taken to prevent fugitive dust from becoming airborne which result in the lowest emission limitation by the application of control technology that is reasonably available considering technological and economic feasibility.
3. **URBAN or SUBURBAN OPEN AREA** - 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 some city or town, may be used for agriculture, be uncultivated, or lie fallow.
4. **VACANT LOT** - A subdivided residential or commercial lot which contains no buildings or structures of a temporary or permanent nature.

[Adopted effective June 29, 1993. Revised 12/4/2002.]

#### 4-2-040. Standards

- A. No person shall cause, suffer, allow, or permit a building or its appurtenances, subdivision site, driveway, parking area, 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, or fill dirt to be deposited, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- 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, such as but not limited to all-terrain vehicles, trucks, cars, cycles, bikes, or buggies, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- C. 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 particulate matter from becoming airborne.
- D. No person shall disturb or remove soil or natural cover from any area without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.

report shall be submitted in a format provided by the Director or Control Officer and include:

1. The date of the burn;
  2. The type and quantity of fuel burned for each date open burning occurred;
  3. The fire type, such as pile or windrow, for each date open burning occurred;
  4. For each date open burning occurred, the legal location, to the nearest township, range and section; or latitude and longitude, to the nearest degree minute; or street address; or parcel number.
- F. Permissible delegation of authority
1. The Control Officer may delegate the authority for the issuance of allowable open burning permits to responsible delegated authorities as defined in §3-8-700.B. Anyone delegated the authority for issuance of open burning permits shall maintain a copy of all currently effective permits issued including a means of contacting the person authorized by the permit to set an open fire in the event that an order for extinguishing of open burning is issued. This includes a no burn restriction when monitoring or forecasting indicates the carbon monoxide standard is likely to be exceeded in Area A, as defined in A.R.S. 49-541, and Chapter 4, Article 3, 4-3-060.C of the Pinal County Air Quality Control District (PCAQCD) Code of Regulations.
- G. Open Burn Permit Suspensions
1. A "no burn" restriction shall be imposed with respect to open burning regulated by Pinal County, whenever monitoring or forecasting indicates the carbon monoxide standard is likely to be exceeded. Such a "no burn" restriction applies to all burning regulated under this Code, even including burning by persons who may hold an otherwise valid open burning permit issued by Pinal County.
  2. That "no burn" restriction shall arise by operation of law whenever the Maricopa County Environmental Services or ADEQ declares such a "no burn" restriction in neighboring Maricopa County.
- H. Violations
- Failure to obtain a permit, or failure to comply with the conditions of a permit, shall be subject to civil and/or criminal penalties in any of the following statutes: A.R.S. §§13-1706, 49-502, 49-511, 49-512, 49-513, or 49-514.
- I. Limited scope of rule.
- Nothing in this rule shall authorize or permit any practice, which is a violation of any statute, ordinance, rule or regulation.

[Adopted effective June 29, 1993. Former Section 3-6-560 renumbered without change as Section 3-8-720 effective November 3, 1993. Revised effective February 22, 1995. Amended February 11, 2004. Amended October 27, 2004.]

### 3-8-710. Permit provisions and administration

- A. Burn permit fees
1. Required fees
- A fee shall be charged for a Temporary Open Burning permit according to the fee schedules found in Appendix C.
2. No Refunds
- No person affected by a permit suspension or "no burn" restriction as allowed under these rules shall be entitled to a refund of any monies paid for an open burning permit.
- B. Signature and acknowledgement
- Every open burning permit shall be signed by the person obtaining the permit, and that signature shall constitute an acknowledgement that:
1. The person obtaining the permit bears responsibility for any failure to properly and adequately control any fire set pursuant to the permit;
  2. The issuance by the Control Officer of a Temporary Open Burning Permit does not release the permittee from any of the requirements of a fire department/district having jurisdiction, and a permit so issued must be validated by said fire department/district to be effective. The permittee is solely responsible for complying with such fire department/district requirements or restrictions.
  3. Even though burning may be separately restricted by a fire department/district, all fees paid are non-refundable, and burn permits will not be extended due to an open burning restriction.
  4. Open burning at a time or in a manner contrary to the terms of the permit or an order from the Control Officer shall constitute one or more violations as set forth in §3-8-700.
- C. Storage of materials prone to spontaneous combustion
- Outdoor disposal or deposition of any non-agricultural materials (100 cubic yards or greater) capable of igniting spontaneously, with the exception of fossil fuels (coal), shall not be allowed, without providing adequate fire-fighting materials, such as sand, dirt, or water.

[Adopted effective June 29, 1993. Former Section 3-6-570 renumbered as Section 3-8-730 and amended effective November 3, 1993. Amended February 22, 1995. Amended December 13, 2000. Amended February 11, 2004. Amended October 27, 2004.]

## CHAPTER 4. EMISSIONS FROM EXISTING AND NEW NON-POINT SOURCES

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### ARTICLE 2. FUGITIVE DUST

#### 4-2-020. General

The purpose of this article is to reasonably regulate operations which periodically may cause fugitive dust emissions into the atmosphere.

[Adopted effective June 29, 1993. Revised 12/4/2002.]

#### 4-2-030. Definitions

For the purpose of this article, the following definitions shall apply:

1. MOTOR VEHICLE - A self-propelled vehicle weighing less than six thousand pounds that is designed for carrying persons or property on a street or highway.
2. REASONABLE PRECAUTION - Measures taken to prevent fugitive dust from becoming airborne which result in the lowest emission limitation by the application of control technology that is reasonably available considering technological and economic feasibility.
3. URBAN or SUBURBAN OPEN AREA - An undivided tract of land surrounding a substantial urban development of a residential, industrial, or commercial nature and which, though near or within the limits of some city or town, may be used for agriculture, be unutilized, or lie fallow.
4. VACANT LOT - A subdivided residential or commercial lot which contains no buildings or structures of a temporary or permanent nature.

[Adopted effective June 29, 1993. Revised 12/4/2002.]

#### 4-2-040. Standards

- A. No person shall cause, suffer, allow, or permit a building or its appurtenances, subdivision site, driveway, parking area, 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, or fill dirt to be deposited, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- 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, such as but not limited to all-terrain vehicles, trucks, cars, cycles, bikes, or buggies, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- C. 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 particulate matter from becoming airborne.
- D. No person shall disturb or remove soil or natural cover from any area without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.

## **ARTICLE 1. WEST PINAL PM10 MODERATE NONATTAINMENT AREA FUGITIVE DUST**

### **4-1-010 General Applicability**

1. The purpose of this Article is to control fugitive dust from open areas /vacant lots, unpaved roads, unpaved lots and paved public roadways by requiring measures to prevent, reduce or mitigate fugitive dust emissions.
2. **Effective Date**  
The rules in this Article will become effective on January 1, 2016.
3. **Geographic Scope**  
The rules in this Article shall be effective throughout the West Pinal County PM<sub>10</sub> Moderate Nonattainment area as defined in 40 CFR Part 81.303.

### **4-1-015. Exemptions**

1. In the case of legitimate vehicle test and development facilities and operations conducted by or for an equipment manufacturer, where dust is required to test and validate the design integrity, product quality and/or commercial acceptance, those specific activities shall be exempt from the applicable standards and requirements in this Article.
2. The standards and requirements of this Article shall not apply to emergency response activities that may disturb the soil conducted by any utility or government agency in order to prevent public injury or to restore critical utilities to functional status. For purposes of this subsection, an emergency response must address a situation arising from a sudden and unforeseeable event beyond the control of the owner and/or operator, including acts of God. Activities by an owner and/or operator to address a disturbance resulting from improperly designed equipment, lack of preventative maintenance, careless or improper operation or operator error shall not qualify as an emergency response.
3. The standards and requirements of this Article shall not apply to normal farm cultural practices according to A.R.S. §49-457 and A.R.S. §49-504.4 which are subject to Arizona Department of Environmental Quality (ADEQ) rules R18-2-610, R18-2-610.01, R18-2-611 and R18-2-611.01.
4. The standards and requirements of this Article shall not apply to dust generating operations subject to the standards and/or requirements described in Chapter 4, Article 3.
5. The standards and requirements of this Article shall not apply to the establishment of initial landscapes without the use of mechanized equipment, conducting landscape maintenance without the use of mechanized equipment, and playing on or maintaining a field used for non-motorized sports. However, establishing initial landscapes without the use of mechanized equipment and conducting landscape maintenance without the use of mechanized equipment shall not include grading, or trenching, performed to establish initial landscapes or to redesign existing landscapes.



#### **4-1-020. Definitions**

For the purpose of this Article, the following definitions shall apply:

1. ADT (Average Daily Trips) – As used in this Article, means the average number of vehicles that cross a given point surface during a specific 24-hour period as determined by the most recent Institute of Transportation Engineers trip generation manual, tube counts, or observations.
2. CONTROL MEASURES- as used in this Article means, a preemptive or concurrent technique used to minimize the generation, emission, entrainment, suspension, and/or airborne transport of fugitive dust in order to comply with applicable standards.
3. DISTURBED SURFACE AREA – As used in this Article, means any portion of the earth’s surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural condition.
4. DUST SUPPRESSANT – As used in this Article, means water, hygroscopic material, solution of water and chemical surfactant foam, non-toxic chemical stabilizer or any other dust palliative, which is not prohibited by the U. S. Environmental Protection Agency (EPA) or the Arizona Department of Environmental Quality (ADEQ), or any applicable law, rule, or regulation, as a treatment material for reducing fugitive dust emissions.
5. EMERGENCY - as used in this Article means a situation arising from sudden and reasonably unforeseeable events beyond the control of the owner and/or operator, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the associated activities to exceed a limitation in this rule, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include any noncompliance due to improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
6. FUGITIVE DUST – As used in this Article, means the regulated particulate matter, which is not collected by a capture system, which is entrained in the ambient air, and which is caused from human and/or natural activities, such as but not limited to, movement of soils, vehicles, equipment, blasting, and wind. For the purpose of this rule, fugitive dust does not include particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines, from portable brazing, soldering, or welding equipment, and from piledrivers.
7. MOTOR VEHICLE - As used in this Article, means a self-propelled vehicle for use on the public roads and highways of the State of Arizona and required to be registered under the Arizona State Uniform motor vehicle Act, including any non-motorized attachments, such as but not limited to, trailers and other conveyances which are connected to or propelled by the actual motorized portion of the vehicle.
8. OPEN AREAS/VACANT LOTS – As used in this Article, means any of the following described in Subsections a through c below. For the purposes of this rule, vacant portions of residential or commercial lots and contiguous parcels that are immediately adjacent to and owned and/or operated by the same individual or entity are considered one open area.

- a. An unsubdivided or undeveloped land whether or not it is adjoining a developed or a partially developed residential, industrial, institutional, governmental, or commercial area.
  - b. A subdivided residential, industrial, institutional, governmental, or commercial lot that contains no approved or permitted buildings or structures of a temporary or permanent nature.
  - c. A partially developed residential, industrial, institutional, governmental, or commercial lot and contiguous lots under common ownership.
- 9. OWNER AND/OR OPERATOR – As used in this Article, means any person including, but not limited to, the property owner, lessee or responsible official.
- 10. PAVE – As used in this Article, to apply and maintain asphalt, concrete, or other similar material to a roadway surface, such as asphaltic concrete, concrete pavement, chip seal, or rubberized asphalt.
- 11. PAVED PUBLIC ROADWAY – As used in this Article, means a publicly owned paved roadway, owned by federal, state, county, municipal, or other government or quasi-governmental agencies as evidenced by a formal acceptance by the state or a political subdivision of the state of either:
  - a. An on-going maintenance obligation for the roadway; or
  - b. A title or easement for the roadway.
- 12. PINAL COUNTY DUST CONTROL FORECAST as used in this Article, 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 of Environmental Quality 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.
- 13. STABILIZED – As used in this Article, means any previously disturbed surface area which, through the application of control measures, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust.
- 14. TRACKOUT – As used in this Article, any and all bulk materials that adhere to and agglomerate on the exterior surface of motor vehicles, haul trucks, and/or equipment (including tires) and that have fallen onto a paved roadway.
- 15. UNPAVED LOT – as used in this Article, is any area that is not paved and that is used for parking, maneuvering, material handling, or storing motor vehicles and equipment. An unpaved lot includes, but is not limited to, automobile impound yards, wrecking yards, automobile dismantling yards, salvage yards, material handling yards, and storage yards. For the purpose of this rule,

maneuvering shall not include military maneuvers or exercises conducted on federal facilities.

16. UNPAVED ROAD - as used in this Article, means any roads, equipment paths, or travel ways that are not paved. Unpaved roads are owned only by federal, state, county, municipal, or other governmental or quasi-governmental agencies. For the purposes of this Article, an unpaved road is not an agricultural road, horse trail, hiking path, bicycle path, or other similar path used exclusively for purposes other than travel by motor vehicles.

#### 4-1-030. Standards

##### 1. GENERAL REQUIREMENTS

- A. The owner and/or operator of open areas/vacant lots, unpaved lots, unpaved roads and paved public roadways shall be subject to the standards and/or requirements described in this rule. Failure to comply with any such standards and/or requirements is deemed a violation of this rule.
- B. The owner and/or operator shall implement applicable control measures.
- C. Control measures shall be implemented to meet the visible emissions requirements, stabilization requirements and compliance determinations for each applicable category.
- D. Failure to implement control measures as required by this rule, as applicable and/or failure to maintain stabilization in order to prevent wind erosion as measured by the requirements of this rule shall be deemed a violation of this rule.

##### 2. OPEN AREAS/VACANT LOTS

- A. **Visible Emissions and Stabilization Requirements:** The owner and/or operator of open areas/vacant lots shall not cause, suffer, allow, or permit fugitive dust emissions which result in opacity of the dust to exceed twenty percent (20%) as measured using an opacity method, as determined by the applicable test method in §4-9-340 or an equivalent test method approved in writing by the Control Officer and the EPA Administrator.
- B. Upon evidence of trespass in open areas/vacant lots, an owner and/or operator shall install and maintain one of the following:
  - i. No trespassing signs
  - ii. Physical barriers such as curbs, fences, gates, posts, shrubs, trees, or other effective control measures to effectively prevent access to the open areas/vacant lots.
- C. Owners and/or operators of open areas/vacant lots 1.0 acre (43,560 square feet) or larger and have a cumulative of 0.5 acre (21,780 square feet) or more disturbed surface area shall implement at least one control measure described below on the disturbed surface area in order to stabilize:
  - i. Apply and maintain water or dust suppressants; or

- ii. Establish vegetation; or
  - iii. Install and maintain pavement; or
  - iv. Apply and maintain gravel uniformly; or
  - v. Apply and maintain chemical/organic stabilizers/suppressants; or
  - vi. Apply and maintain an alternative control measure approved in writing by the Control Officer and the EPA Administrator.
- D. For open areas/vacant lots 1.0 acre (43,560 square feet) or larger and have a cumulative of 0.5 acre (21,780 square feet) or more disturbed surface area, within 30 calendar days following the initial discovery of the disturbed surface area on the open areas/vacant lots, the owner and/or operator shall sign up to receive the Pinal County dust control forecast. The owner and/or operator shall ensure the open areas/vacant lots is stabilized the day leading up to and the day that is forecast to be high risk for dust emissions, as noticed by the Pinal County dust control forecast.
- E. No person shall remove vegetation from any open areas/vacant lots by blading, disking, plowing under or any other means without implementing all of the following control measures to prevent or minimize fugitive dust.
- i. Apply a dust suppressant(s) to the total surface area subject to the disturbance immediately prior to or during the weed abatement.
  - ii. Prevent or eliminate material trackout onto paved surfaces and access points adjoining paved surfaces through one of the control measures in 4-1-030.5.A.i.
  - iii. Apply a dust suppressant(s), gravel, compaction or an alternative control measure immediately following weed abatement to the entire disturbed surface area such that the surface is stabilized.
- F. Compliance with the stabilization requirement in paragraphs C, D and E shall be determined by one of the following:
- i. Observation of a visible crust as determined by the drop ball test in Article 9 (§4-9-320.B.1); or
  - ii. A Threshold Friction Velocity (TFV), corrected for non-erodible elements, of 100 cm/second or higher as determined by the test method in Article 9 (§4-9-320.B.2); or
  - iii. Flat vegetation cover equal to at least 50 percent as determined by the test method in Article 9 (§4-9-320.B.3); or
  - iv. Standing vegetation cover equal to or greater than 30 percent as determined by the test method in Article 9 (§4-9-320.B.4); or
  - v. Standing vegetation cover equal to or greater than 10 percent as determined by the test method in Article 9 (§4-9-320.B.4) where threshold friction velocity, corrected for non-erodible elements, is equal to or greater than 43 cm/second.

### 3. UNPAVED LOTS

- A. The owner and/or operator of an unpaved lot greater than 5,000 square feet in size shall be subject to the requirements described in 4-1-030.3.A.i and shall comply with at least one of the control measures described in 4-1-030.3.A.ii:
- i. **Visible Emissions Requirements and Stabilization Requirements:** The owner and/or operator of an unpaved lot shall not cause or allow visible fugitive dust emissions to exceed 20% opacity as measured using an opacity method, as determined by the applicable test method in §4-9-340 or an equivalent test method approved in writing by the Control Officer and the EPA Administrator, and shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup> as determined by the applicable test method in §4-9-320.A.1. However, if silt loading is equal to or greater than 0.33 oz/ft<sup>2</sup>, then the owner and/or operator shall not allow the silt content to exceed 8% ;
  - ii. **CONTROL MEASURES:**
    - a. Pave; or
    - b. Apply dust suppressant in sufficient quantity and frequency to maintain a stabilized surface; or
    - c. Apply and maintain surface gravel uniformly such that the surface is stabilized; or
    - d. Apply and maintain an alternative control measure approved in writing by the Control Officer and the EPA Administrator.
- B. Control measure(s) in 4-1-030.3.A.ii shall be considered effectively implemented when the unpaved lot meets the requirements of 4-1-030.3.A.i.

### 4. UNPAVED ROADS

- A. The owner and/or operator of unpaved roads with average daily trips (ADT) greater than 150 (A traffic count shall measure motor vehicle traffic over a 48-hour period, which may consist of two non-consecutive 24-hour periods. Motor vehicle traffic shall be measured continuously during each 24-hour period.) shall be subject to the requirements described in 4-1-030.4.A.i and shall comply with one of the control measures described in 4-1-030.4.A.ii:
- i. **Visible Emissions Requirements and Stabilization Requirements:** The owner and/or operator of unpaved roads shall not cause or allow visible fugitive dust emissions to exceed 20% opacity as measured using an opacity method, as determined by the applicable test method in §4-9-340 or an equivalent test method approved in writing by the Control Officer and the EPA Administrator and shall not allow silt loading equal to or greater than 0.33 oz/ft<sup>2</sup> as determined by the applicable test method in §4-9-320.A.1. However, if silt loading is equal to or greater than 0.33 oz/ft<sup>2</sup>, then the owner and/or operator shall not allow the silt content to exceed 6%;

ii. **CONTROL MEASURES:**

- a. Pave; or
- b. Apply and maintain dust suppressants other than water; or
- c. Uniformly apply and maintain surface gravel

B. Control measure(s) in 4-1-030.4.A.ii shall be considered effectively implemented when:

- i. One of the control measures described in 4-1-030.4.A.ii is annually implemented on 15 miles per year of unpaved roads having ADT of 150 or more.
  - a. When the control measure is application and maintenance of dust suppressants other than water, the application and maintenance of the dust suppressants shall only be counted towards the 15 mile threshold when:
    - 1. Done on unpaved roads previously untreated, and
    - 2. Application and maintenance of dust suppressants on unpaved roads previously treated continues annually until the unpaved road is paved.
- ii. For year 2019 and beyond, control measures applied on unpaved roads with less than 150 ADT can be used for compliance with 4-1-030.4.B.i through use of the following equivalency conversion.

ADT Range	Mileage Equivalency (Miles of equivalent control / mileage of actual control)
0-14	0.000
14-62	0.121
62-103	0.514
103-146	0.531
146+	1.000

Example equivalency conversion calculation:

In year one, City or County “A” paves 10 miles of unpaved roads with ADT of 100.

$$10 * 0.514 = 5.14 \text{ miles of 150 ADT equivalent unpaved roads.}$$

## 5. PAVED PUBLIC ROADWAY

- A. Clean up of trackout, Erosion-Caused Deposition of Bulk Materials on paved public roadway: the owner and/or operator of the property from which the trackout or erosion-caused deposition came from shall upon discovery of mud/dirt that extends 50 feet or more from the nearest unpaved surface exit onto the paved public roadway shall:
- i. Within 24 hours of discovery, remove the mud/dirt from paved public roadway with one of the following control measures. (If needed, restrict vehicles from traveling over said mud/dirt until such time as the material can be removed from the travel lanes of the paved public roadway)
    - a. Manually sweeping and picking up; or
    - b. Operating a rotary brush or broom accompanied or preceded by sufficient wetting to limit opacity to 20% or less; or
    - c. Operating a PM10 efficient street sweeper; or
    - d. Flushing with water, if curb and gutters are not present and where the use of water will not result as a source of trackout material or result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program.
  - ii. During removal of mud/dirt, do so in a manner that does not cause another source of fugitive dust.
  - iii. In the event unsafe travel conditions would result from restricting traffic pursuant to section A.i and removal of such material isn't possible within 72 hours due to a weekend or holiday condition, the provisions of section A.i can be extended upon notification to and approval by the Control Officer.
- B. The owner and/or operator of any existing paved public roadways shall take the following actions prior to, during and after work on unpaved road shoulders:
- i. Apply a dust suppressant(s) to the total surface area subject to the disturbance in sufficient quantity and frequency to maintain a stabilized surface.
  - ii. Prevent trackout by using one of the control measures listed in §4-1-030.5.A.i.

### 4-1-040. Recordkeeping

Any person subject to the requirements of this rule shall compile and retain records that provide evidence of control measure application (i.e. receipts and/or purchase records). Such person shall describe in the records, the type of treatment or control measure, extent of coverage, and date applied. Upon verbal or written request by the Control Officer, such person shall provide the records and supporting documentation as soon as possible but no later than 48 hours, excluding weekends. If the Control Officer is at the site where requested records are kept, such person shall provide the records without delay.

#### **4-1-045. Reporting Requirements**

Each city, county, or state agency with primary responsibility for any existing paved public roadway and unpaved roads shall take the following actions:

- A. By January 30 of each year provide the district with a list of all unpaved roads under its jurisdiction, including data on length of, and ADT (if available) on, each unpaved road segment.
- B. By January 30 of each year, submit to the district a list of unpaved roads which were paved during the previous year including the total number of unpaved roads miles, ADTs (if available) and their respective segments.

#### **4-1-050. Records Retention**

Copies of the records required by §4-1-040 (Recordkeeping) and §4-1-045 (reporting) of this rule shall be retained for at least two years.

#### **4-1-060. Violations**

Failure by any person to comply with the applicable requirements of this Article shall constitute a violation subject to penalty as provided in these rules and A.R.S. Title 49, Chapter 3, Article 3, A.R.S. 49-471 et. seq.

Violation Exemptions:

- A. The opacity requirements of this rule shall not apply during:
  - i. Wind conditions that cause fugitive dust to exceed the opacity requirements if applicable control measures are implemented, applied and maintained, and all dust contributing disturbed surface area are stabilized.
  - ii. Emergency maintenance of flood control channels and water retention basins if at least 1 applicable control measure is applied, and maintained.



## CHAPTER 4. EMISSIONS FROM EXISTING AND NEW NON-POINT SOURCES

### ARTICLE 1. ADOPTED DOCUMENT(S)

#### ~~4-1-010. Adopted document(s)~~

~~A.A.C., Title 18, Chapter 2, Article 6 is hereby adopted by reference and made a part of this Code. [Adopted effective June 29, 1993. Revised 3/14/97.]~~

### ARTICLE 2. FUGITIVE DUST

#### 4-2-020. General

The purpose of this article is to reasonably regulate operations which periodically may cause fugitive dust emissions into the atmosphere.

[Adopted effective June 29, 1993. Revised 12/4/2002.]

#### 4-2-030. Definitions

For the purpose of this article, the following definitions shall apply:

1. **MOTOR VEHICLE** - A self-propelled vehicle weighing less than six thousand pounds that is designed for carrying persons or property on a street or highway.
2. **REASONABLE PRECAUTION** - Measures taken to prevent fugitive dust from becoming airborne which result in the lowest emission limitation by the application of control technology that is reasonably available considering technological and economic feasibility.
3. **URBAN or SUBURBAN OPEN AREA** - 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 some city or town, may be used for agriculture, be uncultivated, or lie fallow.
4. **VACANT LOT** - A subdivided residential or commercial lot which contains no buildings or structures of a temporary or permanent nature.

[Adopted effective June 29, 1993. Revised 12/4/2002.]

#### ~~4-2-040. Standards~~

- A. No person shall cause, suffer, allow, or permit a building or its appurtenances, subdivision site, driveway, parking area, 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, or fill dirt to be deposited, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- 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, such as but not limited to all-terrain vehicles, trucks, cars, cycles, bikes, or buggies, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- C. 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 particulate matter from becoming airborne.
- D. No person shall disturb or remove soil or natural cover from any area without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- E. No person shall crush, screen, handle or convey materials or cause, suffer, allow or permit material to be stacked, piled or otherwise stored without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- F. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to prevent excessive amounts of particulate matter from becoming

#### **4-2-040. Standards**

- A. No person shall cause, suffer, allow, or permit a building or its appurtenances, subdivision site, driveway, parking area, 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, or fill dirt to be deposited, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- 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, such as but not limited to all-terrain vehicles, trucks, cars, cycles, bikes, or buggies, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- C. 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 particulate matter from becoming airborne.
- D. No person shall disturb or remove soil or natural cover from any area without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- E. No person shall crush, screen, handle or convey materials or cause, suffer, allow or permit material to be stacked, piled or otherwise stored without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- F. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to prevent excessive amounts of particulate matter from becoming airborne. Other reasonable precautions shall be taken, as necessary, to effectively prevent fugitive dust from becoming airborne.
- G. No person shall cause, suffer, allow or permit transportation of materials likely to give rise to fugitive dust without taking reasonable precautions to prevent fugitive dust from becoming airborne. Earth and other material that is tracked out or transported by trucking and earth moving equipment on paved streets shall be removed by the party or person responsible for such deposits. Removal of earth from paved streets shall not violate the visibility standard in Chapter 2.
- H. No person shall operate, maintain, use or permit the use of any commercial feedlot or commercial livestock area for purposes of feeding or displaying animals, or engage in other activity such as racing and exercising, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.
- I. No person shall cause, suffer, allow, or permit the use, repair, construction or reconstruction of any road or alley without taking every reasonable precaution to effectively prevent fugitive dust from becoming airborne.

[Adopted effective June 29, 1993.]

**4-2-050. Monitoring and records**

- A. The adequacy of the precautions set forth in §4-2-040. shall be determined by reference to the visible opacity limitations in Chapter 2, Article 8. Opacity observations shall not be made or additional preventive measures required when the wind speed instantaneously exceeds 25 mph or when the average wind speed is greater than 15 mph.
- B. Opacity observations for visible emissions of fugitive dust shall be conducted in accordance with techniques specified in Reference Method 9 in the Arizona Testing Manual for Air Pollutant Emissions.
- C. The average wind speed determination shall be on a 60 minute average from the nearest Air Quality Control District monitoring station or by a wind instrument located at the site being checked.

[Adopted effective June 29, 1993. Revised May 14, 1997.]

## ARTICLE 3. CONSTRUCTION SITES - FUGITIVE DUST

### 4-3-160. General Provisions – West Pinal PM10 Nonattainment Area

#### A. Intent and Applicability

1. Intent

The intent of this Article is to control dust emissions associated with construction activities. This Article focuses on fugitive dust emissions from process activity, site activity and a lack of adequate surface stabilization, all associated with construction.

2. Effective Date

The rules in this Article will become effective on January 1, 2016.

3. Geographic Scope

The rules in this Article shall be effective throughout the West Pinal County PM<sub>10</sub> Moderate Nonattainment area as defined in 40 CFR Part 81.303. These rules exclude the rest of Pinal County and the Pinal County portion of the Phoenix PM<sub>10</sub> Serious Nonattainment area, more specifically Township 1 North, Range 8 East, Gila & Salt River Base and Meridian ("T1N R8E") which is covered under Chapter 4, Article 7.

#### B. General Prohibition and Exemptions

1. Subject to the exemptions set forth in this Article, it constitutes a violation of this Article for any person to conduct any dust generating operation at any work site, without complying with this Article:

2. Exemptions

The following are exempt from this Article, or portions of this Article:

- a. The application and permit requirements of this Article shall not apply to any facility operating under authority of a permit issued pursuant to ARS §§49-426 or 49-480, however, any dust generating operations are subject to the requirements of §4-3-180 sections (A) and (B), and facilities must keep records pursuant to §4-3-180(C)(2)(b).
- b. In the case of an emergency, action may be taken to stabilize a dust generating operation or disturbed surface area before submitting a dust generating operation application form. Upon stabilizing the emergency situation, a dust generating operation application form shall be submitted.
- c. In the case of legitimate vehicle test and development facilities and operations conducted by or for an equipment manufacturer, where dust is required to test and validate the design integrity, product quality and/or commercial acceptance, those specific activities shall be exempt from the application, permit and applicable standards in section §4-3-180 under this Article.
- d. The application and permit requirements of this rule shall not apply to road maintenance activities, however, any dust generating operations are subject to the requirements of §4-3-180 sections(A) and (B), and records must be kept pursuant to §4-3-180(C)(2)(b).
- e. The application and permit requirements shall not apply with respect to dust generating operations associated with the emergency repair of utilities.

- f. Establishment of initial landscapes without the use of mechanized equipment, conducting landscape maintenance without the use of mechanized equipment, and playing on or maintaining a field used for non-motorized sports are exempt from the application, permit, and standards in section §4-3-180 of this Article. However, establishing initial landscapes without the use of mechanized equipment and conducting landscape maintenance without the use of mechanized equipment shall not include grading, or trenching performed to establish initial landscapes or to redesign existing landscapes.
- g. The provisions of this rule shall not apply to rooftop operations for cutting, drilling, grinding, or coring roofing tile when such activity is occurring on a pitched roof.

#### **4-3-170. Definitions**

See Chapter 1, Article 3 (General Provisions and Definitions) of this code for definitions of terms that are used but not specifically defined in this Article.

1. "BULK MATERIAL" as used in this Article, means any material including but not limited to earth, rock, silt, sediment, sand, gravel, soil, fill, aggregate less than 2 inches in length or diameter, dirt, mud, demolition debris, trash, cinders, pumice, saw dust, and dry concrete, which are capable of producing fugitive dust at an industrial, institutional, commercial, governmental, construction and/or demolition site.
2. "BULK MATERIAL HANDLING, STORAGE AND/OR TRANSPORTING OPERATION" as used in this Article, means the processing of bulk materials, including but not limited to, the loading, unloading, conveying, transporting, piling, stacking, screening, grading, or moving of bulk materials.
3. CONSTRUCTION as used in this Article means building, maintaining or modifying a capital improvement resting upon, connected to or buried in the earth. Construction includes, but is not limited to, vertical construction, residential construction, installing underground utilities, installing above-ground utilities, and building physical infrastructure including roads, highways, railways, flood structures, drainage works and irrigation works. Notwithstanding any other exemption under these rules, weed abatement by discing or blading and conducted for the purpose of enabling Development Activity or maintaining a work site shall qualify as construction.
4. "CONTROL MEASURE" as used in this Article means, a preemptive or concurrent technique used to minimize the generation, emission, entrainment, suspension, and/or airborne transport of fugitive dust at a work site in order to comply with applicable standards in section §4-3-180. Control measures include but are not limited to:

CONTROL MEASURES	Description
Watering (pre-wetting)	Application of water by means of trucks, hoses, and/or sprinklers prior to conducting any dust generating operation. This will increase the moisture content of the soils and increase stability of the soil.
Watering (operational control)	For disturbed surface areas and dust generating operations water is applied at sufficient intervals and quantity to increase the moisture content of the soils and increase stability of the soil. Also during stacking, loading and unloading operations on open storage piles, apply water as necessary.
Applying chemical stabilizers or dust suppressants	Apply chemical stabilizers/dust suppressants to disturbed surface areas and dust generating operations. Effective in areas which are not subject to daily disturbances.
Altering load-in/load-out procedures and watering	Confine load-in-load out procedures to downwind side of the material and mist material with water prior to loading. Empty loader slowly and keep bucket close to the truck while dumping.
Reducing vehicular speeds	Restrict maximum vehicular speeds to 15 miles per hour on unpaved easements, right of way, unpaved haul/access roads and parking lots.
Controlling Freeboard and spillage and covering haul vehicles	Load all trucks such that the freeboard is not less than three inches; and prevent spillage or loss of bulk material from holes or other openings in the conveyance; cover all haul trucks (empty or full) with an anchored tarp or other suitable anchored material.
Trackout Control	Install trackout control for work sites 5 acres or larger. For all work sites, when trackout extends a cumulative distance of 50 linear feet or more, be cleaned up as soon as practicable; but, in any case, by the end of the work day.
Limit, restrict or reroute motor vehicles access to work site	Erect signs or install physical barriers to limit access of work site.
Other measures as proposed by registrant	Specific measures that are adequate to address applicable standards in section §4-3-180 at the work site. Alternative measures must be approved by the Control Officer and the EPA Administrator.

5. "DISTURBED SURFACE AREA" as used in this Article, means any portion of the earth's surface that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural condition.

This definition excludes those permanently stabilized areas that have:

- a. Been restored to a natural condition, such that vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;
  - b. Been paved or otherwise covered by a permanent structure; or
  - c. Sustained a vegetative ground cover over at least 70 percent of the area for at least 30 days.
6. "DUST GENERATING OPERATION" as used in this Article, means any activity capable of generating fugitive dust, including but not limited to:
- a) Earthmoving activities
  - b) Land clean-up, leveling, back filling
  - c) Drilling
  - d) Construction
  - e) Demolition
  - f) Bulk material handling, storage and/or transporting operations
  - g) Operation of motorized machinery used in Construction
  - h) Establishing and/or using unpaved parking lots, haul/access roads within a work site
  - i) Installing initial landscapes using mechanized equipment
- For the purpose of this rule, landscape maintenance and/or playing on a ball field shall not be considered a dust generating operation.
7. "DUST SUPPRESSANT" as used in this Article, means hygroscopic material, solution of water and chemical surfactant foam, non-toxic chemical stabilizer or any other dust palliative, which is not prohibited by the U. S. Environmental Protection Agency (EPA) or the Arizona Department of Environmental Quality (ADEQ), or any applicable law, rule, or regulation, as a treatment material for reducing fugitive dust emissions.
8. "EARTHMOVING ACTIVITY" as used in this Article, means any land clearing, land cutting and filling operations, blasting, trenching, road construction, grading, landscaping, landfill operations, weed abatement through discing, soil mulching, or any other activity associated with land development where the objective is to disturb the surface of the earth.
9. "EMERGENCY" as used in this Article means a situation arising from sudden and reasonably unforeseeable events beyond the control of the owner and/or operator, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the dust generating operation to exceed a limitation in this rule, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include any noncompliance due to improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
10. "FREEBOARD" as used in this Article, means the vertical distance between the top edge of a cargo container and the highest point at which the bulk material contacts the sides, front, and back of the container.
11. "FUGITIVE DUST", as used in this Article, means the regulated particulate matter, which is not collected by a capture system, which is entrained in the ambient air, and which is caused from human and/or natural activities, such as but not limited to, movement of

soils, vehicles, equipment, blasting, and wind. For the purpose of this Article, fugitive dust does not include particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines, from portable brazing, soldering, or welding equipment, and from piledrivers.

12. "GRAVEL PAD" as used in this Article, means a layer of washed gravel, rock, or crushed rock at the intersection with the paved public roadway and a work site entrance to dislodge mud, dirt, and/or debris from the tire of the motor vehicles or haul trucks prior to leaving the work site.
13. "GRIZZLY" as used in this Article, means a device maintained at the point of intersection of a paved public roadway and a work site entrance to dislodge mud, dirt and/or debris from the tires of the motor vehicles or haul trucks prior to leaving the work site.
14. "HAUL TRUCK" as used in this Article, is any fully or partially open-bodied self-propelled vehicle including any non-motorized attachments, such as but not limited to, trailers or other conveyances, which are connected to or propelled by the actual motorized portion of the vehicle used for transporting bulk materials.
15. "MOTOR VEHICLE" as used in this Article, is a self-propelled vehicle for use on the public roads and highways of the State of Arizona and required to be registered under the Arizona State Uniform Motor Vehicle Act, including any non-motorized attachments, such as but not limited to, trailers and other conveyances which are connected to or propelled by the actual motorized portion of the vehicle.
16. "OWNER AND/OR OPERATOR" as used in this Article, is any person including, but not limited to, the property owner, lessee, developer, responsible official, dust generating operation permit applicant (who may also be the responsible party contracting to do the work), general or prime contractor, supervisor, management company, or any person who owns, leases, operates, controls, or supervises a dust generating operation subject to the requirements of this rule.
17. "PAVED PUBLIC ROADWAY" means a publicly owned paved roadway, owned by federal, state, county, municipal, or other governmental or quasi-governmental agencies as evidenced by a formal acceptance by the state or a political subdivision of the state of either:
  1. An on-going maintenance obligation for the roadway; or
  2. A title or easement for the roadway.
18. "PINAL COUNTY 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 of Environmental Quality shall consider all of the following:
  - a) Projected meteorological conditions, including:
    - i) Wind speed and direction,
    - ii) Stagnation,
    - iii) Recent precipitation, and
    - iv) Potential for precipitation;
  - b) Existing concentrations of air pollution at the time of the forecast; and
  - c) Historic air pollution concentrations that have been observed during meteorological conditions similar to those that are predicted to occur in the forecast.
19. "ROAD CONSTRUCTION" as used in this Article, means the use of any equipment for the paving or new construction of a road surface, street or highway.
20. "ROAD MAINTENANCE" as used in this Article, means the use of any equipment for the repair and preservation of an old road surface, street or highway.



21. "STABILIZE" means any previously disturbed surface area which, through application of water or dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust. Stabilization shall be demonstrated by application of the drop ball test in Article 9 (§4-9-320.B.1).
22. "TRACKOUT" means visible material deposited onto any paved public roadway, as defined in this Article, by traffic leaving a work site.
23. "TRACKOUT CONTROL" as used in this Article, means a gravel pad, grizzly, wheel wash system, or a paved area, located at the point of intersection of an unpaved area and a paved public roadway that controls or prevents vehicular trackout.
24. "TRENCH" as used in this Article, means a long, narrow excavation dug in the earth (as for drainage).
25. "UNPAVED HAUL/ACCESS ROAD" as used in this Article, means any on-site unpaved road used by commercial, industrial, institutional, and/or governmental traffic.
26. "UNPAVED PARKING LOT" as used in this Article, means any area larger than 5,000 square feet that is not paved and that is used for parking, maneuvering, or storing motor vehicles on a work site.
27. "UNPAVED ROAD" as used in this Article, means any unsealed or unpaved roads, equipment path, or travel ways that are not covered by typical roadway materials. Public unpaved roads are any unpaved roadway owned by federal, state, county, municipal, or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public. For the purpose of this rule, an unpaved road is not a horse trail, hiking path, bicycle path, or other similar path used exclusively for purposes other than travel by motor vehicles.
28. "WORK SITE" as used in this Article, means any property upon which dust generating operations occur during construction, and which covers an area of 0.1 acres or larger.
  - a. Trenches that are equal to or larger than the following dimensions are considered work sites and are subject to the requirement of this Article:
    - i. Trenches less than four feet in depth, that exceed a length of 726 feet;
    - ii. Trenches that are four feet or greater in depth, that exceed a length of 363 feet;
  - b. For calculations of disturbed surface areas for land clearing or earthmoving activities, 25 feet will be added to each dimension of all structures, driveways, concrete pads, and other construction projects being built on the site to allow for an equipment utilization zone. If this final figure equals or exceeds 0.1 acres, a dust generating operation application is required for the site.
  - c. If the registrant identifies situations in which the amount of surface area for trenches, land clearing or earthmoving activities should be calculated differently, a case-by-case determination may be made.

**4-3-180. DUST GENERATING OPERATIONS Standards, Application, Permit and Recordkeeping Requirements**

- A. Within the work site, an owner and/or operator:
  1. Shall not conduct or allow dust generating operations that result in opacity of the dust on the property to exceed twenty percent (20%) as measured using an opacity method, as determined by the applicable test method in §4-9-340 or an equivalent test method approved by the Control Officer and the EPA Administrator.
  2. Shall stabilize any disturbed surface area. The owner and/or operator shall conduct every other week inspections to ensure that the work site is stabilized. Ensuring the

work site is stabilized shall include a site-wide inspection to ensure all applicable control measures [as described in §4-3-170.4] as specified in the permit, are implemented on dust generating operations and disturbed surface areas are stabilized.

- B. Where an owner and/or operator obtains a dust generating operation permit for a work site, or a combination of work sites, which are 5 acres or larger, the owner and/or operator shall as soon as practicable:
1. Install suitable trackout control prior to the start of dust generating operations;
  2. For areas, or portions of areas, in which the dust generating operations have ceased or will cease for more than 30 days, erect signs or install physical barriers to limit trespass; and
  3. Ensure the work site is stabilized the day leading up to and the day that is forecast to be high risk for dust emissions, as noticed by the Pinal County Dust Control Forecast. Ensuring the work site is stabilized shall include a site-wide inspection to ensure either:
    - a. All applicable control measures [as described in §4-3-170.4] as specified in the permit, are implemented on dust generating operations, and disturbed surface areas are stabilized; or
    - b. All dust generating operations are ceased and disturbed surface areas are stabilized.
- C. Prior to engaging in any dust generating operations on a work site, the owner and/or operator shall file a dust generating operation application form with the Control Officer, pay the appropriate fee in Appendix C, and receive a signed permit from the Control Officer.
1. Dust generating operations application form:
    - a. The applicant shall present a dust generating operation application on a form approved by the Control Officer, and shall include all essential identification information as specified on that form. A separate application form is required for each site location that is not a contiguous geographic area to the location on the original application form, unless an annual block application is approved.
    - b. The owner and/or operator shall provide a valid cell phone number or email address on the dust generating operation application form. The owner and/or operator of work sites 5 acres or larger shall subscribe to the Pinal County Dust Control Forecast as part of the permit application process.
    - c. Each dust generating operation application shall also include a plot plan with linear dimensions in feet. The plot plan must be on 8-1/2 by 11 inch paper, and may be on one or more sheets. The plan shall identify the parcel (if a parcel number exists; if no parcel number exists, then Global Positioning System (GPS) coordinates of the center of the parcel shall be included), the street address, the direction north, the total area to be disturbed and indicate the sources of fugitive dust emissions on the plot plan.
    - d. Using the options on the application form each dust generating operation application shall contain an explanation of how the applicant will demonstrate compliance with this rule by selection of at least one control measure for each dust generating operation.
    - e. Annual Area Block Application:
      - i. Area block applications shall only be available for dust generating operations associated with:

- a) Maintenance of existing underground or above-ground lines;
  - b) Effecting end-user connections, including but not limited to water connections, sewer connections, natural gas connections, electrical power connections, and communication connections;
  - c) Underground utility line extensions not exceeding 500' in length; and
  - d) Overhead utility line extensions; and
  - e) Expansion or extension of paved roads, unpaved roads, road shoulders, and/or alleys and public right of ways at non-contiguous sites.
- ii. Area block applications shall only be available to:
    - a) Political subdivisions; and
    - b) Public Utility Corporations regulated by the Arizona Corporation Commission; and.
    - c) Contractors or subcontractors for Political subdivisions or Public Utility Corporations
  - iii. The owner and/or operator operating at the work site may submit to the Control Officer one dust generating operation application for more than one dust generating operation at which construction will commence within 12 months of permit issuance.
  - iv. An annual block application must include all the requirements listed above in this subsection (1 a. through 1 d.) and a description of each site and type of dust generating operations to be conducted.
  - v. The owner and/or operator of an area block permit operating at a work site shall adhere to the requirements of all current permits issued to the work site and will be required to re-apply control measures as reasonable and necessary, or re-stabilize any disturbed surface area that becomes disturbed as a result of the area block permit holder's work being done at the work site.
  - vi. For any project not listed in the dust generating operation annual block application, the applicant must notify the Control Officer in writing at least three working days prior to commencing the dust generating operation. Such notification must include the site location, size, and type of dust generating operation, selected control measures, and start date.
2. Dust generating operation permit and recordkeeping:
- a. The signed dust generating operation permit from the control officer will contain the requirements set under §4-3-180 (A) and (B), and conditions regarding the necessary control measures specific to the applicable project as proposed by the registrant. The signature of the owner and/or operator on the dust generating operation permit form shall constitute agreement to accept responsibility for meeting the conditions of the permit and for ensuring the applicable control measures are implemented throughout the work site, at all times that dust generating operations are being performed and during the duration of the project. The owner and/or operator shall maintain a copy of the signed permit form and provide it upon request of the Control Officer or his designee.

- b. On a form approved by the Control Officer the owner and/or operator shall keep records of the every other week inspection reports and site-wide inspection reports from the day leading up to and the day that is forecast to be high risk for dust emissions, including any necessary corrective actions. A demonstration of compliance shall include inspections of the work site conducted pursuant to, and any actions taken to comply with, §4-3-180 sections (A)(2) and (B)(3).
- c. Upon verbal or written request by the Control Officer, inspection records shall be provided as soon as practicable, but no later than 72 hours, excluding weekends. If the Control Officer is at the work site where the requested records are kept, the records shall be provided without delay. Records of inspections on a form approved by the Control Officer, shall be submitted within 30 days following the termination or expiration of the permit.
- d. Owners and/or Operators shall notify the Control Officer as soon as practicable, but no later than 30 days, of the-completion of the project.
- e. Permit Renewal: The first permit obtained for an affected project must cover a contiguous area (unless it is an "annual area block permit") and is valid for one year from the date of issue. If the project has not been completed at the end of the one-year period, the dust generating operation permit must be renewed. The owner and/or operator shall reapply for a dust generating operation permit prior to the expiration date of the original permit. Upon renewal, the new permit will be valid starting on the first calendar day after the completion of the initial one year period of the first permit and is valid for one year from that date. Upon renewal, the total acreage covered by the dust generating operation permit does not have to be contiguous, although all acreage covered by the renewed dust generating operation permit must have been included in the original dust generating operation permit.
- f. At all sites that are five acres or larger, the owner and/or operator shall erect a project information sign at the main entrance that is visible to the public or at each end of the road construction project site. The sign shall be a minimum of 24 inches tall by 30 inches wide, have a white background, and have the words "DUST CONTROL" shown in black block lettering which is at least four inches high, and shall contain the following information in legible fashion:
  - i. Project Name
  - ii. Name and phone number of person(s) responsible for conducting project
  - iii. Text stating: "Dust Complaints? Call Pinal County Air Quality at 520-866-6929"

**4-3-190. Violations**

- A. Failure by any person to comply with the applicable requirements of this Article shall constitute a violation.
- B. Violation Exemptions:  
If all records were maintained in accordance with §4-3-180 section (C)(2)(b), the provisions of section §4-3-180 (A)(1) shall not apply to a work site during:
  - 1. Wind conditions that cause fugitive dust to exceed the opacity requirements of §4-3-180 (A)(1), if all control measures as specified in the permit, are implemented, applied and maintained, all disturbed surface areas are stabilized, and one of the following:
    - a. All dust generating operations are ceased until the opacity requirements of §4-3-180(A)(1) are no longer being exceeded; or

- b. Maintain documentation that any dust generating operations that are still being performed are not the cause of and do not contribute to the opacity violation. Documentation may include onsite opacity observations by a certified observer.
2. Emergency maintenance of flood control channels and water retention basins if all control measures, as specified in the permit are implemented, applied, and maintained.

- ~~21. §5-24-1040 (2/22/95) Carbon Monoxide Emissions Industrial Processes~~
- ~~22. §5-24-1045 (2/22/95) Sulfite Pulp Mills Sulfur Compound Emissions~~
- ~~23. §5-24-1050 (2/22/95, as amended June 20, 1996) Reduced Sulfur Emissions Default Limitation~~
- ~~24. §5-24-1055 (2/22/95) Pumps and Compressors Organic Compound Emissions~~

~~[Adopted effective June 29, 1993. Amended effective November 3, 1993. Amended August 29, 1994. Amended February 22, 1995. Amended October 12, 1995. Amended June 25, 1997. Amended May 27, 1998 and ratified July 29, 1998. Amended July 29, 1998; any conditional changes prior to 12/20/00 made final by SIP revision at 65 FR 79742 (12/20/00). Revised 7/12/00, with changes effective upon adoption. Revised 12/19/01, with changes effective upon adoption. Amended October 27, 2004. Amended May 18, 2005. Amended June 28, 2006. Amended June 13, 2007. Amended June 3, 2009.]~~

#### ARTICLE 4. PM-10 NONATTAINMENT AREA RULES; DUSTPROOFING AND STABILIZATION FOR COMMERCIAL UNPAVED PARKING, DRIVES AND WORKING YARDS

##### 4-4-100. General Provisions

- A. **Intent.** The intent of this Article is to avoid violations of the prevailing PM<sub>10</sub> standard and additionally minimize nuisance impacts by improving control of excessive fugitive dust emissions from unpaved parking lots.
- B. **Relationship to other rules.** The provisions of this Article supplement and do not supplant the other provisions of these rules.
- C. **Effective Date.** Other than as specifically provided, rules set forth in this Article, and the repeal of any rules rescinded in conjunction with the amendment of this Article, shall become effective 60 days after final publication of a corresponding Notice of Final Rulemaking in the Arizona Administrative Register.
- D. **Geographic Applicability**  
This Article applies in the Pinal County portion of the Phoenix PM<sub>10</sub> Serious Nonattainment area, more specifically Township 1 North, Range 8 East, Gila & Salt River Base and Meridian ("T1N R8E").
- E. **Violations**  
Failure by any person to comply with the applicable requirements of this Article shall constitute a violation subject to penalty as provided in these rules and A.R.S. Title 49, Chapter 3, Article 3, A.R.S. §49-471 et seq.

[Adopted effective September 10, 2008, Amended June 3, 2009]

##### 4-4-110 Definitions

As used in this Article:

##### A. Hierarchy of definitions

For purposes of this Article definitions shall be based on the following order of precedence:

1. Enumerated definitions under this rule;
  2. Definitions in §4-7-210;
  3. Definitions set forth elsewhere in these rules; and
  4. The common and ordinary meaning of the term.
- B. **Lot** - A parcel of land identified on a final or parcel map recorded in the office of the Pinal County recorder with a separate and distinct number or letter.
  - C. **Low use unpaved parking lot** - A lot on which vehicles are parked no more than thirty-five (35) days during a calendar year.
  - D. **Motor vehicle** - A self-propelled vehicle for use on the public roads and highways of the State of Arizona and required to be registered under the Arizona State Uniform Motor Vehicle Act, including any non-motorized attachments, such as, but not limited to, trailers or other conveyances which are connected to or propelled by the actual motorized portion of the vehicle.

- E. Owner and/or operator - Any person who owns, leases, operates, controls, maintains or supervises an unpaved parking lot surface subject to the requirements of this Article.
- F. Pavement - A traffic-bearing surface consisting of any of:
1. asphalt,
  2. recycled asphalt,
  3. concrete,
  4. Penetration treatment of bituminous material and a seal coat of bituminous binder and mineral aggregate, commonly known as "double chip seal" or "asphalt rock dust palliative" ("ARDP"),
  5. asphaltic concrete,
  6. rubberized asphalt, or
  7. other similar material.
- G. Property line - The boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- H. Unpaved commercial parking lot - Any area that is not paved and that is used for parking, maneuvering, material handling, or storing motor vehicles and equipment. An unpaved commercial parking lot includes, but is not limited to, automobile impound yards, wrecking yards, automobile dismantling yards, salvage yards, material handling yards, and storage yards. For the purpose of this definition, maneuvering shall not include military maneuvers or exercises conducted on federal facilities. For purposes of Article 4, an unpaved commercial parking lot does not include parking, maneuvering, ingress and egress areas at residential buildings with four or fewer units, which residential parking lots separately regulated under Article 5.  
[Adopted effective September 10, 2008. Amended June 3, 2009]

#### 4-4-120. Objective Standards

An Owner and/or Operator shall stabilize any affected unpaved commercial parking lot surface such that:

- A. [Silt Content/Silt Loading Limitations] Every unpaved commercial parking lot shall show compliance at all times with one of the following objective standards as assessed in accord with Article 9, §4-9-320.A:
1. Silt loading shall not exceed 0.33 oz/ft<sup>2</sup>; or
  2. Silt content shall not exceed 8% for parking areas.
- B. [Opacity Limitations] Observed opacity shall not exceed either of:
1. 20% Internal Opacity Limitation. For any fugitive dust plume caused by vehicular movement, a limit of 20 percent opacity based on an intermittent opacity method, as determined by the applicable test method of Article 9. See §4-9-340.D.; or
  2. 0% Property Line Wind-Driven Opacity Limitation. The net opacity contribution from any unpaved commercial parking lot shall not violate a 0% opacity standard beyond the property line within which the emissions are generated for more than 30 seconds in any continuous six-minute period. For purposes of this limitation, opacity shall be determined based on a time-aggregation method. See Article 9, §4-9-340.F.  
[Adopted effective September 10, 2008. Amended June 3, 2009]

At any unpaved commercial parking lot other than a low-use unpaved commercial parking lot, the Owner and/or Operator shall:

1. Restrict vehicle access to only those areas for which control measures have been taken.
2. Dustproof the unpaved commercial parking lot with one of the following control measures:
  - a. Pave;
  - b. [Gravel surfacing] Uniformly apply and maintain surface gravel; or
  - c. [Dust suppressants & trackout control] Apply dust suppressants other than water and install, maintain, and use a suitable trackout control system that controls and prevents trackout and/or removes particulate matter from the tires and the exterior surfaces of motor vehicles that traverse the site.
3. Make a record of the dustproofing action taken.

**B. Low-Use Unpaved Commercial Parking Lots**

At any low-use unpaved commercial parking lot, the Owner and/or Operator shall:

1. Restrict vehicle access to only those areas for which control measures have been taken.
2. Dustproof the unpaved commercial parking lot with one of the following measures:
  - a. Pave;
  - b. [Gravel surfacing] Uniformly apply and maintain surface gravel;
  - c. [Dust suppressants & trackout control] Apply dust suppressants other than water and install, maintain, and use a suitable trackout control system that controls and prevents trackout and/or removes particulate matter from the tires and the exterior surfaces of motor vehicles that traverse the site; or
  - d. [Water & trackout control] Apply water and install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from the tires and the exterior surfaces of motor vehicles that traverse the site.
3. Make a record of the dustproofing action taken.

**C. Compliance Determination**

Implementation of the work practice standards required under this section shall be deemed inadequate until the Owner and/or Operator achieves compliance with the objective standards of §4-4-120.

**D. Trackout Cleanup Requirement**

If trackout occurs, the Owner and/or Operator shall:

1. Repair and/or replace the control measure(s);
2. Clean-up immediately such trackout from paved areas accessible to the public including curbs, gutters, and sidewalks when trackout exceeds a cumulative distance of 25 lineal feet;
3. Clean-up all visible trackout from paved areas accessible to the public at the end of the day.



4-4-130. Work Practice Standardsee

A.eee Commercial Unpaved Parking Lotsee

At any unpaved commercial parking lot other than a low-use unpaved commercial parking lot, the Owner and/or Operator shall:

1. Restrict vehicle access to only those areas for which control measures have been taken.
2. Dustproof the unpaved commercial parking lot with one of the following control measures:
  - a. Pave;
  - b. [Gravel surfacing] Uniformly apply and maintain surface gravel; or
  - c. [Dust suppressants & trackout control] Apply dust suppressants other than water and install, maintain, and use a suitable trackout control system that controls and prevents trackout and/or removes particulate matter from the tires and the exterior surfaces of motor vehicles that traverse the site.
3. Make a record of the dustproofing action taken.

**B. Low-Use Unpaved Commercial Parking Lots**

At any low-use unpaved commercial parking lot, the Owner and/or Operator shall:

1. Restrict vehicle access to only those areas for which control measures have been taken.
2. Dustproof the unpaved commercial parking lot with one of the following measures:
  - a. Pave;
  - b. [Gravel surfacing] Uniformly apply and maintain surface gravel;
  - c. [Dust suppressants & trackout control] Apply dust suppressants other than water and install, maintain, and use a suitable trackout control system that controls and prevents trackout and/or removes particulate matter from the tires and the exterior surfaces of motor vehicles that traverse the site; or
  - d. [Water & trackout control] Apply water and install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from the tires and the exterior surfaces of motor vehicles that traverse the site.
3. Make a record of the dustproofing action taken.

**C. Compliance Determination**

Implementation of the work practice standards required under this section shall be deemed inadequate until the Owner and/or Operator achieves compliance with the objective standards of §4-4-120.

**D. Trackout Cleanup Requirement**

If trackout occurs, the Owner and/or Operator shall:

1. Repair and/or replace the control measure(s);
2. Clean-up immediately such trackout from paved areas accessible to the public including curbs, gutters, and sidewalks when trackout exceeds a cumulative distance of 25 lineal feet;
3. Clean-up all visible trackout from paved areas accessible to the public at the end of the day.

4.eee Make a record of the repair, replacement and/or cleanup action taken.eee  
[Adopted June 3, 2009]

4-4-140. Recordkeeping and Records Retentioneee

- A.eee Requirement to furnish records upon request. Upon verbal or written request by the Controlee Officer, the log or the records and supporting documentation required under this Article shall beeee provided as soon as possible but no later than 48 hours, excluding weekends. If the Controlee Officer is at the Site where requested records are kept, records shall be provided without delay.eee
- B.eee Records Retention. Any person subject to a record-keeping requirement shall retain copies ofeee approved control measure implementation records, and all supporting documentation for at least two years from the date such records were initiated.  
[Adopted June 3, 2009]

~~4. Make a record of the repair, replacement and/or cleanup action taken.~~

~~[Adopted June 3, 2009]~~

#### 4-4-140. Recordkeeping and Records Retention

~~A. Requirement to furnish records upon request. Upon verbal or written request by the Control Officer, the log or the records and supporting documentation required under this Article shall be provided as soon as possible but no later than 48 hours, excluding weekends. If the Control Officer is at the Site where requested records are kept, records shall be provided without delay.~~

~~B. Records Retention. Any person subject to a record-keeping requirement shall retain copies of approved control measure implementation records, and all supporting documentation for at least two years from the date such records were initiated.~~

~~[Adopted June 3, 2009]~~

#### Article 5 - Nonattainment Area Rules; Stabilization for Residential Parking and Drives

#### 4-5-150. Stabilization for Residential Parking and Drives; Applicability

A. Geographic Applicability.

The "affected area" under this rule includes the Pinal-County-portion of the Phoenix Planning Area Serious PM<sub>10</sub> nonattainment Area, identified as Township 1 North, Range 8 East, Gila & Salt River Base and Meridian.

B. Affected Parcels; Residential Property.

Property subject to this rule:

1. Includes any parcel, contiguous parcels, or any proximate combination of parcels actually used coordinated fashion and having four or fewer residential rental units;
2. Includes any common parking area at an otherwise affected parcel;
3. Excludes any right-of-way legally established and actually maintained for travel by the public or to provide vehicular access to public utilities; and
4. Excludes earthmoving activity at a site, or that portion of a site, covered by mitigation requirements under dust registration issued by the Pinal County Control Officer.

C. Affected Surfaces at a Residential Property.

1. Affected surfaces include any areas in excess of 3,000 square feet utilized on a regular basis for parking, maneuvering or ingress and egress of on- or off-road vehicles.
2. Undisturbed surfaces are not affected surfaces, but only if those undisturbed surfaces are fenced or otherwise clearly distinguished from affected surfaces. Delineated long-term storage stalls, where a vehicle, trailer or other item is stored and not normally removed and replaced more than once in a sixty-day period shall also be considered undisturbed surfaces.

[Adopted effective September 10, 2008. Amended June 3, 2009]

#### 4-5-160. Residential Parking Control Requirement

- A. On and after the effective date, the owner and/or operator of any residential property shall install and maintain stabilized surfacing for all affected surfaces. For purposes of this rule, "owner or operator" means any person who owns, leases, operates, controls, or supervises an affected area.
- B. For purposes of this rule, a stabilized surface shall consist of one of the following, implemented in a manner that meets the maintenance standard of this rule:
  - 1. Paving with asphaltic concrete;
  - 2. Paving with Portland cement based concrete;
  - 3. Surfacing with a penetrating asphalt and a gravel surface, commonly known as chip sealing;
  - 4. Surfacing with and uniformly maintaining a two-inch deep layer of rock having a nominal size of 1/4" or larger;
  - 5. Surfacing with a two-inch deep layer of recycled asphalt;
  - 6. Watering with sufficient frequency so as to maintain a crust on the surface;
  - 7. Surfacing with any other surface treatment that has been approved by the Pinal County Control Officer; or
  - 8. Initially, and at such other times as may be requested by the Control Officer, demonstrating to the satisfaction of the Pinal County Control Officer on a form as required by the Control Officer and pursuant to a test method approved by the Control Officer, that the average threshold friction velocity of the native soil surface, corrected for non-erodible elements, is at least 100 cm/second. Threshold friction velocity shall be assessed in accord with §4-9-320.B.2.

C. Maintenance

Surface stabilization shall be maintained in a manner that prevents visible track-out in excess of ten feet in length

[Adopted effective September 10, 2008. Amended June 3, 2009]

4-5-170. Deferred enforcement date

The Control Officer shall commence enforcement of the requirements of this Article no sooner than October 1, 2009.

[Adopted effective September 10, 2008. Amended June 3, 2009]

~~ARTICLE 7. CONSTRUCTION SITES IN NONATTAINMENT AREAS - FUGITIVE DUST~~

~~4-7-210. Definitions~~

~~As used in this Article:~~

- ~~1. "Aggregate area" means, for purposes of assessing either disturbed area or overall project size, the relevant area or areas under common control and contained within a planned area development, within a legal subdivision, and/or adjoining parcels undergoing concurrent Development Activity. Parcels shall be considered adjoining if they are either contiguous or separated only by a privately or publicly owned easement or right-of-way.~~

~~A. On and after the effective date, the owner and/or operator of any residential property shall install and maintain stabilized surfacing for all affected surfaces. For purposes of this rule, "owner or operator" means any person who owns, leases, operates, controls, or supervises an affected area.~~

~~B. For purposes of this rule, a stabilized surface shall consist of one of the following, implemented in a manner that meets the maintenance standard of this rule:~~

- ~~1. Paving with asphaltic concrete;~~
- ~~2. Paving with Portland cement based concrete;~~
- ~~3. Surfacing with a penetrating asphalt and a gravel surface, commonly known as chip sealing;~~
- ~~4. Surfacing with and uniformly maintaining a two-inch deep layer of rock having a nominal size of 1/4" or larger;~~
- ~~5. Surfacing with a two-inch deep layer of recycled asphalt;~~
- ~~6. Watering with sufficient frequency so as to maintain a crust on the surface;~~
- ~~7. Surfacing with any other surface treatment that has been approved by the Pinal County Control Officer; or~~
- ~~8. Initially, and at such other times as may be requested by the Control Officer, demonstrating to the satisfaction of the Pinal County Control Officer on a form as required by the Control Officer and pursuant to a test method approved by the Control Officer, that the average threshold friction velocity of the native soil surface, corrected for non-erodible elements, is at least 100 cm/second. Threshold friction velocity shall be assessed in accord with §4-9-320.B.2.~~

~~C. Maintenance~~

~~Surface stabilization shall be maintained in a manner that prevents visible track-out in excess of ten feet in length~~

~~[Adopted effective September 10, 2008. Amended June 3, 2009]~~

~~4-5-170. Deferred enforcement date~~

~~The Control Officer shall commence enforcement of the requirements of this Article no sooner than October 1, 2009.~~

~~[Adopted effective September 10, 2008. Amended June 3, 2009]~~

## ARTICLE 7. CONSTRUCTION SITES IN NONATTAINMENT AREAS - FUGITIVE DUST

### 4-7-210. Definitions

As used in this Article:

1. "Aggregate area" means, for purposes of assessing either disturbed area or overall project size, the relevant area or areas under common control and contained within a planned area development, within a legal subdivision, and/or adjoining parcels undergoing concurrent Development Activity. Parcels shall be considered adjoining if they are either contiguous or separated only by a privately or publicly owned easement or right-of-way.

2. "Bulk material" as used in this rule, means any material including but not limited to earth, rock, silt, sediment, sand, gravel, soil, fill, aggregate less than 2 inches in length or diameter, dirt, mud, grubbed materials, cinders, pumice, demolition debris, and dry concrete, which are capable of producing fugitive dust at an industrial, institutional, commercial, governmental, construction and/or demolition site.
3. "Construction" means building, maintaining or modifying a capital improvement resting upon, connected to or buried in the earth. Construction includes, but is not limited to, building construction, installing underground utilities, installing above-ground utilities, and building physical infrastructure including roads, highways, railways, flood structures, drainage works and irrigation works. Notwithstanding any other exemption under these rules, weed abatement by discing or blading and conducted for the purpose of enabling Development Activity or maintaining a Site shall qualify as construction.
4. "Development Activity" or "Development Activities" are defined as follows:
  - A. Development Activity includes:
    1. Earthmoving;
    2. Construction;
    3. When conducted on a Site, any of:
      - a. Use of vehicles or self-propelled equipment for material handling or storage off of a dustproof paved surface;
      - b. Use of vehicles or self-propelled equipment for transporting materials or personnel off of a dustproof paved surface;
      - c. Parking a vehicle or self-propelled equipment off of a dustproof paved surface;
    4. Generating trackout as a result of any other Development Activity.
  - B. Notwithstanding subparagraph A., Development Activities shall not include:
    1. Normal farm cultural practices, including leveling of fields.
    2. Permit-regulated non-fugitive emission points and permit-regulated fugitive emission sources at any stationary facility operating under authority of a permit issued pursuant to ARS §§49-426 or 49-480, provided that this Article shall apply to Development Activity not specifically regulated under the permit.
    3. Permit-regulated non-fugitive emission points at a portable source operating on a Site in support of Development Activity otherwise regulated under this Article pursuant to a permit issued pursuant to ARS §§49-426 or 49-480, except to the extent that operation of such portable source is conducted in support of Development Activity otherwise regulated under this Article, in which case this Article shall still apply to such a permitted portable source with respect to fugitive emissions from any source-specific Development Activity as defined under this Article.
    4. Emergency response activities that may disturb the soil conducted by any utility or government agency in order to prevent public injury or to restore critical utilities to functional status. For purposes of this subsection, an emergency response must address a situation arising from a sudden and unforeseeable event beyond the control of the Owner and/or Operator, including acts of God. Activities by an Owner and/or Operator to address a disturbance resulting from improperly designed equipment, lack of preventative maintenance, careless or improper operation or operator error shall not qualify as an emergency response.

5. Normal surface maintenance of established roads, established utility easements, established traveled rights-of-way and established access roads does not constitute development, but only if such maintenance is not part of a larger project and:
    - a. Is not within a Site that is otherwise subject to a Site Permit requirement; and
    - b. Such maintenance does not involve cutting, filling or the import or export of material.
  6. Hauling activities outside of a Site, other than as regulated under project-linked trackout provisions of these rules and under §4-7-230.D pertaining to haulage between portions of a Site that straddles a roadway.
  7. Weed abatement by discing or blading, subject to the limitations of §§4-7-210.3 and 4-7-210.7.
5. "Disturbed surface" or "disturbed area" means any portion of the earth's surface, or material placed on the earth's surface, that has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural condition, thereby increasing the potential for emission of fugitive dust.
- A. If a Site contains disturbed surface areas exhibiting visibly distinguishable soils, vegetative cover, or other stabilization characteristics, the Owner and/or Operator shall treat each such distinguishable area separately for purposes of assessing the necessary stabilization for that soil type or condition.
  - B. For trenches that are less than four feet in depth, it is assumed that a six (6) foot wide path of surface material will be disturbed as the trench is dug. Once the trench exceeds a length of 726 feet, 0.1 acres of surface area has been disturbed. For trenches that are four feet or greater in depth, it is assumed that a twelve (12) foot wide path of surface material will be disturbed as the trench is dug. Once the trench exceeds a length of 363 feet, 0.1 acres of surface area have been disturbed. If the registrant identifies situations in which the amount of surface area should be calculated differently, a case-by-case determination would be made.
  - C. For calculations of the projected disturbed surface areas that will result from land clearing or earthmoving activities, a minimum of 25 feet will be added to each dimension of all structures, driveways, concrete pads, and other construction projects being built on the Site to allow for an equipment utilization zone.
  - D. Surfaces that have been stabilized to meet at least one of the stabilization standards of §4-7-226.D shall no longer be considered disturbed.
6. "Dust suppressant" means water, hygroscopic material, solution of water and chemical surfactant, foam, non-toxic chemical stabilizer or any other dust palliative, which is not prohibited for ground surface application by the U.S. Environmental Protection Agency (EPA) or the Arizona Department of Environmental Quality (ADEQ) or any applicable law, rule, or regulation, as a treatment material for reducing fugitive dust emissions.
7. "Earthmoving" means use of vehicles or self-propelled equipment for: land stripping; trenching; grading; cutting and filling earthen materials; excavating; land leveling; drilling; back filling; contouring the earth; open stockpiling of bulk materials; loading or unloading bulk material; grubbing foundations or slabs; demolition; or any of the foregoing in connection with landscaping a Site. Blasting operations shall constitute earthmoving. Notwithstanding any other exemption under these rules, weed abatement by discing or blading and conducted for the purpose of enabling other earthmoving activity shall qualify as earthmoving.
8. "End of workday" means the end of a working period that may include one or more work shifts. If working 24 hours a day, the end of a working period shall be considered no later than 8 p.m.



9. "Fugitive dust" as used in this rule, means regulated particulate matter, which is not collected by a capture system, which is entrained in the ambient air, and which is caused from human and/or natural activities, such as but not limited to, movement of soils, vehicles, equipment, blasting, and wind. For the purpose of this rule, fugitive dust does not include particulate matter emitted directly from the exhaust of motor vehicles and other internal combustion engines, from portable brazing, soldering, or welding equipment, and from piledrivers.
10. "Net opacity contribution" means the difference between opacity leaving the Site and opacity entering the Site.
11. "Objective requirements" or "objective standards" mean those standards which either establish a numerical performance standard, or which have a formal compliance assessment method established under this Article. Examples include opacity standards, surface stabilization standards and length and pack-thickness limitations on visible trackout.
12. "Opacity" as used in this rule, means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. See Article 9 for specific methods for assessing opacity.
13. "Owner and/or Operator" means any person who leases, operates, controls, or supervises a Development Activity subject to any requirements of this Article and includes, but is not limited to, the owner, lessee, developer, responsible official, permit applicant, permit holder, general contractor, prime contractor, supervisor or management company of or for a Development Activity or Site.
14. "PAD" means an approved planned area development approved by a political subdivision pursuant to statutory authority.
15. "Paved public roadway" means either:
  - A. A publicly owned paved roadway, as evidenced by a formal acceptance by the state or a political subdivision of the state of either:
    1. An on-going maintenance obligation for the roadway; or
    2. A title or easement for the roadway; or
  - B. Within a PAD or subdivision, a paved private roadway that is open to travel by the public. Where active construction operations continue within a PAD or subdivision, the permittee may post signs to close selected paved roadways within the still-constructing areas to travel by the public. However, at least one road must furnish required paved access to every parcel within the PAD or subdivision that has received a certificate of occupancy, and every such required paved access road shall constitute a "paved public roadway" notwithstanding any signage to the contrary.
16. "Permit," for purposes of this Article, means a Site Permit.
17. "Permittee" means the person or legal entity who has obtained a Site Permit.
18. "Road Construction" as used in this rule, means the use of any equipment for the paving or new construction of a road surface, street or highway.
19. "Road Maintenance" as used in this rule, means the use of any equipment for the repair and preservation of an old road surface, street or highway.
20. "Silt" means any aggregate material with a particle size less than 75 micrometers in diameter, which passes through a No. 200 Sieve.
21. "Site" means any lot, parcel, easement, or right-of-way where Earthmoving or Construction occurs.

22. "Site Permit" means a permit as defined in §§4-7-234, 4-7-238 and/or 4-7-242.
23. "Source" as used in this Article means the Site which is under common control or ownership, and any fixed or moveable object or surface on such Site which is a potential point of origin of fugitive dust.
24. "Stockpile" as used in this rule, means an open storage pile with an open accumulation of bulk material with a 5% or greater silt content that has a total surface area of 150 square feet or more and that at any one point attains a height of three feet. Silt content shall be assumed to be 5% or greater unless the affected party can show, by: testing in accordance with ASTM method C136-96a; or testing by other equivalent method approved in writing by the Control Officer and the EPA Administrator, that the silt content is less than 5%.
25. "Subdivision" means a platted subdivision.
26. "Suppressant" means dust suppressant.
27. "Trackout" means visible material deposited onto any paved public roadway, as defined in this Article, by traffic leaving a Site.
28. "Unpaved haul/access road" as used in this rule, means any on-site unpaved road used by commercial, industrial, institutional, and/or governmental traffic.
29. "Unpaved road" as used in this rule, means any road or equipment path that is not paved. For the purpose of this rule, an unpaved road is not a horse trail, hiking path, bicycle path, or other similar path used exclusively for purposes other than travel by motor vehicles.
30. "Work practice standards" mean those standards which have neither a numerical performance standard or a compliance assessment method established. Compliance with work practice standards is assessed on a pass/fail basis.  
[Adopted June 3, 2009]

#### 4-7-214. General Provisions

- A. **Intent.** The intent of this Article is to avoid violations of the prevailing PM<sub>10</sub> standard and additionally minimize nuisance impacts by improving control of excessive fugitive dust emissions. The Article focuses on emissions from process activity, site activity and a lack of adequate surface stabilization, all associated with construction, earthwork or land development.
- B. **Relationship to other rules.** Other than as provided in subsection D below, the provisions of this Article supplement and do not supplant the other provisions of these rules.
- C. **Effective Date.** The rules set forth in this Article shall become effective 60 days after the publication of a notice of final rulemaking in the Arizona Administrative Register.
- D. **Geographic Applicability**

This Article applies in the Pinal County portion of the Phoenix PM<sub>10</sub> Serious Nonattainment area, more specifically Township 1 North, Range 8 East, Gila & Salt River Base and Meridian ("T1N R8E"). In the affected region, this Article supplants the generally applicable dust registration program of Chapter 4, Article 3 of this Code.

- E. **Violations**  
Failure by any person to comply with the applicable requirements of this Article shall constitute a violation subject to penalty as provided in these rules and A.R.S. Title 49, Chapter 3, Article 3, A.R.S. §49-471 et

seq.  
[Adopted June 3, 2009]

~~seq.~~

~~[Adopted June 3, 2009]~~

4-7-218. Applicability; Development Activity

- A. The objective standards of §4-7-226 and the work practice requirements of §4-7-230 shall apply to Development Activity at any Site, regardless of the size of the disturbed area.
- B. Unless Development Activity qualifies for coverage under an Area Block Permit, the Site Permit requirements of §§4-7-234 and 4-7-238 apply to any Site which includes an aggregate area of more than 0.1 acres that has been or will be disturbed by Development Activity.
- C. The Area Block Permit requirements under §§4-7-234 and 4-7-242 apply to any political subdivisions and Public Utility Corporations which will regularly engage in Development Activity that will disturb an area of 0.1 acres or more.  
[Adopted June 3, 2009]

~~4-7-222. Owner and/or Operator Liability~~

- ~~A. Onset. Compliance with the requirements of this Article shall commence on or before the date when Development Activity begins on the Site.~~
- ~~B. Duration and Termination. Obligations continue until all of the following occur:
  - 1. Development Activity has ceased.
  - 2. All disturbed portions of the Site have been stabilized as required under §4-7-226.
  - 3. The Control Officer approves closure of the construction permit.~~
- ~~C. Obligations. With respect to any Site, an Owner and/or Operator shall:
  - 1. Obtain, or cause to be obtained, and be liable for any failure to obtain, a Permit pursuant to §§4-7-238 or 4-7-242 for any Site with a disturbed area exceeding 0.1 acres.
  - 2. Until termination as provided in this section, comply with or cause compliance with, and be liable for any person's violating or failing to comply with, any of:
    - a. The applicable objective site standards of §4-7-226.
    - b. The applicable obligatory site work practice standards of §4-7-230.
    - c. The requirement that a Site Permit be approved prior to any person engaging in earthmoving that will cause more than 0.1 acre of disturbed area.
    - d. The provisions of any Site Permit for the Site approved pursuant to §§4-7-238 or 4-7-242, including the requirements of the Dust Management Plan included within that permit.~~
- ~~D. Affirmative Defense for Wind-Driven Opacity Violations~~

~~An Owner and/or Operator shall have an affirmative defense to any enforcement action for opacity violations resulting solely from wind acting upon a stabilized surface, provided that:~~

- ~~1. The Owner and/or Operator can show that the prevailing wind speed exceeded 25 m.p.h. when averaged over one hour, as measured by:
  - a. A Pinal County Air Quality monitoring station in the affected area;
  - b. Any other certified meteorological station in the affected area; or
  - c. A wind-speed instrument calibrated to the manufacturer's standards and operated on-site.~~
- ~~2. The Owner and/or Operator can show through written records or otherwise that:
  - a. The requirements of the Site dust control plan were being met; and
  - b. The offending areas of the Site were maintained in a condition adequate to meet relevant stabilization requirements under §§4-7-226.C and 4-7-226.D.~~
- ~~3. The Owner and/or Operator can show that for any areas subject to any Development Activity that continues during windy conditions, including but not limited to earthmoving, equipment~~

4-7-222. Owner and/or Operator Liability

- A. Onset. Compliance with the requirements of this Article shall commence on or before the date when Development Activity begins on the Site.
- B. Duration and Termination. Obligations continue until all of the following occur:
  - 1. Development Activity has ceased.
  - 2. All disturbed portions of the Site have been stabilized as required under §4-7-226.
  - 3. The Control Officer approves closure of the construction permit.
- C. Obligations. With respect to any Site, an Owner and/or Operator shall:
  - 1. Obtain, or cause to be obtained, and be liable for any failure to obtain, a Permit pursuant to §§4-7-238 or 4-7-242 for any Site with a disturbed area exceeding 0.1 acres.
  - 2. Until termination as provided in this section, comply with or cause compliance with, and be liable for any person's violating or failing to comply with, any of:
    - a. The applicable objective site standards of §4-7-226.
    - b. The applicable obligatory site work practice standards of §4-7-230.
    - c. The requirement that a Site Permit be approved prior to any person engaging in earthmoving that will cause more than 0.1 acre of disturbed area.
    - d. The provisions of any Site Permit for the Site approved pursuant to §§4-7-238 or 4-7-242, including the requirements of the Dust Management Plan included within that permit.
- D. Affirmative Defense for Wind-Driven Opacity Violations

An Owner and/or Operator shall have an affirmative defense to any enforcement action for opacity violations resulting solely from wind acting upon a stabilized surface, provided that:

- 1. The Owner and/or Operator can show that the prevailing wind speed exceeded 25 m.p.h. when averaged over one hour, as measured by:
  - a. A Pinal County Air Quality monitoring station in the affected area;
  - b. Any other certified meteorological station in the affected area; or
  - c. A wind-speed instrument calibrated to the manufacturer's standards and operated on-site.
- 2. The Owner and/or Operator can show through written records or otherwise that:
  - a. The requirements of the Site dust control plan were being met; and
  - b. The offending areas of the Site were maintained in a condition adequate to meet relevant stabilization requirements under §§4-7-226.C and 4-7-226.D.
- 3. The Owner and/or Operator can show that for any areas subject to any Development Activity that continues during windy conditions, including but not limited to earthmoving, equipment

movement or site traffic, in addition to any other required control measures one or more of the following measures were applied and maintained:

- a. All Development Activity, other than continued application of water for dust suppression and site stabilization purposes, has ceased;
  - b. Apply water or other suitable dust suppressant at least twice per hour to affected areas;
  - c. For areas that are shown to have an optimum moisture content of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent methods approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content, as determined by ASTM Method D2216-05 or other equivalent methods approved by the Control Officer and the Administrator;
  - d. For areas where the optimum moisture content has not been shown to be less than 12%, maintain soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent methods approved by the Control Officer and the Administrator.
4. The Owner and/or Operator can show that for temporary disturbed surfaces, including but not limited to, after work hours, weekends and holidays, in addition to any other required control measures, the following measures were applied as appropriate:
- a. For open storage piles, either:
    - i. Apply water on all open storage piles at least twice per hour; or
    - ii. Cover open storage piles with tarps, plastic, or other material such that the wind will not remove the covering(s).
  - b. For other temporary disturbed surfaces, either:
    - i. Uniformly apply and maintain surface gravel or dust suppressants; or
    - ii. Apply water to disturbed surface areas at least three times per day, but if disturbed surface areas continue to show evidence of wind-blown dust, increase watering frequency to four times per day.
- [Adopted June 3, 2009]

#### 4-7-226. Objective Standards; Sites

- A. Opacity Limitations. Opacity directly attributable to Development Activity or resulting from any disturbed areas caused by Development Activity shall not exceed any of the following limitations:
1. 0% Property Line Opacity Limitation. Subject to the exemptions below, the net opacity contribution from any Development Activity or disturbed areas caused by Development Activity shall not violate a 0% opacity standard at the boundary of the parcel for more than 30 seconds in any continuous six-minute period.
    - a. This limitation shall not apply to earthmoving operations conducted within 25 feet of a parcel boundary.
    - b. For purposes of this property line opacity standard, opacity shall be determined based on a time-aggregation method. See Article 9, §4-9-340.F.
  2. [Continuous Plume Limitation] Opacity shall not exceed 20% opacity for any continuous plume, as assessed by a time-averaging method, based on observations every 15 seconds over a 3-minute span, as defined in Article 9, §4-9-340.E.
  3. [Intermittent Plume Limitation] Opacity shall not exceed 20% opacity for any intermittent plume, as assessed by the average of a set of six paired observations, spaced by five seconds and conducted within a one-hour period, as defined by the appropriate test method in Article 9, see §§4-9-340.C and 4-9-340.D.
  4. [Wind Events] The opacity limitations of this rule shall apply to wind-driven emissions, provided that an Owner and/or Operator may have an affirmative defense to any violation upon making a showing as required under §4-7-222.

B. Trackout Limitations.

1. [Basic Limitation] Continuous visible trackout from any Site onto a paved public roadway shall not exceed 25' in length or exhibit a trackout pack-depth greater than 0.25".
2. On-site Trackout Control System. For any period of time when a project has more than two acres of area disturbed, or on any day that more than 100 cubic yards of bulk material is shipping in or out of the Site, install and maintain a trackout control system that prevents trackout.
3. Trackout Control System Options.

Where a trackout control system is required, install and maintain at least one of the following system options.

- a. Presumptively acceptable systems.

The following systems shall be acceptable options in a dust mitigation plan:

- i. Rumble strips - 25 foot length. For use of grizzlies or other similar devices designed to remove dirt/mud from tires, the devices shall extend from the intersection with the public paved road surface for a distance of at least 25 feet, and cover the full width of the unpaved exit surface for at least 25 feet.

- ii. Gravel pads - 50 foot length. For use of gravel pads, coverage with gravel shall be at least one inch or larger in diameter and at least 3 inches deep, shall extend from the intersection with the public paved road surface for a distance of at least 50 feet, and cover the full width of the unpaved exit surface for at least 50 feet. Any gravel deposited onto a public paved road travel lane or shoulder must be removed at the end of the workday or immediately following the last vehicle using the gravel pad, or at least once every 24 hours, whichever occurs first.

- iii. Internal paving - 100 feet. For use of paving, paved surfaces shall extend from the intersection with the paved public road surface for a distance of at least 100 feet, and cover the full width of the unpaved access road for that distance to allow mud and dirt to drop off of vehicles before exiting the Site. Mud and dirt deposits accumulating on paved interior roads shall be removed with sufficient frequency, but not less frequently than once per workday, to prevent carryout and trackout onto a paved public road.

- iv. [Wheel wash system] At all exits onto paved areas accessible to the public, install a wheel wash system.

B. Alternative systems.

As an alternative, the Site Permit dust control plan may propose some other system for controlling trackout, provided that visible trackout from such system shall not exceed 5' in length onto a paved public road.

C. Active Area Stabilization Requirements

1. Applicability; Affected Areas

Active area stabilization requirements apply to disturbed areas affected by on-site parking, vehicular traffic, equipment traffic, material transport, or equipment transport.

2. [Objective Standards] Comply with each of the following requirements:

- a. Every disturbed parking area and/or working area shall show compliance at all times with one of the following objective standards as assessed in accord with Article 9, §4-9-320.A:
    - i. Silt loading shall not exceed 0.33 oz/ft<sup>2</sup>; or
    - ii. Silt content shall not exceed 8% for parking and working areas.
  - b. Every disturbed roadway area shall show compliance at all times with one of the following objective standards as assessed in accord with Article 9, §4-9-320.A:
    - i. Silt loading shall not exceed 0.33 oz/ft<sup>2</sup>; or
    - ii. Silt content shall not exceed 6% for roads.
  - c. All disturbed areas other than parking areas, working areas or roadway areas affected under this Active Area Stabilization requirement shall be stabilized such that every disturbed area shows compliance at all times with the drop ball test of Article 9, §4-9-320.B.1.
3. [Maintenance Obligation] Maintain active area stabilization to meet the foregoing standards until the activity ceases and the affected area of the Site has been stabilized to meet the post-operation stabilization standards of §4-7-226.D.

D. Stabilization Requirement for Inactive and Post-operation Areas

Any disturbed surface area on which no activity is occurring shall meet at least one of the standards described below. If areas of the Site exhibit visibly distinguishable surface characteristics, each area shall be separately assessed for stability. Stability shall be assessed in accord with the appropriate test methods described in Article 9, §4-9-320.B. Failure to maintain a disturbed surface area on which no activity is occurring shall be considered in violation of this rule unless the area is maintained in a manner that meets at least one of the standards listed below, as applicable.

1. [Drop Ball Test] Maintain stabilization or a soil crust adequate to pass the drop ball test;
2. [Maintain 100 cm/sec. threshold friction velocity] Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;
3. [Maintain 50% flat vegetative cover] Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%;
4. [Maintain 30% standing vegetative cover] Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%;
5. [Maintain 10% standing vegetative cover and 43 cm/sec. TFV] Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements;
6. [Minimum non-erodible element cover] Maintain a percent cover that is equal to or greater than 10% for non-erodible elements as measured by the "rock test"; or
7. [Implement an approved alternative] Comply with a standard of an alternative test method, upon obtaining the written approval from the Control Officer and the Administrator.

E. Duration of Stabilization Obligation.

1. Unpermitted Sites. For any unpermitted Site, maintain the stabilization standards of §4-7-226.D until Development Activity is complete.



2. Sites Subject to a Block Permit. For any unpermitted Site, maintain the stabilization standards of §4-7-226.D until Development Activity is complete.
3. Other Permitted Sites. For any other Site subject to permit requirement, maintain the stabilization standards of §4-7-226.D until the Control Officer approves closure of the Site Permit under Rule §4-7-238.  
[Adopted June 3, 2009]

4-7-230. Obligatory Work Practice Standards; Sites

A. Project Access Control.

Define, clearly mark, and enforce ingress and egress points for traffic into and out of the Site.

B. Dust Suppression for Inactive and Post-operation Areas and Roadways

For all inactive and post-operation-areas and -roadways within the Site:

1. Restrict access, and pave, apply gravel or apply a suitable dust suppressant other than water;
2. Apply water and prevent access by fences, ditches, vegetation, berms, or other suitable barrier or means sufficient to prevent trespass as approved by the Control Officer; or
3. Establish a vegetative cover in accord with §4-7-226.D.

C. Bulk Material Stacking and Stockpiling Operations

1. At least one of the following control measures shall be implemented during bulk material stacking, loading and unloading operations:
  - a. Spray material with water, as necessary, prior to stacking, loading and unloading and/or while stacking, loading and unloading; or
  - b. Spray material with a dust suppressant other than water, as necessary, prior to stacking, loading, and unloading and/or while stacking, loading and unloading.
2. When not conducting stacking, loading or unloading operations, implement at least one of the following control measures with respect to a stockpile:
  - a. Cover all open storage piles with a tarp, plastic, or other material to prevent wind from removing the covering(s)/such that the covering(s) will not be dislodged by the wind; or
  - b. Apply water to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent methods approved by the Control Officer and the Administrator. For areas that have an optimum moisture content of less than 12% as determined by ASTM Method D1557-02e1 or other equivalent methods approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content; or
  - c. Maintain a soil crust; or
  - d. Implement either of the control measures in preceding subsection .b or .c, and construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is not more than twice the height of the pile, whose height is equal to the pile height, and whose porosity is no more than 50%.

D. Trackout; Monitoring and Cleanup.

1. Monitor trackout length at each egress point.
2. Immediately clean up any trackout that violates the length or pack-thickness limitations of §4-7-226.B.1.

3. Remove all visible trackout at the close of each workday and/or each work shift.

E. Signage

At any Site that is five acres or larger, erect a project information sign at the main entrance that is visible to the public or at each end of the road construction Site. The sign shall be a minimum of 24 inches tall by 30 inches wide, have a white background, and have the words "DUST CONTROL" shown in black block lettering which is at least four inches high, and shall contain the following information in legible fashion"

1. Project Name
2. Name and phone number of person(s) responsible for conducting project
3. Text stating: "Dust Complaints? Call Pinal County Air Quality Control District at (520) 866-6929."

F. Training

1. Dust Coordinator

On any Site, or any contiguous combination of Sites under common control, having five acres or more of disturbed surface area subject to a Site Permit requirement, assure that at all times during earthmoving activity operations related to the purposes for which an Site Permit is required, have on-site at least one individual qualified under a Control-Officer-approved Dust Control Coordinator training program.

2. Superintendent and Water Pull Drivers

Assure that the site superintendent or other designated on-site representative of the Site Permit holder, and any water truck or water pull driver maintaining surface stabilization shall have successfully completed a Control-Officer-approved Basic Dust Control Training Class.

G. Conformance with Project Access Control.

Drivers, contractors, subcontractors, and materialmen shall utilize only the ingress and egress defined by the Owner and/or Operator.

H. Dust Suppression for Active Working Areas, Parking Areas and Roadways

To manage dust from working areas, including disturbed areas affected by on-site parking, vehicular traffic, equipment traffic, material transport, or equipment transport and roadways, at least one of the following measures shall be implemented:

1. Apply water so that the surface is visibly moist;
2. Apply and maintain a suitable dust suppressant other than water;
3. Limit speed to 15 mph and traffic to no more than 20 trips/day, provided reliance on this measure requires that the Dust Management Plan include a traffic management plan that details how speed and daily trips will be limited;
4. Apply gravel, recycled asphalt or other suitable material; or
5. Pave.

I. Dust Suppression During Bulk Excavation Operations

1. Pre-watering shall be applied before commencing earthmoving cut-operations; and

2. Water shall be applied during activity as required to limit particulate emissions to avoid opacity limit violations.

J. Project-internal Load Stabilization

Load stabilization shall be required during haulage of bulk excavated materials internally within a Site and not crossing a paved public road by implementing at least one of the following measures:

1. Limit speed to 15 miles per hour;
2. Stabilize loads with water or a dust suppressant; or
3. Cover the load with a tarp or other suitable dust and wind impermeable material.

K. Roadway-Crossing Load-Stabilization

Load stabilization shall be required during haulage of bulk excavated materials across a paved public road, by implementing all of the following limitations:

1. Load all haul trucks such that the freeboard is not less than three inches;
2. Load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of a cargo container area;
3. Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and
4. When crossing and/or accessing a paved area accessible to the public, install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse the Site.

L. Demolition; Emission Mitigation

To the extent Development Activity includes demolition activities, implement all of the following measures:

1. Apply water to demolition debris immediately following demolition activity; and
2. Apply water to all disturbed soil surfaces to establish a crust and to prevent wind erosion.

M. Weed Abatement; Emission Mitigation

To the extent Earthmoving for a particular project includes weed abatement activity, implement all of the following control measures:

1. Before weed abatement by discing or blading occurs, apply water;
2. While weed abatement by discing or blading is occurring, apply water; and
3. After weed abatement by discing or blading occurs, pave, apply gravel, apply water, apply a suitable dust suppressant other than water, or establish vegetative ground cover.

N. Blasting; Emission Mitigation

All of the following control measures shall be implemented for blasting operations at a Site:

1. In wind gusts above 25 miles per hour, discontinue/cease blasting; and
2. Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.

O. Subcontractor Registration Verification

Assure that any subcontractors engaged in earthmoving activity on the Site have registered with Pinal County Air Quality as a subcontractor.  
[Adopted June 3, 2009]

4-7-234. Nonattainment-Area Dust Permit Program; General Provisions

A. Permittee's Universal Obligations

A permittee under this Article shall be bound to comply with:

1. Applicable objective and work practice standards,
2. The commitments in a dust control plan submitted in support of the application,
3. The application acknowledgments required for a particular permit, and
4. The obligations, standards, and commitments in a permit.

B. Permit Types

1. Site Permits
2. Nonattainment Area Block Permits
3. Any Site subject to a permit requirement under this rule shall not require an additional registration under §4-3-080, the existing county-wide dust registration program.

C. Application Review and Approval; Dust Control Plan Merger; Limited Effect of Approval

1. Following submittal of a complete application under this Article, including payment of any necessary fee, the Control Officer shall within 10 working days approve, disapprove, or conditionally approve the permit application, in accordance with the requirements of this Article.
2. Upon approval of any permit under this Article, the provisions of any dust control plan submitted as part of the application shall be merged as part of the permit, and any commitments in the dust control plan shall constitute enforceable requirements under the permit.
3. Approval of a permit under this Article shall not excuse, or act as a shield with respect to, a violation of any requirement or limitation under these rules, including the provisions of this Article.

D. Fees

Issuance of every permit shall be subject to payment of a fee as specified in Appendix C.

1. Construction Permits shall be assessed a fee based on project area and the fee specified in earthmoving Category A.
2. Block permits shall be assessed a fee based on Appendix C, earthmoving Category D.
3. Permit transfers shall be approved without a fee.
4. Permit revisions shall be assessed a fee based on the time required to process the revision application, with a minimum billing of one hour, and a maximum revision fee of \$1000.00.
5. Late-filed applications are subject to the late filing fee specified in Appendix C.
6. Fee waivers are not allowed.

- E. **Permit Duration**  
All permits shall have a one-year permit term.
- F. **Permit Revisions**  
A permittee may request revision of a permit or a transfer of the permit by filing an amended application. A transfer request shall bear the signatures of authorized representatives for both the transferor and the transferee, and shall further properly identify the transferee.
- G. **Renewals**  
  
Should a construction project last longer than the term of a permit, the permittee shall re-apply for a Dust Control Permit at least 14 calendar days prior to the expiration date of the original permit term. For good cause show, the Control Officer may extend that renewal application deadline. Provided the applicant has a rational system for the completion status of individual parcels within a project, a single permit renewal may cover derivative parcels even though they are no longer contiguous. The renewal fee shall be based on the un-completed area of the project.
- H. **Right of entry and inspection.**  
Subject to the requirements of 49-471.03, any Site covered by a permit issued pursuant to this Article is subject to inspection without prior notice by the Control Officer.
- I. **Application signatures.**  
Every application shall be signed by an individual, and that signature shall constitute a personal representation that the signer has authority to commit the named permit applicant ("Permittee") to comply with the provisions of this Article.  
[Adopted June 3, 2009]

#### 4-7-238. Nonattainment Area Site Permits

- A. **Applicability**
1. **Onset.** Before Development Activity begins on a Site that will involve a disturbance of an aggregate area of more than 0.1 acres, the Owner and/or Operator or someone with privity to the Owner and/or Operator shall apply for and obtain a Site Permit from the Control Officer.
  2. **Duration/Termination.** The Site Permit shall be maintained until all of the following occur:
    - a. Development Activity has ceased.
    - b. All disturbed portions of the Site have been stabilized.
    - c. Closure of the Site Permit in accord with this rule.
- B. **Application Requirements**
- A Site Permit application shall include each of:
1. **Application coversheet**  
The applicant shall present an application on a form approved by the Control Officer, and shall include all essential identification information as specified on that form, including a proper legal identification of the applicant and the property owner, and the assessor's parcel number(s) for the project. A separate application is required for each Site location not contiguous to the location on the original application form.
  2. **Plot Plan or Site Plan**  
Each application shall include a plot plan with linear dimensions in feet. The plot plan must be on 8-1/2 by 11 inch paper, and may be on one or more sheets. The plan should identify the assessor's

parcel number(s), the street address(es), the direction north, indicate the areas to be disturbed, and include a calculation of the area to be disturbed. The plan should show:

- a. Entire project site/facility boundaries,
- b. Acres to be disturbed with linear dimensions,
- c. Nearest public roads,
- d. North arrow, and
- e. Planned exit locations onto paved areas accessible to the public.

3. Identification of surface-disturbing Activities

The Site Permit Application shall separately identify all activities that may cause a surface disturbance, specifically including planned earthmoving activities and other planned activities that may cause a disturbed surface.

- a. Non-earthmoving Activities. The Site Permit application shall identify planned non-earthmoving activity, including any of:
  - i. Vehicle traffic
  - ii. Equipment traffic
  - iii. Parking
  - iv. Material storage and handling
  - v. Other activities.
- b. Earthmoving Activities. The Site Permit application shall identify planned earthmoving activity, including any of:
  - i. Primary mass grading operations
  - ii. Excavations for new footings, pads and concrete work
  - iii. Grubbing existing foundations, slabs or structures
  - iv. Installation of underground utilities
  - v. Landscaping
  - vi. Other earthmoving activities as defined in §4-7-210.

4. Site Dust Control Plan.

The applicant shall include in the application a Site Dust Control Plan, explaining the mitigation measures that will be used to control dust from every covered activity to be conducted on the Site. To be approvable under §4-7-234.C, the Dust Control Plan must explain how the Permittee will achieve compliance with each relevant objective standard in §4-7-226 and each relevant work practice standard in §4-7-230. At a minimum, the Site Dust Control Plan must address each of the following issues, and for each of the controls required under subparagraphs a. through h., must both designate all required measures as primary control measures and must additionally designate at least one contingency control measure:

- a. Indicate how access to the Site will be controlled.
- b. Indicate whether the project will require a trackout control system. Whether or not a trackout control system is required, explain how trackout will be controlled at each of the access points.
- c. For every identified earthmoving activity, explain how dust will be controlled by actions taken prior to or during that activity.
- d. Apart from earthmoving, explain how the Permittee will establish and maintain stabilization of roadways, and areas used for traffic, parking, and the handling and storage of materials.
- e. If the applicant proposes to achieve stabilization by limiting speeds and traffic volume, explain how those limits will be enforced.
- f. Explain how, once earthmoving operations are completed, affected areas will be stabilized.
- g. Explain how areas disturbed by non-earthmoving activities will be stabilized.
- h. If stabilization will depend upon restricting access or preventing trespass, explain how that will be achieved.
- i. If dust mitigation efforts will involve use of dust suppressants, identify the product, include copies of MSDS sheets, and define in the plan details of the utilization in accord with the manufacturer's recommendations, including the method, frequency and intensity of application; the type, number and capacity of application equipment; and information

on environmental impacts and approvals or certifications related to appropriate safe use for ground application.

- j. Define how often records of the volume of water- or suppressant-usage will be recorded.
- k. Define how frequently property-line opacity observations will be conducted and corresponding records recorded.
- l. Define how frequently activity-linked opacity observations will be conducted and corresponding records recorded.
- m. Define how frequently stabilization observations will be conducted and corresponding records recorded.
- n. Define how frequently trackout inspections will be conducted and corresponding records recorded.

5. Phased Close-out Plan

A Site Permit applicant may propose, as an element of the Site Dust Control Plan, a tracking system to define which individual parcels within a PAD or subdivision have qualified for Permit Closeout with respect to that parcel. Subject to the approval of the Control Officer, the tracking system proposal may include an electronic spreadsheet and linked electronic map maintained at the PAD or subdivision site. Closeout with respect to any parcel cannot take effect before the Permittee provides notice to the Control Officer regarding that parcel. Implementation of any such phased plan requires the express approval of the Control Officer.

C. Permittee's Obligations

- 1. Application Acknowledgments. By signing an application, the Permittee acknowledges obligations to, and liability for failure to:
  - a. Assure that any earthmoving activity on the Site is covered by the Permit;
  - b. With respect to the Site:
    - i. Comply with or cause compliance with objective standards of §4-7-226.
    - ii. Comply with or cause compliance with obligatory work practice standards of §4-7-230.
    - iii. Comply with or cause compliance with commitments in the dust management plan submitted in support of the Permit application.
- 2. Permit must be available on-site. A complete copy of the Site Permit, including the dust control plan, shall be kept on the project at all times that Construction Activities occur and shall be made available upon request of the Control Officer.
- 3. Recordkeeping. On any day when disturbed surfaces remain on the Site and any earthmoving or construction activity occurs, the Permittee shall maintain daily logs showing:
  - a. Records verifying integrity of entrance/exit definitions.
  - b. Records of trackout compliance inspections.
  - c. Water/suppressant truck hours of operation and water or suppressant application rates. Permittee may use whatever metrics will reasonably reflect actual application rates.
  - d. Records of opacity observations, including notation of methods utilized.
  - e. Records of location and results of surface stabilization assessments, including notation of methods utilized.
  - f. Compliance with the dust control plan.
- 4. Basic Dust Control Training Requirement. No later than December 31, 2008, a site superintendent or other designated on-site representative of the permit holder and water truck and water pull drivers for each Site shall have successfully completed a Control-Officer-approved Basic Dust Control Training Class.
- 5. Dust Control Coordinator Requirement. Any Site, or any contiguous combination of Sites under common control, having five acres or more of disturbed surface area subject to a Permit requirement shall, at all times during earthmoving activity operations related to the purposes for

which a Site Permit is required, have on-site at least one individual qualified under a Control-Officer-approved Dust Control Coordinator training program.

D. Permit Closeout

1. Site-wide Project Closure; Closure of the Obligations of the Owner and/or Operator.

An Owner and/or Operator may attain a project-wide closeout ("project closure") by obtaining from the Control Officer a written Approval of Certificate of Project Completion based upon a showing of final stabilization following completion of all Development Activity.

2. Site-wide Project Closure; Closure of Permittee's Obligation.

A Permittee may terminate his liability under this Article by obtaining from the Control Officer a written Approval of Certificate of Project Completion, based upon the contractor's showing of:

- a. Final stabilization following completion of contracted project-wide Development Activity;
- b. Other equitable grounds (i.e. Termination of contractor's involvement with project).

3. Phased Closure.

An Owner and/or Operator and a Permittee may terminate liability and obligation under this Article with respect to a specific lot or parcel within a development, by complying with the terms of a Control-Officer-approved phased closure plan.

[Adopted June 3, 2009]

4-7-242. Nonattainment Area Block Permits

A. Applicability

1. Nonattainment Area Block Permits shall only be available for earthmoving activity associated with:
  - a. Maintenance of existing underground or above-ground lines;
  - b. Effecting end-user connections, including but not limited to water connections, sewer connections, natural gas connections, electrical power connections, and communications connections;
  - c. Underground utility line extensions not exceeding 500' in length; and
  - d. Overhead utility line extensions.
2. Nonattainment Area Block Permits shall only be available to:
  - a. Political subdivisions; and
  - b. Public Utility Corporations regulated by the Arizona Corporation Commission.

B. Application Requirements

A Nonattainment Area Block Permit application shall include each of:

1. Application coversheet  
The applicant shall present an application on a form approved by the Control Officer, and shall include all identification information as specified on that form, including a proper legal identification of the applicant.
2. Plot Plan or Site Plan - Not required.
3. Identification of surface-disturbing activities  
The Block Permit Application shall acknowledge that applicability is limited to installation of underground utilities and any associated landscaping.



4. Permit applicability form  
Not required.
5. Block Permit dust control plan.  
The applicant shall include in the application a Block Permit Dust Control Plan, explaining the mitigation measures that will be used to control dust from every covered activity to be conducted under the Block Permit. To be approvable under §4-7-234.C, the Block Permit Dust Control Plan must explain how the Permittee will achieve compliance with each relevant objective standard in §4-7-226 and each relevant work practice standard in §4-7-230. At a minimum, the Block Permit Dust Control Plan must address each of the following issues, and for each of the controls required under subparagraphs a. through h., must both designate all required measures as primary control measures and must additionally designate at least one contingency control measure:
  - a. Indicate how access to the Site will be controlled.
  - b. Indicate whether the project will require a trackout control system. Whether or not a trackout control system is required, explain how trackout will be controlled at each of the access points.
  - c. For every identified earthmoving activity, explain how dust will be controlled by actions taken prior to or during that activity.
  - d. Apart from earthmoving, explain how the Permittee will establish and maintain stabilization of roadways, and areas used for traffic, parking, and the handling and storage of materials.
  - e. If the applicant proposes to achieve stabilization by limiting speeds and traffic volume, explain how those limits will be enforced.
  - f. Explain how, once earthmoving operations are completed, affected areas will be stabilized.
  - g. Explain how areas disturbed by non-earthmoving activities will be stabilized.
  - h. If stabilization will depend upon restricting access or preventing trespass, explain how that will be achieved.
  - i. If dust mitigation efforts will involve use of dust suppressants, identify the product, include copies of MSDS sheets, and define in the plan details of the utilization in accord with the manufacturer's recommendations, including the method, frequency and intensity of application; the type, number and capacity of application equipment; and information on environmental impacts and approvals or certifications related to appropriate safe use for ground application.
  - j. Define how often records of the volume of water- or suppressant-usage will be recorded.
  - k. Define how frequently property-line opacity observations will be conducted and corresponding records recorded.
  - l. Define how frequently activity-linked opacity observations will be conducted and corresponding records recorded.
  - m. Define how frequently stabilization observations will be conducted and corresponding records recorded.
  - n. Define how frequently trackout inspections will be conducted and corresponding records recorded.

C. Block Permittee's Obligations

1. Application Acknowledgments. By signing an application, the Block Permittee acknowledges an obligation to:
  - a. Assure that any earthmoving activity on the Site conducted by the Permittee is covered by an Block Permit;
  - b. With respect to every Site:
    - i. Comply with objective standards of §4-7-226, including the post-operation stabilization requirement.
    - ii. Comply with obligatory work practice standards of §4-7-230.

- iii. Comply with commitments in the dust management plan submitted in support of the Block Permit application.
- 2. The Block Permittee shall, for any project that will disturb more than 0.1 acres, provide the Control Officer with notice of the start and completion of each project conducted under the Block Permit. The notice shall be provided in a format approved by the Control Officer.
- 3. Permit must be available on-site. For any project for which notification is required, a complete copy of the Block Permit, including the Block Permit Dust Control Plan, shall be available on every project Site at all times that earthmoving activities occur and made available upon request of the Control Officer.
- 4. Permittee responsible for compliance. The permittee is responsible for ensuring that all Persons abide by the conditions of the Block Permit and these regulations such that the Site remains in compliance with the Block Permit.
- 5. Recordkeeping  
Unless an alternative frequency is presented in a dust control plan and approved in a permit, on any day when earthmoving activity occurs the Permittee shall maintain daily logs showing:
  - a. Water/suppressant truck hours of operation and water or suppressant application rates. Permittee may use whatever metrics reasonably reflect application rates.
  - b. Records of opacity observations, including notation of methods utilized.
  - c. Records of location and results of post-operation surface stabilization assessments, including notation of methods utilized.
  - d. Compliance with Block Permit dust control plan.
- 6. Basic Dust Control Training Requirement. A site superintendent or other designated on-site representative of the Block Permit holder and water truck and water pull drivers for each Site that will involve disturbance of more than 0.1 acres shall have successfully completed a Control-Officer-approved Basic Dust Control Training Class.

D. Permit Closeout  
Not applicable.

[Adopted June 3, 2009]

4-7-246. Recordkeeping and Records Retention

- A. Requirement to furnish records upon request. Upon verbal or written request by the Control Officer, the log or the records and supporting documentation required under this Article shall be provided as soon as possible but no later than 48 hours, excluding weekends. If the Control Officer is at the Site where requested records are kept, records shall be provided without delay.
- B. Records Retention. Any person subject to a record-keeping requirement shall retain copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation for at least six months following the termination of the dust-generating operation and for at least two years from the date such records were initiated.

[Adopted June 3, 2009]

~~Article 9 - TEST METHODS~~

~~4-9-320 Test Methods for Stabilization For Unpaved Roads and Unpaved Parking Lots~~

~~A. For Unpaved Roads and Unpaved Parking Lots~~

- ~~1. Silt Content Test Method. The purpose of this test method is to estimate the silt content of the trafficked parts of unpaved roads and unpaved parking lots. The higher the silt content, the more~~

iii. Comply with commitments in the dust management plan submitted in support of the Block Permit application.

2. The Block Permittee shall, for any project that will disturb more than 0.1 acres, provide the Control Officer with notice of the start and completion of each project conducted under the Block Permit. The notice shall be provided in a format approved by the Control Officer.
3. Permit must be available on-site. For any project for which notification is required, a complete copy of the Block Permit, including the Block Permit Dust Control Plan, shall be available on every project Site at all times that earthmoving activities occur and made available upon request of the Control Officer.
4. Permittee responsible for compliance. The permittee is responsible for ensuring that all Persons abide by the conditions of the Block Permit and these regulations such that the Site remains in compliance with the Block Permit.
5. Recordkeeping  
Unless an alternative frequency is presented in a dust control plan and approved in a permit, on any day when earthmoving activity occurs the Permittee shall maintain daily logs showing:
  - a. Water/suppressant truck hours of operation and water or suppressant application rates. Permittee may use whatever metrics reasonably reflect application rates.
  - b. Records of opacity observations, including notation of methods utilized.
  - c. Records of location and results of post-operation surface stabilization assessments, including notation of methods utilized.
  - d. Compliance with Block Permit dust control plan.
6. Basic Dust Control Training Requirement. A site superintendent or other designated on-site representative of the Block Permit holder and water truck and water pull drivers for each Site that will involve disturbance of more than 0.1 acres shall have successfully completed a Control-Officer-approved Basic Dust Control Training Class.

D. Permit Closeout

Not applicable.

[Adopted June 3, 2009]

4-7-246. Recordkeeping and Records Retention

- A. Requirement to furnish records upon request. Upon verbal or written request by the Control Officer, the log or the records and supporting documentation required under this Article shall be provided as soon as possible but no later than 48 hours, excluding weekends. If the Control Officer is at the Site where requested records are kept, records shall be provided without delay.
- B. Records Retention. Any person subject to a record-keeping requirement shall retain copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation for at least six months following the termination of the dust-generating operation and for at least two years from the date such records were initiated.

[Adopted June 3, 2009]

Article 9 - TEST METHODS

4-9-320 Test Methods for Stabilization For Unpaved Roads and Unpaved Parking Lots

A. For Unpaved Roads and Unpaved Parking Lots

1. Silt Content Test Method. The purpose of this test method is to estimate the silt content of the trafficked parts of unpaved roads and unpaved parking lots. The higher the silt content, the more

fine dust particles that are released when cars and trucks drive on unpaved roads and unpaved parking lots.

a. Equipment:

- i. A set of sieves with the following openings: 4 millimeters (mm), 2 mm, 1mm, 0.5 mm and 0.25 mm (or a set of standard/commonly available sieves), a lid, and a collector pan.
- ii. A small whisk broom or paintbrush with stiff bristles and dustpan 1 ft. in width (The broom/brush should preferably have one, thin row of bristles no longer than 1.5 inches in length).
- iii. A spatula without holes.
- iv. A small scale with half-ounce increments (e.g. postal/package scale).
- v. A shallow, lightweight container (e.g. plastic storage container).
- vi. A sturdy cardboard box or other rigid object with a level surface.
- vii. A basic calculator.
- viii. Cloth gloves (optional for handling metal sieves on hot, sunny days).
- ix. Sealable plastic bags (if sending samples to a laboratory).
- x. A pencil/pen and paper.

b. Step 1 [-*Test Site Selection; Sample Collection*]: Look for a routinely traveled surface, as evidenced by tire tracks. [Only collect samples from surfaces that are not damp due to precipitation or dew. This statement is not meant to be a standard in itself for dampness where watering is being used as a control measure. It is only intended to ensure that surface testing is done in a representative manner.] Use caution when taking samples to ensure personal safety with respect to passing vehicles. Gently press the edge of a dustpan (1 foot in width) into the surface four times to mark an area that is 1 square foot. Collect a sample of loose surface material using a whiskbroom or brush and slowly sweep the material into the dustpan, minimizing escape of dust particles. Use a spatula to lift heavier elements such as gravel. Only collect dirt/gravel to an approximate depth of 3/8 inch or 1 cm in the 1 square foot area. If you reach a hard, underlying subsurface that is < 3/8 inch in depth, do not continue collecting the sample by digging into the hard surface. In other words, you are only collecting a surface sample of loose material down to 1 cm. In order to confirm that samples are collected to 1 cm in depth, a wooden dowel or other similar narrow object at least one foot in length can be laid horizontally across the survey area while a metric ruler is held perpendicular to the dowel.

- At this point, you can choose to place the sample collected into a plastic bag or container and take it to an independent laboratory for silt content analysis. A reference to the procedure the laboratory is required to follow is at the end of this section.

c. Step 2 [- *Sample Weighing*]: Place a scale on a level surface. Place a lightweight container on the scale. Zero the scale with the weight of the empty container on it. Transfer the entire sample collected in the dustpan to the container, minimizing escape of dust particles. Weigh the sample and record its weight.

d. Step 3 [- *Equipment Configuration*]: Stack a set of sieves in order according to the size openings specified above, beginning with the largest size opening (4 mm) at the top. Place a collector pan underneath the bottom (0.25 mm) sieve.

e. Step 4 [- *Sample Processing #1*]: Carefully pour the sample into the sieve stack, minimizing escape of dust particles by slowly brushing material into the stack with a whiskbroom or brush. (On windy days, use the trunk or door of a car as a wind barricade.) Cover the stack with a lid. Lift up the sieve stack and shake it vigorously up, down and sideways for at least 1 minute.

- f. Step 5 [- *Sample Processing #2*]: Remove the lid from the stack and disassemble each sieve separately, beginning with the top sieve. As you remove each sieve, examine it to make sure that all of the material has been sifted to the finest sieve through which it can pass (e.g., material in each sieve [besides the top sieve that captures a range of larger elements] should look the same size). If this is not the case, re-stack the sieves and collector pan, cover the stack with the lid, and shake it again for at least 1 minute. (You only need to reassemble the sieve(s) that contain material, which requires further sifting.)
- g. Step 6 [- *Weighing Collector Pan Material*]: After disassembling the sieves and collector pan, slowly sweep the material from the collector pan into the empty container originally used to collect and weigh the entire sample. Take care to minimize escape of dust particles. You do not need to do anything with material captured in the sieves; only the collector pan. Weigh the container with the material from the collector pan and record its weight.
- h. Step 7 [- *Silt Loading and Silt Content Calculation*]: If the source is an unpaved road, multiply the resulting weight by 0.38. If the source is an unpaved parking lot, multiply the resulting weight by 0.55. The resulting number is the estimated silt loading. Then, divide by the total weight of the sample you recorded earlier in Step 2 and multiply by 100 to estimate the percent silt content.
- i. Step 8 [- *Characterization Across Entire Site*]: Select another two routinely traveled portions of the unpaved road or unpaved parking lot and repeat this test method. Once you have calculated the silt loading and percent silt content of the 3 samples collected, average your results together.
- j. Step 9: Examine Results. If the average silt loading is less than 0.33 oz/ft<sup>2</sup>, the surface is STABLE. If the average silt loading is greater than or equal to 0.33 oz/ft<sup>2</sup>, then proceed to examine the average percent silt content. If the source is an unpaved road and the average percent silt content is 6% or less, the surface is STABLE. If the source is an unpaved parking lot and the average percent silt content is 8% or less, the surface is STABLE. If your field test results are within 2% of the standard (for example, 4%–8% silt content on an unpaved road), it is recommended that you collect 3 additional samples from the source according to Step 1 and take them to an independent laboratory for silt content analysis.
- k. Independent Laboratory Analysis: You may choose to collect 3 samples from the source, according to Step 1 and send them to an independent laboratory for silt content analysis rather than conduct the sieve field procedure. If so, the test method the laboratory is required to use is:
  - U.S. Environmental Protection Agency (1995), "Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples", (AP-42 Fifth Edition, Volume I, Appendix C.2.3 "Silt Analysis"), Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina.

B. Stabilization Limitations for Open Areas and Vacant Lots: The test methods described below shall be used to determine whether an open area or a vacant lot has a stabilized surface. Should a disturbed open area or vacant lot contain more than one type of disturbance, soil, vegetation, or other characteristics, which are visibly distinguishable, test each representative surface separately for stability, in an area that represents a random portion of the overall disturbed conditions of the site, according to the appropriate test methods described below, and include or eliminate it from the total size assessment of disturbed surface area(s) depending upon test method results.

1. Visible Crust Determination [- *The "Drop Ball Test"*].

a. *[Appropriate Testing Conditions]* Where a visible crust exists, drop a steel ball with a diameter of 15.9 millimeters (0.625 inches) and a mass ranging from 16-17 grams (0.56-0.60 ounce) from a distance of **30 centimeters** (one foot) directly above (at a 90° angle perpendicular to) the soil surface. If blowsand is present, clear the blowsand from the surfaces on which Drop Ball Test is conducted. Blowsand is defined as thin deposits of loose uncombined grains covering less than 50% of a vacant lot which have not originated from the representative vacant lot surface being tested. If material covers a visible crust, which is not blowsand, apply the Threshold Friction Velocity determination of §B.2 of this rule to the loose material to determine whether the surface is stabilized.

b. *[Definition of Sufficient Crust]* A sufficient crust is defined under the following conditions: once a ball has been dropped according to the Appropriate Testing Conditions of §B.1.a, the ball does not sink into the surface, so that it is partially or fully surrounded by loose grains and, upon removing the ball, the surface upon which it fell has not been pulverized, so that loose grains are visible.

c. *[Characterization of Crust Across Entire Site]* Drop the ball three times within a survey area that measures 1 foot by 1 foot and that represents a random portion of the overall disturbed conditions at the site. The survey area shall be considered to have passed the Visible Crust Determination Test if at least two out of the three times that the ball was dropped, the results met the Definition of Sufficient Crust in §B.1.b. Select at least two other survey areas that represent a random portion of the overall disturbed conditions of the site, and repeat this procedure. If the results meet the Definition of Sufficient Crust in §B.1.b for all of the survey areas tested, then the site shall be considered to have passed the Visible Crust Determination Test and shall be considered sufficiently crusted.

d. *[Characterization of Crust Across Entire Site]* At any given site, the existence of a sufficient crust covering one portion of the site may not represent the existence or protectiveness of a crust on another portion of the site. Repeat the visible crust test as often as necessary on each random portion of the overall conditions of the site for an accurate measurement.

2. Determination of Threshold Friction Velocity (TFV): For disturbed surface areas that are not crusted or vegetated, determine threshold friction velocity (TFV) according to the following sieving field procedure (based on a 1952 laboratory procedure published by W. S. Chepil).

a. *[Equipment & Procedure]* Obtain and stack a set of sieves with the following openings: 4 millimeters (mm), 2 mm, 1 mm, 0.5 mm, and 0.25 mm or obtain and stack a set of standard/commonly available sieves. Place the sieves in order according to size openings, beginning with the largest size opening at the top. Place a collector pan underneath the bottom (0.25 mm) sieve. Collect a sample of loose surface material from an area at least 30 cm by 30 cm in size to a depth of approximately 1 cm using a brush and dustpan or other similar device. Only collect soil samples from dry surfaces (i.e. when the surface is not damp to the touch). Remove any rocks larger than 1 cm in diameter from the sample. Pour the sample into the top sieve (4 mm opening) and cover the sieve/collector pan unit with a lid. Minimize escape of particles into the air when transferring surface soil into the sieve/collector pan unit. Move the covered sieve/collector pan unit by hand using a broad, circular arm motion in the horizontal plane. Complete twenty circular arm movements, ten clockwise and ten counter-clockwise, at a speed just necessary to achieve some relative horizontal motion between the sieves and the particles. Remove the lid from the sieve/collector pan unit and disassemble each sieve separately beginning with the largest sieve. As each sieve is removed, examine it for loose particles. If loose particles have not been sifted to the finest sieve through which they can pass, reassemble and cover the sieve/collector pan unit and gently rotate it an additional ten times. After disassembling the sieve/collector pan unit, slightly tilt and gently tap each sieve and the collector pan so that material aligns along one side. In doing so, minimize escape of particles into the air. Line up the sieves and collector pan in a row and visibly inspect the relative quantities of catch in order to determine which sieve (or whether the collector pan) contains the greatest volume of material. If a visual determination of

relative volumes of catch among sieves is difficult, use a graduated cylinder to measure the volume. Estimate TFV for the sieve catch with the greatest volume using Table 1, which provides a correlation between sieve opening size and TFV.

Table 1. Determination of Threshold Friction Velocity

Tyler Sieve No.	ASTM 11 Sieve No.	Opening (mm)	TFV (cm/s)
5	5	5	135
9	10	2	100
16	18	1	76
32	35	0.5	58
60	60	0.25	43
Collector Pan	-	-	30

b. *[Characterization of TFV Across Entire Site]* Collect at least three soil samples which represent random portions of the over-all conditions of the site, repeat the above TFV test method for each sample and average the resulting TFVs together to determine the TFV uncorrected for non-erodible elements. Non-erodible elements are distinct elements, in the random portion of the overall conditions of the site, that are larger than 1 cm in diameter, remain firmly in place during a wind episode, and inhibit soil loss by consuming part of the shear stress of the wind. Non-erodible elements include stones and bulk surface material but do not include flat or standing vegetation. For surfaces with non-erodible elements, determine corrections to the TFV by identifying the fraction of the survey area, as viewed from directly overhead, that is occupied by non-erodible elements using the following procedure. For a more detailed description of this procedure, see §B.5 - the Rock Test Method. Select a survey area of 1 meter by 1 meter that represents a random portion of the overall conditions of the site. Where many non-erodible elements lie within the survey area, separate the non-erodible elements into groups according to size. For each group, calculate the overhead area for the non-erodible elements according to the following equations:

Average Length × Average Width = Average Dimensions . . . . . Eq. 1

Average Dimensions × Number of Elements = Overhead Area . . . . . Eq. 2

Overhead Area of Group 1 + Overhead Area of Group 2 (etc.) = Total Overhead Area . . . . . Eq. 3

Total Overhead Area ÷ 2 = Total Frontal Area . . . . . Eq. 4

(Total Frontal Area ÷ Survey Area) × 100 = Percent Cover of Non-Erodible Elements . . . . . Eq. 5

Note: Ensure consistent units of measurement (e.g., square meters or square inches) when calculating percent cover.

Repeat this procedure on an additional two distinct survey areas that represent a random portion of the overall conditions of the site and average the results. Use Table 2 to identify the correction factor for the percent cover of non-erodible elements. Multiply the TFV by the corresponding correction factor to calculate the TFV corrected for non-erodible elements.

Table 2. Correction Factors for Threshold Friction Velocity

Percent Cover of Non-Erodible Elements Factor	Correction Factor
Greater than or equal to 10%	5
Greater than or equal to 5% and less than 10%	3
Less than 5% and greater than or equal to 1%	2
Less than 1%	None

3. **Determination of Flat Vegetative Cover:** Flat vegetation includes attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind. Flat vegetation, which is dead but firmly attached, shall be considered equally protective as live vegetation. Stones or other aggregate larger than 1 centimeter in diameter shall be considered protective cover in the course of conducting the line transect test method. Where flat vegetation exists, conduct the following line transect test method.
  - a. **Line Transect Test Method:** Stretch a 100-foot measuring tape across a survey area that represents a random portion of the overall conditions of the site. Firmly anchor both ends of the measuring tape into the surface using a tool such as a screwdriver, with the tape stretched taut and close to the soil surface. If vegetation exists in regular rows, place the tape diagonally (at approximately a 45° angle) away from a parallel or perpendicular position to the vegetated rows. Pinpoint an area the size of a 3/32 inch diameter brazing rod or wooden dowel centered above each 1-foot interval mark along one edge of the tape. Count the number of times that flat vegetation lies directly underneath the pinpointed area at 1-foot intervals. Consistently observe the underlying surface from a 90° angle directly above each pinpoint on one side of the tape. Do not count the underlying surface as vegetated if any portion of the pinpoint extends beyond the edge of the vegetation underneath in any direction. If clumps of vegetation or vegetative debris lie underneath the pinpointed area, count the surface as vegetated, unless bare soil is visible directly below the pinpointed area. When 100 observations have been made, add together the number of times a surface was counted as vegetated. This total represents the percent of flat vegetation cover (e.g., if 35 positive counts were made, then vegetation cover is 35%). If the survey area that represents a random portion of the overall conditions of the site is too small for 100 observations, make as many observations as possible. Then multiply the count of vegetated surface areas by the appropriate conversion factor to obtain percent cover. For example, if vegetation was counted 20 times within a total of 50 observations, divide 20 by 50 and multiply by 100 to obtain a flat vegetation cover of 40%.
  - b. *[Required Number of Observations]* Conduct the line transect test method, as described above, an additional two times on areas that represent a random portion of the overall conditions of the site and average results.
4. **Determination of Standing Vegetative Cover:** Standing vegetation includes vegetation that is attached (rooted) with a predominant vertical orientation. Standing vegetation, which is dead but firmly rooted, shall be considered equally protective as live vegetation. Conduct the following standing vegetation test method to determine if 30% cover or more exists. If the resulting percent cover is less than 30% but equal to or greater than 10%, then conduct the test in §B.2 (Determination of Threshold Friction Velocity [TFV]) in order to determine if the site is stabilized, such that the standing vegetation cover is equal to or greater than 10%, where threshold friction velocity, corrected for non-erodible elements, is equal to or greater than 43 cm/second.
  - a. *[Define Survey Area]* For standing vegetation that consists of large, separate vegetative structures (e.g., shrubs and sagebrush), select a survey area that represents a random portion of the overall conditions of the site that is the shape of a square with sides equal to at least 10 times the average height of the vegetative structures. For smaller standing vegetation, select a survey area of three feet by three feet.
  - b. *[Calculate Frontal Silhouette Area]* Count the number of standing vegetative structures within the survey area. Count vegetation, which grows in clumps as a single unit. Where different types of vegetation exist and/or vegetation of different height and width exists, separate the vegetative structures with similar dimensions into groups. Count the number of vegetative structures in each group within the survey area. Select an individual structure within each group that represents the



average height and width of the vegetation in the group. If the structure is dense (e.g., when looking at it vertically from base to top there is little or zero open air space within its perimeter), calculate and record its frontal silhouette area, according to Equation 6. Also, use Equation 6 to estimate the average height and width of the vegetation if the survey area is larger than nine square feet. Otherwise, use the procedure in §B.4.c (Vegetative Density) to calculate the frontal silhouette area. Then calculate the percent cover of standing vegetation according to Equations 7, 8, and 9.

$$(\text{Average Height}) \times (\text{Average Width}) = \text{Frontal Silhouette Area} \dots \dots \dots \text{Eq. 6}$$

$$(\text{Frontal Silhouette Area of Individual Vegetative Structure}) \times (\text{Number of Vegetation Structures Per Group}) = \text{Frontal Silhouette Area of Group} \dots \dots \dots \text{Eq. 7}$$

$$\text{Frontal Silhouette Area of Group 1} + \text{Frontal Silhouette Area of Group 2 (etc.)} = \text{Total Frontal Silhouette Area} \dots \dots \dots \text{Eq. 8}$$

$$(\text{Total Frontal Silhouette Area} \div \text{Survey Area}) \times 100 = \text{Percent Cover of Standing Vegetation} \dots \dots \dots \text{Eq. 9}$$

$$[(\text{Number of Circled Gridlines within the Outlined Area Counted that are not Covered by Vegetation} \div \text{Total Number of Gridline Intersections within the Outlined Area}) \times 100] = \text{Percent Open Space} \dots \dots \dots \text{Eq. 10}$$

$$100 - \text{Percent Open Space} = \text{Percent Vegetative Density} \dots \dots \dots \text{Eq. 11}$$

$$\text{Percent Vegetative Density} \div 100 = \text{Vegetative Density} \dots \dots \dots \text{Eq. 12}$$

$$[\text{Max. Height} \times \text{Max. Width}] \times [\text{Vegetative Density}/0.4]0.5 = \text{Frontal Silhouette Area} \dots \dots \dots \text{Eq. 13}$$

Note: Ensure consistent units of measurement (e.g., square meters or square inches) when calculating percent cover.

c. **Vegetative Density Factor:** Cut a single, representative piece of vegetation (or consolidated vegetative structure) to within 1 cm of surface soil. Using a white paper grid or transparent grid over white paper, lay the vegetation flat on top of the grid (but do not apply pressure to flatten the structure). Grid boxes of 1-inch or ½-inch squares are sufficient for most vegetation when conducting this procedure. Using a marker or pencil, outline the shape of the vegetation along its outer perimeter, according to Figure B, C, or D, as appropriate. (Note: Figure C differs from Figure D primarily in that the width of vegetation in Figure C is narrow at its base and gradually broadens to its tallest height. In Figure D, the width of the vegetation generally becomes narrower from its midpoint to its tallest height.) Remove the vegetation, count and record the total number of gridline intersections within the outlined area, but do not count gridline intersections that connect with the outlined shape. There must be at least 10 gridline intersections within the outlined area and preferably more than 20, otherwise, use smaller grid boxes. Draw small circles (no greater than a 3/32 inch diameter) at each gridline intersection counted within the outlined area. Replace the vegetation on the grid within its outlined shape. From a distance of approximately 2 feet directly above the grid, observe each circled gridline intersection. Count and record the number of circled gridline intersections that are not covered by any piece of the vegetation. To calculate percent vegetative density, use Equations 10 and 11. If percent vegetative density is equal to or greater than 30, use an equation (one of the Equations 16, 17, or 18) that matches the outline used to trace the vegetation (Figure B, C, or D) to calculate its frontal silhouette area. Outline the shape of the vegetation along its outer perimeter, as either a cylinder; an inverted cone; or the upper portion of a sphere, as appropriate. For classification purposes, vegetation that generally flares with increasing height should be considered an inverted cone. Vegetation that generally narrows in width above a midpoint should be considered as the upper portion of a sphere. If percent vegetative density is less than 30, use Equations 12 and 13 to calculate the frontal silhouette area.

Figure B. Cylinder - See MaricopaAppendixC (pdf, 2132 KB), page 10, available on-line at <http://yosemite.epa.gov/R9/r9sips.nsf/AgencyProvision/0A50F4E53BD113898825735B0065A8D6?OpenDocument>.

Frontal Silhouette Area = Maximum Height × Maximum Width ... .. Eq. 16

Figure C. Inverted Cone. See MaricopaAppendixC (pdf, 2132 KB), page 11, available on-line at <http://yosemite.epa.gov/R9/r9sips.nsf/AgencyProvision/0A50F4E53BD113898825735B0065A8D6?OpenDocument>.

Inverted Cone Frontal Silhouette Area = Maximum Height × ½ Maximum Width ... .. Eq. 17

Figure D. Upper Sphere. See MaricopaAppendixC (pdf, 2132 KB), page 12, available on-line at <http://yosemite.epa.gov/R9/r9sips.nsf/AgencyProvision/0A50F4E53BD113898825735B0065A8D6?OpenDocument>.

Upper Sphere - Frontal Silhouette Area = (3.14 × Maximum Height × ½ Maximum Width) ÷ 2 ... .. Eq. 18

5. Rock Test Method: The Rock Test Method examines the wind-resistance effects of rocks and other non-erodible elements on disturbed surfaces. Non-erodible elements are objects larger than 1 centimeter (cm) in diameter that remain firmly in place even on windy days. Typically, non-erodible elements include rocks, stones, glass fragments, and hard-packed clumps of soil lying on or embedded in the surface. Vegetation does not count as a non-erodible element in this method. The purpose of this test method is to estimate the percent cover of non-erodible elements on a given surface to see whether such elements take up enough space to offer protection against windblown dust. For simplification, the following test method refers to all non-erodible elements as “rocks”.

a. *[Test Area]* Select a 1-meter × 1-meter survey area that represents the general rock distribution on the surface. (A 1-meter × 1-meter area is slightly greater than a 3-foot × 3-foot area.) Mark off the survey area by tracing a straight, visible line in the dirt along the edge of a measuring tape or by placing short ropes, yard sticks, or other straight objects in a square around the survey area.

b. *[Initial Surface Characterization]* Without moving any of the rocks or other elements, examine the survey area. Since rocks >3/8 inch (1 cm) in diameter are of interest, measure the diameter of some of the smaller rocks to get a sense for which rocks need to be considered.

c. *[Grouping Characterization of Rocks]* Mentally group the rocks >3/8 inch (1 cm) diameter lying in the survey area into small, medium, and large size categories. Or, if the rocks are all approximately the same size, simply select a rock of average size and typical shape. Without removing any of the rocks from the ground, count the number of rocks in the survey area in each group and write down the resulting number.

d. *[Determination of Average Individual Rock Area]* Without removing rocks, select one or two average-size rocks in each group and measure the length and width. Use either metric units or standard units. Using a calculator, multiply the length times the width of the rocks to get the average dimensions of the rocks in each group. Write down the results for each rock group.

e. *[Calculation of Aggregate Total Rock Area]* For each rock group, multiply the average dimensions (length times width) by the number of rocks counted in the group. Add the results from each rock group to get the total rock area within the survey area.

f. *[Calculation of Total Rock Area]* Divide the total rock area by two (to get frontal area). Divide the resulting number by the size of the survey area (making sure the units of measurement match), and multiply by 100 for percent rock cover. For example, the total rock area is 1,400 square centimeters, divide 1,400 by 2 to get 700. Divide 700 by 10,000 (the survey area is 1 meter by 1

meter, which is 100 centimeters by 100 centimeters or 10,000 square centimeters), and multiply by 100. The result is 7% rock cover. If rock measurements are made in inches, convert the survey area from meters to inches (1 inch = 2.54 centimeters).

g. *[Characterization of Rock Cover Across Entire Site]* Select and mark off two additional survey areas and repeat the procedures described above in subsections a. through f. Make sure the additional survey areas also represent the general rock distribution on the site. Average the percent cover results from all three survey areas to estimate the average percent of rock cover.

h. *[Initial Rock Cover Stabilization Determination]* If the average rock cover is greater than or equal to 10%, the surface is stable. If the average rock cover is less than 10%, follow the procedures in the following subsection i.

i. *[Combined Rock Cover/TFV Stabilization Determination]* If the average rock cover is less than 10%, the surface may or may not be stable. Follow the procedures in Subsection B.2 (Determination of Threshold Friction Velocity [TFV]) of this rule and use the results from the rock test method as a correction (i.e., multiplication) factor. If the rock cover is at least 1%, such rock cover helps to limit windblown dust. However, depending on the soil's ability to release fine dust particles into the air, the percent rock cover may or may not be sufficient enough to stabilize the surface. It is also possible that the soil itself has a high enough TFV to be stable without even accounting for rock cover.

j. *[TFV Correction Based on Partial Rock Cover]* After completing the procedures to calculate the TFV as described in the preceding subsection, use Table 2 to identify the appropriate correction factor to the TFV, depending on the percent rock cover. Multiply the correction factor by the TFV value for a final TFV estimate that is corrected for non-erodible elements.

C. TEST METHODS ADOPTED BY REFERENCE: The following test methods are adopted by reference. These adoptions by reference include no future editions or amendments. Copies of the test methods listed in this section are available for review at Pinal County Air Quality, 31 North Pinal St., Florence, AZ 85232.

1. ASTM Method C136-06 ("Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates"), 2006 edition.
2. ASTM Method D2216-05 ("Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass"), 2005 edition.
3. ASTM Method D1557-02e1 ("Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>))), 2002 edition.

[Adopted June 3, 2009]

#### 4-9-340 Visual Opacity Test Methods

##### A. General Provisions

1. Applicability: These methods apply to the determination of opacity of visible emissions under this Chapter 4.
2. Principle: the opacity of emissions from sources of visible emissions is determined visually by an observer qualified according to the procedures of §G of this rule.
3. Procedures: An observer qualified, in accordance with §G of this rule shall use the procedures set forth in this Article for visually determining the opacity of emissions.

B. Procedures for Determining Opacity from Emissions From Stationary Sources

1. Opacity from stationary point sources shall be determined in accord with EPA Method 9, as adopted by reference herein.
2. Adoption by Reference

The following test methods are adopted by reference. These adoptions by reference include no future editions or amendments. Copies of the test methods listed in this section are available for review at Pinal County Air Quality, 31 North Pinal St., Florence, AZ 85232.

- a. EPA Reference Method 9, 40 CFR Part 60, Appendix A (7/1/08).

C. Procedures for Determining Time-Averaged Opacity from Intermittent Operations

1. *[Applicability - Intermittent Plume Average Opacity Determination for Operations]*

The purpose of this method is determine the opacity of non-continuous dust plumes caused by activities including, but not limited to, bulk material loading/unloading, non-conveyORIZED screening, or trenching with backhoes.

2. Opacity Determination Process

- a. Position: Stand at least 25 feet from the dust-generating operation in order to provide a clear view of the emissions with the sun oriented in the 140° sector to the back. Choose a discrete portion of the operation for observation, such as the unloading point, not the whole operation. Following the above requirements, make opacity observations so that the line of vision is approximately perpendicular to the dust plume and wind direction. If multiple plumes are involved, do not include more than one plume in the line of sight at one time:
- b. Initial Fallout Zone: The initial fallout zone within the plume must be identified. Record the distance from the equipment or path that is your identified initial fallout zone. The initial fallout zone is that area where the heaviest particles drop out of the entrained fugitive dust plume. Opacity readings should be taken at the maximum point of the entrained fugitive dust plume that is located outside the initial fallout zone.
- c. Field Records: Note the following on an observational record sheet:
  - i. Location of dust-generating operation, type of operation, type of equipment in use and activity, and method of control used, if any;
  - ii. Observer's name, certification data and affiliation, a sketch of the observer's position relative to the dust-generating operation, and observer's estimated distance and direction to the location of the dust-generating operation;
  - iii. Time that readings begin, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds); and
  - iv. Color of the plume and type of background.
- d. Observations. Make opacity observations, to the extent possible, using a contrasting background that is perpendicular to the line of vision. Make two observations per discrete activity, beginning with the first reading at zero seconds and the second reading at five seconds. The zero-second observation should begin immediately after a plume has

been created above the surface involved. Do not look continuously at the plume but, instead, observe the plume briefly at zero seconds and then again at five seconds.

- e. **Recording Observations:** Record the opacity observations to the nearest 5% on an observational record sheet. Each momentary observation recorded represents the average opacity of emissions for a five-second period. Repeat observations until you have recorded at least a total of 12 consecutive opacity readings. The 12 consecutive readings must be taken within the same period of observation but must not exceed one hour. Observations immediately preceding and following interrupted observations can be considered consecutive (e.g., vehicle traveled in front of path, plume doubled over).
- f. **Data Reduction:** Average 12 consecutive opacity readings together. If the average opacity reading is equal to or less than the numerical standard in the underlying rule, the dust-generating operation is in compliance.

D. *Procedures for Determining Average Opacity from Vehicle Movement*

- 1. *[Applicability - Intermittent Plume Average Opacity Determination for Vehicular Movement].*  
The purpose of this test method is to estimate the percent opacity of fugitive dust plumes caused by vehicle movement on unpaved roads and unpaved parking lots. This method can only be conducted by an individual who has received certification as a qualified observer. Qualification and testing requirements can be found in Section G of this Rule.
- 2. **Opacity Determination Process**
  - a. **Step 1 [- Position]:** Stand at least 16.5 feet from the fugitive dust source in order to provide a clear view of the emissions with the sun oriented in the 140° sector to the back. Following the above requirements, make opacity observations so that the line of vision is approximately perpendicular to the dust plume and wind direction. If multiple plumes are involved, do not include more than one plume in the line of sight at one time.
  - b. **Step 2. [- Field Records]:** Record the fugitive dust source location, source type, method of control used, if any, observer's name, certification data and affiliation, and a sketch of the observer's position relative to the fugitive dust source. Also, record the time, estimated distance to the fugitive dust source location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), observer's position to the fugitive dust source, and color of the plume and type of background on the visible emission observation from both when opacity readings are initiated and completed.
  - c. **Step 3 [- Observations]:** Make opacity observations, to the extent possible, using a contrasting background that is perpendicular to the line of vision. Make opacity observations approximately 1 meter above the surface from which the plume is generated. Note that the observation is to be made at only one visual point upon generation of a plume as opposed to visually tracking the entire length of a dust plume as it is created along a surface. Make two observations per vehicle, beginning with the first reading at zero seconds and the second reading at five seconds. The zero-second observation should begin immediately after the plume has been created above the surface involved. Do not look continuously at the plume but, instead, observe the plume briefly at zero seconds and then again at five seconds.
  - d. **Step 4 [- Recording Observations - #1]:** Record the opacity observations to the nearest 5% on an observational record sheet. Each momentary observation recorded represents the average opacity of emissions for a 5-second period. While it is not required by the test method, EPA recommends that the observer estimate the size of vehicles which generate dust plumes for which readings are taken (e.g. mid-size passenger car or heavy-

duty truck) and the approximate speeds the vehicles are traveling when the readings are taken.

- e. Step 5 [- *Recording Observations - #2*]: Repeat Step 3 and Step 4 until you have recorded a total of 12 consecutive opacity readings. This will occur once six vehicles have driven on the source in your line of observation for which you are able to take proper readings. The 12 consecutive readings must be taken within the same period of observation but must not exceed 1 hour. Observations immediately preceding and following interrupted observations can be considered consecutive.
- f. Step 6 [- *Data Reduction*]: Average the 12 opacity readings together. If the average opacity reading is equal to or less than the numerical standard in the underlying rule, the source is in compliance.

E. Procedures for Determining Time-Averaged Opacity from Continuous Operations

1. [*Applicability - Continuous Plume Average Opacity Determination for Operations*]

The purpose of this method is to determine the opacity of continuous dust plumes caused by equipment and activities including but not limited to graders, trenchers, paddlewheels, blades, clearing, leveling, and raking.

2. Opacity Determination Process

- a. Position: Stand at least 25 feet from the dust-generating operation to provide a clear view of the emissions with the sun oriented in the 140° sector to your back. Following the above requirements, make opacity observations so that the line of vision is approximately perpendicular to the dust plume and wind direction.
- b. Dust Plume: Evaluate the dust plume generation and determine if the observations will be made from a single plume or from multiple related plumes.
  - i. If a single piece of equipment is observed working, then all measurements should be taken off the resultant plume as long as the equipment remains within the 140° sector to the back.
  - ii. If there are multiple related sources or multiple related points of emissions of dust from a particular activity, or multiple pieces of equipment operating in a confined area, opacity readings should be taken at the densest point within the discrete length of equipment travel path within the 140° sector to the back. Readings can be taken for more than one piece of equipment within the discrete length of travel path within the 140° sector to the back.
- c. Initial Fallout Zone: The initial fallout zone within the plume must be identified. Record the distance from the equipment or path that is your identified initial fallout zone. The initial fallout zone is that area where the heaviest particles drop out of the entrained fugitive dust plume. Opacity readings should be taken at the maximum point of the entrained fugitive dust plume that is located outside the initial fallout zone.
- d. Field Records: Note the following on an observational record sheet:
  - i. Location of the dust-generating operation, type of operation, type of equipment in use and activity, and method of control used, if any;

- ii. Observer's name, certification data and affiliation, a sketch of the observer's position relative to the dust-generating operation, and observer's estimated distance and direction to the location of the dust-generating operation; and
  - iii. Time that readings begin, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds).
- e. Observations: Make opacity observations, to the extent possible, using a contrasting background that is perpendicular to the line of vision. Make opacity observations at a point beyond the fallout zone. The observations should be made at the densest point. Observations will be made every 10 seconds until at least 12 readings have been recorded. Do not look continuously at the plume, but observe the plume momentarily at 10-second intervals. If the equipment generating the plume travels outside the field of observation or if the equipment ceases to operate, mark an "X" for the 10-second reading interval. Mark an "X" when plumes are stacked or doubled, either behind or in front, or become parallel to line of sight. Opacity readings identified as "X" shall be considered interrupted readings.
- f. Recording Observations: Record the opacity observations to the nearest 5% on an observational record sheet. Each momentary observation recorded represents the average opacity of emissions for a 10-second period.
- g. Data Reduction: Average 12 consecutive opacity readings together. If the average opacity reading is equal to or less than the numerical standard in the underlying rule, the dust-generating operation is in compliance.

F. Procedures for Determining the Frequency of Visible Emissions; Time Aggregation Method

1. *Applicability - Aggregate Quantification of Visible Emission Duration*

The purpose of this method is to determine the amount of time that visible emissions occur during the observation period (*i.e.*, the accumulated emission time).

2. Adoption by Reference

The following test methods are adopted by reference. These adoptions by reference include no future editions or amendments. Copies of the test methods listed in this section are available for review at Pinal County Air Quality, 31 North Pinal St., Florence, AZ 85232.

- a. EPA Reference Method 22 ("Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares"), 2000 edition.

G. Qualification and Testing

- 1. Certification Requirements: To receive certification as a qualified observer, a candidate must be tested and demonstrate the ability to assign opacity readings in 5% increments to 25 different black plumes and 25 different white plumes, with an error not to exceed 15% opacity on any one reading and an average error not to exceed 7.5% opacity in each category. Candidates shall be tested according to the procedures described in this subsection. Any smoke generator shall be equipped with a smoke meter, which meets the requirements of this subsection. Certification tests that do not meet the requirements of this subsection are not valid. The certification shall be valid for a period of 6 months, and after each 6-month period the qualification procedures must be repeated by an observer in order to retain certification.
- 2. Certification Procedure: The certification test consists of showing the candidate a complete run of 50 plumes, 25 black plumes and 25 white plumes, generated by a smoke generator. Plumes shall

be presented in random order within each set of 25 black and 25 white plumes. The candidate assigns an opacity value to each plume and records the observation on a suitable form. At the completion of each run of 50 readings, the score of the candidate is determined. If a candidate fails to qualify, the complete run of 50 readings must be repeated in any retest. The smoke test may be administered as part of a smoke school or training program, and may be preceded by training or familiarization runs of the smoke generator, during which candidates are shown black and white plumes of known opacity.

3. Smoke Generator Specifications: Any smoke generator used for the purpose of this subsection shall be equipped with a smoke meter installed to measure opacity across the diameter of the smoke generator stack. The smoke meter output shall display in-stack opacity, based upon a path length equal to the stack exit diameter on a full 0% to 100% chart recorder scale. The smoke meter optical design and performance shall meet the specifications shown in Table 3 of this appendix. The smoke meter shall be calibrated as prescribed in this subsection prior to conducting each smoke reading test. At the completion of each test, the zero and span drift shall be checked, and if the drift exceeds plus or minus 1% opacity, the condition shall be corrected prior to conducting any subsequent test runs. The smoke meter shall be demonstrated, at the time of installation, to meet the specifications listed in Table 3 of this appendix. This demonstration shall be repeated following any subsequent repair or replacement of the photocell or associated electronic circuitry, including the chart recorder or output meter, or every 6 months, whichever occurs first.

a. Calibration: The smoke meter is calibrated after allowing a minimum of 30 minutes warm-up by alternately producing simulated opacity of 0% and 100%. When stable response at 0% or 100% is noted, the smoke meter is adjusted to produce an output of 0% or 100%, as appropriate. This calibration shall be repeated until stable 0% and 100% readings are produced without adjustment. Simulated 0% and 100% opacity values may be produced by alternately switching the power to the light source on and off while the smoke generator is not producing smoke.

b. Smoke Meter Evaluation: The smoke meter design and performance are to be evaluated as follows:

i. Light Source: Verify, from manufacturer's data and from voltage measurements made at the lamp, as installed, that the lamp is operated within plus or minus 5% of the nominal rated voltage.

ii. Spectral Response of Photocell: Verify from manufacturer's data that the photocell has a photopic response (i.e., the spectral sensitivity of the cell shall closely approximate the standard spectral-luminosity curve for photopic vision which is referenced in (b) of Table 3 of this appendix).

iii. Angle of View: Check construction geometry to ensure that the total angle of view of the smoke plume, as seen by the photocell, does not exceed 15°. Calculate the total angle of view as follows:

$$\text{Total Angle of View} = 2 \tan^{-1} d/2L$$

where:

d = The photocell diameter + the diameter of the limiting aperture; and

L = The distance from the photocell to the limiting aperture.



The limiting aperture is the point in the path between the photocell and the smoke plume where the angle of view is most restricted. In smoke generator smoke meters, this is normally an orifice plate.

- iv. **Angle of Projection:** Check construction geometry to ensure that the total angle of projection of the lamp on the smoke plume does not exceed 15°. Calculate the total angle of projection as follows:

$$\text{Total Angle of Projection} = 2 \tan^{-1} d/2L$$

Where:

d = The sum of the length of the lamp filament + the diameter of the limiting aperture; and

L = The distance from the lamp to the limiting aperture.

- v. **Calibration Error:** Using neutral-density filters of known opacity, check the error between the actual response and the theoretical linear response of the smoke meter. This check is accomplished by first calibrating the smoke meter, according to subsection G.3.a , and then inserting a series of three neutral-density filters of nominal opacity of 20%, 50%, and 75% in the smoke meter path length. Use filters calibrated within plus or minus 2%. Care should be taken when inserting the filters to prevent stray light from affecting the meter. Make a total of five nonconsecutive readings for each filter. The maximum opacity error on any one reading shall be plus or minus 3%.
- vi. **Zero and Span Drift:** Determine the zero and span drift by calibrating and operating the smoke generator in a normal manner over a 1-hour period. The drift is measured by checking the zero and span at the end of this period.
- vii. **Response Time:** Determine the response time by producing the series of five simulated 0% and 100% opacity values and observing the time required to reach stable response. Opacity values of 0% and 100% may be simulated by alternately switching the power to the light source off and on while the smoke generator is not operating.

Table 3. Smoke Meter Design and Performance Specifications

Parameter	Specification
1. Light source	Incandescent lamp operated at nominal rated voltage
2. Spectral response of photocell	Photopic (daylight spectral response of the human eye)
Angle of view	5° maximum total angle
Angle of projection	5° maximum total angle
Calibration error	Plus or minus 3% opacity maximum
Zero and span drift	Plus or minus 1% opacity 30 minutes
3. Response time	Less than or equal to 5 seconds

[Adopted June 3, 2009]

## ARTICLE 13. SURFACE COATING OPERATIONS

### 5-13-100 – GENERAL

1. PURPOSE: To limit the emission of volatile organic compounds (VOCs) from surface coating operations in the Pinal County portion of the Phoenix metro 8-hour ozone nonattainment area (2008 ozone National Ambient Air Quality Standard (NAAQS)), defined in 40 CFR 81.303.
2. APPLICABILITY: This rule applies to surface coating operations in the Pinal County portion of the Phoenix metro 8-hour ozone nonattainment area for the 2008 ozone NAAQS, namely T1N, R8E; T1S, R8E (Sections 1 through 12) where the total actual VOC emissions from all operations, including related cleaning activities, at the facility are equal to or exceed 15 lbs/day or an equivalent 2.7 tons per year, before consideration of controls.

Additionally:

- i. Surface-coating activities regulated under this rule include, but are not limited to, the application of coating, coating preparation/mixing at the facility applying the coating, and the cleanup of coating application equipment.
  - ii. §5-13-100.3 sets forth partial exemptions for certain materials or uses employed by a surface coating operation subject to this rule.
  - iii. In addition to this rule, facilities may be subject to New Source Performance Standards (NSPS) in Chapter 6 and/or to National Emission Standards for Hazardous Air Pollutants (NESHAP) in Chapter 7 of these regulations.
3. PARTIAL EXEMPTIONS:
    - i. Qualified Materials Exemption:
      - a. Leak-Preventing Materials: Sealants, caulking, and similar materials used on the following substrates for the primary purpose of leak prevention are exempt from this rule:
        - (1) Non-metallic substrates; and
        - (2) Post manufacture, such as, but not limited to, old joints and seals on pipe and valve assemblies.
      - b. Certain Joint Fillers: Caulking and beaded sealants used to fill gaps or to fill joints between surfaces are exempt from this rule, except those used in manufacturing other metal parts and products or in the manufacturing of cans.
    - ii. Application Methods Exemptions: The following coatings are exempt from application methods in §5-13-300.2 of this rule but are subject to the remaining provisions of this rule:
      - a. Metal part texture coatings;
      - b. Metal part touch-up and repair coatings;
    - iii. Application Methods and VOC-Limit Exemptions: The following surface coating operations are exempt from §§5-13-300.1(surface coating standards), 5-13-300.2 (Application methods), and 5-13-300.5 (Emission control system requirements) of this rule but shall comply with §§5-13-300.3 (Cleanup of application equipment), 5-13-300.4 (Work practices-handling, disposal and storage of VOC-Containing material), and 5-13-500 (Monitoring & Records) of this rule.

- a. Aerosol can spray coating from a non-refillable container that is less than 22 fluid ounces (0.66 liter) capacity without exceeding 2 ton/yr VOC usage or purchase, facility wide threshold.
- b. Low usage of VOC coatings which exceed thresholds for coating categories listed in Table 1 of this Rule, which in aggregate of all formulations do not exceed 55 gal/yr (208 liters) facility-wide. The operator shall update usage records of these coatings at the end of each month of their use, pursuant to §5-13-500(1)(ii) of this rule.
- c. A Small Surface-Coating Source
- d. This rule is not applicable to coatings or solvents having a VOC content, minus exempt compounds, of less than 0.15 lb VOC/gal (18g/L).
- e. Metal Parts Coating:
  - (1) Stencil coatings.
  - (2) Safety-indicating coatings.
  - (3) Solid-film lubricants.
  - (4) Electric-insulating and thermal-conducting coatings.
  - (5) Magnetic data storage disk coatings.
  - (6) Plastic extruded onto metal parts to form a coating.
- iv. Low Usage Allowance for Restricted Spray Guns: Spray guns otherwise prohibited by §5-13-300.2 of this rule for use with coatings over 2 lbs VOC/gal minus exempt compounds, are exempt from this rule under the following limited conditions:
  - a. If VOC emissions from the finishing application are captured and directed to an ECS complying with the provisions of §5-13-300.5 of this rule; or
  - b. To coat the inside of pipes and tubes with a wand-style applicator; or
  - c. Using an airbrush or other small gun that has a reservoir capacity not exceeding 250 cc (8.8 fl. oz) and is used solely for detailing, lettering, touchup, and/or repair.

4. TOTAL CATEGORICAL EXEMPTIONS: This rule does not apply to the following operations:
- i. Solvent cleaning (Chapter 5, Article 15).

[Adopted November 30, 2016, Amended August 5, 2020]

### **5-13-200 – DEFINITIONS:**

For the purpose of this rule, the following definitions shall apply, in addition to those definitions found in §1-3-140 (Definitions) of these rules. In the event of any inconsistency between any of the Pinal County Air Quality Control District Code of Regulations, the definitions in this rule take precedence.

1. ADHESIVE: A material used for the primary purpose of bonding two or more surfaces together.
2. ADHESIVE PRIMER: A coating applied to a substrate, prior to the application of an adhesive, to provide a bonding surface.
3. AEROSOL CAN-SPRAY COATING: A coating sold in a hand-held, pressurized, non-refillable container, of less than 22 fluid ounces (0.66 liter) capacity, and that is expelled from the container in a finely divided form when a valve on the container is depressed.
4. AIR-DRIED COATING: A coating dried by the use of air or forced warm air at temperatures below 194°F (90°C).

5. ALTERNATIVE APPLICATION METHOD: Any method approved by the Administrator as HVLP-equivalent.
6. BAKED COATING: A coating that is dried or cured in an oven in which the oven temperature at or above 194°F (90°C).
7. CAMOUFLAGE: A coating used, principally by the military, to conceal equipment from detection.
8. CAULKING: A semisolid material that is used to aerodynamically smooth surfaces or fill cavities.
9. COATING APPLICATION EQUIPMENT: Any spray gun, wand, rollers, brushes or any other means used to apply or cover a surface with a coating for either beauty, protection or other purpose.
10. DAY: A period of 24 consecutive hours beginning at midnight.
11. DRUM COATING: Coating of a cylindrical metal shipping container larger than 12 gallons capacity but no larger than 110 gallons capacity.
12. ELECTRIC INSULATING VARNISH: A non-convertible-type coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance.
13. ELECTROSTATIC SYSTEM: A method of applying atomized paint by electrically charging the coating and the object being coated with opposing charges. A higher proportion of the coating reaches and coats the object than would occur in the absence of a charge.
14. EMISSION CONTROL SYSTEM (ECS): A system, approved in writing by the Control Officer, designed and operated in accordance with the equipment manufacturer's specifications, to reduce emissions of volatile organic compounds. Such system consists of an emissions collection subsystem and an emissions processing subsystem.
15. ETCHING FILLER: A coating that contains less than 23 percent solids by weight and at least ½ percent acid by weight, and is used instead of applying a pretreatment coating followed by a primer..
16. EXTREME HIGH-GLOSS COATING: A coating when tested by the ASTM D-523-89 (1999) shows reflectance of 75 or more on a 60° meter.
17. EXEMPT ORGANIC COMPOUNDS: The federally listed non-precursor organic compounds, organic compounds which have been determined to have negligible photochemical reactivity as listed in 40 CFR 51.100(s).
18. EXTREME-PERFORMANCE COATING: A coating used on a metal or plastic surface where the coated surface is, in its intended use, subject to the following:
  - (A) Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solutions; or
  - (B) Repeated exposure to temperatures in excess of 250° F; or
  - (C) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers or scouring agents.

Extreme performance coatings include, but are not limited to, coatings applied to locomotives, railroad cars, farm machinery, and heavy duty trucks.

19. FABRIC: A textile material. Non-manufactured items from nature are not fabric except for natural threads, fibers, filaments, and similar that have been manufactured into textile fabric.
20. FILLER: A relatively non-adhesive substance added to an adhesive to improve its working properties, permanence, strength, or other qualities.
21. FLEXIBLE PLASTIC PART OR PRODUCT: A plastic part or product designed to withstand significant deformation without damaging it for its intended use. Not included are flexible plastic parts that are found on a can, coil, metal furniture, or large appliance, or that are already a part of an aerospace component, highway vehicle, mobile equipment, architectural building or structure, or a previously coated marine-vessel .
22. FLOW COAT: A non-atomized technique of applying coatings to a substrate with a fluid nozzle in a fan pattern with no air supplied to the nozzle.
23. HAND APPLICATION METHODS: Application of coatings by non-mechanical, hand-held equipment including but not limited to paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags, and sponges.
24. HEAT-RESISTANT COATING: A coating that must withstand a temperature of at least 400°F during normal use.
25. HIGH PERFORMANCE ARCHITECTURAL COATING: A coating used to protect architectural subsections and that meets the requirements of the Architectural Aluminum Manufacturer Association's publication number AAMA 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) or 2605-05 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels).
26. HIGH TEMPERATURE COATING: A coating that is certified to withstand a temperature of 1000°F for 24 hours.
27. HIGH-VOLUME, LOW PRESSURE (HVLP) SPRAY-GUN: Spray equipment that is permanently labeled as such and used to apply any coating by means of a spray-gun which is designed and operated between 0.1 and 10 pounds per square inch gauge (psig) air atomizing pressure measured dynamically at the center of the air cap and at the air horns.
28. HIGHWAY VEHICLE: A vehicle that is physically capable of being driven upon a highway including, but not limited to, cars, pickups, vans, trucks, truck-tractors, motor-homes, motorcycles, and utility vehicles.
29. IN USE OR HANDLED: Actively engaging the materials with activities such as mixing, depositing, brushing, rolling, padding, wiping or removing or transferring material into or out of the container.
30. LARGE APPLIANCE: A door, case, lid, panel, or interior support part of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners, evaporative coolers, and other similar products.
31. LOW PRESSURE SPRAY GUN: An air-atomized spray gun that, by design, functions best at tip pressures below 10 psig (516 mm Hg), measured according to §5-13-500(4)(i)(d) of this rule, and for which the manufacturer makes no claims to the public that the gun can be used effectively above 12 psig (619 mm Hg).
32. METAL FURNITURE: Furniture made of metal or any metal part which will be assembled with other parts made of metal or other material(s) to form a furniture piece.

33. METALLIC COATING: A coating that contains more than 5 grams of metal particles per liter of coating as applied.
34. MILITARY SPECIFICATION COATING: A coating that has a formulation that has been approved by a United States Military Agency for use on military equipment.
35. MOBILE EQUIPMENT: Equipment that is physically capable of being driven or drawn on a highway including, but not limited to: construction vehicles (such as mobile cranes, bulldozers, concrete mixers); farming equipment (wheel tractor, plow, pesticide sprayer); hauling equipment (truck trailers, utility bodies, camper shells); and miscellaneous equipment (street cleaners, mopeds, golf carts).
36. MOLD-SEAL COATING: The initial coating applied to a new mold or a repaired mold to provide a smooth surface which, when coated with a mold release coating, prevents products from sticking to the mold.
37. MULTI-COMPONENT COATING: A coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.
38. NON-PRECURSOR ORGANIC COMPOUNDS: Non-Precursor Organic Compounds are compounds having negligible photochemical reactivity. The list of negligible photochemical reactivity compounds is provided in 40 CFR 51.100(s).
39. ONE-COMPONENT COATING: A coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner, necessary to reduce viscosity, is not considered a component.
40. OTHER METAL PARTS AND PRODUCTS: Any metal part or product, excluding the following items that are made of metal: can, coil, furniture, large appliance, aerospace component, metal foil, metal textile fabric, semiconductor metal, highway vehicle, mobile equipment, an architectural building or structure, a previously coated marine-vessel.
41. PAN BACKING COATING: A coating applied to the surface of pots, pans, or other cooking implements that are exposed directly to a flame or other heating element.
42. PLASTIC: Substrates containing one or more resins and may be solid, porous, flexible, or rigid. Plastics include fiber reinforced plastic composites. Any solid, synthetic: resin, polymer, or elastomer, except rubber. For the purposes of this rule, plastic film is considered film; fabric and paper made of polymeric plastic fibers are considered fabric and paper, respectively.
43. PREFABRICATED ARCHITECTURAL COMPONENT COATING: A coating applied to metal parts and products which are to be used as an architectural structure.
44. PRETREATMENT COATING: A coating containing no more than 12 percent solids by weight, and at least 1/2 percent acid, by weight, is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion and ease of stripping.
45. PRIMER: A coating applied directly to substrate for any one or combination of the following purposes: corrosion prevention, protection from the environment, functional fluid resistance, or adhesion of subsequent coatings.
46. REPAIR COATING: A coating used to recoat the portion of a completed finish that suffered post-production damage at the facility where the finish was applied.
47. RESTRICTED SPRAY GUN: An air-atomizing spray gun that is not a low pressure spray gun, and any other spray gun that is not on the list in §5-13-300.2 of this rule.

48. **SEALANT (BEADED):** A material with adhesive properties that is applied as a rope or bead and that is formulated for use primarily to fill, seal, waterproof, or weatherproof gaps or joints between two surfaces. Sealants include sealant primers and caulks.
49. **SILICONE-RELEASE COATING:** Any coating which contains silicone resin and is intended to prevent food from sticking to metal surfaces such as baking pans.
50. **SOLAR-ABSORBANT COATING:** A coating which has as its prime purpose the absorption of solar radiation.
51. **SMALL SURFACE COATING SOURCE (SSCS):** A facility from which the total VOC emissions for all surface coating operations that are subject to this rule without, or prior to, any emission control, is less than 2 tons/yr (1814 kg); as demonstrated by both adequate records of coating and diluent use (according to §5-13-500.1 of this rule) and a separate tally of the number of days each month such coating operations occur.
52. **STENCIL COATING:** An ink or a coating that is rolled or brushed onto a template or stamp in order to add identifying letters, symbols and/or numbers.
53. **SURFACE COATING:** A liquid, fluid, or mastic composition that is converted to a solid (or semi-solid) protective, decorative, or adherent film or deposit after application as a thin layer. Surface coating is generally distinct and different from impregnation and from applying adhesive for bonding purposes.
54. **SURFACE COATING OPERATION:** Preparation, handling, mixing, and application of surface coating, and cleanup of application equipment and enclosures at a facility where surface coating is applied.
55. **SURFACE PREPARATION:** Surface preparation is the cleaning of a substrate to remove dirt, oils, and other contaminants prior to the application of surface coatings or sealants.
56. **TEXTURE COATING:** A coating that is applied which, in its finished form, consists of discrete raised spots of the coating.
57. **TOUCH UP COATING:** A coating used to cover minor coating imperfections after the main coating operation. This includes touch-up coating that accompanies the purchase of an object already coated with that coating.
58. **TRANSFER EFFICIENCY:** The ratio of the weight of coating solids adhering to the part being coated, to the weight of coating solids used in the application process expressed as a percentage.
59. **VACUUM-METALIZING COATING:** The undercoat applied to the substrate on which the metal is deposited or the overcoat is applied directly to the metal film. Vacuum metalizing/ physical vapor deposition (PVD) is the process whereby the metal is vaporized and deposited in a substrate in a vacuum chamber.
60. **VOC ACTUAL:** VOC Actual includes the VOC Content minus the weight of water and minus the weight of exempt compounds divided by the total volume of all materials. Units of VOC actual are in pounds of VOC per gallon (or grams per liter) of material and shall be calculated using the following equation:

$$\text{VOC Actual} = \frac{W_s - W_w - W_{es}}{V_m}$$

Using consistently either English or metric measures in the calculations, where:

$W_s$  = weight of all volatile material in pounds (or grams) including VOC, water, non-precursor organic compounds and dissolved vapors

$W_w$  = weight of water in pounds (or grams)

$W_{es}$  = weight of all non-precursor organic compounds in pounds (or grams)

$V_m$  = volume of total material in gallons (or liters)

61. VOC CONTENT: The organic chemicals in a material that have a high vapor pressure at ordinary room temperature. The high vapor pressure results from a low boiling point, which causes large numbers of molecules to evaporate or sublime from the liquid or solid form of the compound and enter the surrounding air. The term VOC Content is a general term used throughout the rule and includes VOC, VOC Actual or VOC Regulatory.
62. VOC REGULATORY: VOC Content Minus Exempt Compounds. The VOC content minus the weight of water and minus the weight of Exempt Compounds divided by the volume of material minus the volume of water and minus the volume of Exempt Compounds. Units of VOC Regulatory are in pounds of VOC per gallon (or grams per liter) of material and shall be calculated using the following equation:

$$\text{VOC Regulatory} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Using consistently either English or metric measures in the calculations, where:

$W_s$  = weight of all volatile material in pounds (or grams), including VOC, water, non-precursor organic compounds and dissolved vapors

$W_w$  = weight of water in pounds (or grams)

$W_{es}$  = weight of all non-precursor organic compounds in pounds (or grams)

$V_m$  = volume of total material in gallons (or liters)

$V_w$  = volume of water in gallons (or liters)

$V_{es}$  = volume of all non-precursor organic compounds in gallons (or liters)

[Adopted November 30, 2016, Amended August 5, 2020]

## 5-13-300 – STANDARDS

1. SURFACE COATINGS: An owner or operator shall comply with one of the following for all applications of surface coatings:
  - i. Meet the limits in Table 1 of this rule. Coating limits are VOC Regulatory; or
  - ii. Operate an Emission Control System (ECS) in accordance with §5-13-300.5 of this rule when applying a coating that exceeds the VOC limits in Table 1 of this rule; All VOC coatings used that exceed the VOC limits in Table 1 of this rule shall be clearly labeled such that coating-operators are informed that an ECS must be used during application of surface coatings; or
  - iii. Qualify for an exemption under §5-13-100.3 or §5-13-100.4 of this rule.

Table 1: Coating Limits For Metal Parts and Products



Coating Category	Air Dried		Baked	
	g VOC/l	lb VOC/gal	g VOC/l	lb VOC/gal
General One Component*	340	2.8	280	2.3
General Multi Component*	340	2.8	280	2.3
Camouflage	420	3.5	420	3.5
Electric-Insulating Varnish	420	3.5	420	3.5
Etching Filler	420	3.5	420	3.5
Extreme High-Gloss	420	3.5	360	3.0
Extreme Performance	420	3.5	360	3.0
Heat-Resistant	420	3.5	360	3.0
High Performance Architectural	740	6.2	740	6.2
High Temperature	420	3.5	420	3.5
Metallic	420	3.5	420	3.5
Military Specification	340	2.8	280	2.3
Mold-Seal	420	3.5	420	3.5
Pan Backing	420	3.5	420	3.5
Prefabricated Architectural Component	420	3.5	280	2.3
Pretreatment Coating	420	3.5	420	3.5
Repair	420	3.5	360	3.0
Silicone Release	420	3.5	420	3.5
Solar-Absorbent	420	3.5	360	3.0
Touch up	420	3.5	360	3.0
Vacuum-Metalizing	420	3.5	420	3.5
Drum Coating, New, Exterior	340	2.8	340	2.8
Drum Coating, New, Interior	420	3.5	420	3.5
Drum Coating, Reconditioned, Exterior	420	3.5	420	3.5
Drum Coating, Reconditioned, Interior	500	4.2	500	4.2

\* If a coating does not meet a specific coating category definition, then it is assumed to be a general use coating and the VOC limit for “general coating” applies.

2. APPLICATION METHODS FOR SURFACE COATINGS:

- i. An owner or operator shall use one of the following methods for all applications of surface coating materials containing more than 2 pounds of VOC per gallon (240 g/L), minus exempt compounds, (VOC regulatory):
  - a. HVLP Spray-Gun (High Volume Low Pressure Spray Gun);
  - b. Electrostatic System;
  - c. A system that atomizes principally by hydraulic pressure, including “airless” and “air assisted airless”;
  - d. Hand Application Methods, including but not limited to:
    - (1) Flow Coat;
    - (2) Roll Coat;
    - (3) Dip-Coating;
  - e. An Alternative Application Method
- ii. An owner or operator is allowed to use a device or system other than that described in §5-13-300(2)(i) of this rule for applications of surface coating containing less than 2.0 lb VOC/gal (240 g/l) (VOC Regulatory).

3. CLEANUP OF APPLICATION EQUIPMENT: An owner or operator shall comply with the following when using VOC-containing material to clean application equipment:
- i. Spray-Gun Cleaning Requirements:
    - a. Clean spray-guns without spraying or atomizing a solvent cleaner with the gun.
    - b. Spray-Gun Cleaning Machine: Use a spray-gun cleaning machine that complies with the following requirements unless the owner or operator complies with the manual spray-gun cleaning requirements in §5-13-300(3)(ii) of this rule.
      - (1) Spray-Gun Cleaning Machine-General Requirements: The spray-gun cleaning machine shall meet all of the following requirements:
        - (a) Be designed to clean spray-guns.
        - (b) Have at least one pump that drives solvent cleaner through and over the spray-gun.
        - (c) Have a basin which permits containment of the solvent cleaner.
        - (d) Be kept in proper repair and free from liquid leaks.
        - (e) Shall be fitted with a cover.
        - (f) Be located on-site where the spray application occurs; and
        - (g) Be operated and maintained according to manufacturer's or distributor's instructions.
      - (2) Automatic Spray-Gun Cleaning Machine: An automatic spray-gun cleaning machine shall have a self-covering or enclosing cover feature when not loading or unloading that in the cover's closed position allows no gaps exceeding 1/8 inch (3 mm) between the cover and the cabinet. This self-enclosing feature shall be maintained and consistently cover or enclose to these gap limits.
      - (3) Non-Automatic Remote Reservoir Spray-Gun Cleaning Machine: Non-automatic Remote Reservoir Spray-Gun Cleaning Machine shall meet all of the following requirements:
        - (a) Drain solvent cleaner from the sink/work-space quickly into a remote reservoir when work-space is not in use; and
        - (b) Machine reservoir shall not have cumulative total openings, including the drain opening(s) exceeding two square inches in area so that the reservoir will not allow VOC vapors to escape to the atmosphere; and
        - (c) Allow a machine design in which the base of the sink/work-space functions as the reservoir's top surface, as long as the fit/seal between sink base and reservoir container allows the reservoir to meet the opening limits specified in §5-13-300(3)(i)(b)(3)(b) of this rule.
  - ii. Manual Spray-Gun Cleaning Requirements: An owner or operator manually cleaning spray-guns shall comply with the following requirements:
    - a. Disassembled spray-guns must be cleaned by non-mechanical, hand-held method of application of cleaners including but not limited to paint brushes, hand rollers, caulking guns, trowels, spatulas, syringe daubers, rags, and sponges;
    - b. Disassembled spray-guns must be soaked in a vat which remains covered at all times, except when the application equipment is being handled in the container, or transferred into or out of the container;
    - c. Solvent cleaners used to clean spray-guns shall be less than 10 percent VOC (excluding water and non-precursor organic compounds) and shall contain less than

8.0 percent VOC by weight (including water and non-precursor organic compounds) and calculated pursuant to VOC Regulatory as defined in this rule.

4. **WORK PRACTICES-HANDLING, DISPOSAL AND STORAGE OF VOC-CONTAINING MATERIAL:** An owner or operator of any surface coating facility shall store, handle, and dispose of VOC-containing material in a way to prevent the evaporation of VOC to the atmosphere. Work practices limiting VOC emissions include but are not limited to the following:
- i. **Use and Storage:** An owner or operator shall cover and keep covered each VOC-containing material which is not currently in use. A person shall store finishing and cleaning materials in closed or covered leak-free containers.
  - ii. **Disposal of VOC-Containing Material:** An owner or operator shall store all VOC-containing materials intended for disposal including, but not limited to, rags, waste coatings, waste brushes, waste rollers, waste applicators, waste solvents, and their residues, in closed, leak free containers. The containers shall be clearly marked "Disposal of VOC Material" and remain covered with a leak tight cover, when not in use.
  - iii. Minimize spills of VOC-containing coatings, thinners, and coating-related waste materials;
  - iv. Convey VOC-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes.
  - v. **Use of VOC Solvent for Surface Coating Cleanup:** An owner or operator shall minimize VOC emissions from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.
5. **EMISSION CONTROL SYSTEM (ECS) REQUIREMENTS:**
- i. **ECS Control Efficiencies:** To meet the requirements pursuant to §5-13-300(1)(ii) of this rule, an ECS shall be operated as follows:
    - a. **Overall ECS Efficiency:** The overall capture and control efficiency (CE) of an ECS shall be determined by the equation below. An owner or operator, who chooses to use an ECS instead of meeting the limits in Table 1 of this rule and specified application methods, shall operate an ECS at an overall CE efficiency of at least 90%.
      - i.  $CE_{\text{Capture and Control}} = [CE_{\text{Capture}} \times CE_{\text{Control}}]/100$   
Where:  
 $CE_{\text{Capture and Control}} =$  Overall Capture and Control Efficiency, in percent  
 $CE_{\text{Capture}} =$  Capture Efficiency of the collection device, in percent,  
As determined in Section 5-13-300.5.i.b  
 $CE_{\text{Control}} =$  Control Efficiency of the control device, in percent,  
As determined in Section 5-13-300.5.i.c.
    - b. The capture efficiency of a VOC emission control system's collection device(s) shall be determined according to EPA's "Guidelines for Determining Capture Efficiency", January 9, 1995 and 40 CFR 51, Appendix M, Methods 204-204F, as applicable, or any other method approved by EPA and the Control Officer.
    - c. The control efficiency of a VOC emission control system's control device(s) shall be determined using EPA Methods 2, 2A, 2C or 2D for measuring flow rates and EPA Methods 25, 25A, or 25B for measuring total gaseous organic concentrations at the inlet and outlet of the control device. EPA Method 18 shall be used to determine the emissions of exempt compounds.

- d. Alternative for Very Dilute Input: For VOC input-concentrations of less than 100 ppm (as methane) at the inlet of the ECS, the control efficiency is satisfied if the VOC output is less than 20 mg VOC/m<sup>3</sup> (as methane) adjusted to standard conditions.
- ii. Operation and Maintenance (O&M) Plan Required for ECS:
  - a. An owner or operator shall provide and maintain (an) O&M Plan(s) for any ECS, any other emission processing equipment, and any ECS monitoring devices used pursuant to this rule or to an air pollution control permit.
  - b. The owner or operator shall submit to the Control Officer for approval the O&M Plans of each ECS and each ECS monitoring device used pursuant to this rule.
  - c. The owner or operator shall comply with all identified actions and schedules provided in each O&M Plan.
- iii. Providing and Maintaining ECS Monitoring Devices: Any owner or operator incinerating, adsorbing, or otherwise processing VOC emissions pursuant to this rule shall provide, properly install and maintain in calibration, in good working order and in operation, devices described in the facility's O&M Plan that indicate temperatures, pressures, rates of flow, or other operating conditions necessary to determine if air pollution control equipment is functioning properly and is properly maintained. Records shall be kept pursuant to §5-13-500.2 which demonstrate that the ECS meets the overall control standard required by §5-13-300(5)(i) of this rule.
- iv. O&M Plan Responsibility: An owner or operator of a facility that is required to have an O&M Plan pursuant to §5-13-300(5)(ii) must fully comply with all O&M Plans that the owner or operator has submitted for approval, but which have not yet been approved, unless notified otherwise by the Control Officer in writing. If revisions to the plan have been submitted and not yet been approved by the Control Officer, then an owner or operator shall comply with the most recent O&M plan on file at Pinal County Air Quality Control District.
- v. Operation and Maintenance (O&M) Plan Contents For an ECS:
  - a. An O&M Plan for any ECS including any ECS monitoring devices shall include all of the following information:
    - (1) ECS equipment manufacturer;
    - (2) ECS equipment model;
    - (3) ECS equipment identification number or identifier that owner or operator subject to this rule assigns to such ECS equipment when manufacturer's equipment identification number is unknown,; and
    - (4) Information required by §5-13-500.2 and §5-13-500.3 of this rule.
  - b. Control Officer Modifications to Plan: After discussion with the owner or operator, the Control Officer may modify the plan in writing prior to approval of the initial O&M Plan. An owner or operator shall then comply with the plan modified.
  - c. Deficient Plan: The owner or operator subject to this rule, who receives a written notice from the Control Officer that the O&M Plan is deficient or inadequate, must make written revisions to the O&M Plan for any ECS including any ECS monitoring devices, and must submit such revised O&M Plan to the Control Officer within five working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon written request, for good cause. During the time such owner or operator is preparing revisions to the O&M Plan, such owner or operator shall still comply with all requirements of this rule.

## **5-13-400 – ADMINISTRATIVE REQUIREMENTS**

1. COMPLIANCE SCHEDULE VOC LIMITS:
  - i. Emission Control System (ECS): Any owner or operator installing an ECS shall:
    - a. Implement all recordkeeping provisions of this rule.
    - b. Announce the intention to use an ECS to the Control Officer in writing if:
      - (1) The ECS is used as an alternative to meeting the spray-gun provisions of §5-13-300.2 of this rule; or
      - (2) The ECS is used as an alternative to meeting the gun cleaning machine provisions of §5-13-300.3 of this rule.
    - c. One year after rule adoption of this rule, the ECS announced pursuant to §5-13-400(1)(i)(b) shall be in continuous use.
  - ii. VOC limits and Rule Requirements: Upon adoption of this rule, the owner or operator shall discontinue shelf purchase of materials that are non-compliant with §5-13-300(1)(i). The owner or operator has up to 6 months after rule adoption to complete use of existing non-compliant materials already purchased. A schedule for achieving compliant use of materials shall be prepared and made available to an inspector upon request. This schedule shall specify that 6 months after rule adoption complete material compliance shall be achieved.
2. COMPLIANCE SCHEDULE O&M PLAN:
  - i. O&M Plans for ECS equipment subject to this rule shall be revised by November 5, 2020.
  - ii. The Control Officer shall take final action on an O&M Plan revision/update to address the newly amended provisions of this rule within thirty calendar days of the filing of the complete O&M Plan revision/update. The Control Officer shall notify the applicant in writing of approval or denial.

[Adopted November 30, 2016, Amended August 5, 2020]

## **5-13-500 – MONITORING AND RECORDS**

1. RECORDKEEPING AND REPORTING: The owner or operator shall comply with the following recordkeeping requirements,
  - i. The type and amount used of each VOC-containing coating which is regulated by name or type in Table 1 of this rule, and update each VOC-containing material, related to surface coating, that is not addressed by this table. This includes, but is not limited to, thinners, surfacers, and diluents.
  - ii. Records shall be retained for five years and shall be made available to the Control Officer upon request.
  - iii. Current Lists:
    - a. Maintain a current list of coatings, or any other VOC-containing materials regulated by this rule. This list shall include:

VOC content for each as received (before thinning). Express VOC content in 1 of 3 forms:

      - (1) Pounds VOC per gallon<sub>5</sub>;
      - (2) Grams VOC per liter<sub>5</sub>; or
      - (3) The percent VOC by weight along with the specific gravity or density, (Two numbers are required).

- b. An owner or operator using any VOC coating subject to §5-13-300.1 of this rule shall have on site the written value of the VOC content in one of the following forms:
  - (1) A manufacturer's technical data sheet;
  - (2) A manufacturer's safety data sheet (MSDS); or
  - (3) Actual test results.
  
- c. Usage or Purchase Records:
  - (1) Monthly: Records of the amount of VOC coatings used shall be updated by the end of month for the previous month. Show the type and amount of each make-up (as described in §5-13-500(1)(iii) of this rule) and all other VOC cleaners or solvents to which this rule is applicable.
  - (2) Annually:
    - (i) Low VOC Coatings: Use of low VOC coatings shall be updated at least annually.
    - (ii) Low-VOC Cleaner: An owner and/or operator need not keep a record of a cleaning substance that is made by diluting a concentrate with water or non-precursor compound(s) to a level that qualifies as a "Low VOC Cleaner" if records of the concentrate usage are kept in accordance with this rule.
  - (3) Grouping by VOC Content: For purposes of recording usage, an operator may give VOC coatings, cleaners, and solvents of similar VOC content a single group-name, distinct from any product names in the group. The total usage of all the products in that group is then recorded under just one name. (In such a case, the operator must also keep a separate list that identifies the product names of the particular solvents included under the group name). To the group name shall be assigned the highest VOC content among the members of that group, rounded to the nearest 10th of a pound of VOC per gallon of material, or to the nearest gram VOC per liter of material.
  
- d. Facilities That Are Not Small Surface-Coating Sources: Facilities that are not small surface-coating sources shall for all coatings (except those recorded under §5-13-100(3)(iv)(c) low usage allowance), make the following listings for coatings that have VOC limits listed in Table 1 of this rule:
  - (1) VOC Before Reducing: The VOC content of each coating as received, minus exempt compounds. (This figure is sometimes called the "EPA Method 24" VOC content on manufacturer's data sheets). If the coating is a multi-part coating, list the manufacturer's final VOC content.
  - (2) List Maximum VOC Content of Coating As Applied: For each coating that you thin/reduce or add any additive to, record in a permanent log either of the following:
    - (a) The maximum number of fluid ounces thinner/reducer added to a gallon of unreduced coating (or maximum g/liter), and the maximum fluid ounces of every other additive mixed into a gallon of the coating; or
    - (b) The VOC content of the coating, after adding the maximum amount of thinner/reducer and other additives added as determined by the formula in the definition of VOC Regulatory in this rule.

- e. Aerosol Spray Cans: Maintain purchase records for aerosol spray-cans, including VOC content.
  - iv. Frequency of Updating Usage or Purchase Records: Maintain records according to the following schedule:
    - a. Small Surface-Coating Sources: Small surface-coating sources shall update each month's records of coating use by the end of the following month.
    - b. All Other Sources: For a source that does not meet the definition of small surface-coating source, update records monthly for each coating used that complies with the VOC limits in Table 1 of this rule. Complete a month's update by the end of the following month.
  - v. Grouping By VOC Content: The highest VOC content among the members of that grouping shall be assigned to that grouping, rounded to the nearest 10th of a pound. To identify what products belong within each group, after each group name and the group's VOC content of material must appear the name of each product in the group and its VOC content of material. For example: For flexible plastic parts, you use 20 gallons of primer that has 3.04 lb VOC/gal., 30 gallons of primer having 3.14 lb VOC/gal., and 40 gallons of primer having 2.89 lb VOC/gal. You may record usage as 90 gallons of flexible plastic primer containing 3.1 lb VOC/gal. If grams VOC per liter is used to record VOC content, round off to the nearest whole number of grams.
2. ECS RECORDING REQUIREMENTS:
- i. On each day an ECS is used at a facility pursuant to this rule, the owner or operator shall:
    - a. Record the amount and VOC content of coating, the amount of catalyst/hardener, and the amounts of solvent, reducer, and diluent used that were subject to ECS control pursuant to this rule; and
    - b. Make a permanent record of the operating parameters of the key systems as required by the O&M Plan; and
    - c. Make a permanent record of the maintenance actions taken within 24 hours of the action's completion for each day or period the O&M Plan requires maintenance be done.
  - ii. An explanation shall be entered for scheduled maintenance that is not performed during the period designated for it in the O&M Plan.
3. O&M PLAN RECORDS: An owner or operator of a facility shall maintain all of the following records in accordance with an approved O&M Plan for any ECS,
- i. Periods of time an approved ECS is operating to comply with this rule;
  - ii. Periods of time an approved ECS is not operating;
  - iii. Flow rates;
  - iv. Pressure drops;
  - v. Other conditions necessary to determine if the approved ECS is functioning properly;
  - vi. Results of visual inspections; and
  - vii. Correction action taken, if any.
4. COMPLIANCE DETERMINATION AND TEST METHODS:
- i. Compliance Determination: The following means shall be used to determine compliance with this rule. When more than one test method is permitted for a determination, an

exceedance of the limits established in the rule determined by any of the applicable test methods constitutes a violation of this rule.

- a. Measurement of VOC content of materials subject to §§5-13-300.1 or 5-13-300.2 of this rule shall be conducted and reported using one of the following means:
    - (1) VOC content of coatings, solvents, and other substances having less than 5% solids will be determined by the test method in §§5-13-500(4)(ii)(f) of this rule (BAAQMD Method 31 [May 18, 2005]) or 5-13-500(4)(ii)(g) (SCAQMD Method 313-91 [April 1997]) of this rule.
    - (2) The VOC content of coatings or other materials having 5% or more solids will be determined by the test method in §5-13-500(4)(ii)(c) (EPA Method 24), §§5-13-500(4)(ii)(f) (BAAQMD Method 31 [May 18, 2005]) or 5-13-500(4)(ii)(g) (SCAQMD Method 313-91 [April 1997]) of this rule.
      - (a) Plastisols, powder coatings, and radiation-cured coatings shall be cured according to the procedures actually used in the coating process being tested before final VOC-emission determinations are made.
  - b. The VOC content of gaseous emissions entering and exiting an ECS shall be determined by either EPA Method 18 referred to in §5-13-500(4)(ii)(b) of this rule, or EPA Method 25, referred to in §5-13-500(4)(ii)(d), or EPA Method 25a, referred to in §5-13-500(4)(ii)(d) or Method 25b, referred to in §5-13-500(4)(ii)(d) of this rule.
  - c. Capture efficiency of an ECS shall be determined according to EPA's "Guidelines for Determining Capture Efficiency", January 9, 1995 and 40 CFR 51, Appendix M, Methods 204-204F, as applicable (EPA Methods 2, 2a, 2c, or 2d).
  - d. Measurement of air pressure at the center of the spray gun tip and air horns of an air-atomizing spray gun shall be performed using an attachable device in proper working order supplied by the gun's manufacturer for performing such a measurement.
  - e. Temperature measurements shall be done with an instrument with an accuracy and precision of less than one-half degree Fahrenheit (0.25°C) for temperatures up to 480°F (250°C).
  - f. The transfer efficiency of the alternative coating application method shall be determined in accordance with the South Coast Air Quality Management District (SCAQMD) method "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989" and SCAQMD "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficiency Spray Gun, September 26, 2002."
- ii. Test Methods Adopted By Reference: The EPA test methods as they exist in the Code of Federal Regulations (CFR) (July 1, 2019), as listed below, are adopted by reference. The other test methods listed here are also adopted by reference, each having paired with it a specific date that identifies the particular version/revision of the method that is adopted by reference. These adoptions by reference include no future editions or amendments.
    - a. EPA Methods 2 ("Determination of Stack Gas Velocity and Volumetric Flow Rate"), 2a ("Direct Measurement of Gas Volume Through Pipes and Small Ducts"), 2c ("Determination of Stack Gas Velocity and Volumetric Flow rate in Small Stacks or



Ducts”), and 2d (“Measurement of Gas volumetric Flow Rates in Small Pipes and Ducts”). All 4 of the foregoing methods are in 40 CFR 60, Appendix A.

- b. EPA Method 18 (“Measurement of Gaseous Organic Compound Emissions by Gas Chromatography”) (40 CFR 60, Appendix A).
  - c. EPA Test Method 24 (“Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings”) (40 CFR 60, Appendix A).
  - d. EPA Method 25 (“Determination of Total Gaseous Non-methane Organic Emissions as Carbon”), 25a (“Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer”), and 25b (“Determination of Total Gaseous Organic Concentration Using a Nondispersive Infrared Analyzer”) (40 CFR 60, Appendix A).
  - e. EPA Test Methods 204 (“Criteria for and Verification of a Permanent or Temporary Total Enclosure”), 204a, 204b, 204c, 204d, 204e, and 204f (Appendix M, 40 CFR 51).
  - f. California’s Bay Area Air Quality Management District (BAAQMD) Method 31 (May 18, 2005), “Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners, and Low Solids Coatings.”
  - g. California’s South Coast Air Quality Management District (SCAQMD) Method 313-91 (April 1997).
- iii. Test Methods for ECS: For coatings/adhesives controlled pursuant to §5-13-300(5) of this rule:
- a. Measurements of VOC emissions from an ECS shall be conducted in accordance with EPA Methods 18, or by Method 25 (40 CFR 60, Appendix A).
  - b. Capture efficiency of an ECS shall be determined by mass balance in combination with ventilation/draft rate determinations done in accordance with §5-13-500(4)(iii)(c) of this rule or with US EPA Test Methods 204, 204a, 204b, 204c, 204d, 204e, and 204f (Appendix M, 40 CFR 51).
  - c. Ventilation/draft rates shall be determined by EPA Methods 2, 2a, 2c, or 2d (40 CFR 60, Appendix A).

[Adopted November 30, 2016, Amended August 5, 2020]

## CHAPTER 5

### ARTICLE 18. STORAGE OF ORGANIC LIQUIDS

#### 5-18-740. Storage of Volatile Organic Compounds; Organic Compound Emissions

- A. No person shall place, store or hold in any stationary tank, reservoir or other container, of more than 40,000 gallons capacity, any gasoline or any petroleum distillate 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 pressures sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is equipped with a floating roof or vapor recovery system or other vapor emission control device.
- B. No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more unless such tank is equipped with either submerged filling inlets or with vapor recovery or emission control systems such that loss of vapor to the atmosphere during filling operations shall be minimized. The provisions of this Section B shall not apply to the loading of gasoline into any tank having a capacity of less than 2,000 gallons which was installed prior to June 26, 1967 nor to any underground tank installed prior to June 26, 1967 where the fill line between the fill connection and tank is offset.

[Adopted effective March 31, 1975 as R7-3-3.1. Approved as an element of the applicable SIP at 43 FR 53084 (11/15/78). Renumbered February 22, 1995.]

## **CHAPTER 5**

### **ARTICLE 19. LOADING OF ORGANIC LIQUIDS**

#### **5-19-800. General**

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.

[Renumbering & codification of former PGCAQCD Reg. 7-3-3.2 (3/31/75), readopted February 22, 1995.]

## **ARTICLE 20. STORAGE AND LOADING OF GASOLINE AT GASOLINE DISPENSING FACILITIES**

### **5-20-100. GENERAL**

1. Purpose: To limit emissions of volatile organic compounds (VOC) from gasoline during storage and loading of gasoline at gasoline dispensing facilities.
2. Applicability: This Article applies to an owner or operator who operates a gasoline dispensing facility, including those located at airports in the Pinal County portion of the Phoenix-Mesa 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS) nonattainment area, namely T1N, R8E; T1S, R8E (Sections 1 through 12) as defined in 40 CFR 81.303 (2019).
3. Exemptions:
  - a. This Article does not apply to the storage and loading of the following fuels:
    - i. Diesel
    - ii. Liquefied petroleum gas (LPG)
  - b. Bulk gasoline plant or bulk gasoline terminal: This Article does not apply to a bulk gasoline plant or a bulk gasoline terminal.
  - c. Stationary gasoline dispensing tanks for farm operations: Any stationary gasoline dispensing tank used exclusively for the fueling of implements of normal farm operations must comply with Section §5-20-300.2 (General Housekeeping Requirements), but is exempt from all other requirements of this rule.
  - d. Control of VOC Vapors exemption: The Stage 1 Vapory Recovery System provisions of §5-20-300.5.b of this Article shall not apply to the following stationary gasoline dispensing tanks:
    - i. Non-resale gasoline dispensing operations: Any stationary gasoline dispensing facility receiving less than 120,000 gallons of gasoline in any 12 consecutive calendar months, dispensing no resold gasoline, and having each stationary gasoline tank equipped with a permanent submerged fill pipe is exempt from §5-20-300.5.b of this Article. However, any operation shall become subject to the provisions of §5-20-300.5.b of this Article by exceeding the 120,000 gallon threshold, and shall remain subject to such provisions even if annual throughput later fall below this threshold.
    - ii. Stationary gasoline dispensing tanks of 1,000 gallons or less: Any stationary gasoline dispensing tank having a capacity of 1,000 gallons or less which was installed prior to October 2, 1978, provided that such tank is equipped with a permanent submerged fill pipe. Where, because of government regulation including, but not limited to, Fire Department codes, such a fill pipe cannot be installed, the gasoline shall be delivered into the tank using a nozzle extension that reaches within 6 inches of the tank bottom.

[Adopted November 30, 2016, Amended August 5, 2020]

### **5-20-200. DEFINITIONS**

1. BULK GASOLINE PLANT - Any gasoline storage and distribution facility that meets all of the following:
  - a. Loads gasoline from a pipeline, railcar, or gasoline cargo tank into a stationary gasoline storage tank;

- b. Loads gasoline from the stationary gasoline storage tank into a gasoline cargo tank for transport to a gasoline dispensing facility (GDF) or a bulk gasoline plant; and
  - c. Has a gasoline throughput of less than 20,000 gallons per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State, or local law, and discoverable by the Control Officer and any other person [40 CFR §63.11100]
2. BULK GASOLINE TERMINAL - Any gasoline storage and gasoline distribution facility that meets all of the following:
- a. Loads gasoline from a pipeline, railcar, or gasoline cargo tank into a stationary gasoline storage tank;
  - b. Loads gasoline from the stationary gasoline storage tank into a gasoline cargo tank for transport to a gasoline dispensing facility (GDF) or a bulk gasoline plant; and
  - c. Has a gasoline throughput of 20,000 gallons per day or greater. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State, or local law, and discoverable by the Control Officer and any other person [40 CFR §63.11100]
3. CARB-CERTIFIED: A vapor control system, subsystem, or component that has been specifically approved by system configuration and manufacturer's name and model number in an executive order of the California Air Resources Board (CARB), pursuant to Section 41954 of the California Health and Safety Code.
4. COAXIAL VAPOR BALANCE SYSTEM: A type of vapor balance system in which the gasoline vapors are removed through the same opening through which the fuel is delivered.
5. DUAL-POINT VAPOR BALANCE SYSTEM: A type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection. [40 CFR 63.11132].
6. GASOLINE: Any petroleum distillate, petroleum distillate/alcohol blend, petroleum distillate/organic compound blend, or alcohol having a Reid vapor pressure between 4.0 and 14.7 psi (200-760 mm Hg.), as determined by §5-20-500(5)(b) of this Article, and which is used as a fuel for internal combustion engines.
7. GASOLINE CARGO TANK: A delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load. This includes any hoses the vessel carries through which deliveries must be made.
8. GASOLINE DISPENSING FACILITY (GDF): Any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on-road and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline fueled engines and equipment. [40 CFR 63.11132]
9. GASOLINE VAPORS: Vapors, originating from liquid gasoline, that are usually found in mixture with air. Included are any droplets of liquid gasoline or of gasoline vapor condensate that are entrained by the vapor.
10. LEAK-FREE: A condition in which there is no liquid gasoline escape or seepage of more than 3 drops per minute from gasoline storage, handling, and ancillary equipment, including, but not limited to, seepage and escaped from above ground fittings.
11. MARICOPA COUNTY (MC) VAPOR TIGHTNESS TEST: The complete pressure, vacuum, and vapor-valve testing of a gasoline cargo tank that is performed according to Maricopa County specifications as described in the current SIP-approved Maricopa County Air Quality Rule 352.

12. **POPPETTED DRY BREAK:** A type of vapor loss control equipment that opens only by connection to a mating device to ensure that no gasoline vapors escape from the stationary dispensing tank before the vapor return line is connected.
13. **SPILL CONTAINMENT RECEPTACLE:** An enclosed container around:
  - a. A gasoline fill pipe that is designed to collect any liquid gasoline spillage resulting from the connection, flow of gasoline during loading, or the disconnection between the gasoline delivery hose and the fill pipe.
  - b. A vapor return riser connection that is designed to collect any liquid gasoline spillage resulting from the connection, the condensation of gasoline vapor during vapor recovery, or the disconnection between the vapor recovery hose and the popped valve.
14. **STAGE 1 VAPOR RECOVERY (VR) SYSTEM:** At a gasoline dispensing facility, the use of installed vapor recovery equipment designed to reduce by at least 95% the VOC vapor that would otherwise be displaced into the atmosphere from a stationary dispensing tank when gasoline is delivered into the tank by a gasoline cargo tank. This reduction may be done either by capturing the displaced vapors within the gasoline cargo tank, and or by processing the vapors on site with an emission processing device.
15. **STATIONARY DISPENSING TANK:** Any stationary tank which dispenses gasoline directly into a motorized vehicle's fuel tank, dispenses gasoline into an aircraft's fuel tank, or dispenses gasoline into a watercraft's fuel tank that directly fuels its engine(s).
16. **SUBMERGED FILL:** Any discharge pipe or nozzle which meets the applicable specifications in 40 CFR 63.11117 (2019).
17. **VAPOR LOSS CONTROL EQUIPMENT:** Any piping, hoses, equipment, or devices which are used to collect, store and/or process VOC vapors at a service station or other gasoline dispensing operation.
18. **VAPOR TIGHT:** A condition in which an organic vapor analyzer (OVA) at the site of (potential) leakage of vapor shows less than 10,000 ppmv as methane or a combustible gas detector (CGD) shows less than one-fifth 1/5 LEL (lower explosive limit) when either the OVA or the CGD is calibrated with a gas specified by the manufacturer and is used according to the manufacturer's instructions.

[Adopted November 30, 2016, Amended August 5, 2020]

## **5-20-300. STANDARDS**

1. **MANUFACTURERS, SUPPLIERS, AND OWNERS OR OPERATORS:**
  - a. A manufacturer, supplier, owner or operator shall not supply, offer for sale, sell, install or allow the installation of an aboveground or underground stationary gasoline storage tank, any type of vapor recovery system or any of its components unless the tank, system and components meet the following:
    - i. The equipment meets the manufacturer's specifications as certified by CARB using test methods incorporated by reference in §5-20-500(6) (Test Methods Incorporated by Reference).
    - ii. The piping of a VR system is designed and constructed as certified by CARB for that specific VR system.
    - iii. All vapor return lines from dispensing tanks shall be equipped with CARB-certified, spring loaded, vapor-tight, popped dry break valves.
    - iv. After August 5, 2020, each new or rebuilt installed component shall be clearly identified with a permanent identification affixed by the certified manufacturer or rebuilder.

- b. A licensed Vapor Recovery Registered Service Representative (RSR) in the State of Arizona shall install an aboveground or underground storage tank or vapor recovery system components.
- c. Coaxial Vapor Balance System Prohibition: An owner or operator shall not
  - i. Install a coaxial fill pipe in a new installation; or
  - ii. Reinstall a coaxial fill pipe during any changes to the tank when the top of the tank is exposed and the vapor port bung is pre-configured to accept vapor recovery piping.
- d. The owner or operator of a stationary gasoline storage tank equipped with vapor recovery and the owner or operator of a gasoline cargo tank equipped with vapor recovery shall have the responsibility to ensure that the vapor recovery equipment is properly connected during the loading of gasoline.
- e. An owner or operator of a GDF shall install and maintain a permanent submerged fill pipe.
- f. An owner or operator of a stationary gasoline storage tank shall maintain the stationary gasoline storage tank in a leak-free, vapor tight condition as to not allow liquid or vapor to escape through a storage tank's outer surfaces, nor from any of the joints where the tank is connected to pipe(s), wires or other systems.

2. GENERAL HOUSEKEEPING REQUIREMENTS:

- a. An owner or operator shall not store gasoline or permit the loading of gasoline in any stationary gasoline storage tank located above or below ground unless all of the following conditions are met:
  - i. Minimize gasoline spills;
  - ii. Clean up spills as expeditiously as practicable;
  - iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
  - iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling equipment, such as oil/water separators;
  - v. Properly dispose of any VOC containing material.

3. GASOLINE STORAGE EQUIPMENT AND OPERATION REQUIREMENTS:

- a. An Underground Storage Tank (UST) with a capacity more than 250 gallons shall meet all of the following conditions:
  - i. The UST shall be equipped and maintained according to §5-20-300.1 of this rule.
  - ii. For an existing GDF, maintain a dual-point vapor recovery system OR a coaxial vapor balance system. For new installations or modifications to existing GDF, install and maintain a dual-point vapor recovery system with separate fill and vapor connection points;
  - iii. A pressure vacuum vent shall be installed and maintained per manufacturer specifications.
  - iv. The vapor recovery system shall be maintained and operated according to the manufacturer's specifications and the applicable CARB Executive Orders including the corresponding CARB approved Installation, Operation and Maintenance Manual unless exempt from the vapor recovery system requirements in §5-20-100.3 (Exemptions).
  - v. A permanent submerged fill pipe is installed and maintained to ensure the highest point of the discharge opening is no more than six inches from the bottom of the UST;
  - vi. Each fill pipe shall be equipped with gasketed vapor tight cap.
  - vii. Each popped dry break shall be equipped with vapor tight seal and gasketed vapor tight cap.

- viii. Each gasketed vapor tight cap shall be maintained in a closed position except when the fill pipe or popped dry break it serves is actively in use.
  - ix. The fill pipe assembly, including fill pipe, fittings and gaskets, shall be maintained:
    - 1. To be intact and not loose.
    - 2. To prevent liquid leakage.
    - 3. To prevent vapor leakage. Vapor leakage can be determined by using one or more of the methods found in §5-20-500.
  - x. A spill containment receptacle shall be:
    - 1. Equipped with an integral drain valve or other CARB-certified equipment, to return spilled gasoline to the underground stationary storage tank. The drain valve shall be maintained closed and free of vapor emissions at all times except when the valve is actively in use.
    - 2. Maintained to be:
      - a. Free of standing gasoline.
      - b. Free of standing liquid.
      - c. Free of debris.
      - d. Free of foreign matter.
      - e. Free of cracks and rust.
- b. An Above Ground Storage Tank (AST) with a capacity greater than 250 gallons must meet all of the following conditions:
- i. A permanent submerged fill pipe is installed and maintained to ensure the highest point of the discharge opening is no more than six inches (6") from the bottom of the AST. If the AST is side filled, the fill pipe discharge opening is no more than 18 inches above the tank bottom;
  - ii. A pressure vacuum vent is installed and maintained per manufacturer specifications;
  - iii. Each fill pipe is equipped with a gasketed vapor tight cap;
  - iv. Each popped dry break is equipped with a vapor tight seal and is covered with a gasketed vapor tight cap;
  - v. All threads, gaskets, and mating surfaces of the fill pipe assembly shall prevent liquid or vapor leakage at the joints of the assembly;
  - vi. Each gasketed vapor tight cap is maintained in a closed position except when actively in use;
  - vii. If an AST is equipped with a spill containment receptacle, it shall be maintained to be free of standing liquid, debris and other foreign matter;
  - viii. A spill containment receptacle is installed at each fill pipe;
  - ix. Each spill containment receptacle equipped with an integral drain valve or other CARB-certified equipment that returns spilled gasoline to the aboveground storage tank shall be maintained closed vapor tight except when the valve is actively in use; and
  - x. Any overfill prevention equipment shall be approved, installed and maintained vapor tight to the atmosphere. Any device mounted within the fill pipe shall be so designed and maintained that no vapor from the vapor space above the gasoline within the tank can penetrate into the fill pipe or through any of the fill pipe assembly into the atmosphere.

#### 4. LOADING OF GASOLINE:

- a. The owner or operator of the gasoline dispensing facility or the owner or operator of the gasoline cargo tank shall observe all parts of the gasoline loading process and shall discontinue the loading of gasoline if any of the following are observed:
  - i. Liquid leaks
  - ii. Visible vapor leaks



- iii. Significant odors
- b. The owner or operator of a gasoline dispensing facility shall immediately stop using a stage I vapor recovery system or component if one or more of the following system or component defects occur:
  - i. Tank vent pipes are not the proper height or are not properly capped with approved pressure and vacuum vent valves;
  - ii. Vent pipes do not meet the CARB-specified paint color code specified in the other requirements outlined in the authority to construct permit.
  - iii. The stage 1 vapor recovery system is not properly installed or maintained as evidenced by the following:
    - 1. Spill containment buckets are cracked, rusted, or not clean and empty of liquid; sidewalls are not attached or are otherwise improperly installed; and drain valves are non-functioning or do not seal;
    - 2. A fill adaptor collar or vapor poppet (drybreak) is loose, damaged or has a fill or vapor cap that is not installed or is missing, broken, not securely attached, or missing gaskets;
    - 3. Coaxial stage I is not equipped with a functioning CARB-approved poppetted fill tube or the coaxial cap is not installed or is missing, broken, not securely attached, or missing gaskets; or
    - 4. A fill tube is missing, broken, or not sealed, has holes or damaged overfill prevention; or the high point of the bottom opening is more than 6 inches above the tank bottom.
- c. The owner or operator of the gasoline cargo tank shall not load, or allow the loading of gasoline if:
  - i. A gauge pressure exceeds eighteen inches (18") of water (33.6 mm Hg) pressure in the gasoline cargo tank.
  - ii. The vacuum pressure exceeds six inches (6") of water (11.2 mm Hg) in the gasoline cargo tank.
- d. The owner or operator of the gasoline dispensing facility, or the owner or operator of the gasoline cargo tank, shall not allow the loading of gasoline from any cargo tank into any stationary gasoline storage tank unless the cargo tank clearly displays a valid Maricopa County Vapor Tightness Test decal that is permanently mounted near the front right (passenger) side of the gasoline cargo tank.

5. CONTROL OF VOC VAPORS:

- a. Gasoline vapors displaced from a stationary dispensing tank by gasoline being delivered shall be handled by a Stage 1 Vapor Recovery System, unless the tank is exempted by §5-20-100.3 of this rule.
- b. Stage 1 Vapor-Recovery System Configuration:
  - i. Replacement: No part of a vapor recovery system for which there is a CARB specification shall be replaced with anything but CARB-certified components.
  - ii. Vapor Valves:
    - 1. All vapor return lines from a stationary dispensing tank shall be equipped with CARB-certified, spring-loaded, vapor-tight, poppetted dry break valves.
    - 2. Vapor valves shall be inspected weekly to determine if closure is complete and gaskets are intact; a record shall be made pursuant to §5-20-500.4 of this rule.
  - iii. Above Ground Systems: An above ground dispensing tank shall have CARB-certified fittings wherever CARB so specifies.
  - iv. Installation of New Gasoline Tank: Each new gasoline tank installation shall use CARB-certified fittings exclusively wherever CARB so specifies, and:
    - 1. Shall have its own separate, functioning dual-point vapor return line;

2. Is allowed to have a combination vapor recovery system that in addition to having a separate dual-point vapor return line, also has vapor piping/fittings linking it to one or more (other) stationary gasoline dispensing tanks.
- v. New Coaxial Prohibited:
  1. No coaxial fill pipes shall be installed in new installations; and
  2. No coaxial fill pipes shall be reinstalled in major modifications in which the top of the tank is exposed and the vapor port bung is pre-configured to accept vapor recovery piping.
- c. Equipment Maintenance and Use Required:
  - i. All vapor loss control equipment shall be:
    1. CARB certified and installed as required.
    2. Operated as recommended by the manufacturer.
    3. Maintained leak-free, vapor-tight and in good working order.
  - ii. Coaxial Systems: Both spring-loaded and fixed coaxial fill pipes shall be
    1. Maintained according to the standards of their manufacturer(s); and
    2. Be operated so that there is no obstruction of vapor passage from the tank to the cargo tank.

[Adopted November 30, 2016, Amended August 5, 2020]

## **5-20-400. ADMINISTRATIVE REQUIREMENTS**

1. The owner or operator of a gasoline dispensing facility shall conduct inspections of the stationary gasoline storage tank.
  - a. The inspection shall include, but is not limited to all of the following:
    - i. The spill containment receptacle shall be maintained:
      1. Free of cracks, rust and defects;
      2. Free of foreign material;
      3. Empty of liquid, including gasoline; and
      4. The drain valve, if installed, shall properly seal.
    - ii. The external fittings of the fill pipe assembly shall be:
      1. Intact and not loose;
      2. Covered with a gasketed cap that fits securely onto the fill pipe.
    - iii. The poppetted dry break shall be:
      1. Equipped with a vapor tight seal;
      2. Covered with a gasketed cap that fits securely onto the poppetted dry break.
  - b. The inspections shall be conducted:
    - i. At least once per calendar week; or
    - ii. If the gasoline dispensing facilities receives gasoline loads less than once per calendar week, the inspection shall take place upon completion of the receipt of the load of gasoline.
2. Burden of Proof:
  - a. Proving Exempt Status: The burden of proof of eligibility for exemption from a provision of this rule is on the owner or operator. An owner or operator seeking such an exemption shall maintain adequate records and furnish them to the Control Officer upon request.
  - b. Providing Proof of Equipment Compliance: It is the responsibility of the owner or operator to provide proof, when requested by the Control Officer, that a vapor recovery system or its modifications meet the requirements of this Article.

3. CARB Decertification: An owner or operator shall not install or reinstall a component related to vapor recovery that has been decertified by CARB.

[Adopted November 30, 2016]

## **5-20-500. MONITORING AND RECORDS**

1. IDENTIFYING A POTENTIAL VAPOR LEAK: For purposes of identifying a potential vapor leak, the use of sight, sound or smell are acceptable. If a potential vapor leak is detected through the use of sight, sound or smell, an owner or operator or Control Officer shall conduct one of the test procedures in §5-20-500.1.a or §5-20-500.1.b.
  - a. Method 21-Determination of Volatile Organic Compound Leaks, Alternative Screening Procedure 8.3.3:
    - i. Spray a soap solution over all potential leak sources. The soap solution may be a commercially available leak detection solution or may be prepared using concentrated detergent and water. A pressure sprayer or squeeze bottle may be used to dispense the solution.
    - ii. Observe the potential leak sites to determine if any bubbles are formed.
      1. If no bubbles are observed, the source is presumed to have no detectable vapor leaks.
      2. If any bubbles are observed, the test procedures in §5-20-500.2.a shall be used to determine vapor tight status.
  - b. Optical Gas Imaging: An owner or operator may use a calibrated optical gas imaging instrument to identify a potential leak. If a vapor leak is detected, the instrument techniques listed in Section §5-20-500.2.a of this rule shall be used to determine if a vapor tight condition exists.
2. DETERMINING VAPOR TIGHT STATUS: An owner or operator or Control Officer shall follow the test procedure in §5-20-500.2.a to determine the vapor tight status on a vapor balance system or spill containment equipment at a stationary gas dispensing facility or on a gasoline cargo tank.
  - a. Combustible Gas Detector or Organic Vapor Analyzer – Test Procedure: Check the peripheries of all potential sources of leakage during storage or loading of gasoline at the gasoline dispensing facility with a combustible gas detector (CGD) or organic vapor analyzer(OVA) as follows:
    - i. Calibration: Within four hours prior to monitoring, the CGD or OVA shall be suitably calibrated in a manner and with the gas specified by the manufacturer for 20 percent lower explosive limit (20% LEL) response or calibrated with methane for a 10,000 ppm response.
    - ii. Probe Distance: The probe inlet shall be one inch (2.5 cm) or less from the potential leak source when searching for leaks. The probe inlet shall be one inch (2.5 cm) from the leak source when the highest detector reading is being determined for a discovered leak. When the probe is obstructed from moving within one inch (2.5 cm) of an actual or potential leak source, the closest practicable probe distance shall be used.
    - iii. Probe Movement: The probe shall be moved slowly, not faster than 1.6 inches per second (4 centimeters per second). If there is any meter deflection at a potential or actual leak source, the probe shall be positioned to locate the point of highest meter response.
    - iv. Probe Position: The probe inlet shall be positioned in the path of the vapor flow from a leak such that the central axis of the probe-tube inlet shall be positioned coaxial with the path of the most concentrated vapors.
    - v. Wind: Wind shall be blocked as much as possible from the space being monitored.

- vi. Data Recording: The highest detector reading and location for each incidence of detected leakage shall be recorded, along with the date and time. If no gasoline vapor is detected, that fact shall be entered into the record.
3. COMPLIANCE INSPECTIONS: Any gasoline dispensing facility required by this rule to be equipped with vapor loss control devices may be subject to monitoring for vapor tightness and liquid leak tightness during any working hours. Such a tank may be opened for gauging or inspection when loading operations are not in progress, provided that such tank is part of an open system or is served by a positive-pressure relief valve with a relief setting not exceeding + 1/2 lb psig.
4. GASOLINE DISPENSING FACILITY RECORDKEEPING: The owner or operator of each gasoline dispensing facility in the Pinal County portion of the Phoenix 8-hour ozone nonattainment area shall maintain records as follows:
  - a. The total amount of gasoline received each month shall be recorded by the end of the following month.
  - b. The owner or operator of a gasoline dispensing facility shall record inspections in a permanent record or log book:
    - i. By the end of Saturday of the following week; or
    - ii. If the gasoline dispensing facilities receives gasoline loads less than once per calendar week, the owner or operator shall record the inspection within three days after the receipt of the load of gasoline.
    - iii. These records and any reports or supporting information required by this rule or by the Control Officer shall be retained for at least 5 years.
    - iv. Records of the past 12 months shall be in a readily accessible location and must be made available to the Control Officer within 24 hours upon verbal or written request.
5. COMPLIANCE DETERMINATION: The test methods referenced in §5-20-500.6 of this rule, shall be used in the ways given in the subsections that immediately follow. When more than one test method is permitted for a determination, an exceedance of the limits established in this rule determined by any of the applicable test methods constitutes a violation of this rule. For routine information collection, the Control Officer may accept a manufacturer's data sheet (MSDS), data certified by an officer of the supplying company, or test data for the product of inquiry.
  - a. Control efficiency of vapor loss control equipment and a closed vent system and control device shall be determined according to EPA Method 2A and either EPA Method 25A or 25B, or by EPA approved CARB test methods listed in §5-20-500.6.c. EPA Method 2B shall be used for vapor incineration devices.
  - b. Vapor pressure of gasoline shall be determined using ASTM D323-06a Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method or ASTM D4953-06, Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method). ASTM D323-06 shall be used for gasoline either containing no oxygenates or MTBE (methyl tertiary butyl ether) as the sole oxygenate. Method ASTM D4953-06 shall be used for oxygenated gasoline.
  - c. Vapor Leaks:
    - i. If a determination of leak tight status is to be made on Stage 1VR system or spill containment equipment at a gasoline dispensing facility or on a cargo tank at the station, the method in §5-20-500.2 of this rule shall be used.
    - ii. If it has been established that there are no other interfering vapor escapes, it is an exceedance if a reading by the Control Officer from an established vapor escape above 1/5 LEL (or 10,000 ppmv as methane) is sustained for at least 5 seconds, and the probe is either consistently further than 1 inch from the source and/or the probe is consistently being moved faster than 1.6 inches per second.

- iii. The Control Officer may count it as a failure to perform weekly inspections pursuant to §5-20-400 of this rule if foreign material is found in a spill containment receptacle and there is no record of an inspection's being performed in the preceding 10 days.

6. TEST METHODS: The EPA test methods as they exist in the Code of Federal Regulations (CFR) as listed below, are adopted by reference. The CARB test methods as they exist in Stationary Source Test Methods, Volume 2, on April 8, 1999, as listed in §5-20-500(6)(c) of this rule, are adopted by reference. The other test methods listed here are also adopted by reference, each having paired with it a specific date that identifies the particular version/revision of the method that is adopted by reference. These adoptions by reference include no future editions or amendments.

a. EPA Test Methods:

- i. EPA Methods 2a (“Direct Measurement of Gas Volume Through Pipes and Small Ducts”), and 2b (“Determination of Exhaust-Gas Volume Flow-Rate From Gasoline Vapor Incinerators”). 40 CFR 60, Appendix A.
- ii. EPA Method 21 - Determination of Volatile Organic Compound Leaks.
- iii. EPA Method 21-Determination of Volatile Organic Compound Leaks, Alternative Screening Procedure 8.3.3
- iv. EPA Method 25 (“Determination of Total Gaseous Nonmethane Organic Emissions as Carbon”) (40 CFR part 60, Appendix A).
- v. EPA Method 25A – Gaseous Organic Concentration – Flame Ionization. (40 CFR Part 60, Appendix A).
- vi. EPA Method 25B – Gaseous Organic Concentration – Infrared Analyzer. (40 CFR Part 60, Appendix A).
- vii. EPA Method 27 (“Determination Of Vapor Tightness Of Gasoline Delivery Tank Using Pressure-Vacuum Test”) in 40 CFR 60, Appendix A.
- viii. Optical Gas Imaging: Alternative Work Practice for Monitoring Equipment Leaks, 40 CFR 60.18(g), (h), and (i).

b. ASTM Standards:

- i. ASTM D323-06 “Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method).
- ii. ASTM D4953-06 “Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method)

c. CARB Certification and Test Procedures for Gasoline Vapor Recovery Systems:

- i. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1B, Static Torque of Rotatable Phase 1 Adaptors, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
- ii. California Air Resources Board Vapor Recovery Test Procedure TP-201.1,— Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003.
- iii. CARB Test Procedure TP-201.1A - “Determination of Efficiency of Phase I Vapor Recovery Systems of Dispensing Facilities with Assist Processors”.
- iv. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
- v. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1C, Leak Rate of Drop Tube/Drain Valve Assembly, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.

- vi. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1D, Leak Rate of Drop Tube Overfill Protection Devices and Spill Container Drain Valves, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
  - vii. California Air Resources Board Vapor Recovery Test Procedure TP-201.3—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended July 26, 2012.
  - viii. Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994.
- d. Additional Test Methods:
- i. 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.
  - ii. American Petroleum Institute Standard API STD 650 Welded Tanks for Oil Storage, Twelfth Edition, Includes Errata 1 (2013), Errata 2 (2014), and Addendum 1 (2014).

[Adopted November 30, 2016, Amended August 5, 2020]

**5-22-950. Fossil Fuel Fired Steam Generator Standard Applicability**

The provisions of this article are applicable to steam power generating facilities. For purposes of this Article, a new source is one that commenced construction on or after March 31, 1975.

[Former PGCAQCD Reg. 7-3-2.2 (3/31/75) and 7-3-5.1 (3/31/75). Codified February 22, 1995.]

**5-22-960. Fossil Fuel Fired Steam Generator Sulfur Dioxide Emission Limitation**

A. Steam power generating installations which are new sources shall not emit more than 0.80 pounds of sulfur dioxide, maximum two-hour average, per million Btu heat input when oil is fired. Steam power generating installations shall not emit more than 1.0 pounds of sulfur dioxide maximum two-hour average, per million Btu heat input when oil is fired.

B. Steam power generating installations which are new sources shall not emit more than 0.80 pounds of sulfur dioxide, maximum two-hour average, per million Btu heat input when coal is fired. Steam power generating installations shall not emit more than 1.0 pounds of sulfur dioxide, maximum two-hour average, per million Btu heat input when coal is fired.

[Former PGCAQCD Reg. 7-3-2.2 (3/31/75). Codified February 22, 1995.]



- ~~2. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to 194° F (90°C)~~
- ~~3. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water, delivered to a coating applicator that applies extreme performance coatings.~~
- ~~4. 3.0 pounds per gallon (0.36 kilograms per liter) of coating, excluding water, delivered to a coating applicator for all other coatings and coating application systems.~~

- M. If more than one emission limitation in subsection (L) of this Section applies to a specific coating, then the least stringent emission limitation shall be applied.
- N. All VOC emissions from solvent washings shall be considered in the emission limitations in subsection (L) of this Section, unless the solvent is directed into containers that prevent evaporation into the atmosphere.
- O. As an alternative compliance with the emission limits of subsection (L), the owner or operator may install and operate an emission control system with a combined capture and control efficiency of 90 percent or greater as needed to achieve an equivalent level of control as determined by EPA Test Methods 204 and its sub methods.

[Adopted February 22, 1995, Amended October 13, 2010]

#### **5-24-1032. Federally Enforceable Minimum Standard of Performance - Process Particulate Emissions**

- A. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any process source whatsoever, except incineration and fuel-burning equipment, in total quantities of particulate matter discharged into the atmosphere in any one hour from any unclassified process source in excess of the amounts calculated by one of the following equations:

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

$$E = 4.10P^{0.67} \text{ where:}$$

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

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

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

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

where "E" and "P" are defined as indicated in subparagraph (1) of this paragraph.

- B. Any process source subject to allowable rate of emissions as defined in this section must capture, to the maximum practical extent, all particulate matter resulting from operation of individual equipment comprising the complete process. Failure to control these "Fugitive" emissions in a manner satisfactory to the Control Officer, or which exceed the opacity requirements of Chapter 2, Article 8, will result in a non-compliance status even though the requirements of subsection 1 of this section have been complied with. Fugitive dust resulting from vehicular movement required by normal operation of a process source must be controlled as defined by Chapter 4, Article 2.

[Former PGCAQCD Reg. 7-3-1.8 (3/31/75). Codified February 22, 1995.]

**5-24-1040. Carbon monoxide emissions - industrial processes**

No person shall cause, suffer, allow or permit discharge from any source carbon monoxide emissions without the use of complete secondary combustion of waste gases generated by any process source.

[Former PGCAQCD Reg. 7-3-4.1 (3/31/75). Codified February 22, 1995.]

**5-24-1045. Sulfite pulp mills - sulfur compound emissions**

No person shall cause, suffer, allow or permit discharge into the atmosphere of an amount in excess of nine pounds of sulfur oxides, calculated as sulfur dioxide, per air-dried ton of pulp produced from a sulfite pulp mill. The total emissions shall include sulfur oxides emitted from blow pits, washer vents, storage tanks and digester relief and recovery system.

[Former PGCAQCD Reg. 7-3-2.3 (3/31/75). Codified February 22, 1995.]

## **CHAPTER 5**

### **ARTICLE 24**

#### **5-24-1055. Pumps and Compressors - organic compound emissions**

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.

[Former PGCAQCD Reg. 7-3-3.3 (3/31/75). Codified February 22, 1995.]