Pinal County Air Quality Control District

When recorded return to:
Clerk of the Board
Pinal County
P.O. Box 827
Florence, Arizona 85232

PINAL COUNTY BOARD OF SUPERVISORS
RESOLUTION NO. 031925-AQ
PINAL COUNTY AIR QUALITY CONTROL DISTRICT

A RESOLUTION OF THE BOARD OF SUPERVISORS OF PINAL COUNTY, ADOPTING CERTAIN REVISIONS TO THE PINAL COUNTY AIR QUALITY CONTROL DISTRICT RULES AND REQUESTING THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY SUBMIT THE REVISIONS TO THE ENVIRONMENTAL PROTECTION AGENCY AS AN ELEMENT OF THE ARIZONA STATE IMPLEMENTATION PLAN.

WHEREAS, the Pinal County Board of Supervisors ("Board") is empowered under A.R.S. §49-479 to adopt rules for the purpose of controlling the release of air contaminants within the County;

WHEREAS, The Clean Air Act Amendments (CAAA) of 1990 require ozone nonattainment areas to implement Reasonably Available Control Technology (RACT) to control Volatile Organic Compounds (VOC) emissions. Pinal County has a small portion of the Phoenix ozone nonattainment area in northern portions of the County for the 2015 ozone National Ambient Air Quality Standards (NAAQS).;

WHEREAS, In compliance with the CAAA requirements, in 2020 the Pinal County Board of Supervisors (BOS) adopted revisions to two ozone RACT rules, surface coatings (Chapter 5, Article 13), gas dispensing facilities (Chapter 5, Article 20) along with a negative declaration document (listed all of the other source categories with Control Technology Guidelines (CTGs) that have no industrial sources located in the Pinal County portion of the ozone nonattainment area).;

WHEREAS, The adopted rules and negative declaration were submitted to EPA with a request that they be included in the SIP. EPA's review of the submitted rules resulted in a limited approval, limited disapproval of the submitted ozone RACT rules for surface coatings (Chapter 5, Article 13), gas dispensing facilities (Chapter 5, Article 20) and negative declaration document [84 FR 39196, August 9, 2019];

WHEREAS, On October 7, 2022 the U.S. EPA published in the Federal Register (87 FR 60897) the final air quality designation for Pinal County Air Quality Control District (PCAQCD) to align with the 2015 Ozone National Ambient Air Quality Standards (NAAQS). The designation of 'Nonattainment' applied to both the existing 2008 Phoenix-Mesa Ozone NAA boundary and a newly expanded section of Pinal County comprising of the area monitored by the Queen Valley monitor and San Tan Valley, excluding any land defined as Indian Country under federal law;

WHEREAS, Pinal County in coordination with stakeholders and EPA the proposed rule revisions (Chapter 5, Articles 13 and 20) and negative declaration document;

WHEREAS, to the extent applicable, the District has complied with the notice-publication and other public notification requirements of A.R.S. §§49-471.04 and 49-479, and 40 C.F.R. §51-102, including a combined notice of proposed rulemaking and oral proceeding published online https://www.pinal.gov/403/Rulemaking on January 22, 2025 and in local newspapers;

WHEREAS, the proposed rule changes will go into effect on date of Board adoption;

THEREFORE, FOR THE PURPOSE OF PROTECTING AND PRESERVING THE QUALITY OF AIR WITHIN THE COUNTY IN A SENSIBLE AND ORDERLY MANNER, IT IS HEREBY RESOLVED BY THE BOARD TO:

1. **Adopt the following revisions, additions and deletions to the Pinal County Air Quality Control District Code of Regulations reflected in Exhibit A.**
2. **Direct Pinal County Air Quality to submit the adopted rules (excluding §1-1-105) to the Arizona Department of Environmental Quality (ADEQ) with the request that they be submitted to the Environmental Protection Agency (EPA) for inclusion in the Arizona State Implementation Plan (SIP).**
3. **Approve the document "Reasonably Available Control Technology (RACT) Analysis, Negative Declaration and Rules Adoption" reflected in Exhibit B and request that it be included in the adopted rules submittal to the Environmental Protection Agency (EPA).**

IN WITNESS WHEREOF, the undersigned, in accord with the vote of the Pinal County Board of Supervisors as duly reflected in the minutes of the Board meeting, have executed this document on behalf of the Board of Supervisors on this _____ day of _____, 2020.

PINAL COUNTY, a political subdivision of the State of Arizona,

By: _____
Chairman of the Board of Supervisors

ATTEST: _____
Clerk of the Board of Supervisors

APPROVED AS TO FORM:
Brad Miller, County Attorney

By: _____ 33202
Deputy County Attorney IAN DARANYI

Exhibit A

1-1-105. SIP list

A. As a declaration of Board policy rather than a rule, and subject to the limitations of paragraphs B. and C. of this section, the Board of Supervisors expressly designates the following list of sections within this Code, to be presented to the Governor of Arizona for transmittal to the Administrator of the EPA with a request that they be included as elements in the Arizona SIP:

1. Chapter 1
   a. Article 1.(As amended 5/14/97 and 5/27/98), except for §§1-1-105 and 1-1-107
   b. Article 2 (As amended 5/14/97 and 7/12/00) except for §1-2-110
   c. Article 3. (As amended 5/14/97, 5/27/98 and 10/27/04, 07/23/14, except for §1-3-130 and the definition in §1-3-140.82 (10/12/95) of "maximum achievable control technology.")
2. Chapter 2
   a. Article 1. (As amended 10/12/95)
   b. Article 2. (As amended 5/14/97), excluding:
      i. §2-2-090 (as amended 5/14/97)
   c. Article 3. (As amended 10/12/95)
   d. Article 4. (As amended 10/12/95)
   e. Article 5. (As amended 10/12/95)
   f. Article 6. (As amended 10/12/95)
   g. Article 7. (As amended 10/12/95)
   h. Article 8. (As amended 5/18/05, as amended 1/7/09)
3. Chapter 3
   a. Article 1. (As amended 5/14/97, and 5/27/98, 7/12/00, and 7/1/20), excluding:
      i. §3-1-020
      ii. §3-1-045
      iii. §3-1-080
      iv. §3-1-100
      v. §3-1-150 (as amended 5/14/97)
      vi. §3-1-160 (as amended 5/14/97)
      vii. §3-1-170 (as amended 5/14/97)
      viii. §3-1-173 (as amended 5/14/97)
   b. Article 2. (As amended 10/12/95, 5/27/98 and 7/29/98)
   c. Article 3. (As amended 10/12/95, 5/27/15)
   d. Article 8. (As amended 10/12/95 and 10/27/04)
4. Chapter 4
   a. Article 1. (As amended 2/22/95, 10/28/15, 1/25/23)
   b. Article 2. (As amended 5/14/97, 7/12/00, 12/4/02 and 10/27/04)
   c. Article 3, limited to:
      i. §4-3-160 (As amended 10/28/15, 1/25/23)
      ii. §4-3-170 (As amended 10/28/15, 1/25/23)
      iii. §4-3-180 (As amended 10/28/15, 1/25/23)
   d. Article 4 (As amended 6/3/09)
   e. Article 5 (As amended 6/3/09)
   f. Reserved
   g. Article 7 (As amended 6/3/09)

h. Reserved
i. Article 9, limited to:
i. §4-9-310 (As added 1/25/23)
ii. §4-9-320 (As amended 6/3/09)
iii. §4-9-340 (As amended 6/3/09)

5. Chapter 5
a. Article 13. (as amended 8/5/20 and 3/19/2025), excluding
i. §5-13-390 (as amended 10/12/95)
b. Article 20. (as amended 8/5/20 and 3/19/2025)

B. Notwithstanding the approval as elements of the SIP of those provisions of the Code identified in paragraph A of this section, those provisions, save §3-1-084 which shall be expressly exempted from the limitation of this paragraph, shall operate as elements of the SIP only insofar as they pertain to:
1. "construction," as defined in Nov. '93 Code §1-3-140.28; or
2. "modification," as defined in Nov. '93 Code §1-3-140.85; and

C. Notwithstanding the approval as elements of the SIP of those provisions of the Code identified in paragraph A of this section, neither those provisions nor any permit conditions imposed pursuant to those provisions shall:
1. Operate as elements of the SIP insofar as they pertain to other than "conventional pollutants," as defined in §1-3-140.33;
2. Operate as elements of the SIP insofar as they pertain only to a requirement arising under, or pertain to a source subject to regulation exclusively by virtue of a requirement arising under:
a. §111 of the Clean Air Act; or
b. Title IV of the 1990 amendments to the Clean Air Act; or
c. Title VI of the 1990 amendments to the Clean Air Act; or
d. Any section of this Code that is not a part of the SIP;
3. Operate as an element of the SIP, at least insofar as they impose a "fee";
4. Operate as an element of the SIP, at least insofar as they require a "certification";
5. Operate as an element of the SIP, at least insofar as they impose obligations pertaining to "renewals";
6. Operate as an element of the SIP, at least insofar as they impose requirements regarding "excess emissions"; or
7. Operate as an element of the SIP, at least insofar as they impose requirements regarding "compliance plans."

D. As a renumbering and reconciliation of previously approved SIP provisions as elements of this Code, the Board of Supervisors additionally designates the following list of sections within this Code, to be presented to the Governor of Arizona for transmittal to the Administrator of the EPA with a request that they be included as elements in the Arizona SIP without operational limitation:
1. §§1-1-010.C (2/22/95) and 1-1-010.D (2/22/95) *Declaration of Policy*
2. Chapter 2, Article 8 (As amended 1/7/09) *Visibility Limiting Standard*
3. Chapter 3, Article 8 (2/22/95) *Open Burning*
4. [Reserved]
5. [Reserved]
6. [Reserved]
7. [Reserved]
8. [Reserved]

9. [Reserved]
10. [Reserved]
11. [Reserved]
12. §5-18-740 (2/22/95) *Storage of Organic Compounds - Organic Compound Emissions*
13. §5-19-800 (2/22/95) *Loading of Volatile Organic Compounds - Organic Compound Emissions*
16. §5-22-950 (2/22/95) *Fossil Fuel Fired Steam Generator Standard Applicability*
17. §5-22-960 (2/22/95) *Fossil Fuel Fired Steam Generator Sulfur Dioxide Emission Limitation*
18. §5-24-1030.F (2/22/95) *Generally Applicable Federally Enforceable Minimum Standard of Performance - Organic Compound Emissions*
19. §5-24-1030.I (2/22/95) *Generally Applicable Federally Enforceable Minimum Standard of Performance - Carbon Monoxide*
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*

ARTICLE 13. SURFACE COATING OPERATIONS

5-13-100 – ~~GENERAL~~General

~~1.~~A. ~~PURPOSE~~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~~2015 ozone National Ambient Air Quality Standard (NAAQS)), defined in 40 CFR 81.303.

~~2.~~B. ~~APPLICABILITY~~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~~2015 ozone NAAQS, namely ~~T1N, R8E; T1S, R8E (Sections 1 through 12)~~T1N, R8E; T1N, R9E; T1N, R10E; T1S, R8E; T1S, R9E; T1S, R10E; T2S, R8E (sections 1 through 10, 15 through 22, and 27 through 34); T2S, R9E (sections 1 through 6); T2S, R10E (sections 1 through 6); T3S, R7E (sections 1 through 6, 11 through 14, 23 through 26, and 35 through 36); T3S, R8E (sections 3 through 10, 15 through 22, and 27 through 34) 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.~~1. 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.~~2. ~~§5-13-100.3~~§5-13-100.C. sets forth partial exemptions for certain materials or uses employed by a surface coating operation subject to this rule.

~~iii.~~3. 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~~C. ~~PARTIAL EXEMPTIONS:~~Partial Exemptions:

~~i~~1. 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)~~i. Non-metallic substrates; and

~~(2)~~ii. 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.~~2. Application Methods Exemptions: The following coatings are exempt from application methods in ~~§5-13-300.2~~§5-13-300.B. 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.~~3. Application Methods and VOC-Limit Exemptions: The following surface coating operations are exempt from ~~§§5-13-300.1~~§§5-13-300.A (surface coating standards), ~~5-13-300.2~~5-13-300.B. (Application methods), and ~~5-13-300.5~~5-13-300.E. (Emission control system requirements) of this rule but shall comply with ~~§§5-13-300.3~~§§5-13-300.C. (Cleanup of application equipment), ~~5-13-300.4~~5-13-300.D. (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)~~§5-13-500.A.2. 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)~~ i. Stencil coatings.

~~(2)~~ ii. Safety-indicating coatings.

~~(3)~~ iii. Solid-film lubricants.

~~(4)~~ iv. Electric-insulating and thermal-conducting coatings.

~~(5)~~ v. Magnetic data storage disk coatings.

~~(6)~~ vi. Plastic extruded onto metal parts to form a coating.

~~Iv~~4. Low Usage Allowance for Restricted Spray Guns: Spray guns otherwise prohibited by ~~§5-13-300.2~~§5-13-300.B. 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~~§5-13-300.E. 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.

4D. ~~TOTAL CATEGORICAL EXEMPTIONS:~~Total Categorical Exemptions: This rule does not apply to the following operations:

~~I~~1. Solvent cleaning (Chapter 5, Article 15).

5-13-200 – ~~DEFINITIONS:~~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 $^{1}/_{2}$ 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, handheld 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)~~§5-13-500.D.1.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~~§5-13-300.B. 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~~§5-13-500.A. 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 sublimate 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)

5-13-300 – ~~STANDARDS~~Standards

~~1.~~A. ~~SURFACE COATINGS:~~Surface Coatings: An owner or operator shall comply with one of the following for all applications of surface coatings:

~~i.~~1. Meet the limits in Table 1 of this rule. Coating limits are VOC Regulatory; or

~~ii.~~2. Operate an Emission Control System (ECS) in accordance with ~~§5-13-300.5~~§5-13-300.E. 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 ~~than~~that an ECS must be used during application of surface coatings; or

~~iii.~~3. Qualify for an exemption under ~~§5-13-100.3~~§5-13-100.C or ~~§5-13-100.4~~§5-13-100.E 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

Coating Category	Air Dried		Baked	
	g VOC/l	lb VOC/gal	g VOC/l	lb VOC/gal
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	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.~~B. ~~APPLICATION METHODS FOR SURFACE COATINGS:~~Application Methods for Surface Coatings:

~~i.~~1. 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)~~i. Flow Coat;

~~(2)~~ii. Roll Coat;

~~(3)~~iii. Dip-Coating;

e. An Alternative Application Method

~~ii.~~2. An owner or operator is allowed to use a device or system other than that described in ~~§5-13-300(2)(i)~~§5-13-300.B.1. of this rule for applications of surface coating containing less than 2.0 lb VOC/gal (240 g/l) (VOC Regulatory).

~~3.~~C. ~~CLEANUP OF APPLICATION EQUIPMENT~~Cleanup of Application Equipment: An owner or operator shall comply with the following when using VOC-containing material to clean application equipment:

~~i.~~1. 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)~~§5-13-300.C.2. of this rule.

~~(1)~~i. Spray-Gun Cleaning Machine-General Requirements: The spray-gun cleaning machine shall meet all of the following requirements:

~~(a)~~(1) Be designed to clean spray-guns.

~~(b)~~(2) Have at least one pump that drives solvent cleaner through and over the spray-gun.

~~(c)~~(3) Have a basin which permits containment of the solvent cleaner.

~~(d)~~(4) Be kept in proper repair and free from liquid leaks.

~~(e)~~(5) Shall be fitted with a cover.

~~(f)~~(6) Be located on-site where the spray application occurs; and

~~(g)~~(7) Be operated and maintained according to manufacturer's or distributor's instructions.

~~(2)~~ii. 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)~~iii. Non-Automatic Remote Reservoir Spray-Gun Cleaning Machine: Non-automatic Remote Reservoir Spray-Gun Cleaning Machine shall meet all of the following requirements:

~~(a)~~(1). Drain solvent cleaner from the sink/work-space quickly into a remote reservoir when work-space is not in use; and

~~(b)~~(2). 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)~~(3). 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).~~§5-13-300.C.1.b.iii.(2) of this rule.

~~ii.~~2. 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.

4D. ~~WORK PRACTICES-HANDLING, DISPOSAL AND STORAGE OF VOC- CONTAINING MATERIAL:~~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.~~1. 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.~~2. 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.~~3. Minimize spills of VOC-containing coatings, thinners, and coating-related waste materials;

~~iv.~~4.Convey VOC-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes.

~~v.~~5. 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~~E. ~~EMISSION CONTROL SYSTEM (ECS) REQUIREMENTS:~~Emission Control System (ECS) Requirements:

~~i~~1. ECS Control Efficiencies: To meet the requirements pursuant to ~~§5-13-300(1)(ii)~~§5-13-300.A.2. 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. $CE_{Capture\ and\ Control} = [CE_{Capture} \times CE_{Control}]/100$

Where:

$CE_{Capture\ and\ Control}$ = Overall Capture and Control Efficiency, in percent

$CE_{Capture}$ = Capture Efficiency of the collection device, in percent,

As determined in Section ~~5-13-300.5.i.b~~§5-13-300.E.1.b.

$CE_{Control}$ = Control Efficiency of the control device, in percent,

As determined in Section ~~5-13-300.5.i.c~~§5-13-300.E.1.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^3 (as methane) adjusted to standard conditions.

~~ii.~~2. 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.~~3. 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~~§5-13-500.B. which demonstrate that the ECS meets the overall control standard required by ~~§5-13-300(5)(i)~~§5-13-300.E.1. of this rule.

~~iv.~~4.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)~~§5-13-300.E.2. 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.~~5. 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)~~i. ECS equipment manufacturer;

~~(2)~~ii. ECS equipment model;

~~(3)~~iii. 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)~~iv. Information required by ~~§5-13-500.2~~§5-13-500.B. and ~~§5-13-500.3~~§5-13-500.C. 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~~Administrative Requirements

~~1.~~A. ~~COMPLIANCE SCHEDULE VOC LIMITS:~~Compliance Schedule VOC Limits:

~~i.~~1. 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)~~i. The ECS is used as an alternative to meeting the spray-gun provisions of ~~§5-13-300.2~~§5-13-300.B. of this rule; or

~~(2)~~ii. The ECS is used as an alternative to meeting the gun cleaning machine provisions of ~~§5-13-300.3~~§5-13-300.C. of this rule.

c. One year after rule adoption of this rule, the ECS announced pursuant to ~~§5-13-400(1)(i)(b)~~ §5-13-400.A.1.b. shall be in continuous use.

~~ii.~~2. 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).~~§5-13-300.A.1. 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.~~B. ~~COMPLIANCE SCHEDULE O&M PLAN:~~Compliance Schedule O&M Plan:

~~i.~~1. O&M Plans for ECS equipment subject to this rule shall be revised by November 5, 2020.

~~ii.~~2. 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.

5-13-500 – ~~MONITORING AND RECORDS~~Monitoring and Records

~~1.~~A. ~~RECORDKEEPING AND REPORTING:~~Recordkeeping and Reporting: The owner or operator shall comply with the following recordkeeping requirements,

~~i.~~1. 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.~~2. Records shall be retained for five years and shall be made available to the Control Officer upon request.

~~iii.~~3.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)~~i. Pounds VOC per gallon, ;

~~(2)~~ii. Grams VOC per liter, ; or

~~(3)~~iii. 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~~§5-13-300.A. of this rule shall have on site the written value of the VOC content in one of the following forms:

~~(1)~~i. A manufacturer's technical data sheet;

~~(2)~~ii. A manufacturer's safety data sheet (MSDS); or

~~(3)~~iii. Actual test results.

c. Usage or Purchase Records:

~~(1)~~i. 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)~~§5-13-500.A.3. of this rule) and all other VOC cleaners or solvents to which this rule is applicable.

~~(2)~~ii. Annually:

~~(i)~~(1) Low VOC Coatings: Use of low VOC coatings shall be updated at least annually.

~~(ii)~~(2) 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)~~iii. 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)(e)~~§5-13-100C.4.e. low usage allowance), make the following listings for coatings that have VOC limits listed in Table 1 of this rule:

~~(1)~~i. 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)~~ii. 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)~~(1) 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)~~(2) 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.~~4. 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.~~5. 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.~~B. ECS ~~RECORDING REQUIREMENTS:~~Recording Requirements:

~~i.~~1. 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.~~2. An explanation shall be entered for scheduled maintenance that is not performed during the period designated for it in the O&M Plan.

~~3~~C. O&M ~~PLAN RECORDS:~~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.~~1. Periods of time an approved ECS is operating to comply with this rule;

~~ii.~~2. Periods of time an approved ECS is not operating;

~~iii.~~3. Flow rates;

~~iv.~~4. Pressure drops;

~~v.~~5. Other conditions necessary to determine if the approved ECS is functioning properly;

~~vi.~~6. Results of visual inspections; and

~~vii.~~7. Correction action taken, if any.

~~4~~D. ~~COMPLIANCE DETERMINATION AND TEST METHODS:~~Compliance Determination and Test Methods:

~~i.~~1. 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~~§§5-13-300.A. or ~~5-13-300.2~~5-13-300.B. of this rule shall be conducted and reported using one of the following means:

~~(1)~~i. 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)~~§§5-13-500.D.2.f. of this rule (BAAQMD Method 31 [May 18, 2005]) or ~~5-13-500(4)(ii)(g)~~5-13-500.D.2.g. (SCAQMD Method 313-91 [April 1997]) of this rule.

~~(2)~~ii. 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)(e)~~§5-13-500.D.2.e. (EPA Method 24), ~~§§5-13-500(4)(ii)(f)~~§§5-13-500.D.2.f. (BAAQMD Method 31 [May 18. 2005]) or ~~5-13-500(4)(ii)(g)~~5-13-500.D.2.g. (SCAQMD Method 313-91 [April 1997]) of this rule.

~~(a).~~(1). 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)~~§5-13-500.D.2.b. of this rule, or EPA Method 25, referred to in ~~§5-13-500(4)(ii)(d)~~§5-13-500.D.2.d, or EPA Method 25a, referred to in ~~§5-13-500(4)(ii)(d)~~§5-13-500.D.2.d or Method 25b, referred to in ~~§5-13-500(4)(ii)(d)~~§5-13-500.D.2.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~~2. 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~~3. Test Methods for ECS: For coatings/adhesives controlled pursuant to ~~§5-13-300(5)~~§5-13-300.E. 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)~~§5-13-500.D.3.e 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).

ARTICLE 20. STORAGE AND LOADING OF GASOLINE AT GASOLINE DISPENSING FACILITIES

5-20-100. ~~GENERAL~~General

~~1.~~A. Purpose: To limit emissions of volatile organic compounds (VOC) from gasoline during storage and loading of gasoline at gasoline dispensing facilities.

~~2.~~B. 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~~2015 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)~~T1N, R8E; T1N, R9E; T1N, R10E; T1S, R8E; T1S, R9E; T1S, R10E; T2S, R8E (sections 1 through 10, 15 through 22, and 27 through 34); T2S, R9E (sections 1 through 6); T2S, R10E (sections 1 through 6); T3S, R7E (sections 1 through 6, 11 through 14, 23 through 26, and 35 through 36); T3S, R8E (sections 3 through 10, 15 through 22, and 27 through 34) as defined in 40 CFR 81.303 (11/07/2022).

~~3.~~C. Exemptions:

~~a.~~1. This Article does not apply to the storage and loading of the following fuels:

~~i.~~a. Diesel

~~ii.~~b. Liquefied petroleum gas (LPG)

~~b.~~2. Bulk gasoline plant or bulk gasoline terminal: This Article does not apply to a bulk gasoline plant or a bulk gasoline terminal.

~~c.~~3. Stationary gasoline dispensing tanks for farm operations greater than 550 gallons: Any stationary gasoline dispensing tank greater than 550 gallons, used exclusively for the fueling of implements of normal farm operations must comply with Section ~~5-20-300.2~~§5-20-300.B. (General Housekeeping Requirements), but is exempt from all other requirements of this rule. Stationary gasoline dispensing tanks for farm operations less than 550 gallons are exempt from all requirements of this rule.

~~d.~~4. Control of VOC Vapors exemption: The Stage 1 Vapory Recovery System provisions of ~~5-20-300.5.b~~§5-20-300.E.2. of this Article shall not apply to the following stationary gasoline dispensing tanks:

~~i.~~a. 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~~5§-20-300.E.2. of this Article. However, any operation shall become subject to the provisions of ~~5-20-300.5.b~~§5-20-300.E.2. 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.~~b. 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.

5-20-200. ~~DEFINITIONS~~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)~~ §5-20-500.E.2. 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 poppetted 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.

5-20-300. ~~STANDARDS~~Standards

~~1.~~A. ~~MANUFACTURERS, SUPPLIERS, AND OWNERS OR OPERATORS:~~Manufacturers, Suppliers, and Owners or Operators:

~~a.~~1. 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.~~a. The equipment meets the manufacturer's specifications as certified by CARB using test methods incorporated by reference in ~~5-20-500.(6)~~ §5-20-500.F. (Test Methods Incorporated by Reference).

~~ii.~~b. The piping of a VR system is designed and constructed as certified by CARB for that specific VR system.

~~iii.~~c. All vapor return lines from dispensing tanks shall be equipped with CARB-certified, spring loaded, vapor-tight, poppetted dry break valves.

~~iv.~~d. 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.~~2. 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.~~3. Coaxial Vapor Balance System Prohibition: An owner or operator shall not

~~i.~~a. Install a coaxial fill pipe in a new installation; or

~~ii.~~b. 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.~~4. 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.~~5. An owner or operator of a GDF shall install and maintain a permanent submerged fill pipe.

~~f.~~6. 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.~~B. ~~GENERAL HOUSEKEEPING REQUIREMENTS:~~General Housekeeping Requirements:

~~a.~~1. 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.~~a. Minimize gasoline spills;

~~ii.~~b. Clean up spills as expeditiously as practicable;

~~iii.~~c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

~~iv.~~d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling equipment, such as oil/water separators;

~~v.~~e. Properly dispose of any VOC containing material.

~~3.~~C. ~~GASOLINE STORAGE EQUIPMENT AND OPERATION REQUIREMENTS:~~Gasoline Storage Equipment and Operation Requirements:

~~a.~~1. An Underground Storage Tank (UST) with a capacity more than 250 gallons shall meet all of the following conditions:

~~i.~~a. The UST shall be equipped and maintained according to ~~5-20-300.1~~§5-20-300.A. of this rule.

~~ii.~~b. 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.~~c. A pressure vacuum vent shall be installed and maintained per manufacturer specifications.

~~iv~~d. 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~~§5-20-100.C. (Exemptions).

~~v.~~e. 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.~~f. Each fill pipe shall be equipped with gasketted vapor tight cap.

~~vii.~~g. Each poppetted dry break shall be equipped with vapor tight seal and gasketted vapor tight cap.

~~viii.~~h. Each gasketed vapor tight cap shall be maintained in a closed position except when the fill pipe or poppetted dry break it serves is actively in use.

~~ix.~~i. The fill pipe assembly, including fill pipe, fittings and gaskets, shall be maintained:

~~1.~~i. To be intact and not loose.

~~2.~~ii. To prevent liquid leakage.

~~3.~~iii. To prevent vapor leakage. Vapor leakage can be determined by using one or more of the methods found in §5-20-500.

~~x.~~j. A spill containment receptacle shall be:

~~1.~~i. 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.~~ii. Maintained to be:

~~a.~~(1) Free of standing gasoline.

~~b.~~(2) Free of standing liquid.

~~c.~~(3) Free of debris.

~~d.~~(4) Free of foreign matter.

~~e.~~(5) Free of cracks and rust.

~~b.~~2. An Above Ground Storage Tank (AST) with a capacity greater than 250 gallons must meet all of the following conditions:

~~i.~~a. 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.~~b. A pressure vacuum vent is installed and maintained per manufacturer specifications;

~~iii.~~c. Each fill pipe is equipped with a gasketed vapor tight cap;

~~iv.~~d. Each poppetted dry break is equipped with a vapor tight seal and is covered with a gasketed vapor tight cap;

~~v.~~e. All threads, gaskets, and mating surfaces of the fill pipe assembly shall prevent liquid or vapor leakage at the joints of the assembly;

~~vi.~~f. Each gasketed vapor tight cap is maintained in a closed position except when actively in use;

~~vii.~~g. 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.~~h. A spill containment receptacle is installed at each fill pipe;

~~ix.~~i. 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.~~j. 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.~~D. ~~LOADING OF GASOLINE:~~Loading of Gasoline:

~~a~~1. 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.~~a. Liquid leaks

~~ii.~~b. Visible vapor leaks

~~iii.~~c. Significant odors

~~b.~~2. 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.~~a. Tank vent pipes are not the proper height or are not properly capped with approved pressure and vacuum vent valves;

~~ii.~~b. Vent pipes do not meet the CARB-specified paint color code specified in the other requirements outlined in the authority to construct permit.

~~iii.~~c. The stage 1 vapor recovery system is not properly installed or maintained as evidenced by the following:

~~1.~~i. 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.~~ii. 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.~~iii. Coaxial stage I is not equipped with a functioning CARB-approved poppeted fill tube or the coaxial cap is not installed or is missing, broken, not securely attached, or missing gaskets; or

~~4.~~iv. 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.~~3. The owner or operator of the gasoline cargo tank shall not load, or allow the loading of gasoline if:

~~i.~~a. A gauge pressure exceeds eighteen inches (18”) of water (33.6 mm Hg) pressure in the gasoline cargo tank.

~~ii.~~b. The vacuum pressure exceeds six inches (6”) of water (11.2 mm Hg) in the gasoline cargo tank.

~~d.~~4. 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.~~E. ~~CONTROL OF VOC VAPORS:~~Control of VOC Vapors:

~~a.~~1. 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~~§5-20-100.C. of this rule.

~~b.~~2. Stage 1 Vapor-Recovery System Configuration:

~~i.~~a. 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.~~b. Vapor Valves:

~~1.~~i. All vapor return lines from a stationary dispensing tank shall be equipped with CARB-certified, spring-loaded, vapor-tight, poppetted dry break valves.

~~2.~~ii. 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~~§5-20-500.D. of this rule.

~~iii.~~c. Above Ground Systems: An above ground dispensing tank shall have CARB-certified fittings wherever CARB so specifies.

~~iv.~~d. Installation of New Gasoline Tank: Each new gasoline tank installation shall use CARB-certified fittings exclusively wherever CARB so specifies, and:

~~1.~~i. Shall have its own separate, functioning dual-point vapor return line;

~~2.~~ii. 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.~~e. New Coaxial Prohibited:

~~1.~~i. No coaxial fill pipes shall be installed in new installations; and

~~2.~~ii. 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.~~3. Equipment Maintenance and Use Required:

~~i.~~a. All vapor loss control equipment shall be:

~~1.~~i. CARB certified and installed as required.

~~2.~~ii. Operated as recommended by the manufacturer.

~~3.~~iii. Maintained leak-free, vapor-tight and in good working order.

~~ii.~~b. Coaxial Systems: Both spring-loaded and fixed coaxial fill pipes shall be

~~1.~~i. Maintained according to the standards of their manufacturer(s); and

~~2.~~ii. Be operated so that there is no obstruction of vapor passage from the tank to the cargo tank.

5-20-400. ~~ADMINISTRATIVE REQUIREMENTS~~Administrative Requirements

~~1.~~A. The owner or operator of a gasoline dispensing facility shall conduct inspections of the stationary gasoline storage tank.

~~a.~~1. The inspection shall include, but is not limited to all of the following:

~~i.~~a. The spill containment receptacle shall be maintained:

~~1.~~i. Free of cracks, rust and defects;

~~2.~~ii. Free of foreign material;

~~3.~~iii. Empty of liquid, including gasoline; and

~~4.~~iv. The drain valve, if installed, shall properly seal.

~~ii.~~b. The external fittings of the fill pipe assembly shall be:

~~1.~~i. Intact and not loose;

~~2.~~ii. Covered with a gasketed cap that fits securely onto the fill pipe.

~~iii.~~c. The poppetted dry break shall be:

~~1.~~i. Equipped with a vapor tight seal;

~~2.~~ii. Covered with a gasketed cap that fits securely onto the poppetted dry break.

~~b.~~2. The inspections shall be conducted:

~~i.~~a. At least once per calendar week; or

~~ii.~~b. 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.~~B. Burden of Proof:

~~a.~~1. 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.~~2. 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.~~C. CARB Decertification: An owner or operator shall not install or reinstall a component related to vapor recovery that has been decertified by CARB.

5-20-500. ~~MONITORING AND RECORDS~~Monitoring and Records

~~1.~~A. ~~IDENTIFYING A POTENTIAL VAPOR LEAK:~~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~~§5-20-500.A.1. or ~~5-20-500.1.a~~§5-20-500.A.2.

~~a.~~1. Method 21-Determination of Volatile Organic Compound Leaks, Alternative Screening Procedure 8.3.3:

~~i.~~a. 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.~~b. Observe the potential leak sites to determine if any bubbles are formed.

~~1.~~i. If no bubbles are observed, the source is presumed to have no detectable vapor leaks.

~~2.~~ii. If any bubbles are observed, the test procedures in ~~5-20-500.2.a~~§5-20-500.B.1. shall be used to determine vapor tight status.

~~b.~~2. 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~~§5-20-500.B.1. of this rule shall be used to determine if a vapor tight condition exists.

~~2.~~B. ~~DETERMINING VAPOR TIGHT STATUS~~Determining Vapor Tight Status: An owner or operator or Control Officer shall follow the test procedure in ~~5-20-500.2.a~~§5-20-500.B.1. 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.~~1. 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.~~a. 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.~~b. Probe Distance: The probe inlet shall be ~~one inch (2.5cm) or less~~at the surface during measurement 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.~~c. 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.~~d. 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.~~e. Wind: Wind shall be blocked as much as possible from the space being monitored.

~~vi.~~f. 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.~~C. ~~COMPLIANCE INSPECTIONS:~~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.

4D. ~~GASOLINE DISPENSING FACILITY RECORDKEEPING:~~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.~~1. The total amount of gasoline received each month shall be recorded by the end of the following month.

~~b.~~2. The owner or operator of a gasoline dispensing facility shall record inspections in a permanent record or log book:

~~i.~~a. By the end of Saturday of the following week; or

~~ii.~~b. 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.~~c. 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.~~d. 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.~~E. ~~COMPLIANCE DETERMINATION~~Compliance Determination: The test methods referenced in ~~5-20-500.6~~§5-20-500.F. 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.~~1. 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~~§5-20-500.F.3. EPA Method 2B shall be used for vapor incineration devices.

~~b.~~2. Vapor pressure of gasoline shall be determined using ASTM D323-06~~a~~ 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.~~3. Vapor Leaks:

~~i~~a. 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~~§5-20-500.B. of this rule shall be used.

~~ii.~~b. 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.~~c. 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.~~F. ~~TEST METHODS:~~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.e~~§5-20-500.F.3. 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.~~1. EPA Test Methods:

~~i.~~a. 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.~~b. EPA Method 21 - Determination of Volatile Organic Compound Leaks.

~~iii.~~c. EPA Method 21-Determination of Volatile Organic Compound Leaks, Alternative Screening Procedure 8.3.3

~~iv.~~d. EPA Method 25 ("Determination of Total Gaseous Nonmethane Organic Emissions as Carbon") (40 CFR part 60, Appendix A).

~~v.~~e. EPA Method 25A – Gaseous Organic Concentration – Flame Ionization. (40 CFR Part 60, Appendix A).

~~vi.~~f. EPA Method 25B – Gaseous Organic Concentration – Infrared Analyzer. (40 CFR Part 60, Appendix A).

~~vii.~~g. EPA Method 27 ("Determination Of Vapor Tightness Of Gasoline Delivery Tank Using Pressure-Vacuum Test") in 40 CFR 60, Appendix A.

~~viii.~~h. Optical Gas Imaging: Alternative Work Practice for Monitoring Equipment Leaks, 40 CFR 60.18(g),(h), and (i).

~~b.~~2. ASTM Standards:

~~i.~~a. ASTM D323-06 "Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method).

~~ii.~~b. ASTM D4953-06 "Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method)

~~c.~~3. CARB Certification and Test Procedures for Gasoline Vapor Recovery Systems:

~~i.~~a. 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 958122815.

~~ii.~~b. 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.~~c. CARB Test Procedure TP-201.1A - "Determination of Efficiency of Phase I Vapor Recovery Systems of Dispensing Facilities with Assist Processors".

~~iv.~~d. 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.~~e. 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.~~f. 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.~~g. 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.~~h. 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.~~4. Additional Test Methods:

~~i.~~a. 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.~~b. 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).

Exhibit B

Reasonably Available Control Technology (RACT) Analysis Negative Declaration and Rules Update and Adoption

Prepared by

Pinal County Air Quality Control District (PCAQCD)

Pursuant to Sections 182(b)(2) and 182(f) of the Clean Air Act
For The
Pinal County Portion of the Phoenix-Mesa Ozone Nonattainment Area

Addressing The

2015 8-hour Ozone National Ambient Air Quality Standard

Proposed Analysis Released January 23, 2025
for
Public Review and Comments

Public Hearing February 24, 2025

Staff Report

Table of Contents

Executive Summary

When the U.S. EPA promulgates a new or revised National Ambient Air Quality Standard (NAAQS), the U.S. EPA is required to designate all areas in the country as nonattainment, attainment, or unclassifiable, pursuant to section 107(d)(1) of the Clean Air Act (CAA). Section 107(d)(1)(A)(i) of the CAA defines a nonattainment area (NAA) as, ‘‘any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant.’’ If an area meets either prong of this definition, states should recommend and the EPA is obligated to designate the area as ‘‘Nonattainment”. A portion of Pinal County within the Phoenix-Mesa, Arizona area is designated as nonattainment for the 2015 Ozone NAAQS.

The CAA mandates that certain sources in ozone NAA implement control methods known as reasonably available control technology (RACT). The U.S. Environmental Protection Agency (EPA) defines RACT as the lowest emission limitation a source can achieve using control technology that is reasonably available considering both technological and economic feasibility.

The RACT requirement is meant to ensure that moderate and above ozone NAA’s have in place RACT for all source categories covered by a Control Techniques Guidelines (CTG[1]) document, as well as for major sources of volatile organic compounds (VOCs) or oxides of nitrogen (NO_X) not subject to a CTG. A local air district adopts control methods if it has sources in its NAA that are subject to a CTG or if it has major sources of VOCs or NO_X in its NAA not subject to a CTG. Alternatively, the district may declare that there are no sources in its area subject to a RACT requirement, and then the requirement to adopt a rule for those sources is no longer applicable. This is known as a "Negative Declaration."

On October 7, 2022 the U.S. EPA published in the Federal Register (87 FR 60897[2]) the final air quality designation for Pinal County Air Quality Control District (PCAQCD) to align with the 2015 Ozone National Ambient Air Quality Standards (NAAQS) (40 CFR 81.303, Table 1). The designation of ‘Nonattainment’ applied to both the existing boundary known as 'Area A,' (primarily aligning with the 2008 Phoenix-Mesa Ozone NAA) and a newly expanded section of Pinal County comprising of the area monitored by the Queen Valley monitor and San Tan Valley, excluding any land defined as Indian Country under federal law (18 U.S.C. 1151).

This document details the implementation of RACT measures throughout the entire 2015 Ozone NAA under PCAQCD jurisdiction. The identified RACT measures build upon the existing measures implemented in Area A to control volatile organic compounds (VOC) emissions from surface coating operations and gasoline dispensing facilities. In addition, the PCAQCD is including the negative declaration document (listing all of the other source categories with Control Technology Guidelines (CTGs) that have no industrial sources located in the Pinal County portion of the 2015 ozone NAA). The negative declarations are adopted for the entire 2015 NAA under PCAQCD’s jurisdiction and negative declarations for major sources of NO_X and non-CTG major sources of VOC are included in the analysis.

Once the negative declarations and the revised, amended and renumbered rules in Appendices B and D are adopted by the Pinal County Board of Supervisors (BOS), they shall be submitted to

[1] CTGs are documents issued by EPA to provide States with the EPA's recommendation on how to control the emissions of VOC from a specific type of source category in an ozone nonattainment area instead of national regulations. CTG’s are considered as effective as a regulation in reducing VOC emissions.

[2] Docket ID EPA-OAR-2021-0742

the Arizona Department of Environmental Quality (ADEQ) for transmission to the U.S. EPA as a revision to the State Implementation Plan.

Background

National Ambient Air Quality Standards for Ozone

Sections 182(b)(2) and 182(f) of the federal CAA requires the Pinal County Air Quality Control District (PCAQCD) to submit a revision to the State Implementation Plan (SIP) to implement Reasonably Available Control Technology (RACT) for each category of volatile organic compound (VOC) sources covered by a Control Techniques Guidelines (CTG) document and for any major[3] stationary source of VOC or NO_X located in the area. Alternatively, areas may adopt a negative declaration documenting that the air district has no stationary sources or emitting facilities subject to the CTGs in the area.

States and Air Districts must submit negative declarations for those source categories for which they are not adopting CTG-based regulations (because they have no sources above the CTG recommended threshold) regardless of whether such negative declarations were made for an earlier SIP. This is necessary since there may now be sources in the NAA that previously did not exist, or in areas where the boundaries of the NAA have expanded, there may be sources in the new portion of the NAA which should not be overlooked. The negative declaration must go through the same public review requirements as any other SIP submittal.

Nonattainment Area within the District

On October 7, 2022 the U.S. EPA published in the Federal Register (87 FR 60897) the final air quality designation for Pinal County Air Quality Control District (PCAQCD) to align with the 2015 Ozone National Ambient Air Quality Standards (NAAQS). The designation of 'Nonattainment' applied to both the existing boundary known as 'Area A,' (primarily aligning with the 2008 Phoenix-Mesa Ozone NAA) and a newly expanded section of Pinal County comprising of the area monitored by the Queen Valley monitor and San Tan Valley, excluding any land defined as Indian Country under federal law (18 U.S.C. 1151).

Table 1: Pinal County Area of the Phoenix-Mesa 8-hr Ozone NAA

8-Hour Ozone NAAQS	Phoenix-Mesa, AZ Designated 'Moderate' NAA Partial County Description
2008 Designated Area "Area A"	T1N, R8E; T1S, R8E (Sections 1 through 12)
2015 Designated Area "Expanded"	T1N, R8E; T1N, R9E; T1N, R10E; T1S, R8E; T1S, R9E; T1S, R10E; T2S, R8E (Sections 1 through 10, 15 through 22, and 27 through 34); T2S, R9E (Sections 1 through 6); T2S, R10E (Sections 1 through 6); T3S, R7E (Sections 1 through 6, 11 through 14, 23 through 26, and 35 through 36); T3S, R8E (Sections 3 through 10, 15 through 22, and 27 through 34)

[3] The definition of a major source is dependent on the severity of the air quality problem in a region. For Pinal County Air Pollution Control District, which contains part of a Moderate ozone nonattainment area, the major source threshold is the potential to emit 100 tons per year of VOC or NO_X.

Reasonably Available Control Technology Requirement

The CAA requires certain sources in ozone NAAs to implement RACT control methods. The US EPA defines RACT as the lowest emission limitation that a particular source is capable of meeting by the application of control technology (i.e., devices, systems, process modification, or other apparatus or techniques that reduce air pollution) that is reasonably available considering technological and economic feasibility. The RACT requirement is targeted to ensure that all moderate and above ozone NAAs have in place all RACT for all source categories covered by EPA's recommended Control Techniques Guidelines (CTG) document and for any major stationary source of VOC or NO_X located in the area.

Sections 182(b)(2) and 182(f) of the CAA requires a revision to the SIP to implement RACT for each category of VOC or NO_X sources in the ozone NAA. A District adopts the RACT control methods if it has a source in its area subject to a CTG or is a major source of VOC or NO_X. Alternatively, the District may declare that there are no sources in its area subject to a RACT requirement because it has no sources above the CTG recommended threshold, and then the requirement to adopt a RACT rule for those sources is no longer applicable. This is known as a "Negative Declaration."

EPA initially approved most of PCAQCD's negative declarations for the 2008 ozone NAAQS in 84 FR 39196 on August 9, 2019. In this action, the US EPA partially approved and partially disapproved the 2008 RACT SIP.

On September 22, 2021[4], the US EPA approved additional negative declarations for the 2008 8-hour ozone NAAQS in the portion of the Phoenix-Mesa ozone NAA under the jurisdiction of the PCAQCD and the following two PCAQCD rules: Chapter 5, Article 13, Surface Coating Operations, and Chapter 5, Article 20, Storage and Loading of Gasoline at Gasoline Dispensing Facilities. The RACT rule for Surface Coating Operations consists of PCAQCD Code of Regulations sections 5-13-100, 5-13-200, 5-13-300, 5-13-400, and 5-13-500. The RACT rule for Storage and Loading of Gasoline at Gasoline Dispensing Facilities consists of PCAQCD Code of Regulations sections 5-20-100, 5-20-200, 5-20-300, 5-20-400, and 5-20-500.

On October 7, 2022 the U.S. EPA published in the Federal Register (87 FR 60897) the final air quality designation for Pinal County Air Quality Control District (PCAQCD) to align with the 2015 Ozone National Ambient Air Quality Standards (NAAQS). The designation of 'Nonattainment' applied to both the existing Apache Junction boundary known as 'Area A,' (primarily aligning with the 2008 Phoenix-Mesa Ozone NAA) and a newly expanded section of Pinal County comprising of the area monitored by the Queen Valley monitor and San Tan Valley, excluding any land defined as Indian Country under federal law (18 U.S.C. 1151).

Each time US EPA promulgates a revision to the ozone NAAQS, a District with a NAA classified as Moderate or above must re-affirm its Negative Declarations for those source categories for which it is not adopting CTG-based regulations regardless of whether such negative declarations were made for an earlier standard. This is necessary since there may now be sources in the NAA that previously did not exist, or in areas where the boundaries of the NAA have expanded, there may be sources in the new portion of the NAA which should not be overlooked.

The negative declaration re-affirmation must go through the same public review requirements as any other SIP submittal. The RACT Analysis and/or Negative Declaration

[4] 86 FR 46986

must be submitted to the US EPA within two years from the effective date of the designations (November 7, 2024).

In this submittal, PCAQCD is finalizing rule updates that provides details for the implementation of RACT measures for surface coating operations and storage and loading of gasoline at gasoline dispensing facilities into the 2015 8-hour Ozone NAA under the jurisdiction of Pinal County.

The RACT rules amendments include:

- Corrected formatting of numbering and lettering schemes to come in-line with PCAQCD Code of Regulations;
- Adoption of EPA recommendations identified during the February 2021 Surface Coating Operations rulemaking technical support document (TSD) and the January 2021 Storage and Loading of Gasoline at Gasoline Dispensing Facilities rulemaking TSD.[5] (Article 13 and 20 of the PCAQCD Code of Regulations respectively).

Negative Declaration

Affected Sources

To determine that there are no operating facilities in the Pinal County portion of the 2015 Phoenix-Mesa Ozone NAA that fall under a source category with RACT guidance besides surface coating operations and gasoline dispensing facilities, the following checks were conducted:

- District internal database of permitted stationary sources.
- Internet website searches for key words.
- County planning records.

District Internal Database of Permitted Stationary Sources:

The District permitting threshold is 1 ton per year (5.5lbs/day) of any pollutant, therefore virtually all industrial activities are permitted in Pinal County. The district staff have reviewed the permitted facilities located in the NAA portion of Pinal County and have summarized that source categories which have applicable CTGs in Table 2. Table 2 also includes the annual permit limits of VOC of the largest facility within the source types. A complete list of all the permitted facilities in the Pinal County jurisdiction of the NAA is included in Appendix A.

Table 2: Summary of CTG Applicable Source Categories in Pinal County Jurisdiction of the Phoenix-Mesa Ozone NAA

Source Category	Number of Sources	Max PTE VOC of the Largest Facility Within Source Category (tons/yr)
Gasoline Dispensing Facilities	34	37.0
Surface Coating Operations	12	90.0

[5] EPA Docket ID: EPA-R09-OAR-2021-0134

Determination of VOC emissions at a given gasoline dispensing facility is dependent on the annual throughput or volume of dispensed gasoline. Each of the permitted gasoline service stations (34 in total) have a potential to emit 37 tons of VOC per year. In 2023, the total VOC emissions from all permitted gasoline dispensing facilities amounted to 219.28 tons.

Of those sources listed in the NAA, the total reported VOC emissions from the surface coating facilities in the year 2023 amounted to 2.40 tons.

District records of permitted NO_X sources within the 2015 Ozone NAA are also presented in Appendix A. There are no major sources of NO_X in the NAA. In 2023, the two largest NO_X sources were both sand and gravel operations, with emission related equipment at each source generating 31.48 and 22.41 tons of NO_X. All emission units at these sand and gravel operations are subject to new source performance standards and each permitted facility has a potential to emit less than 48.9 tons/yr. The total 2023 reported NO_X emissions from all permitted facilities amounted to 90.05 tons.

Internet Search:

The District staff conducted internet website searches for businesses located in the Pinal County portion of the Ozone NAA. Since the County already has a low permitting threshold (1 ton per year), all industrial sources have already been identified and determined not to surpass the CTG applicability (excluding the aforementioned surface coating facility and gas stations).

County Planning Records:

Through the County's "One Stop Shop" the District is routed each new permit application that undergoes review through the planning department of Pinal County for the unincorporated areas within the NAA. Through this process, the District is alerted to any potential new sources. The District has not received any permit applications from potential new sources in unincorporated areas of the NAA.

Additionally for projects within the NAA, developers are informed of the requirement for a dust permit for any projects 0.1 acres or larger. It is then through the dust permit, applicability that the County determines if an industrial permit is necessary for new sources within the NAA. The District has not received any permit applications from potential new sources in the Pinal County portion if the NAA.

As a result of these searches, the District has concluded that, aside from the thirty-four (34) gasoline service stations and the ten (10) surface coating operations, there are no other operational facilities in the Pinal County portion of the 2015 Phoenix-Mesa Ozone NAA that fall under a source category subject to RACT guidance.

The District is making a Negative Declaration for all CTG's for reducing ozone causing emissions listed in Appendix B except for the following three CTG's:

- Design Criteria for Stage I Vapor Control Systems – Gasoline Service Stations (EPA-450/R-75-102). Chapter 5, Article 20 is RACT for this category.
- Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VI: Surface Coating of Miscellaneous Metal Parts and Products (EPA-450/2-78-015). Chapter 5, Article 13 is RACT for this category.
- Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings (EPA 453/R-08-003, Table 2). Chapter 5, Article 13 is RACT for this category

There is one Title V source in the Pinal County portion of the ozone NAA, which is a landfill and as such does not have a CTG. The facility is currently subject to New Source Performance Standards (NSPS) for Municipal Solid Waste Landfills (MSW) (40 CFR Part 60, Subpart WWW) and the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Waste Landfills (40 CFR 63, Subpart AAAA). The Landfill installed a NSPS compliant Gas Collection Control System on July 30, 2017. The current system collects landfill gas and controls emissions of non-methane organic compounds (NMOCs) with a destruction efficiency of at least 98 percent. On July 14, 2016, the U.S. EPA signed a final rule[6] establishing NSPS intended to reduce emissions from existing MSW landfills, thereby updating the previous emissions guidelines (EG), which were issued in 1996. The NSPS are codified at 40 CFR part 60, subpart XXX, and the EG are codified at 40 CFR part 60, subpart Cf. According to PCAQCD Rule §5-34-2050.C, MSW landfills may meet the requirements of Subpart Cf (Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills) by complying with Subpart XXX. On August 3, 2021, the Title V permit conditions for this landfill was updated to include the requirements of Subpart Cf by complying with Subpart XXX. Since September 27, 2021, the landfill has operated its Gas Collection and Control System under the requirements in Subpart XXX.

There are no other Title V sources in the Pinal County portion of the 2015 Ozone NAA. Therefore there are no major VOC and no major NO_X sources in the Pinal County portion of the 2015 Moderate Ozone NAA.

As a result of these searches, the District has concluded that outside of the gasoline dispensing facilities and surface coating operations, there are no other permitted operating facilities that are subject to the CTGs listed in Appendix B. Additionally, there are no major stationary sources of VOC or NO_X subject to the listed CTGs in the Pinal County portion of the 2015 Ozone NAA. PCAQCD does not anticipate those sources in the near future. On August 9, 2019 (84 FR 39196) and August 23, 2021 (86 FR 46986), the US EPA approved the PCAQCD negative declarations for the 2008 8-hour ozone NAAQS. The negative declarations in Appendix B are identical to those approved in the August 9, 2019 and August 23, 2021 actions and apply to the 2015 8-hour ozone NAA. A full list of negative declarations can be found in Appendix B.

State Implementation Plan Submittal

The District made the negative declarations and amended rules available for public comment. The Pinal County Board of Supervisors may adopt the amended rules (Appendix D) and negative declarations (Appendix B) and direct staff to forward them to the Arizona Department of Environmental Quality (ADEQ) for submittal to the U.S. EPA as a SIP revision.

Appendices

Appendix A: PCAQCD Permitted Sources in the expanded Pinal County portion of the Phoenix-Mesa 2015 Ozone NAA as of March 13, 2025

Appendix B: Additional Negative Declarations for the 2015 8-hour ozone NAAQS as of January 2025

Appendix C: Cutback asphalt emails

Appendix D: PCAQCD Rules Chapter 5, Articles 13 and 20 as amended March 13, 2025

[6] EPA Docket ID No. EPA-HQ-OAR-2014-0451

Appendix A
PCAQCD Permitted Sources in the Pinal County Jurisdiction of the 2015 Phoenix-Mesa Ozone Nonattainment Area (As of January 2025)

Sorted by Highest VOC Emitting Source in 2023

Subject to CTG	PCAQCD RACT Rule	Facility Name	Permit #	SIC Code	2023 Actual VOC Emissions (TPY)	Allowable VOC Emissions (TYP)	2023 Actual NOx Emissions (TPY)	Allowable NOx Emissions (TPY)
Yes	Ch 5, Article 13	Rolling Plains Construction	C31403.000	3443	24.59	90	0	0
Yes	Ch 5, Article 20	Fry's Fuel Station #665	S12772.000	5411	24.41	37	0	0
Yes	Ch 5, Article 20	Fry's Fuel Center #682	S12786.000	5411	23.8	37	0	0
Yes	Ch 5, Article 20	Fast Market #4596	S12705.000	5541	18.67	37	0	0
Yes	Ch 5, Article 20	Circle K Store #2741610	S12726.000	5541	17.55	37	0	0
Yes	Ch 5, Article 20	Circle K Store #2703388	S12616.000	5541	16.92	37	0	0
Yes	Ch 5, Article 20	Circle K Store #2703499	S12780.000	5411	16.07	37	0	0
Yes	Ch 5, Article 20	Circle K Store #2703444	S12702.000	5541	13.33	37	0	0
Yes	Ch 5, Article 20	Circle K Store #2705918	S12732.000	5541	12.67	37	0	0
Yes	Ch 5, Article 20	QuikTrip Store #437	S12769.000	5541	12.27	37	0	0

Subject to CTG	PCAQCD RACT Rule	Facility Name	Permit #	SIC Code	2023 Actual VOC Emissions (TPY)	Allowable VOC Emissions (TYP)	2023 Actual NOx Emissions (TPY)	Allowable NOx Emissions (TPY)
Yes	Ch 5, Article 20	Cobble Propco #18	S12722.000	5541	12.19	37	0	0
Yes	Ch 5, Article 20	Circle K Store #2741647	S12781.000	5541	11.06	37	0	0
Yes	Ch 5, Article 20	Gantzel Farms Country Store	S12790.000	5541	7.74	37	0	0
Yes	Ch 5, Article 20	Circle K Store #2703440	S12733.000	5541	5.61	37	0	0
Yes	Ch 5, Article 20	QuikTrip Store #495	S12723.000	5541	4.79	37	0	0
Yes	Ch 5, Article 20	Fry's Fuel Center #84	S12736.000	5541	4.14	37	0	0
No	-	Apache Junction Landfill	V20691.000	4953	3.88	10.45	5.87	30.72
Yes	Ch 5, Article 20	Canyon Food Mart	S12695.000	5411	2.41	37	0	0
Yes	Ch 5, Article 20	Ventura Market Copper Basin	S12716.000	5541	1.98	37	0	0
Yes	Ch 5, Article 20	Circle K Store #2703442	S12738.000	5541	1.97	37	0	0
Yes	Ch 5, Article 20	Circle K Store #2701989	S12752.000	5411	1.74	37	0	0
Yes	Ch 5, Article 20	88 Trails	S12807.000	5541	1.67	37	0	0
Yes	Ch 5, Article 20	Goldfield Chevron	S12737.000	5541	1.4	37	0	0
No	-	Top Drawer Components	B31373.A01	2511	1.33	2.5	0	0
Yes	Ch 5, Article 20	4 Sons Food Store #505	S12721.000	5541	1.1	37	0	0

Subject to CTG	PCAQCD RACT Rule	Facility Name	Permit #	SIC Code	2023 Actual VOC Emissions (TPY)	Allowable VOC Emissions (TYP)	2023 Actual NOx Emissions (TPY)	Allowable NOx Emissions (TPY)
Yes	Ch 5, Article 20	AJ's Mini Mart	S12717.000	5541	1.07	37	0	0
Yes	Ch 5, Article 20	Circle K Store #2708746	S12759.000	5411	1.03	37	0	0
Yes	Ch 5, Article 13	Sonoran Steelworks	S13207.000	7692	1.02	3	0	0
No	-	Apache Junction Plant 8	B31416.000	3273	1	2.1	22.41	48
No	-	LG Energy Solution Arizona ESS	C31422.000	3691	1	43.34	1	22.9
No	-	LG Energy Solution Arizona	C31387.R01	3691	1	13.13	1	36.68
No	-	Southwest Rock Products - Queen Creek Plant #3	B31371.000	1499	0.92	1.4	31.48	48.9
Yes	Ch 5, Article 20	Flyers Energy #3216	S12727.000	5541	0.83	37	0	0
Yes	Ch 5, Article 20	Circle K Store #2701556	S12632.000	5411	0.7	37	0	0
Yes	Ch 5, Article 20	Torco Race Fuels	S12785.000	5541	0.65	37	0	0
Yes	Ch 5, Article 13	Linx Auto Body	S13216.000	7532	0.65	2	0	0
Yes	Ch 5, Article 20	4 Sons Food Store #501	S12764.000	5541	0.64	37	0	0
Yes	Ch 5, Article 13	Studio Iron	B31317.000	3479	0.4	1.9	0	0
Yes	Ch 5, Article 20	Apache Korners	S12711.A02	5541	0.35	37	0	0
Yes	Ch 5, Article 13	Severtson Corp.	S13241.000	3999	0.29	2.97	0	0

Subject to CTG	PCAQCD RACT Rule	Facility Name	Permit #	SIC Code	2023 Actual VOC Emissions (TPY)	Allowable VOC Emissions (TYP)	2023 Actual NOx Emissions (TPY)	Allowable NOx Emissions (TPY)
Yes	Ch 5, Article 20	The Store In Queen Valley	S12710.A01	5541	0.25	37	0	0
No	-	Apache Junction Plant # 31	B31445.000	3273	0.21	2	3.36	49.13
Yes	Ch 5, Article 13	Sledge's Auto Body	S13235.000	7532	0.2	1.9	0	0
No	-	Section 8	B31203.000	3443	0.18	1	2.19	13.6
Yes	Ch 5, Article 13	Cave's Canopies And Steel	S13232.000	3449	0.14	2.9	0	0
Yes	Ch 5, Article 20	Magma Gas Service Area	S12811.000	4932	0.14	2.1	0	0
No	-	Epcor San Tan District - Pecan WTF	S16190.R01	4952	0.08	0	2.07	2.9
Yes	Ch 5, Article 20	Mountain Brook Golf Course	S12739.000	7992	0.07	37	0	0
Yes	Ch 5, Article 20	New Magma Irrigation & Drainage District	S12795.000	4971	0.06	2	0	0
Yes	Ch 5, Article 13	R-N-R Steel	S13212.000	3441	0.06	1.9	0	0
No	-	EPCOR San Tan District - San Tan WRF	S16191.000	4952	0.05	0.1	1.51	2
No	-	Wastewater Treatment Plant	S16192.000	4952	0.04	0	0.48	0.8
Yes	Ch 5, Article 13	Broken Wheel Enterprises	S13254.000	7532	0.04	2.6	0.06	7.6
No	-	Entrada Del Oro Wastewater Treatment Plant	S16105.000	4952	0.02	0	0.19	0.7
No	-	Banner Ironwood Medical Center	B31441.000	8062	0.01	2	1.85	9.1

Subject to CTG	PCAQCD RACT Rule	Facility Name	Permit #	SIC Code	2023 Actual VOC Emissions (TPY)	Allowable VOC Emissions (TYP)	2023 Actual NOx Emissions (TPY)	Allowable NOx Emissions (TPY)
No	-	Banner Goldfield Medical Center	B31330.000	8062	0.01	0.4	0.6	8.5
No	-	Pinal Customer Center	S16188.000	4931	0.01	2.8	0.27	1.8
No	-	Home Depot Store #0419	S16175.000	5211	0.01	0	0.22	0.7
No	-	Gold Canyon Wastewater Treatment Plant	S16209.000	4952	0.01	0	0.19	0.5
No	-	Queen Creek Plant	B31340.000	3273	0.01	0.3	0.09	4
Yes	Ch 5, Article 13	Jacob Noel	S13258.000	7641	0	2.2	0	3
No	-	Treasure Chest Granite Pit	B31472.000	1423	0	1.4	1.77	49
No	-	Heart Strings Services	B31409.000	7261	0	0.1	1	3.6
No	-	Roadhaven Resort	S10113.000	7033	0	0	0.26	1.5
No	-	Golden Vista R.V. Resort	S10134.000	7033	0	0.2	0.16	3.2
No	-	Superstition Area Water Plant	S16169.000	4941	0	0	0.16	0.96
No	-	Sunrise Rv Resort	S10127.000	7033	0	0.3	0.14	6.1
No	-	Superstition East Central Office	S16140.000	4813	0	0	0.11	0.5
No	-	Golden Sun Rv Resort	S10132.000	7033	0	0	0.09	0.6
No	-	Superstition Crematory	B31368.000	7261	0	0.07	0.08	3.61
No	-	Cemex - Apache Junction Plant	B31361.000	3273	0	0	0.06	0.5
No	-	Queen Creek Rm	B31452.000	3273	0	0	0.06	2.4
No	-	Walmart Store #1381	S10139.000	5399	0	0.1	0.04	2.6
No	-	Booster Station 2 / Well 6	S16139.000	4952	0	0	0.03	1
Yes	Ch 5, Article 13	Paul Biancalana	S13260.000	3471	0	0.4	0.02	5.4
No	-	Apache Junction Health Center	S10131.000	8051	0	0.1	0.01	1.7
No	-	San Tan #1	B31465.R01	1442	0	7.3	0	48.2
Yes	Ch 5, Article 20	Temcon Concrete Construction (East Yard)	S12696.000	1795	0	2.1	0	0

Subject to CTG	PCAQCD RACT Rule	Facility Name	Permit #	SIC Code	2023 Actual VOC Emissions (TPY)	Allowable VOC Emissions (TYP)	2023 Actual NOx Emissions (TPY)	Allowable NOx Emissions (TPY)
Yes	Ch 5, Article 13	Classic Collision-1989-Apache Junction	S13246.A02	7532	0	2.1	0	0
No	-	EPCOR San Tan District - Johnson Farms LS	S16174.000	4952	0	0.1	0	0.6
No	-	Core Ready Mix Plant 1	B31183.000	3273	0	0	0	0
No	-	Southwest Rock Products - Queen Creek Plant #1	B31334.000	1499	0	0	0	0
No	-	Kloeckner Metals	B31353.000	3443	0	0	0	0.1
No	-	Magnum Products	B31437.000	2891	0	0	0	0
No	-	Williams Field Lift Station	S16173.000	4952	0	0	0	2.4
No	-	Superstition Vistas Water Campus	S16176.000	4941	0	0	0	3.22

Permit # Key:

Located within the 2008 Ozone NAA
Located within the 2015 Ozone NAA

S10 - Fuel Burning Equipment
S12 - Gas Stations
S13 - Auto Body Shops / Surface Coating Operations
S16 – Generators
B - Minor Permit
V - Title V Permit
C - Synthetic Minor Permit

Appendix B: Negative Declarations[7]

The District has reviewed its permit files and emission inventory, as well as business listings and county planning records, and has determined that there are no stationary sources or emitting facilities for the following Negative Declarations. The District also does not anticipate these sources in the near future.

#	CTG #	CTG Title	Neg Dec submitted
2	EPA-450/2-77-008	Surface Coating of Cans	Yes
3	EPA-450/2-77-008	Surface Coating of Coils	Yes
4	EPA-450/2-77-008	Surface Coating of Paper	Yes
5	EPA-450/2-77-008	Surface Coating of Fabric	Yes
6	EPA-450/2-77-008	Surface Coating of Automobiles and Light-Duty Trucks	Yes
7	EPA-450/2-77-022	Solvent Metal Cleaning	Yes
8	EPA-450/2-77-025	Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds	Yes
9	EPA-450/2-77-026	Tank Truck Gasoline Loading Terminals	Yes
10	EPA-450/2-77-032	Surface Coating of Metal Furniture	Yes
11	EPA-450/2-77-033	Surface Coating for Insulation of Magnet Wire	Yes
12	EPA-450/2-77-034	Surface Coating of Large Appliances	Yes
13	EPA-450/2-77-035	Bulk Gasoline Plants	Yes
14	EPA-450/2-77-036	Storage of Petroleum Liquids in Fixed-Roof Tanks	Yes
15	EPA-450/2-77-037	Cutback Asphalt	Yes
17	EPA-450/2-78-029	Manufacture of Synthesized Pharmaceutical Products	Yes
18	EPA-450/2-78-030	Manufacture of Pneumatic Rubber Tires	Yes
19	EPA-450/2-78-032	Factory Surface Coating of Flat Wood Paneling	Yes

[7] On August 9, 2019 (84 FR 39196) and August 23, 2021 (86 FR 46986), the US EPA approved these PCAQCD negative declarations for the 2008 8-hour ozone NAAQS.

#	CTG #	CTG Title	Neg Dec submitted
20	EPA-450/2-78-033	Graphic Arts-Rotogravure and Flexography	Yes
21	EPA-450/2-78-036	Leaks from Petroleum Refinery Equipment	Yes
22	EPA-450/2-78-047	Petroleum Liquid Storage in External Floating Roof Tanks	Yes
23	EPA-450/2-78-051	Leaks from Gasoline Tank Trucks and Vapor Collection Systems	Yes
24	EPA-450/3-82-009	Large Petroleum Dry Cleaners	Yes
25	EPA-450/3-83-006	Leaks from Synthetic Organic Chemical and Polymer Manufacturing Equipment	Yes
26	EPA-450/3-83-007	Equipment Leaks from Natural Gas/Gasoline Processing Plants	Yes
27	EPA-450/3-83-008	Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins	Yes
28	EPA-450/3-84-015	Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry	Yes
29	EPA-450/4-91-031	Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry	Yes
30	EPA-453/R-96-007	Wood Furniture Manufacturing Operations	Yes
31	EPA-453/R-94-032 61 FR 44050; 8/27/96	ACT Surface Coating Operations at Shipbuilding and Ship Repair Facilities Shipbuilding and Ship Repair Operations (Surface Coating)	Yes
32	59 FR 29216; 6/06/94 EPA-453/R-97-004	NESHAPS Aerospace Manufacturing and Rework Coating Operations at Aerospace Manufacturing and Rework Operations	Yes
33	EPA-453/R-06-001	Industrial Cleaning Solvents	Yes
34	EPA-453/R-06-002	Offset Lithographic Printing and Letterpress Printing	Yes
35	EPA-453/R-06-003	Flexible Package Printing	Yes
36	EPA-453/R-06-004	Flat Wood Paneling Coatings	Yes
37	EPA 453/R-07-003	Paper, Film, and Foil Coatings	Yes
38	EPA 453/R-07-004	Large Appliance Coatings	Yes
39	EPA 453/R-07-005	Metal Furniture Coatings	Yes

#	CTG #	CTG Title	Neg Dec submitted
41	EPA 453/R-08-003	Miscellaneous Metal and Plastic Parts Coatings Table 3 – Plastic Parts and Products	Yes
42	EPA 453/R-08-003	Miscellaneous Metal and Plastic Parts Coatings Table 4 – Automotive/Transportation and Business Machine Plastic Parts	Yes
43	EPA 453/R-08-003	Miscellaneous Metal and Plastic Parts Coatings Table 5 – Pleasure Craft Surface Coating	Yes
44	EPA 453/R-08-003	Miscellaneous Metal and Plastic Parts Coatings Table 6 – Motor Vehicle Materials	Yes
45	EPA 453/R-08-004	Fiberglass Boat Manufacturing Materials	Yes
46	EPA 453/R-08-005	Miscellaneous Industrial Adhesives	Yes
47	EPA 453/R-08-006	Automobile and Light-Duty Truck Assembly Coatings	Yes
48	EPA 453/B-16-001	Oil and Natural Gas Industry	Yes
No major non-CTG sources of VOC, District has submitted a negative Declaration			Yes[8]
No major non-CTG sources of NO_X, District has submitted a negative Declaration			Yes[8]

[8] This statement means that according to the district's evaluation, there are no major sources of Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NO_X) that are not covered by existing Control Techniques Guidelines (CTGs), and therefore, the District submits a "negative declaration" signifying that no further regulatory actions are needed for these sources.

Appendix C: Cutback Asphalt Emails

November 6, 2024: Apache Junction Public Works: Confirmation of no cutback asphalt use.

PINAL COUNTY

Rupesh Patel <rupesh.patel@pinal.gov>

Re: [External] Cutback Asphalt

1 message

Rupesh Patel <rupesh.patel@pinal.gov> Wed, Nov 6, 2024 at 11:02 AM
To: Shane Kiesow <skiesow@apachejunctionaz.gov>

Good day,

Thank you for the update. I appreciate you confirming that there have been no cutback asphalt use in your operations within your corporate limits or the additional areas we discussed.

I have reached out to Pinal County Public Works to get clarification on their activities. Thanks again for the response.

Rupesh Patel
Air Quality Manager (Planning)
Pinal County Air Quality
520-866-6915

PINAL COUNTY

On Wed, Nov 6, 2024 at 10:53 AM Shane Kiesow <skiesow@apachejunctionaz.gov> wrote:

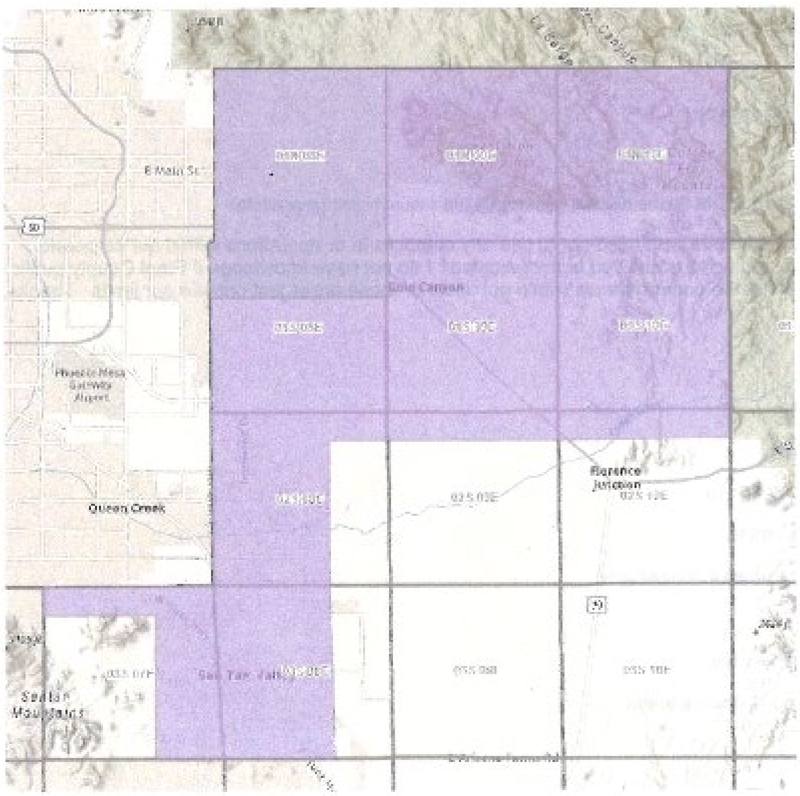
> Good day Rupesh. We have continued not to use any cutbacks in or operations within our corporate limits nor within the additional areas you communicated. I do not have knowledge if Pinal County public works has or not within the county islands within our limits or those areas just outside our limits. Thanks,
>
> Shane Kiesow
> Public Works Manager
> 575 E. Baseline Ave.
> Apache Junction, AZ 85119
> Tel. Direct: 480 474-8516
> Email: skiesow@apachejunctionaz.gov
>
> **Office Hours (Closed Fridays)**
>
> **Monday – Thursday, 7:00AM – 6:00PM**
>
> **From:** Rupesh Patel <rupesh.patel@pinal.gov>
> **Sent:** Wednesday, November 6, 2024 6:51 AM
> **To:** Shane Kiesow <skiesow@apachejunctionaz.gov>
> **Subject:** [External] Cutback Asphalt

Good morning Shane,

A few years back Pinal County planning manager Scott DiBiase reached out to you requesting if any cutback asphalt was used within the Apache Junction area (copy of email and your response attached). Since then, the area of concern has expanded to parcels in Gold Canyon, Florence, Queen Creek and San Tan Valley (see map below).

I'm reaching out to see if the County has used any cutback asphalt in Apache Junction or within this newly expanded area since your last declaration on Feb 12, 2019.

Thank you



Rupesh Patel
Air Quality Manager (Planning)
Pinal County Air Quality

November 7, 2024: Pinal County Public Works: Confirmation of no cutback asphalt use.

PINAL COUNTY

Rupesh Patel <rupesh.patel@pinal.gov>

Re: [External] Cutback Asphalt

1 message

Rupesh Patel <rupesh.patel@pinal.gov> Wed, Nov 6, 2024 at 11:02 AM
To: Shane Kiesow <skiesow@apachejunctionaz.gov>

Good day,

Thank you for the update. I appreciate you confirming that there have been no cutback asphalt use in your operations within your corporate limits or the additional areas we discussed.

I have reached out to Pinal County Public Works to get clarification on their activities. Thanks again for the response.

Rupesh Patel
Air Quality Manager (Planning)
Pinal County Air Quality
520-866-6915

PINAL COUNTY

On Wed, Nov 6, 2024 at 10:53 AM Shane Kiesow <skiesow@apachejunctionaz.gov> wrote:

> Good day Rupesh. We have continued not to use any cutbacks in or operations within our corporate limits nor within the additional areas you communicated. I do not have knowledge if Pinal County public works has or not within the county islands within our limits or those areas just outside our limits. Thanks,
>
> Shane Kiesow
>
> Public Works Manager
>
> 575 E. Baseline Ave.
>
> Apache Junction, AZ 85119
>
> Tel. Direct: 480 474-8516
>
> Email: skiesow@apachejunctionaz.gov
>
> **Office Hours (Closed Fridays)**
>
> **Monday – Thursday, 7:00AM – 6:00PM**
>
> ---
>
> **From:** Rupesh Patel <rupesh.patel@pinal.gov>
> **Sent:** Wednesday, November 6, 2024 6:51 AM
> **To:** Shane Kiesow <skiesow@apachejunctionaz.gov>
> **Subject:** [External] Cutback Asphalt

PINAL COUNTY

Rupesh Patel <rupesh.patel@pinal.gov>

Re: Cutback Asphalt

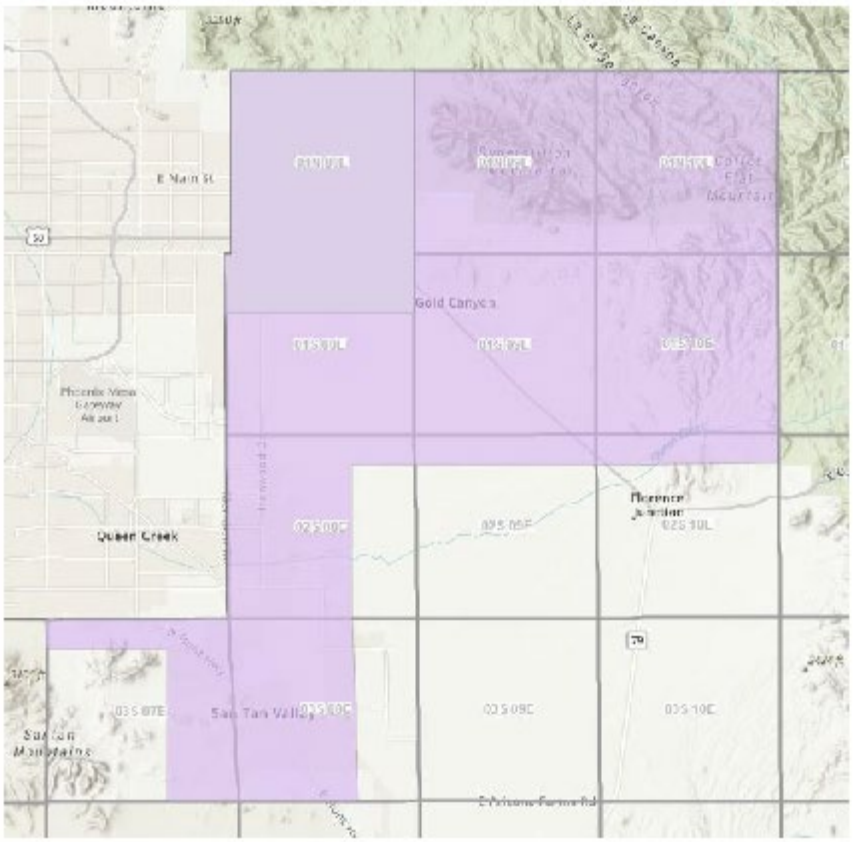
1 message

Jim Higginbotham <jim.higginbotham@pinal.gov> Thu, Nov 7, 2024 at 1:12 PM
To: Rupesh Patel <rupesh.patel@pinal.gov>
Cc: Celeste Garza <celeste.garza@pinal.gov>

Correct

On Thu, Nov 7, 2024 at 12:04 PM Rupesh Patel <rupesh.patel@pinal.gov> wrote:

> Hi Jim,
>
> Thank you for the reply. So to confirm, no cutback asphalt has been used in Apache Junction or within this newly expanded area since the last declaration on Feb 12, 2019. Correct?
>
> Thanks
> Rupesh
>
> On Thu, Nov 7, 2024 at 11:59 AM Jim Higginbotham <jim.higginbotham@pinal.gov> wrote:
>
> > I can get you a list of the products we use, none of them have cutback material in them.
> > fyi
> >
> > On Thu, Nov 7, 2024 at 11:21 AM Rupesh Patel <rupesh.patel@pinal.gov> wrote:
> >
> > > Good morning,
> > >
> > > I have a request for information that I had originally sent to Joe Ortiz and it's come to my attention that Joe may not be the best contact. I have been provided your names as alternate contacts and hope that one of you can answer my question. Please review the email below and attachment.
> > >
> > > Thank you!
> > >
> > > Rupesh Patel
> > > Air Quality Manager (Planning)
> > > Pinal County Air Quality
> > > 520-866-6915
> > > PINAL COUNTY
> > >
> > > ---------- Forwarded message ---------
> > > From: **Rupesh Patel** <rupesh.patel@pinal.gov>
> > > Date: Wed, Nov 6, 2024 at 6:43 AM
> > > Subject: Cutback Asphalt
> > > To: Joe Ortiz <joe.ortiz@pinal.gov>
> > >
> > > Good morning Joe,
> > >
> > > A few years back Scott DiBiase reached out to you requesting if the county had used any cutback asphalt within the Apache Junction area (copy of email and your response attached). Since then, the area of concern has expanded to parcels in Gold Canyon, Florence, Queen Creek and San Tan Valley (see map below).
> > >
> > > I'm reaching out to see if the County has used any cutback asphalt in this newly expanded area.
> > >
> > > Thank you



Rupesh Patel
Air Quality Manager (Planning)
Pinal County Air Quality
520-866-6915

PINAL COUNTY

November 18, 2024: Town of Queen Creek: Confirmation of no cutback asphalt use.

PINAL COUNTY

Rupesh Patel <rupesh.patel@pinal.gov>

Pinal County Air Quality - Cutback Asphalt

1 message

Ramona Simpson <ramona.simpson@queencreekaz.gov> Mon, Nov 18, 2024 at 12:27 PM
To: rupesh.patel@pinal.gov
Cc: Chris Dovel <christopher.dovel@queencreek.org>, anu.jain@pinal.gov, Bruce Gardner <bruce.gardner@queencreekaz.gov>, Shea Joachim <shea.joachim@queencreekaz.gov>, Mohamed Youssef <mohamed.youssef@queencreekaz.gov>

Rupesh

The Town of Queen Creek is a member of the East Valley Asphalt Committee (EVAC) coalition, and follows the prescribed specifications and criteria for the mix designs for our private development and capital improvement paving projects.

Additionally, the Pavement Preservation division conducts road maintenance, surface treatments, and temporary repairs, and does not allow cutback emulsions to be used in these activities, either internally applied or contracted.

Just a note, since the Town of Queen Creek is in both Maricopa County and Pinal County, we have been subject to the more stringent Air Quality regulations that exist in Maricopa County, but we apply that across the whole Queen Creek boundaries.

If you have any questions or other concerns, please let me know!

Ramona Simpson, *MPA*
Operations Manager - Environmental/Fleet
t: (480) 358-3831
m: (480) 510-4412
e: ramona.simpson@queencreekaz.gov
19805 S. 220th Street, **Queen Creek, AZ 85142**
Office hours: Monday – Thursday, 7 a.m. – 6 p.m., closed on Fridays

TOWN OF QUEEN CREEK ARIZONA

Appendix D: Chapter 5, Articles 13 and 20

Rulemaking proposals were posted online on 01/23/2025 at
https://www.pinal.gov/403/Rulemaking

ARTICLE 13. SURFACE COATING OPERATIONS

5-13-100 General

A. 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 (2015 ozone National Ambient Air Quality Standard (NAAQS)), defined in 40 CFR 81.303.

B. Applicability: This rule applies to surface coating operations in the Pinal County portion of the Phoenix metro 8-hour ozone nonattainment area for the 2015 ozone NAAQS, namely T1N, R8E; T1N, R9E; T1N, R10E; T1S, R8E; T1S, R9E; T1S, R10E; T2S, R8E (sections 1 through 10, 15 through 22, and 27 through 34); T2S, R9E (sections 1 through 6); T2S, R10E (sections 1 through 6); T3S, R7E (sections 1 through 6, 11 through 14, 23 through 26, and 35 through 36); T3S, R8E (sections 3 through 10, 15 through 22, and 27 through 34) 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:

1. 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.
2. §5-13-100.C. sets forth partial exemptions for certain materials or uses employed by a surface coating operation subject to this rule.
3. 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.

C. Partial Exemptions:

1. 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:
      i. Non-metallic substrates; and
      ii. 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.
2. Application Methods Exemptions: The following coatings are exempt from application methods in §5-13-300.B. 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;
3. Application Methods and VOC-Limit Exemptions: The following surface coating operations are exempt from §§5-13-300.A. (surface coating standards), 5-13-300.B. (Application methods), and 5-13-300.E. (Emission control system requirements) of this rule but shall comply with §§5-13-300.C. (Cleanup of

application equipment), 5-13-300.D. (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.A.2. 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:

i. Stencil coatings.

ii. Safety-indicating coatings.

iii. Solid-film lubricants.

iv. Electric-insulating and thermal-conducting coatings.

v. Magnetic data storage disk coatings.

vi. Plastic extruded onto metal parts to form a coating.

4. Low Usage Allowance for Restricted Spray Guns: Spray guns otherwise prohibited by §5-13-300.B. 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.E. 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.

D. Total Categorical Exemptions: This rule does not apply to the following operations:

1. Solvent cleaning (Chapter 5, Article 15).

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 $^{1}/_{2}$ 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, handheld 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.D.1.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.B 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.A. 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 sublimate 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)

5-13-300 Standards

A. Surface Coatings: An owner or operator shall comply with one of the following for all applications of surface coatings:

1. Meet the limits in Table 1 of this rule. Coating limits are VOC Regulatory; or
2. Operate an Emission Control System (ECS) in accordance with §5-13-300.E. 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
3. Qualify for an exemption under §5-13-100.C. or §5-13-100.E. 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.

B. Application Methods for Surface Coatings:

1. 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:

      i. Flow Coat;

      ii. Roll Coat;

      iii. Dip-Coating;

e. An Alternative Application Method

2. An owner or operator is allowed to use a device or system other than that described in §5-13-300B.1. of this rule for applications of surface coating containing less than 2.0 lb VOC/gal (240 g/l) (VOC Regulatory).

C. Cleanup of Application Equipment: An owner or operator shall comply with the following when using VOC-containing material to clean application equipment:

1. 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 §5-13-300C.2. of this rule.

i. Spray-Gun Cleaning Machine-General Requirements: The spray-gun cleaning machine shall meet all of the following requirements:

(1) Be designed to clean spray-guns.

(2) Have at least one pump that drives solvent cleaner through and over the spray-gun.

(3) Have a basin which permits containment of the solvent cleaner.

(4) Be kept in proper repair and free from liquid leaks.

(5) Shall be fitted with a cover.

(6) Be located on-site where the spray application occurs; and

(7) Be operated and maintained according to manufacturer’s or distributor’s instructions.

ii. 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.

iii. Non-Automatic Remote Reservoir Spray-Gun Cleaning Machine: Non-automatic Remote Reservoir Spray-Gun Cleaning Machine shall meet all of the following requirements:

(1) Drain solvent cleaner from the sink/work-space quickly into a remote reservoir when work-space is not in use; and

(2) 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

(3) 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.C.1.b.iii.(2) of this rule.

2. 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.

D. 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:

1. 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.

2. 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.

3. Minimize spills of VOC-containing coatings, thinners, and coating-related waste materials;

4. Convey VOC-containing coatings, thinners, and coating-related waste materials from one location to another in closed containers or pipes.

5. 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.

E. Emission Control System (ECS) Requirements:

1. ECS Control Efficiencies: To meet the requirements pursuant to §5-13-300A.2. 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. $CE_{Capture\ and\ Control} = [CE_{Capture} \times CE_{Control}]/100$

Where:

$CE_{Capture\ and\ Control}$ = Overall Capture and Control Efficiency, in percent

$CE_{Capture}$ = Capture Efficiency of the collection device, in percent,

As determined in Section §5-13-300.E.1.b.

$CE_{Control}$ = Control Efficiency of the control device, in percent,

As determined in Section §5-13-300.E.1.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^3 (as methane) adjusted to standard conditions.

2. 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.

3. 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.B. which demonstrate that the ECS meets the overall control standard required by §5-13-300.E.1. of this rule.

4. 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.E.2. 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.

5. 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:

      i. ECS equipment manufacturer;

ii. ECS equipment model;

iii. 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

iv. Information required by §5-13-500.B. and §5-13-500.C. 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

A. Compliance Schedule VOC Limits:

1. 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:

i. The ECS is used as an alternative to meeting the spray-gun provisions of §5-13-300.B. of this rule; or

ii. The ECS is used as an alternative to meeting the gun cleaning machine provisions of §5-13-300.C. of this rule.

c. One year after rule adoption of this rule, the ECS announced pursuant to §5-13-400.A.1.b. shall be in continuous use.

2. 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.A.1. 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.

B. Compliance Schedule O&M Plan:

1. O&M Plans for ECS equipment subject to this rule shall be revised by November 5, 2020.

2. 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.

5-13-500 Monitoring and Records

A. Recordkeeping and Reporting: The owner or operator shall comply with the following recordkeeping requirements,

1. 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.
2. Records shall be retained for five years and shall be made available to the Control Officer upon request.
3. 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:

      i. Pounds VOC per gallon;

      ii. Grams VOC per liter; or

      iii. 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.A. of this rule shall have on site the written value of the VOC content in one of the following forms:

      i. A manufacturer's technical data sheet;

      ii. A manufacturer's safety data sheet (MSDS); or

      iii. Actual test results.

   c. Usage or Purchase Records:

      i. 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.A.3. of this rule) and all other VOC cleaners or solvents to which this rule is applicable.

      ii. Annually:

         (1) Low VOC Coatings: Use of low VOC coatings shall be updated at least annually.

         (2) 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.

      iii. 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.C.4.e. low usage allowance), make the following listings for coatings that have VOC limits listed in Table 1 of this rule:

i. 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.

ii. 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:

(1) 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

(2) 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.

4. 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.

5. 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.

B. ECS Recording Requirements:

1. 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.

2. An explanation shall be entered for scheduled maintenance that is not performed during the period designated for it in the O&M Plan.

C. 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,

1. Periods of time an approved ECS is operating to comply with this rule;
2. Periods of time an approved ECS is not operating;
3. Flow rates;
4. Pressure drops;
5. Other conditions necessary to determine if the approved ECS is functioning properly;
6. Results of visual inspections; and
7. Correction action taken, if any.

D. Compliance Determination and Test Methods:

1. 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.A. or 5-13-300.B. of this rule shall be conducted and reported using one of the following means:

i. VOC content of coatings, solvents, and other substances having less than 5% solids will be determined by the test method in §§5-13-500.D.2.f. of this rule (BAAQMD Method 31 [May 18, 2005]) or 5-13-500.D.2.g. (SCAQMD Method 313-91 [April 1997]) of this rule.

ii. The VOC content of coatings or other materials having 5% or more solids will be determined by the test method in §5-13-500.D.2.e. (EPA Method 24), §§5-13-500.D.2.f. (BAAQMD Method 31 [May 18. 2005]) or 5-13-500.D.2.g. (SCAQMD Method 313-91 [April 1997]) of this rule.

(1) 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.D.2.b. of this rule, or EPA Method 25, referred to in §5-13-500.D.2.d, or EPA Method 25a, referred to in §5-13-500.D.2.d or Method 25b, referred to in §5-13-500.D.2.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."

2. 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).

3. Test Methods for ECS: For coatings/adhesives controlled pursuant to §5-13-300.E 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.D.3.e 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).

Chapter 5
Article 20. - Storage and Loading of Gasoline at Gasoline Dispensing Facilities

ARTICLE 20. STORAGE AND LOADING OF GASOLINE AT GASOLINE DISPENSING FACILITIES

5-20-100. General

A. Purpose: To limit emissions of volatile organic compounds (VOC) from gasoline during storage and loading of gasoline at gasoline dispensing facilities.

B. 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 2015 8-hour ozone National Ambient Air Quality Standard (NAAQS) nonattainment area, namely T1N, R8E; T1N, R9E; T1N, R10E; T1S, R8E; T1S, R9E; T1S, R10E; T2S, R8E (sections 1 through 10, 15 through 22, and 27 through 34); T2S, R9E (sections 1 through 6); T2S, R10E (sections 1 through 6); T3S, R7E (sections 1 through 6, 11 through 14, 23 through 26, and 35 through 36); T3S, R8E (sections 3 through 10, 15 through 22, and 27 through 34) as defined in 40 CFR 81.303 (11/07/2022).

C. Exemptions:

1. This Article does not apply to the storage and loading of the following fuels:
    a. Diesel
    b. Liquefied petroleum gas (LPG)
2. Bulk gasoline plant or bulk gasoline terminal: This Article does not apply to a bulk gasoline plant or a bulk gasoline terminal.
3. 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.B. (General Housekeeping Requirements), but is exempt from all other requirements of this rule.
4. Control of VOC Vapors exemption: The Stage 1 Vapory Recovery System provisions of §5-20-300.E.2. of this Article shall not apply to the following stationary gasoline dispensing tanks:
    a. 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.E.2. of this Article. However, any operation shall become subject to the provisions of §5-20-300.E.2. 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.
    b. 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.

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.E.2. 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 poppetted 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.

5-20-300. Standards

A. Manufacturers, Suppliers, and Owners or Operators:
    1. 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:
        a. The equipment meets the manufacturer's specifications as certified by CARB using test methods incorporated by reference in §5-20-500.F. (Test Methods Incorporated by Reference).

b. The piping of a VR system is designed and constructed as certified by CARB for that specific VR system.

c. All vapor return lines from dispensing tanks shall be equipped with CARB-certified, spring loaded, vapor-tight, poppetted dry break valves.

d. 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.

2. 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.

3. Coaxial Vapor Balance System Prohibition: An owner or operator shall not

a. Install a coaxial fill pipe in a new installation; or

b. 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.

4. 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.

5. An owner or operator of a GDF shall install and maintain a permanent submerged fill pipe.

6. 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.

B. General Housekeeping Requirements:

1. 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:

a. Minimize gasoline spills;

b. Clean up spills as expeditiously as practicable;

c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling equipment, such as oil/water separators;

e. Properly dispose of any VOC containing material.

C. Gasoline Storage Equipment and Operation Requirements:

1. An Underground Storage Tank (UST) with a capacity more than 250 gallons shall meet all of the following conditions:

a. The UST shall be equipped and maintained according to §5-20-300.A. of this rule.

b. 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;

c. A pressure vacuum vent shall be installed and maintained per manufacturer specifications.

d. 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.C. (Exemptions).

e. 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;

f. Each fill pipe shall be equipped with gasketted vapor tight cap.

g. Each poppetted dry break shall be equipped with vapor tight seal and gasketted vapor tight cap.

h. Each gasketed vapor tight cap shall be maintained in a closed position except when the fill pipe or poppetted dry break it serves is actively in use.

i. The fill pipe assembly, including fill pipe, fittings and gaskets, shall be maintained:

i. To be intact and not loose.

ii. To prevent liquid leakage.

iii. To prevent vapor leakage. Vapor leakage can be determined by using one or more of the methods found in §5-20-500.

j. A spill containment receptacle shall be:

i. 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.

ii. Maintained to be:

(1) Free of standing gasoline.

(2) Free of standing liquid.

(3) Free of debris.

(4) Free of foreign matter.

(5) Free of cracks and rust.

2. An Above Ground Storage Tank (AST) with a capacity greater than 250 gallons must meet all of the following conditions:

a. 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;

b. A pressure vacuum vent is installed and maintained per manufacturer specifications;

c. Each fill pipe is equipped with a gasketed vapor tight cap;

d. Each poppetted dry break is equipped with a vapor tight seal and is covered with a gasketed vapor tight cap;

e. All threads, gaskets, and mating surfaces of the fill pipe assembly shall prevent liquid or vapor leakage at the joints of the assembly;

f. Each gasketed vapor tight cap is maintained in a closed position except when actively in use;

g. 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;

h. A spill containment receptacle is installed at each fill pipe;

i. 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

j. 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.

D. Loading of Gasoline:

1. 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:

   a. Liquid leaks

   b. Visible vapor leaks

   c. Significant odors

2. 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:

   a. Tank vent pipes are not the proper height or are not properly capped with approved pressure and vacuum vent valves;

   b. Vent pipes do not meet the CARB-specified paint color code specified in the other requirements outlined in the authority to construct permit.

   c. The stage 1 vapor recovery system is not properly installed or maintained as evidenced by the following:

      i. 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;

      ii. 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;

      iii. Coaxial stage I is not equipped with a functioning CARB-approved poppeted fill tube or the coaxial cap is not installed or is missing, broken, not securely attached, or missing gaskets; or

      iv. 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.

3. The owner or operator of the gasoline cargo tank shall not load, or allow the loading of gasoline if:

   a. A gauge pressure exceeds eighteen inches (18”) of water (33.6 mm Hg) pressure in the gasoline cargo tank.

b. The vacuum pressure exceeds six inches (6”) of water (11.2 mm Hg) in the gasoline cargo tank.

4. 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.

E. Control of VOC Vapors:

1. 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.C. of this rule.

2. Stage 1 Vapor-Recovery System Configuration:

a. Replacement: No part of a vapor recovery system for which there is a CARB specification shall be replaced with anything but CARB-certified components.

b. Vapor Valves:

i. All vapor return lines from a stationary dispensing tank shall be equipped with CARB-certified, spring-loaded, vapor-tight, poppetted dry break valves.

ii. 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.D. of this rule.

c. Above Ground Systems: An above ground dispensing tank shall have CARB-certified fittings wherever CARB so specifies.

d. Installation of New Gasoline Tank: Each new gasoline tank installation shall use CARB-certified fittings exclusively wherever CARB so specifies, and:

i. Shall have its own separate, functioning dual-point vapor return line;

ii. 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.

e. New Coaxial Prohibited:

i. No coaxial fill pipes shall be installed in new installations; and

ii. 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.

3. Equipment Maintenance and Use Required:

a. All vapor loss control equipment shall be:

i. CARB certified and installed as required.

ii. Operated as recommended by the manufacturer.

iii. Maintained leak-free, vapor-tight and in good working order.

b. Coaxial Systems: Both spring-loaded and fixed coaxial fill pipes shall be

i. Maintained according to the standards of their manufacturer(s); and

ii. Be operated so that there is no obstruction of vapor passage from the tank to the cargo tank.

5-20-400. Administrative Requirements

A. The owner or operator of a gasoline dispensing facility shall conduct inspections of the stationary gasoline storage tank.

1. The inspection shall include, but is not limited to all of the following:

a. The spill containment receptacle shall be maintained:

i. Free of cracks, rust and defects;

ii. Free of foreign material;

iii. Empty of liquid, including gasoline; and

iv. The drain valve, if installed, shall properly seal.

b. The external fittings of the fill pipe assembly shall be:

i. Intact and not loose;

ii. Covered with a gasketed cap that fits securely onto the fill pipe.

c. The poppetted dry break shall be:

i. Equipped with a vapor tight seal;

ii. Covered with a gasketed cap that fits securely onto the poppetted dry break.

2. The inspections shall be conducted:

a. At least once per calendar week; or

b. 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.

B. Burden of Proof:

1. 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.

2. 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.

C. CARB Decertification: An owner or operator shall not install or reinstall a component related to vapor recovery that has been decertified by CARB.

5-20-500. Monitoring and Records

A. 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.A.1. or §5-20-500.A.2.

1. Method 21-Determination of Volatile Organic Compound Leaks, Alternative Screening Procedure 8.3.3:

a. 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.

b. Observe the potential leak sites to determine if any bubbles are formed.

i. If no bubbles are observed, the source is presumed to have no detectable vapor leaks.

ii. If any bubbles are observed, the test procedures in §5-20-500.B.1. shall be used to determine vapor tight status.

2. 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.B.1. of this rule shall be used to determine if a vapor tight condition exists.

B. Determining Vapor Tight Status: An owner or operator or Control Officer shall follow the test procedure in §5-20-500.B.1. 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.

1. 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:

a. 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.

b. Probe Distance: The probe inlet shall be at the surface during measurement 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.

c. 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.

d. 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.

e. Wind: Wind shall be blocked as much as possible from the space being monitored.

f. 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.

C. 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.

D. 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:

1. The total amount of gasoline received each month shall be recorded by the end of the following month.
2. The owner or operator of a gasoline dispensing facility shall record inspections in a permanent record or log book:
    a. By the end of Saturday of the following week; or
    b. 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.
    c. 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.
    d. 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.

E. Compliance Determination: The test methods referenced in §5-20-500.F. 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.

1. 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.F.3. EPA Method 2B shall be used for vapor incineration devices.
2. Vapor pressure of gasoline shall be determined using ASTM D323-06 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.
3. Vapor Leaks:
    a. 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.B. of this rule shall be used.
    b. 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.
    c. 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.

F. 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.F.3. 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.

1. EPA Test Methods:
    a. 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.
    b. EPA Method 21 - Determination of Volatile Organic Compound Leaks.
    c. EPA Method 21-Determination of Volatile Organic Compound Leaks, Alternative Screening Procedure 8.3.3.
    d. EPA Method 25 ("Determination of Total Gaseous Nonmethane Organic Emissions as Carbon") (40 CFR part 60, Appendix A).
    e. EPA Method 25A – Gaseous Organic Concentration – Flame Ionization. (40 CFR Part 60, Appendix A).
    f. EPA Method 25B – Gaseous Organic Concentration – Infrared Analyzer. (40 CFR Part 60, Appendix A).
    g. EPA Method 27 ("Determination Of Vapor Tightness Of Gasoline Delivery Tank Using Pressure-Vacuum Test") in 40 CFR 60, Appendix A.
    h. Optical Gas Imaging: Alternative Work Practice for Monitoring Equipment Leaks, 40 CFR 60.18(g),(h), and (i).
2. ASTM Standards:
    a. ASTM D323-06 "Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method).
    b. ASTM D4953-06 "Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method)
3. CARB Certification and Test Procedures for Gasoline Vapor Recovery Systems:
    a. 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 958122815.
    b. 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.
    c. CARB Test Procedure TP-201.1A - "Determination of Efficiency of Phase I Vapor Recovery Systems of Dispensing Facilities with Assist Processors".
    d. 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.

e. 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.

f. 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.

g. 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.

h. 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.

4. Additional Test Methods:

a. 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.

b. 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).