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Pinal County  
P.O. Box 827  
Florence, Arizona 85232

**PINAL COUNTY BOARD OF SUPERVISORS**  
**RESOLUTION NO. 113016-AQ2**  
**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**, ongoing ozone exceedances in Phoenix-Mesa 8-hour ozone nonattainment area resulted in a June 3, 2016 Environmental Protection Agency (EPA) redesignation from marginal nonattainment to moderate nonattainment.;

**WHEREAS**, a requirement of the redesignation is the development of ozone Reasonably Available Control Technology (RACT) rules for source categories that surpass emissions thresholds defined in Control Technique Guidelines (CTG).;

**WHEREAS**, Pinal County Air Quality's analysis of permitted sources in the Pinal County portion of the Phoenix-Mesa 8-hour ozone nonattainment area determined that two source categories (Gasoline Dispensing Facilities, Surface Coatings) surpass the CTG emissions thresholds and thus need ozone RACT rules.;

**WHEREAS**, Pinal County in coordination with stakeholders, EPA and Arizona Department of Environmental Quality (ADEQ) developed a gasoline dispensing facilities rule that provides the necessary control measures to reduce ozone precursors that contribute to ozone formation.;

**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 at 22 A.A.R. 2274 (8/26/16);

**WHEREAS**, the elements of the final proposed changes in the County's air quality rules are set forth below in full;

**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, the full text of which follows the indicated field markers.**
- 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 following document "Reasonably Available Control Technology (RACT) Analysis, Negative Declaration and Rules Adoption" and request that it be included in the adopted rules submittal to the Environmental Protection Agency (EPA).**

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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 and 7/12/00), 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).
  - 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)
    - ii. §4-3-170 (As amended 10/28/15)
    - iii. §4-3-180 (As amended 10/28/15)
    - iv. §4-3-190 (As amended 10/28/15)
  - 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. §4-9-320 (As amended 6/3/09)
      - ii. §4-9-340 (As amended 6/3/09)

1. Chapter 5

- a. Article 20. (as amended 11/30/16)

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*

CHAPTER 5, ARTICLE 20.

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

5-20-100. GENERAL

1. Purpose: To limit emissions of volatile organic compounds (VOC) from gasoline during storage and loading of gasoline at gasoline dispensing facilities.
2. Applicability: This Article applies to an owner or operator who operates a gasoline dispensing facility, including those located at airports in the Pinal County portion of the Phoenix-Mesa 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS) nonattainment area, namely T1N, R8E; T1S, R8E (Sections 1 through 12) as defined in 40 CFR 81.303.
3. Exemptions:
  - a. This Article does not apply to the storage and loading of the following fuels:
    - i. Diesel
    - ii. Liquefied petroleum gas (LPG)
  - b. Aviation gasoline loaded at airports: The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is exempt from §5-20-300.4 and section §5-20-300.5(a) of this Article. The storage of aviation gas at airports is subject to this Article.
  - c. Bulk gasoline plant or bulk gasoline terminal: This Article does not apply to a bulk gasoline plant or a bulk gasoline terminal.
  - d. Stationary gasoline dispensing tanks for farm operations: Any stationary gasoline dispensing tank used exclusively for the fueling of implements of normal farm operations must comply with Section §5-20-300.2 (General Housekeeping Requirements), but is exempt from all other requirements of this rule.

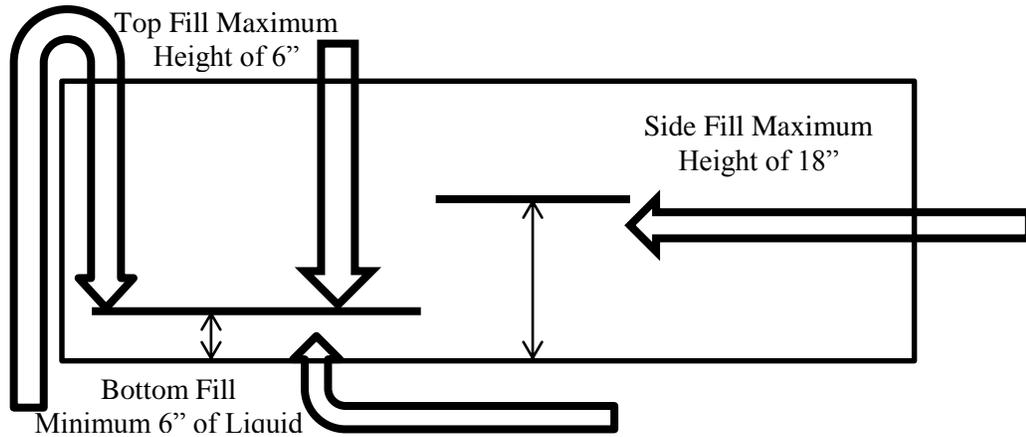
- e. Control of VOC Vapors exemption: The Stage 1 Vapory Recovery System provisions of §5-20-300.5.b of this Article shall not apply to the following stationary gasoline dispensing tanks:
  - i. Non-resale gasoline dispensing operations: Any stationary gasoline dispensing facility receiving less than 120,000 gallons of gasoline in any 12 consecutive calendar months, dispensing no resold gasoline, and having each stationary gasoline tank equipped with a permanent submerged fill pipe is exempt from §5-20-300 of this Article. However, any operation shall become subject to the provisions of §5-20-300 of this Article by exceeding the 120,000 gallon threshold, and shall remain subject to such provisions even if annual emissions later fall below this threshold.
  - ii. Stationary gasoline dispensing tanks of 1,000 gallons or less: Any stationary gasoline dispensing tank having a capacity of 1,000 gallons or less which was installed prior to October 2, 1978, provided that such tank is equipped with a permanent submerged fill pipe. Where, because of government regulation including, but not limited to, Fire Department codes, such a fill pipe cannot be installed, the gasoline shall be delivered into the tank using a nozzle extension that reaches within 6 inches of the tank bottom.
- f. The owner or operator of a gasoline dispensing facility that is unattended or when there is only one owner or operator under control of the gasoline dispensing facility present, the owner or operator of the gasoline dispensing facility is exempt from §5-20-300.4.

#### 5-20-200. DEFINITIONS

1. AVIATION GASOLINE – A type of gasoline used to fuel a piston engine aircraft.
2. 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.
3. 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.
4. 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].
5. 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(4)(b) of this Article, and which is used as a fuel for internal combustion engines.
6. 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.
7. 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]
  8. 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.
  9. 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.
  10. MARICOP 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 Maricopa County Air Quality Rule 352.
  11. 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.
  12. 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.
  13. 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).
  14. SUBMERGED FILL: Any discharge pipe or nozzle which meets the applicable specifications as follows:
    - a. Top-Fill or Bottom-Fill Tanks: The end of the discharge pipe or nozzle is totally submerged when the liquid level is six inches (15 cm) from the bottom of the tank.
    - b. Side-Fill: At its highest point within the storage tank that is less than 2,000,000 gallon capacity, the end of the discharge pipe or nozzle is totally submerged when the liquid level is 18 inches (46 cm) from the bottom of the tank.
    - c. Horizontal Fill: At its highest point within a floating roof tank of 2,000,000 gallons or greater capacity, the end of the discharge pipe or nozzle may be up to 39.4 inches (1 meter) above the tank bottom if the discharge pipe or nozzle is

kept completely submerged, including when the roof rests on its legs, except when the tank is being emptied completely.



15. 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.
16. VAPOR TIGHT: A condition in which a suitable detector at the site of (potential) leakage of vapor shows less than 10,0000 ppmv when calibrated with methane; or the detector shows less than 1/5 LEL (lower explosive limit) subsequent to calibration with a gas specified by the manufacturer and is used according to the manufacturer's instructions.

#### 5-20-300. STANDARDS

##### 1. MANUFACTURERS, SUPPLIERS, AND OWNERS OR OPERATORS:

- a. A manufacturer, supplier, owner or operator shall not supply, offer for sale, sell, install or allow the installation of an aboveground or underground storage tank, any type of vapor recovery system or any of its components unless the tank, system and components meet the following:
  - i. Replacement Components for a Vapor Recovery System: A vapor recovery system for which there is a CARB specification shall be replaced with components that comply with one of the following:
    1. The equipment is supplied by the manufacturer as a CARB-certified component; or
    2. The equipment is rebuilt by a person who is authorized by CARB to rebuild that specific CARB-certified component.
  - ii. All vapor return lines from dispensing tanks shall be equipped with CARB-certified, spring loaded, vapor-tight, poppetted dry break valves.

- iii. After [date of rule adoption], each new or rebuilt installed component shall be clearly identified with a permanent identification affixed by the certified manufacturer or rebuilder.
- b. A licensed Vapor Recovery Registered Service Representative (RSR) in the State of Arizona shall install an aboveground or underground storage tank or vapor recovery system components.
- c. Coaxial Vapor Balance System Prohibition: An owner or operator shall not
  - i. Install a coaxial fill pipe in a new installation; or
  - ii. Reinstall a coaxial fill pipe during any changes to the tank when the top of the tank is exposed and the vapor port bung is pre-configured to accept vapor recovery piping.
- d. The owner or operator of a stationary dispensing tank shall verify that vapor recovery equipment (if required by this rule) is properly connected and in use at all times while gasoline is actively being loaded. If the gasoline dispensing facility is unattended or there is only one owner or operator under control of the gasoline dispensing facility on-site, the owner or operator of the cargo tank is responsible for the proper connection and use of the vapor recovery equipment (if required by this rule) while gasoline is being actively loaded.
- e. An owner or operator shall load, allow the loading, or provide equipment for the loading of gasoline from any cargo tank identified with a current Maricopa County Pressure Test decal into any stationary gasoline storage tank.

2. GENERAL HOUSEKEEPING REQUIREMENTS:

- a. An owner or operator shall not store gasoline or permit the loading of gasoline in any stationary gasoline storage tank located above or below ground unless all of the following conditions are met:
  - i. Minimize gasoline spills;
  - ii. Clean up spills as expeditiously as practicable;
  - iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
  - iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling equipment, such as oil/water separators;
  - v. Properly dispose of any VOC containing material.

3. GASOLINE STORAGE EQUIPMENT AND OPERATION REQUIREMENTS:

- a. An Underground Storage Tank (UST) must meet all of the following conditions unless exempt from the vapor recovery system requirements per §5-20-100.3 of this Article:
  - i. The UST is equipped and maintained according to §5-20-300.1 of this rule;

- ii. For an existing GDF, maintain a dual-point vapor recovery system OR a coaxial vapor balance system. For new installations or modifications to existing GDF, install and maintain a dual-point vapor recovery system with separate fill and vapor connection points;
  - iii. A pressure vacuum vent is installed and maintained per manufacturer specifications;
  - iv. The vapor recovery system is 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;
  - v. A permanent submerged fill pipe is installed and maintained to ensure the highest point of the discharge opening is no more than six inches (6") from the bottom of the UST;
  - vi. Each fill pipe is equipped with gasketed vapor tight cap;
  - vii. Each popped dry break is equipped with vapor tight seal and gasketed vapor tight cap;
  - viii. Each gasketed vapor tight cap is maintained in a closed position except when the fill pipe or popped dry break it serves is actively in use;
  - ix. The fill pipe assembly, including fill pipe, fittings and gaskets, is maintained to prevent vapor leakage from any portion of the vapor recovery system; and
  - x. A spill containment receptacle is installed and maintained free of standing liquid, debris and other foreign matter. The spill containment receptacle shall be 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.
- b. An Above Ground Storage Tank (AST) with a capacity greater than 250 gallons must meet all of the following conditions:
- i. A permanent submerged fill pipe is installed and maintained to ensure the highest point of the discharge opening is no more than six inches (6") from the bottom of the AST. If the AST is side filled, the fill pipe discharge opening is no more than 18 inches above the tank bottom;
  - ii. A pressure vacuum vent is installed and maintained per manufacturer specifications;
  - iii. Each fill pipe is equipped with a gasketed vapor tight cap;
  - iv. Each popped dry break is equipped with a vapor tight seal and is covered with a gasketed vapor tight cap;
  - v. All threads, gaskets, and mating surfaces of the fill pipe assembly shall prevent liquid or vapor leakage at the joints of the assembly;

- vi. Each gasketed vapor tight cap is maintained in a closed position except when actively in use;
- vii. If an AST is equipped with a spill containment receptacle, it shall be maintained to be free of standing liquid, debris and other foreign matter;
- viii. A spill containment receptacle is installed at each fill pipe;
- ix. Each spill containment receptacle equipped with an integral drain valve or other approved equipment that returns spilled gasoline to the aboveground storage tank shall be maintained closed vapor tight except when the valve is actively in use; and
- x. Any overfill prevention equipment shall be approved, installed and maintained vapor tight to the atmosphere. Any device mounted within the fill pipe shall be so designed and maintained that no vapor from the vapor space above the gasoline within the tank can penetrate into the fill pipe or through any of the fill pipe assembly into the atmosphere.

4. LOADING OF GASOLINE:

- a. When more than one owner or operator is present at a gasoline dispensing facility, prior to accepting a load of gasoline, the owner or operator of a gasoline dispensing facility shall verify all of the following:
  - i. The gasoline cargo tank clearly displays a valid Maricopa County (Mc) Vapor Tightness Test decal that is permanently mounted near the front on the right (passenger) side of the vessel.
  - ii. The owner or operator of the gasoline cargo tank connects the vapor return hose.

5. CONTROL OF VOC VAPORS:

- a. Gasoline vapors displaced from a stationary dispensing tank by gasoline being delivered shall be handled by a Stage 1 Vapor Recovery System, unless the tank is exempted by §5-20-100.3 of this rule.
- b. Stage 1 Vapor-Recovery System Configuration:
  - i. Replacement: No part of a vapor recovery system for which there is a CARB specification shall be replaced with anything but CARB-certified components.
  - ii. Vapor Valves:
    - 1. All vapor return lines from a stationary dispensing tank shall be equipped with CARB-certified, spring-loaded, vapor-tight, poppetted dry break valves.
    - 2. Vapor valves shall be inspected weekly to determine if closure is complete and gaskets are intact; a record shall be made pursuant to §5-20-500.2 of this rule.
  - iii. Above Ground Systems: An above ground dispensing tank shall have CARB-certified fittings wherever CARB so specifies.

- iv. Installation of New Gasoline Tank: Each new gasoline tank installation shall use CARB-certified fittings exclusively wherever CARB so specifies, and:
  - 1. Shall have its own separate, functioning dual-point vapor return line;
  - 2. Is allowed to have a combination vapor recovery system that in addition to having a separate dual-point vapor return line, also has vapor piping/fittings linking it to one or more (other) stationary gasoline dispensing tanks.
- v. New Coaxial Prohibited:
  - 1. No coaxial fill pipes shall be installed in new installations; and
  - 2. No coaxial fill pipes shall be reinstalled in major modifications in which the top of the tank is exposed and the vapor port bung is pre-configured to accept vapor recovery piping.
- c. Equipment Maintenance and Use Required:
  - i. All vapor loss control equipment shall be:
    - 1. Installed as required;
    - 2. Operated as recommended by the manufacturer; and
    - 3. Maintained leak-free, vapor-tight and in good working order.
  - ii. Coaxial Systems: Both spring-loaded and fixed coaxial fill pipes shall be
    - 1. Maintained according to the standards of their manufacturer(s); and
    - 2. Be operated so that there is no obstruction of vapor passage from the tank to the cargo tank.

#### 5-20-400. ADMINISTRATIVE REQUIREMENTS

- 1. The owner or operator of a gasoline dispensing facility shall conduct inspections of the stationary gasoline storage tank.
  - a. The inspection shall include, but is not limited to all of the following:
    - i. The spill containment receptacle shall be maintained:
      - 1. Free of cracks, rust and defects;
      - 2. Free of foreign material;
      - 3. Empty of liquid, including gasoline; and
      - 4. The drain valve, if installed, shall properly seal.
    - ii. The external fittings of the fill pipe assembly shall be:
      - 1. Intact and not loose;
      - 2. Covered with a gasketed cap that fits securely onto the fill pipe.
    - iii. The poppetted dry break shall be:
      - 1. Equipped with a vapor tight seal;
      - 2. Covered with a gasketed cap that fits securely onto the poppetted dry break.
  - b. The inspections shall be conducted:

- i. At least once per calendar week; or
    - ii. If the gasoline dispensing facilities receives gasoline loads less than once per calendar week, the inspection shall take place upon completion of the receipt of the load of gasoline.
- 2. Burden of Proof:
  - a. Proving Exempt Status: The burden of proof of eligibility for exemption from a provision of this rule is on the owner or operator. An owner or operator seeking such an exemption shall maintain adequate records and furnish them to the Control Officer upon request.
  - b. Providing Proof of Equipment Compliance: It is the responsibility of the owner or operator to provide proof, when requested by the Control Officer, that a vapor recovery system or its modifications meet the requirements of this Article.
- 3. CARB Decertification: An owner or operator shall not install or reinstall a component related to vapor recovery that has been decertified by CARB.

## 5-20-500. MONITORING AND RECORDS

### 1. MONITORING FOR LEAKS

- a. Combustible Gas Detector or Organic Vapor Analyzer – Test Procedure: During loading of gasoline into storage tanks, the peripheries of all potential sources of leakage at the loading facility are checked with a combustible gas detector (CGD) or organic vapor analyzer(OVA) as follows:
  - i. Calibration: Within four hours prior to monitoring, the CGD or OVA shall be suitably calibrated in a manner and with the gas specified by the manufacturer for 20 percent LEL response, or calibrated with methane for a 10,000 ppm response.
  - ii. Probe Distance: The probe inlet shall be one inch (2.5 cm) or less from the potential leak source when searching for leaks. The probe inlet shall be one inch (2.5 cm) from the leak source when the highest detector reading is being determined for a discovered leak. When the probe is obstructed from moving within one inch (2.5 cm) of an actual or potential leak source, the closest practicable probe distance shall be used.
  - iii. Probe Movement: The probe shall be moved slowly, not faster than 1.6 inches per second (4 centimeters per second). If there is any meter deflection at a potential or actual leak source, the probe shall be positioned to locate the point of highest meter response.
  - iv. Probe Position: The probe inlet shall be positioned in the path of the vapor flow from a leak such that the central axis of the probe-tube inlet shall be positioned coaxial with the path of the most concentrated vapors.

- b. Method 21-Determination of Volatile Organic Compound Leaks, Alternative Screening Procedure 8.3.3:
  - i. Spray a soap solution over all potential leak sources. The soap solution may be a commercially available leak detection solution or may be prepared using concentrated detergent and water. A pressure sprayer or squeeze bottle may be used to dispense the solution.
  - ii. Observe the potential leak sites to determine if any bubbles are formed.
    - 1. If no bubbles are observed, the source is presumed to have no detectable vapor leaks.
    - 2. If any bubbles are observed, the instrument techniques of §5-20-500.1.a of this rule shall be used to determine if a vapor leak exists.
  - c. Optical Gas Imaging: An owner or operator may use an optical gas imaging instrument to identify vapor leaks. If a vapor leak is detected, the instrument techniques listed in Section §5-20-500.1.a of this rule shall be used to determine if a vapor leak exists.
- 2. 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.
- 3. GASOLINE DISPENSING FACILITY RECORDKEEPING: The owner or operator of each gasoline dispensing facility in the Pinal County portion of the Phoenix 8-hour ozone nonattainment area shall maintain records as follows:
  - a. The total amount of gasoline received each month shall be recorded by the end of the following month.
  - b. The owner or operator of a gasoline dispensing facility shall record inspections in a permanent record or log book:
    - i. By the end of Saturday of the following week; or
    - ii. If the gasoline dispensing facilities receives gasoline loads less than once per calendar week, the owner or operator shall record the inspection within three days after the receipt of the load of gasoline.
    - iii. These records and any reports or supporting information required by this rule or by the Control Officer shall be retained for at least 5 years.
    - iv. Records of the past 12 months shall be in a readily accessible location and must be made available to the Control Officer within 24 hours upon verbal or written request.

4. COMPLIANCE DETERMINATION: The test methods referenced in §5-20-500.5 of this rule, shall be used in the ways given in the subsections that immediately follow. When more than one test method is permitted for a determination, an exceedance of the limits established in this rule determined by any of the applicable test methods constitutes a violation of this rule. For routine information collection, the Control Officer may accept a manufacturer's data sheet (MSDS), data certified by an officer of the supplying company, or test data for the product of inquiry.
- a. Control efficiency of vapor loss control equipment and vapor collection/processing systems shall be determined according to EPA Method 2A and either EPA Method 25A or 25B, or by CARB-approved test methods. EPA Method 2B shall be used for vapor incineration devices.
  - b. Vapor pressure of gasoline shall be determined using ASTM D323-15a Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method or ASTM D4953-15, Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method. ASTM D323-15a shall be used for gasoline either containing no oxygenates or MTBE (methyl tertiary butyl ether) as the sole oxygenate. Method ASTM 4953-15 shall be used for oxygenated gasoline.
  - c. Vapor Leaks:
    - i. If a determination of leak tight status is to be made on Stage 1VR system or spill containment equipment at a gasoline dispensing facility or on a cargo tank at the station, the method in §5-20-500(4)(c) of this rule shall be used.
    - ii. §5-20-500(4)(c) of this rule probe distance and movement parameters not with-standing, 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 ppm 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 4 cm per second.
    - iii. The Control Officer may count it as a failure to perform weekly inspections pursuant to §5-20-300.3 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.
5. 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(5)(c) of this rule, are adopted by reference. The other test methods listed here are also adopted by reference, each having paired with it a specific date that identifies the particular version/revision of the method that is adopted by reference. These adoptions by reference include no future editions or amendments.

- a. EPA Test Methods:
  - i. EPA Methods 2a (“Direct Measurement of Gas Volume Through Pipes and Small Ducts”), and 2b (“Determination of Exhaust-Gas Volume Flow-Rate From Gasoline Vapor Incinerators“).40 CFR 60, Appendix A.
  - ii. EPA Method 21 - Determination of Volatile Organic Compound Leaks.
  - iii. EPA Method 21-Determination of Volatile Organic Compound Leaks, Alternative Screening Procedure 8.3.3
  - iv. EPA Method 25 (“Determination of Total Gaseous Nonmethane Organic Emissions as Carbon”) and its submethods (40 CFR 60, Appendix A).
  - v. EPA Method 27 (“Determination Of Vapor Tightness Of Gasoline Delivery Tank Using Pressure-Vacuum Test”) in 40 CFR 60, Appendix A.
  - vi. Optical Gas Imaging: Alternative Work Practice for Monitoring Equipment Leaks, 40 CFR 60.18(g). An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, Appendix A-7, Method 21to monitor for equipment volatile organic compound leaks.
- b. ASTM Standards:
  - i. ASTM D323-15a “Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method).
  - ii. ASTM D4953-15 “Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method)
- c. CARB Certification and Test Procedures for Gasoline Vapor Recovery Systems:
  - i. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1B, Static Torque of Rotatable Phase I Adaptors, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
  - ii. California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003.
  - iii. CARB Test Procedure TP-201.1A - “Determination of Efficiency of Phase I Vapor Recovery Systems of Dispensing Facilities with Assist Processors”.
  - iv. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, October 8, 2003 edition,

California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.

- v. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1C, Leak Rate of Drop Tube/Drain Valve Assembly, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
  - vi. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1D, Leak Rate of Drop Tube Overfill Protection Devices and Spill Container Drain Valves, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
  - vii. California Air Resources Board Vapor Recovery Test Procedure TP-201.3—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended July 26, 2012.
  - viii. Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994.
- d. Additional Test Methods:
- i. San Diego County Air Pollution Control District Test Procedure TP-96-1, March 1996, Third Revision, Air Pollution Control District, 9150 Chesapeake Drive, San Diego, CA 92123-1096.
  - ii. American Petroleum Institute Standard API STD 650 Welded Tanks for Oil Storage, Twelfth Edition, Includes Errata 1 (2013), Errata 2 (2014), and Addendum 1 (2014).

**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 \_\_\_\_\_, 2016.

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:

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Lando Voyles  
Pinal County Attorney

By: \_\_\_\_\_  
Deputy County Attorney