Pinal County Air Quality Control District

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August 5, 2016 - **Intended for Publication on August 26, 2016**

PINAL COUNTY AIR QUALITY CONTROL DISTRICT

COMBINED
NOTICE OF PROPOSED RULEMAKING
PURSUANT TO A.R.S. §49-112 AND §49-471.01 *et seq.*
AND
NOTICE OF ORAL PROCEEDING
PURSUANT TO A.R.S. 49-471.06

1. Preamble

A. The Pinal County Air Quality Control District (PCAQCD), an operating division of Pinal County, proposes that the Board of Supervisors (BOS) adopt or amend certain rules under authority of A.R.S. §§49-479 and 49-480, which respectively authorize the board to adopt rules to control air pollution.

The Clean Air Act Amendments (CAAA) of 1990 required ozone nonattainment areas to implement Reasonably Available Control Technology (RACT) to control Volatile Organic Compounds (VOC) emissions. Pinal County has a small portion in/around the Apache Junction area that's incorporated into the Phoenix metro ozone nonattainment area for the 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS). The Phoenix metro was originally designated a 'Marginal' nonattainment area for the 2008 8-hour ozone NAAQS on July 20, 2012 and required to attain the standard by July 20, 2015. A marginal ozone nonattainment area isn't required to submit an all-encompassing State Implementation Plan (SIP) that higher nonattainment designations carry (i.e. moderate, serious, severe) which include RACT requirements.

Unfortunately the nonattainment area didn't attain the ozone NAAQS by the July 20, 2015 deadline and was recently redesignated to a moderate 8-hour ozone nonattainment area (81 FR 26697, May 4, 2016). Thus requiring the nonattainment area to complete a SIP by January 1, 2017 which includes RACT rules.

Pinal County Air Quality evaluated permitted sources within the Pinal County portion of the 8-hour ozone nonattainment area to determine what, if any source categories would require RACT. The two source categories in the ozone nonattainment area that were found to require RACT rules are gasoline service stations and surface coatings. This particular rulemaking addresses gasoline service stations.

The proposed amended and new rules are identified below and include an amendment to §1-1-105 with the ultimate purpose of this rulemaking being the submittal of the adopted rules in Chapter 5, Article 20 (specifically sections 100, 200, 300, 400 and 500) through

ADEQ to EPA, for inclusion as elements of the Arizona State Implementation Plan (SIP) as required under the Clean Air Act (CAA).

B. All of the proposed corresponding changes are discussed in subsection E. of this preamble, and include the following sections:

Section Affected	Rulemaking Action
§1-1-105. SIP List	Amend
§5-20-100. General	New
§5-20-200. Definitions	New
§5-20-300. Standards	New
§5-20-400. Administrative Requirements	New
§5-20-500. Monitoring and Records	New

C. Those wishing further information regarding any aspect of this proposal may contact Scott DiBiase, Pinal County Air Quality, 31 North Pinal St., Building F, Florence, Arizona, 85132, 520-866-6929, scott.dibiase@pinalcountyaz.gov. To the extent possible, the District will also post information on the County's website, *pinalcountyaz.gov*, under the "air quality" link.

D. The rule making process will consist of an initial administrative rule development process, including this notice, a 30 day public comment period, a stakeholder meeting and an oral proceeding before the Control Officer or his designee. The date and location for the stakeholder meeting and oral proceeding are set forth below. Written comments are due prior to the close of the comment period, which shall be the close-of-business on the day of the oral proceeding. The final step in the rule adoption process will be a hearing before the Board of Supervisors. The Board of Supervisors hearing will be separately scheduled and noticed in accord with A.R.S. §49-479, and, where applicable, the requirements of 40 C.F.R. §51.102.

E. The proposed additions include the following:

1. §1-1-105 – Addition of Chapter 5, Article 20, sections 100, 200, 300, 400 and 500 and their adoption dates in Section 1-1-105 which is a list designating which Board approved rules (and their corresponding adoption dates) that are 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
2. Addition of Chapter 5, Article 20, §100. General
    1) Purpose of the rule – limit emissions of VOCs from gasoline during storage and loading of gasoline at gasoline dispensing facilities.
    2) Applicability – Applies to an owner or operator that operates a gasoline dispensing facility in the Pinal County portion of the Phoenix-Mesa 2008 8-hour ozone NAAQS nonattainment area.
    3) Exemptions
        a) Rule doesn't apply to storage and loading of diesel nor liquefied petroleum gas (LPG)
        b) The loading of aviation gasoline into storage tanks at airports and transfer of aviation gasoline within the airport is exempt from the loading of gasoline

requirements and control of VOC vapors (i.e. Stage 1 Vapor Recovery System) requirements. However the storage of aviation gasoline requirements still pertain.

c) Bulk gasoline plant or terminal
d) Stationary gasoline dispensing tanks used exclusively for fueling of implements of normal farm operations are exempt from all requirements of this rule except for the general housekeeping (i.e. minimize gasoline spills, clean up spills as expeditiously as possible, etc.)
e) Stage 1 vapor recovery systems don't apply to the following:
    i. Non-resale gasoline dispensing operations receiving less than 120,000 gallons in any 12 consecutive calendar month is exempt from the standards as long as each stationary gasoline tank is equipped with a permanent submerged fill pipe.
    ii. Stationary gasoline dispensing tanks having a capacity of 1,000 gallons or less that were installed prior to October 2, 1978, provided there's a permanent submerged fill pipe, unless such a pipe can't be installed then use of a nozzle extension is permitted.
f) Loading of gasoline standards exempt when the gasoline dispensing facility is unattended or when there is only one owner or operator present.

3. Addition of Chapter 5, Article 20, §200. Definitions – Sixteen relevant definitions to the proposed new rule.
4. Addition of Chapter 5, Article 20, §300. Standards
    1) Manufacturers, suppliers, and owners or operators
        a) Tank system requirements for the manufacturers, suppliers and owners or operators including
            i. CARB certified components or rebuilt by a person authorized by CARB to rebuild components. Identification requirements for installed components.
            ii. A licensed vapor recovery registered service representative in the State of Arizona is required to install an aboveground or underground storage tank or vapor recovery system.
            iii. Restrictions for use of coaxial vapor balance systems
            iv. The owner or operator of stationary dispensing tanks is required to verify that vapor recovery equipment is properly installed and is in use at all times.
            v. Requirement for owner or operator to allow the loading of gasoline from any cargo tank that has a current Maricopa County Pressure Test decal.
    2) General housekeeping requirements

a) Requirements for the owner or operator to minimize gasoline spills, clean up spills quickly, cover all open gasoline containers and gasoline storage tank fill-pipes with a gasketed seals when not in use. Minimize gasoline sent to open waste collection systems and properly dispose of VOC containing material.

3) Requirements for gasoline storage equipment and operations
   a) Unless exempt (per §5-20-100.3), underground storage tanks (UST) must meet ten conditions, including but not limited to, being equipped and maintained with CARB certified components and authorized personnel.
   b) Above ground storage tanks with a capacity greater than 250 gallons have to meet ten conditions similar in nature to the UST requirements in 5-20-300(3)(a).
4) Loading of gasoline
   a) When one or more owner or operator is present during acceptance of loading of gasoline, they shall verify the gasoline cargo tank displays a valid Maricopa County vapor tightness test decal and the owner or operator connects the vapor return hose.
5) Control of VOC vapors
   a) Unless exempted, gasoline vapors are to be handled by a Stage 1 vapor recovery system
   b) Stage 1 vapor recovery system system configuration
      i. CARB certified replacement parts required including vapor valves. The vapor valves are to be inspected weekly and records are to be kept on the inspections.
      ii. CARB certified fittings required for above ground systems
      iii. Each new tank shall have CARB-certified fittings and have its own separate and functioning dual-point vapor return line and is allowed to have a combination vapor recovery system linking it to one or more other stationary gasoline dispensing tanks
      iv. Prohibition on use of coaxial fill pipes in new installations and major modifications.
   c) Equipment maintenance and use requirements
      i. Vapor loss control equipment needs to be installed and operated correctly and maintained leak-free, vapor-tight and in good working order.
      ii. Coaxial systems on existing tanks shall be maintained according manufacturer(s) standards and have no obstruction of vapor passage from the tank to the cargo tank.
6) Administrative requirements
   a) The owner or operator is required to conduct inspections of the gasoline storage tank, including the spill

containment receptacle, the external fittings of the fill pipe assembly, and the poppetted dry break. The frequency of inspections, at least once per week or if the gasoline dispensing facility receives gasoline loads less than once per week, the inspection shall take place upon the completion of receipt of the load of gasoline.

b) The burden of proof of the eligibility for exemption from a provision(s) in this rule is on the owner or operator. The owner or operator seeking such an exemption shall keep adequate records and give them to the control officer when requested. The owner or operator is also required to provide proof when requested by the Control Officer that a vapor recovery system or its modifications meet the requirements of the article.

c) An owner or operator can't install or reinstall a component related to vapor recovery that's been decertified by CARB.

7) Monitoring and Records

a) Monitoring for leaks

i. Test procedures for combustible gas detector or organic vapor analyzer including calibration of equipment, probe distance, probe movement and probe position

ii. Method 21, alternative screening procedure using a soap solution to determine whether a leak exists

iii. Optical gas imaging may be used to identify vapor leaks. If vapor leaks are detected then the instrument techniques in 5-20-500.1.a are to be used to determine if a vapor leak exists.

b) Compliance inspections

i. During any working hours any gasoline dispensing facility required by this rule to have vapor loss control devices may be subject to monitoring for vapor tightness and liquid leak tightness. Such tanks may be opened for gauging or inspection when loading operations aren't in progress as long as the tank is part of an open system or is served by a positive-pressure relief valve.

c) Gasoline dispensing facility recordkeeping

i. The owner or operator is required to keep records of the total amount of gasoline received each month which shall be recorded by the end of the following month. The owner or operator shall record inspections in a permanent record or log book by the end of Saturday of the following week or shall record the inspection within three days after receipt of the load of gasoline if the facility receives gasoline loads less than one per week. The records shall be retained for at least 5

years and records of the past 12 months shall be readily accessible and made available to the Control Officer within 24 hours upon verbal or written request.

d) Compliance determination
    i. Compliance parameters defined for control efficiency of vapor loss, vapor pressure of gasoline and vapor leaks including reference to test methods in §5-20-500.5
e) Test methods
    i. Stationary source test methods listed including EPA, ASTM, CARB, San Diego County and American Petroleum Institute.

F. A reference to any study relevant to the rule that the agency reviewed and either relied on in its evaluation of or justification for the rule or did not rely on in its evaluation of or justification for the rule, where the public may obtain or review each study (See contact information in subsection C above), all data underlying each study, and any analysis of each study and other supporting material:

Design criteria for stage I vapor control systems gasoline service stations. EPA-450-R-75-102.

G. Economic, small business and consumer impact statement

The following discussion addresses each of the elements required for an economic, small business and consumer impact state under A.R.S. §41-1055.

This rulemaking is proposing to adopt Chapter 5, Article 20. Storage and Loading of Gasoline at Gasoline Dispensing Facilities.

The persons affected by this rulemaking will be the owners or operators of gasoline dispensing facilities in the Pinal County portion of the Phoenix metro ozone nonattainment area. The department has issued permits to 14 facilities that will be subject to Chapter 5, Article 20. The majority of these permitted gasoline dispensing facilities are owned and operated by national chains with other locations in Maricopa County. The facilities in Maricopa County have been regulated with RACT level rules (Maricopa County rules 33, 33.3 and 353) since the 1980s. Correspondingly their equipment and business practices align with the RACT rule. Since the gasoline dispensing facilities in Pinal County are in close proximity to the Phoenix metro and are run by the same national chains, both equipment and business practices are similar in nature. Therefore the majority of the equipment and business practices requirements of Chapter 5, Article 20 are for the most part already being followed. Therefore minimal impacts are expected. The one aspect of Chapter 5, Article 20 that may have some impact on gasoline dispensing facilities in the Pinal County portion of the Phoenix ozone nonattainment area are the administrative requirements. The owners or operators will be required to regularly inspect their storage tanks for leaks and also to keep records of

their inspections. It is assumed that the owners or operators of the gasoline dispensing facilities already inspect their facilities in order to limit the possibility of loss of fuel from leaking storage tanks. However the documentation of these inspections may not be taking place currently so additional administrative duties will be required of the regulated community in order to comply with Chapter 5, Article 20.

The probable costs to the implementing agency (Pinal County Air Quality) will be minimal since the department already conducts regular inspections of gasoline dispensing facilities in order to verify compliance with their permit requirements.

H. The proposed changes will take effect on January 1, 2017.

I. Compliance with the Fee-limitations of A.R.S. §49-112 (A) or (B).

Based on information and belief, the Director of the Pinal County Air Quality Control District affirms the following:

Initially, the total of the fees and other charges currently assessed in connection with the administration of the County's air quality program do not now equal the cost of program administration. To the extent that both the County and ADEQ impose parallel fees, the County's fees are capped by rule at ADEQ's rates, which implicitly affirms that the County's fees are reasonable. To the extent the County's program affects certain sources that ADEQ either does not regulate or does not charge, these proposed changes do not impose any additional fees on those sources at this time.

J. Persons may obtain a full copy of the proposed rule or existing rules at:

Pinal County Air Quality Control District
31 North Pinal St., Building F.
P.O. Box 987
Florence, AZ. 85132

http://www.pinalcountyaz.gov/AirQuality/Pages/home.aspx

K. A list of all previous notices appearing in the Register addressing the proposed rules:

Notice of Rulemaking Docket Opening: ## A.A.R. ##, ###, August 26, 2016.

L. Date, time and location of scheduled oral proceeding:

1) Stakeholder Meeting

Date:	September 13, 2016
Time:	2 p.m.
Location:	31 N. Pinal St., Florence, AZ. Building F, Ocotillo room

2) Oral Proceeding

Date: September 27, 2016

Time: 2 p.m.

Location: 31 N. Pinal St., Florence, AZ.
Building F, Ocotillo room

Nature of meeting: Oral proceeding before the Control Officer or his designee in accord with A.R.S. §49-471.06(C) to consider public comments upon any or all of this proposal.

2. The full text of the proposed changes follows:

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)

5. Chapter 5
    a. Article 20. (as amended ##/##/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.

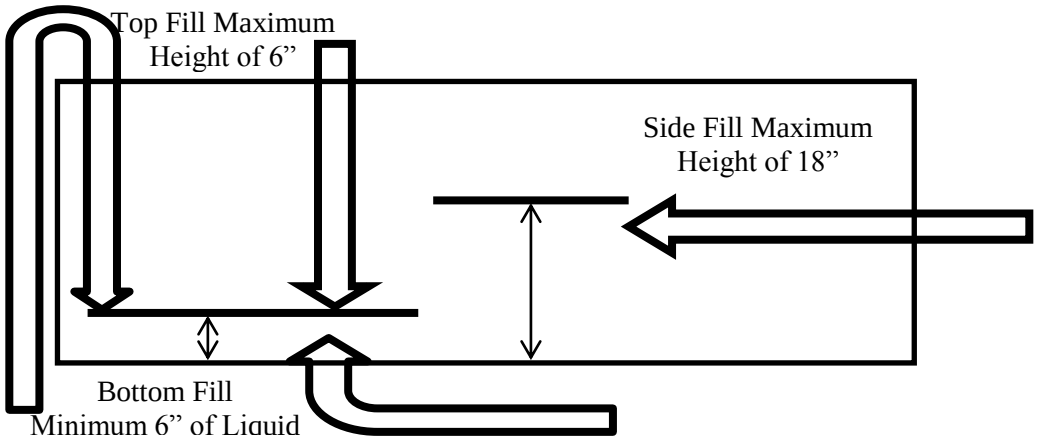
f. The owner or operator of a gasoline dispensing facility that is unattended or when there is only one owner or operator under control of the gasoline dispensing facility present, the owner or operator of the gasoline dispensing facility is exempt from §5-20-300.4.

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 gasketted vapor tight cap;

vii. Each poppetted dry break is equipped with vapor tight seal and gasketted vapor tight cap;
viii. Each gasketed vapor tight cap is maintained in a closed position except when the fill pipe or poppetted 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 poppetted 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 1 Adaptors, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
ii. California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003.
iii. CARB Test Procedure TP-201.1A - "Determination of Efficiency of Phase I Vapor Recovery Systems of Dispensing Facilities with Assist Processors".
iv. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
v. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1C, Leak Rate of Drop Tube/Drain Valve Assembly, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.
vi. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1D, Leak Rate of Drop Tube Overfill Protection Devices and Spill Container Drain Valves, October 8,

2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.

vii. California Air Resources Board Vapor Recovery Test Procedure TP-201.3—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended July 26, 2012.

viii. Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994.

d. Additional Test Methods:

i. San Diego County Air Pollution Control District Test Procedure TP-96-1, March 1996, Third Revision, Air Pollution Control District, 9150 Chesapeake Drive, San Diego, CA 92123-1096.

ii. American Petroleum Institute Standard API STD 650 Welded Tanks for Oil Storage, Twelfth Edition, Includes Errata 1 (2013), Errata 2 (2014), and Addendum 1 (2014).