PINAL COUNTY

Pinal County Air Quality Control District

Ozone Reasonably Available Control Technology (RACT) Rulemaking – Gasoline Dispensing Facilities (Chapter 5, Article 20)

Notice of Final Rulemaking

Pursuant to A.R.S. §49-471.07

Pinal County Air Quality Control

August 10, 2020

Published online at
http://www.pinalcountyaz.gov/AirQuality/Pages/Rulemaking.aspx

On August 10, 2020

1. Preamble
   A. The Pinal County Air Quality Control District (PCAQCD), an operating division of Pinal County, proposed 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 incorporate into the Phoenix metro ozone nonattainment area for the 2008 8-hour ozone National Ambient Air Quality Standards (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, and severe) and include RACT requirements.

      Unfortunately the nonattainment area didn't attain the ozone NAAQS by the July 20, 2015 deadline and was 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 that included RACT rules. As required, PCAQCD conducted an ozone RACT rulemaking in 2016 which culminated in an 11/30/2016 BOS approval of Chapter 5, Article 20 – Storage and Loading of Gasoline at Gasoline Dispensing Facilities (Gasoline Dispensing Facilities) and subsequent SIP submittal to EPA (via the Arizona Department of Environmental Quality (ADEQ)). The Environmental Protection Agency (EPA) reviewed the submitted gasoline dispensing facilities rules (Ch. 5, Article 20) and published a Proposed Rule - Partial Approval, Partial Disapproval and Limited Approval, Limited Disapproval in the Federal Register (84 FR 20838, May 13, 2019). The Final Rule was published in the Federal Register on August 9, 2019 (84 FR 39196) and started a sanctions clock. PCAQCD is required to revise the gasoline dispensing facilities rules and address the approvability issues (covered under this proposed rulemaking) and have EPA approve the revised rules by March 9, 2021.

      The adopted amended rules are identified below and include an amendment to §1-1-105 (not to be included with the SIP submittal) with the ultimate purpose of this rulemaking being the submittal through ADEQ to EPA (and EPA approval) of the adopted rules in Chapter 5, Article 20, Sections 100, 200, 300, 400 and 500.

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

B. Those wishing further information regarding any aspect of this rulemaking may contact Scott DiBiase, Pinal County Air Quality, 31 North Pinal St., Building F, Florence, Arizona, 85132, 520-866-6929, scott.dibiase@pinal.gov.

C. The rulemaking process consisted of an initial administrative rule development process, including a combined notice of proposed rulemaking and oral proceeding (posted online April 20, 2020), a 30 day public comment period, a stakeholder meeting held on June 3, 2020, an oral proceeding before the Control Officer or his designee held on June 10, 2020. Written comments were due prior to the close of the comment period, which was the close-of-business on the day of the Oral Proceeding (no comments were received). The final step in the rule adoption process was a public hearing before the Board of Supervisors on August 5, 2020.

D. The adopted rule revisions include the following:

1. Adopted grammatical and numbering corrections/changes throughout Chapter 5, Article 20 (i.e. removal of extra period, comma, updating numbering, etc.) which don't change the meaning or purpose of the rules.
2. Revision of §1-1-105 to include the amend date for Chapter 5, Article 20 rules (sections 100 through 500). §1-1-105 is a list designating which Board approved rules (and their corresponding adoption dates) 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. §1-1-105 is not to be included in the SIP submittal.
3. Removal of definition of "Aviation Gasoline" in Section 200 due to the removal of the aviation gasoline exemption in Section 100.

Rule Approvability Comments listed in the March 11, 2019 EPA letter from Doris Lo, Manager Rules Office to PCAQCD Director Michael Sundblom:

1. 100.3.f exempts an owner or operator from verifying that the gasoline cargo tank has a valid Maricopa County vapor tightness certification decal and from verifying specified work practice requirements when loading gasoline, if the station is unattended or there is only one owner or operator present. As there may be one attendant at a Gasoline Dispensing Facility in many instances for a variety of reasons, this exemption is overly broad and challenging to verify or enforce. The District must remove or narrow this exemption and/or amend 5-20-300.4.

Removal of 100.3.f and addition of decal requirement and work practice requirements language in 5-20-300.4

2. 300.1.e This section does not state a prohibition. The District must rephrase this section to state a prohibition, for example, specify that an owner or operator shall not allow the loading of gasoline from any cargo tank unless the cargo tank has a current Maricopa County Pressure Test decal.

   Removal of 300.1.e and addition of decal requirement language in 5-20-300.4.d

Rule Improvement Comments listed in the March 11, 2019 EPA letter from Doris Lo, Manager Rules Office to PCAQCD Director Michael Sundblom:

1. 100.2 The applicability section references the 2008 NAAQS and associated boundaries. This may become a problem if the nonattainment area boundaries change for future NAAQS. We suggest less specificity.

   Kept applicability section language as is in order to provide future opportunities for potentially affected source categories that may be impacted to changes in ozone nonattainment areas to comment on future ozone RACT rulemakings.

2. 100.3.b loading of aviation gasoline into storage tanks at airports is exempted. Maricopa County plans to delete this exemption in its Rule 351 to address SIP relaxation. Pinal County may want to consider deleting this exemption for consistency with MC Rule 351.

   Per EPA request, removal of 100.3.b

3. 100.3.c Bulk gasoline plant and bulk gasoline terminal are exempted but not defined in the rule.

   Addition of definitions for bulk gasoline plant and bulk gasoline terminal in Section 200 – Definitions.

4. 100.3.e.i last line — the reference to "annual emissions" should be changed to "annual throughput".

   Change from ‘‘annual emissions’’ to ‘‘annual throughput’’ in 100.3.i

5. 200.10 Definitions typo — MARICOP COUNTY. We also recommend clarifying this definition to state: "….as described in the current SIP-approved version of Maricopa County Air Quality Rule 352."

   Per EPA request, typo correction and addition of ‘‘Current SIP-Approved’’ language in the Maricopa County Vapor Tightness Test definition.

6. 200.14.c Submerged Fill - Horizontal fill pipes are allowed up to 39.4 inches from the tank bottom. Most similar rules in other air districts do not have this provision and Maricopa County Rule 350 replaced references to horizontal fill pipes with an option for gasoline storage tanks to be API Standard 650 compliant. Consider deleting references to horizontal fill pipes if Pinal County does not have gasoline

storage tanks with fill pipes whose discharge opening is over 18" from the bottom of the tank. Alternatively, consider incorporating the requirements in 40 CFR 63.11117(b)(3).

Removal of submerged fill definition and graphic in Section 200 and replacement with language that references 40 CFR 63.11117 (2019).

7. 200.16 specifies vapor tight status is determined by a "suitable detector". Please clarify or define the term "suitable detector."

   Removal of ‘‘suitable detector’’ and replacement with more specific rule language (i.e. organic vapor analyzer, combustible gas detector).

8. 300 Standards We recommend adding:
   1) Language that requires gasoline dispensing be discontinued immediately when any liquid leaks, visible vapors, or significant odors are observed and not be resumed until the observed issue is repaired and,
   2) language that prohibits the use of Stage I vapor recovery system that has any defects that substantially impair effectiveness of the vapor recovery equipment, including defects listed in Arizona Administrative Code Title 3, Chapter 7, R3-7-1007.D[1] and applicable Stage I defects incorporated by reference in California Code of Regulation, Title 17, Division 3, Chapter 1, Subchapter 8, Article 1, 94006[2].

   Addition of new language in 300.4 to address the EPA comments above.

9. 300. The CTG applicable to vapor recovery systems and cargo tanks includes the requirement that vapor collection and vapor processing equipment be designed and operated to prevent gauge pressure in the cargo tank from exceeding 18 inches of water and prevent vacuum from exceeding 6 inches of water.[3] As the CTG is applicable to cargo tanks loading fuel at gasoline delivery facilities, we recommend including this requirement.

   Addition of new language in 300.4 to address the EPA comments above.

10. 300.1a.iii missing date "After [date of rule adoption], each…"

[1] Available at https://apps.azsos.gov/public_services/CodeTOC.htm.

[2] Available at https://govt.westlaw.com/calregs/Document/I6C9E7137AFA443A89AC95911DO5D19D?viewType=FullText&originatio n Context—documenttoc&transitionType—Documentltem&contextData=(sc.Default) and https://ww2.arb.ca.gov/ourwork/ programs/vapor-recovery/vapor-recovery-equipment-defects-list.

[3] See "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems" (EPA-450/2-78-051, December 1978), section II.B.2.2. available at https ://www3. epa.gov/airqua I ity/ctg act/197812 voc epa450 2-78-051 tank trucks vcs.pdf

Added the rule adoption date after the Pinal County Board of Supervisors approved the rulemaking proposal, before ADEQ submittal and request (to EPA) for inclusion into the State Implementation Plan.

11. 300.1 Although the rule specifies Stage I vapor recovery system replacement components must be CARB certified (sections 300.1 and 300.5.b), it is not clear whether the rule requires new Stage I vapor recovery installations be CARB certified. We recommend clarifying in the rule that for vapor recovery systems to be sold, or installed in the district, the vapor recovery system and piping must be CARB certified.

    Removal of original language and addition of clarifying language in 300.1 to address EPA's comment.

12. 300.3.a.x; 300.3.b.vii, viii, ix; 400.1.a.i; and 500.4.c.iii all refer to a spill containment receptacle, however the term is not defined. We recommend adding a definition for the term.[4]

    Addition of spill containment receptacle in Section 200.

13. 300.3.b.ix states "Each spill containment receptacle equipped with an integral drain valve or other approved equipment…" should clarify who approves the "other approved equipment" (e.g., Control Officer?) or the criteria for the approval.

    Removal of generic approved language and replacement with CARB-Certified.

14. 300.5.b.ii.2 typo internal cross reference to §5-20-500.2 is incorrect. Propose revision in numbering to correct cross reference.

    Revision to the number to correct cross reference.

15. 300.5.c.i.3 How often is the entire vapor recovery system tested to ensure it meets the "vapor tight" requirement, e.g., using CARB TP 201.3? e.g., Bay Area AQMD Regulation 8 Rule 7, Gasoline Dispensing Facilities and South Coast AQMD Rule 461, Gasoline Transfer and Dispensing[5], specify annual test using the CARB static pressure decay test. The Bay Area rule allows a limited testing frequency exemption (at least once every 24 months) for tanks equipped with an in-station diagnostics system. (see Reg 8 Rule 7, sections 8-7-301.13 and 8-7-117).

    No change to the current language.

[4] or example, SCAQMD Rule 461 section (b)(33) and Sacramento
Air Quality Management District Rule 448 section 215. Available at http://www.aqmd.gov/docs/default-source/rulebook/rule-iv/rule-461.pdf?sfyrsn=4 and http://www.airquality.org/ProgramCoordination/Documents/rule448.pdf.

[5] Available at http://www.baaqmd.govi—/media/dotgov/files/rules/reg-8-rule-7-gasoline-dispensingfacilities/documents/rg0807.pdf?la—en and http://www.aqmd.govidocs/default-source/rule-book/rule-iv/rule461 .pdf?sfvrsn=4.

16. 500.1.a Monitoring and Records Monitoring for Leaks. As written, all potential sources of leaks shall be monitored with a combustible gas detector (CGD) or organic vapor analyzer (OVA) during loading of gasoline into storage tanks. We are not aware of a similar California requirement to monitor for leaks using a CGD or OVA during cargo tank deliveries to gasoline dispensing stations. If this section is retained, consider adding a lead-in paragraph to allow facilities to use 500.1.b and 1.c screening procedures similar to Maricopa County Rule 353 section 501 to determine when leak monitoring with instrumentation is required. Also, before making any changes, please note that section 500.1 appears linked to 500.4.c.i. Also see comment below that section 500.4.c.i is referencing back to itself. The rule should include a requirement to record the results of leak monitoring specified in 500.1.a similar to Maricopa County Rule 353 section 501.1.f.

    Removal and replacement of language to add a lead-in paragraph (500.1.a) to allow facilities to use 500.1.b, 1.c and addition of 500.2.vi to address the other EPA comments.

17. 500.1.c — The second sentence is confusing as stated: "If a vapor leak is detected, the instrument techniques… of this rule shall be used to determine if a vapor leak exists." Please consider whether the second usage of "vapor leak" should instead be "vapor tight condition."

    Removal of original section and replacement in 500.1.a and b including ‘‘vapor tight condition’’ language.

18. 500.4.a Compliance determination. This section allows the control efficiency to be determined by any "CARB-approved test methods." Please amend this provision to reference either EPA-approved CARB test methods, or the CARB test methods listed in section 500.5.c.

    Addition of ‘‘EPA-approved’’ per EPA recommendation.

19. 500.4.b The right-hand side closing parenthesis is missing after "Reid Method" and "Dry Method".

    Addition of right-hand side closing parenthesis

20. 500.4.c.i Vapor Leaks typo This section references back to itself "§5-20-500(4)(c)" to determine leak tight status.

    Addition of corrective language reference subsection 500.4 in general.

21. 500.4.c.iii cross references to 5-20-300.3, which seems incorrect.

    Correction to reference section 400.

22. 500.5.a.iv references EPA Method 25 and its submethods in 40 CFR 60, Appendix A. It is not clear which "submethods" the District intends to reference (e.g., EPA method 25A, 25B, 25C, 25D, or 25E). Please clarify this provision by referring specifically to the intended test methods.

Addition of clarifying language (EPA submethods 25A and 25B) to address EPA question/concern.

23. 500.5.a.vi Optical Gas Imaging (OGI) - references 40 CFR 60.18(g) for OGI. Please also reference 40 CFR 60.18(h) and (i), as those parts also include relevant requirements when using an OGI.

    Addition of language that references 40 CFR 60.18(h) and (i).

24. 500.5.b incorporates by reference ASTM D323-15a and ASTM D4953-15. EPA does not automatically approve the latest ASTM method for use. Please reference the most recent ASTMs that are EPA-approved (ASTM D323-06 and ASTM D4953-06). Alternatively, the District may submit a formal request and information including the differences between the requested method and latest EPA-approved method, for EPA approval.

    Revision of language to reference the most recent ASTMs that are EPA-approved.

E. A reference to any study relevant to the rule that the agency reviewed and either relied on in it 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 B above), all data underlying each study, and any analysis of each study and other supporting material.

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

EPA Final Rule – Partial Approval, Partial Disapproval and Limited Approval, Limited Disapproval of Arizona Air Plan Revisions; Pinal County Air Quality Control District (84 FR 39196, August 9, 2019). Docket No. EPA-R09-OAR-2019-0159.

TSD Reviewing Pinal RACT SIP, March 2019 – prepared by Stanley Tong – EPA-R09-OAR-2019-0159-0020.

EPA letter from Doris Lo, Manager, Rules Office, Air Division, EPA Region 9, dated March 11, 2019 to Michael Sundblom, Director, Pinal County Air Quality Control District. RE: EPA Comments on the Pinal County Air Quality Control District Reasonably Available Control Technology (RACT) Analysis, Negative Declaration and Rules Adoption.

F. 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 adopted amendments to Chapter 5, Article 20. Storage and Loading of Gasoline at Gasoline Dispensing Facilities in the Pinal County portion of the Phoenix-Mesa 8-hour ozone nonattainment area.

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 16 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.

G. The adopted changes took effect on August 5, 2020.

H. 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 changes do not impose any additional fees on those sources at this time.

I. Persons may obtain a full copy of the adopted rules 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

J. A list of all previous notices related to this rulemaking:

Combined Notice of Proposed Rulemaking and Oral Proceeding – posted online April 20, 2020 (https://www.pinalcountyaz.gov/AirQuality/Pages/CurrentRulemaking3.aspx).

K. **The full text of the 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 13. (as amended 11/30/16), excluding
      i. §5-13-390 (as amended 10/12/95)
   a. Article 20. (as amended ~~11/30/16~~ ##/##/20)

B. Notwithstanding the approval as elements of the SIP of those provisions of the Code identified in paragraph A of this section, those provisions, save §3-1-084 which shall be expressly exempted from the limitation of this paragraph, shall operate as elements of the SIP only insofar as they pertain to:

1. "construction," as defined in Nov. '93 Code §1-3-140.28; or

2. "modification," as defined in Nov. '93 Code §1-3-140.85; and

C. Notwithstanding the approval as elements of the SIP of those provisions of the Code identified in paragraph A of this section, neither those provisions nor any permit conditions imposed pursuant to those provisions shall:

1. Operate as elements of the SIP insofar as they pertain to other than "conventional pollutants," as defined in §1-3-140.33;

2. Operate as elements of the SIP insofar as they pertain only to a requirement arising under, or pertain to a source subject to regulation exclusively by virtue of a requirement arising under:

   a. §111 of the Clean Air Act; or

   b. Title IV of the 1990 amendments to the Clean Air Act; or

   c. Title VI of the 1990 amendments to the Clean Air Act; or

   d. Any section of this Code that is not a part of the SIP;

3. Operate as an element of the SIP, at least insofar as they impose a "fee";

4. Operate as an element of the SIP, at least insofar as they require a "certification";

5. Operate as an element of the SIP, at least insofar as they impose obligations pertaining to "renewals";

6. Operate as an element of the SIP, at least insofar as they impose requirements regarding "excess emissions"; or

7. Operate as an element of the SIP, at least insofar as they impose requirements regarding "compliance plans."

D. As a renumbering and reconciliation of previously approved SIP provisions as elements of this Code, the Board of Supervisors additionally designates the following list of sections within this Code, to be presented to the Governor of Arizona for transmittal to the Administrator of the EPA with a request that they be included as elements in the Arizona SIP without operational limitation:

1. §§1-1-010.C (2/22/95) and 1-1-010.D (2/22/95) *Declaration of Policy*

2. Chapter 2, Article 8 (As amended 1/7/09) *Visibility Limiting Standard*

3. Chapter 3, Article 8 (2/22/95) *Open Burning*

4. [Reserved]

5. [Reserved]

6. [Reserved]

7. [Reserved]

8. [Reserved]

9. [Reserved]

10. [Reserved]

11. [Reserved]

12. §5-18-740 (2/22/95) *Storage of Organic Compounds - Organic Compound Emissions*

13. §5-19-800 (2/22/95) *Loading of Volatile Organic Compounds - Organic Compound Emissions*

16. §5-22-950 (2/22/95) *Fossil Fuel Fired Steam Generator Standard Applicability*

17. §5-22-960 (2/22/95) *Fossil Fuel Fired Steam Generator Sulfur Dioxide Emission Limitation*

18. §5-24-1030.F (2/22/95) *Generally Applicable Federally Enforceable Minimum Standard of Performance - Organic Compound Emissions*

19. §5-24-1030.I (2/22/95) *Generally Applicable Federally Enforceable Minimum Standard of Performance - Carbon Monoxide*

20. §5-24-1032 (2/22/95) *Federally Enforceable Minimum Standard of Performance - Process Particulate Emissions*

21. §5-24-1040 (2/22/95) *Carbon Monoxide Emissions - Industrial Processes*

22. §5-24-1045 (2/22/95) *Sulfite Pulp Mills - Sulfur Compound Emissions*

23. §5-24-1050 (2/22/95, as amended June 20, 1996) *Reduced Sulfur Emissions - Default Limitation*

24. §5-24-1055 (2/22/95) *Pumps and Compressors - Organic Compound Emissions*

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

5-20-100. GENERAL

1. Purpose: To limit emissions of volatile organic compounds (VOC) from gasoline during storage and loading of gasoline at gasoline dispensing facilities.
2. Applicability: This Article applies to an owner or operator who operates a gasoline dispensing facility, including those located at airports in the Pinal County portion of the Phoenix-Mesa 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS) nonattainment area, namely T1N, R8E; T1S, R8E (Sections 1 through 12) as defined in 40 CFR 81.303 (2019).
3. Exemptions:
    a. This Article does not apply to the storage and loading of the following fuels:
        i. Diesel
        ii. Liquefied petroleum gas (LPG)
    ~~b. 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.~~ b. Bulk gasoline plant or bulk gasoline terminal: This Article does not apply to a bulk gasoline plant or a bulk gasoline terminal.
    ~~d.~~ c. Stationary gasoline dispensing tanks for farm operations: Any stationary gasoline dispensing tank used exclusively for the fueling of implements of normal farm operations must comply with Section §5-20-300.2 (General Housekeeping Requirements), but is exempt from all other requirements of this rule.
    ~~e.~~ d. Control of VOC Vapors exemption: The Stage 1 Vapory Recovery System provisions of §5-20-300.5.b of this Article shall not apply to the following stationary gasoline dispensing tanks:
        i. Non-resale gasoline dispensing operations: Any stationary gasoline dispensing facility receiving less than 120,000 gallons of gasoline in any 12 consecutive calendar months, dispensing no resold gasoline, and having each stationary gasoline tank equipped with a permanent submerged fill pipe is exempt from §5-20-300 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~~ throughput later fall below this threshold.
        ii. Stationary gasoline dispensing tanks of 1,000 gallons or less: Any stationary gasoline dispensing tank having a capacity of 1,000 gallons or less which was installed prior to October 2, 1978, provided that such tank is equipped with a permanent submerged fill pipe. Where, because of government regulation including, but not limited to, Fire Department codes, such a fill pipe cannot be

installed, the gasoline shall be delivered into the tank using a nozzle extension that reaches within 6 inches of the tank bottom.

~~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.~~1. BULK GASOLINE PLANT – Any gasoline storage and distribution facility that meets all of the following:

a. Loads gasoline from a pipeline, railcar, or gasoline cargo tank into a stationary gasoline storage tank;

b. Loads gasoline from the stationary gasoline storage tank into a gasoline cargo tank for transport to a gasoline dispensing facility (GDF) or a bulk gasoline plant; and

c. Has a gasoline throughput of less than 20,000 gallons per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State, or local law, and discoverable by the Control Officer and any other person [40 CFR §63.11100]

2. BULK GASOLINE TERMINAL – Any gasoline storage and gasoline distribution facility that meets all of the following:

a. Loads gasoline from a pipeline, railcar, or gasoline cargo tank into a stationary gasoline storage tank;

b. Loads gasoline from the stationary gasoline storage tank into a gasoline cargo tank for transport to a gasoline dispensing facility (GDF) or a bulk gasoline plant; and

c. Has a gasoline throughput of 20,000 gallons per day or greater. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State, or local law, and discoverable by the Control Officer and any other person [40 CFR §63.11100]

~~2.~~ 3. CARB-CERTIFIED: A vapor control system, subsystem, or component that has been specifically approved by system configuration and manufacturer's name and model number in an executive order of the California Air Resources Board (CARB), pursuant to Section 41954 of the California Health and Safety Code.

~~3.~~ 4. COAXIAL VAPOR BALANCE SYSTEM: A type of vapor balance system in which the gasoline vapors are removed through the same opening through which the fuel is delivered.

~~4.~~ 5. DUAL-POINT VAPOR BALANCE SYSTEM: A type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection. [40 CFR 63.11132].

~~5.~~ 6. GASOLINE: Any petroleum distillate, petroleum distillate/alcohol blend, petroleum distillate/organic compound blend, or alcohol having a Reid vapor pressure between 4.0 and 14.7 psi (200-760 mm Hg.), as determined by §5-20-500(~~4~~5)(b) of this Article, and which is used as a fuel for internal combustion engines.

~~6.~~ 7. GASOLINE CARGO TANK: A delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load. This includes any hoses the vessel carries through which deliveries must be made.

~~7.~~ 8. GASOLINE DISPENSING FACILITY (GDF): Any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad

engine, including nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on-road and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline fueled engines and equipment. [40 CFR 63.11132]

~~8.~~ 9. GASOLINE VAPORS: Vapors, originating from liquid gasoline, that are usually found in mixture with air. Included are any droplets of liquid gasoline or of gasoline vapor condensate that are entrained by the vapor.

~~9.~~ 10. LEAK-FREE: A condition in which there is no liquid gasoline escape or seepage of more than 3 drops per minute from gasoline storage, handling, and ancillary equipment, including, but not limited to, seepage and escaped from above ground fittings.

~~10.~~ 11. MARICOPA COUNTY (MC) VAPOR TIGHTNESS TEST: The complete pressure, vacuum, and vapor-valve testing of a gasoline cargo tank that is performed according to Maricopa County specifications as described in the current SIP-approved Maricopa County Air Quality Rule 352.

~~11.~~ 12. POPPETTED DRY BREAK: A type of vapor loss control equipment that opens only by connection to a mating device to ensure that no gasoline vapors escape from the stationary dispensing tank before the vapor return line is connected.

13. SPILL CONTAINMENT RECEPTACLE: An enclosed container around:

a. A gasoline fill pipe that is designed to collect any liquid gasoline spillage resulting from the connection, flow of gasoline during loading, or the disconnection between the gasoline delivery hose and the fill pipe.

b. A vapor return riser connection that is designed to collect any liquid gasoline spillage resulting from the connection, the condensation of gasoline vapor during vapor recovery, or the disconnection between the vapor recovery hose and the poppetted valve.

~~12.~~ 14. STAGE 1 VAPOR RECOVERY (VR) SYSTEM: At a gasoline dispensing facility, the use of installed vapor recovery equipment designed to reduce by at least 95% the VOC vapor that would otherwise be displaced into the atmosphere from a stationary dispensing tank when gasoline is delivered into the tank by a gasoline cargo tank. This reduction may be done either by capturing the displaced vapors within the gasoline cargo tank, and or by processing the vapors on site with an emission processing device.

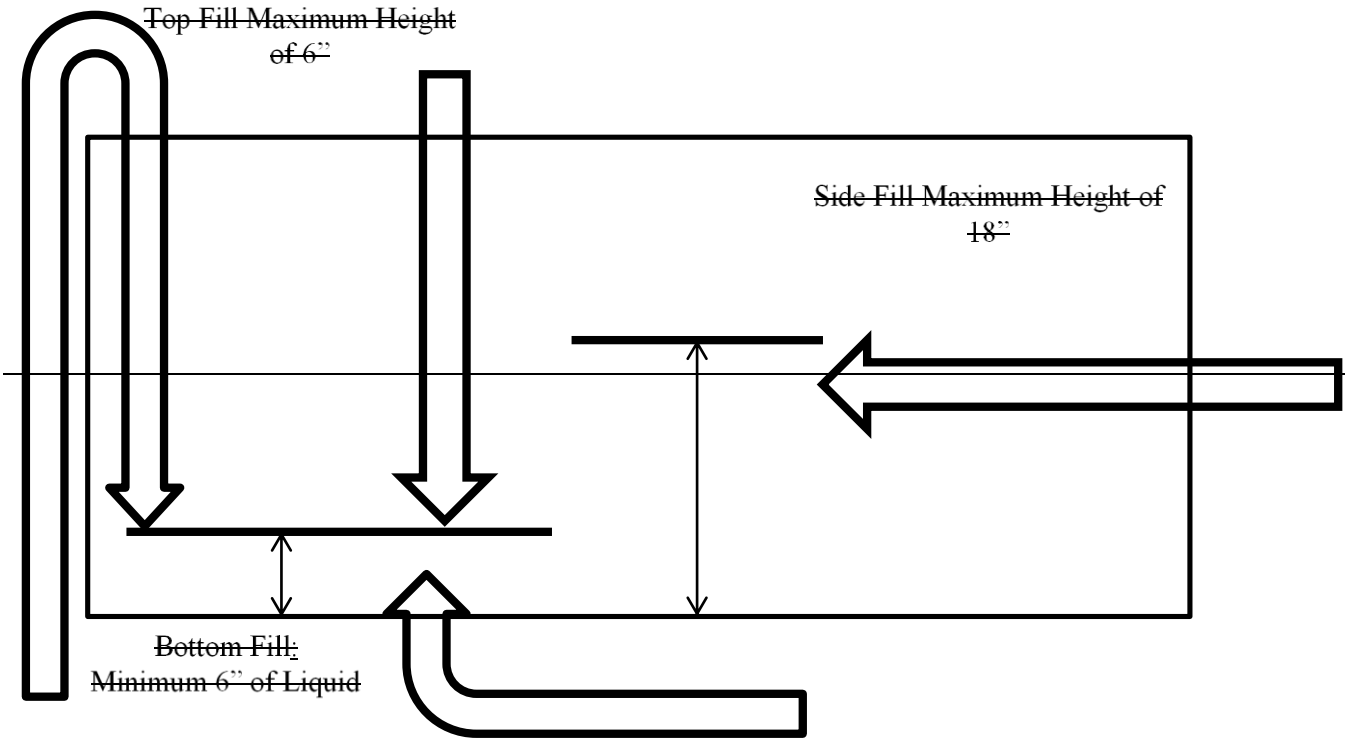
~~13.~~ 15. STATIONARY DISPENSING TANK: Any stationary tank which dispenses gasoline directly into a motorized vehicle's fuel tank, dispenses gasoline into an aircraft's fuel tank, or dispenses gasoline into a watercraft's fuel tank that directly fuels its engine(s).

~~14.~~ 16. SUBMERGED FILL: Any discharge pipe or nozzle which meets the applicable specifications ~~as follows~~ in 40 CFR 63.11117 (2019):

~~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.~~ 17. VAPOR LOSS CONTROL EQUIPMENT: Any piping, hoses, equipment, or devices which are used to collect, store and/or process VOC vapors at a service station or other gasoline dispensing operation.

~~16.~~ 18. VAPOR TIGHT: A condition in which ~~a suitable detector~~ an organic vapor analyzer (OVA) at the site of (potential) leakage of vapor shows less than 10,0000 ppmv ~~when calibrated with~~ as methane~~;~~ or ~~the detector~~ a combustible gas detector (CGD) shows less than one-fifth (1/5) LEL (lower explosive limit) when either the OVA or the CGD is ~~subsequent to calibration~~ calibrated 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 stationary gasoline storage tank, any type of vapor recovery system or any of its components unless the tank, system and components meet the following:
        ~~i. 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.~~

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

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

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

~~iii.~~ iv. 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.~~

d. The owner or operator of a stationary gasoline storage tank equipped with vapor recovery and the owner or operator of a gasoline cargo tank equipped with vapor recovery shall have the responsibility to ensure that the vapor recovery equipment is properly connected during the loading of gasoline.

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

f. An owner or operator of a stationary gasoline storage tank shall maintain the stationary gasoline storage tank in a leak-free, vapor tight condition as to not allow liquid or vapor to escape through a storage tank's outer surfaces, nor from any of the joints where the tank is connected to pipe(s), wires or other systems.

2. GENERAL HOUSEKEEPING REQUIREMENTS:
   a. An owner or operator shall not store gasoline or permit the loading of gasoline in any stationary gasoline storage tank located above or below ground unless all of the following conditions are met:
      i. Minimize gasoline spills;
      ii. Clean up spills as expeditiously as practicable;
      iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;

iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling equipment, such as oil/water separators;
v. Properly dispose of any VOC containing material.

3. GASOLINE STORAGE EQUIPMENT AND OPERATION REQUIREMENTS:
   a. An Underground Storage Tank (UST) with a capacity more than 250 gallons ~~must~~ shall 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~~ shall be equipped and maintained according to §5-20-300.1 of this rule~~;~~.
      ii. For an existing GDF, maintain a dual-point vapor recovery system OR a coaxial vapor balance system. For new installations or modifications to existing GDF, install and maintain a dual-point vapor recovery system with separate fill and vapor connection points;
      iii. A pressure vacuum vent ~~is~~ shall be installed and maintained per manufacturer specifications~~;~~.
      iv. The vapor recovery system ~~is~~ shall be maintained and operated according to the manufacturer's specifications and the applicable CARB Executive Orders including the corresponding CARB approved Installation, Operation and Maintenance Manual~~;~~ unless exempt from the vapor recovery system requirements in §5-20-100.3 (Exemptions).
      v. A permanent submerged fill pipe is installed and maintained to ensure the highest point of the discharge opening is no more than six inches ~~(6")~~ from the bottom of the UST;
      vi. Each fill pipe ~~is~~ shall be equipped with gasketted vapor tight cap~~;~~.
      vii. Each poppetted dry break ~~is~~ shall be equipped with vapor tight seal and gasketted vapor tight cap~~;~~.
      viii. Each gasketed vapor tight cap ~~is~~ shall be 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~~ shall be maintained: ~~to prevent vapor leakage from any portion of the vapor recovery system; and~~
         1. To be intact and not loose.
         2. To prevent liquid leakage.
         3. To prevent vapor leakage. Vapor leakage can be determined by using one of more of the methods found in §5-20-500.
      x. A spill containment receptacle ~~is installed and maintained free of standing liquid, debris and other foreign matter. The spill containment receptacle~~ shall be :
         1. ~~e~~Equipped with an integral drain valve or other CARB-certified equipment, to return spilled gasoline to the underground stationary storage tank. The drain valve shall be maintained closed and free of vapor emissions at all times except when the valve is actively in use.
         2. Maintained to be:
            a. Free of standing gasoline.
            b. Free of standing liquid.
            c. Free of debris.
            d. Free of foreign matter.
            e. Free of cracks and rust.
   b. An Above Ground Storage Tank (AST) with a capacity greater than 250 gallons must meet all of the following conditions:
      i. A permanent submerged fill pipe is installed and maintained to ensure the highest point of the discharge opening is no more than six inches (6") from the bottom

of the AST. If the AST is side filled, the fill pipe discharge opening is no more than 18 inches above the tank bottom;

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

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

iv. Each 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~~ CARB-certified equipment that returns spilled gasoline to the aboveground storage tank shall be maintained closed vapor tight except when the valve is actively in use; and

x. Any overfill prevention equipment shall be approved, installed and maintained vapor tight to the atmosphere. Any device mounted within the fill pipe shall be so designed and maintained that no vapor from the vapor space above the gasoline within the tank can penetrate into the fill pipe or through any of the fill pipe assembly into the atmosphere.

4. LOADING OF GASOLINE:

~~a. 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.~~

a. The owner or operator of the gasoline dispensing facility or the owner or operator of the gasoline cargo tank shall observe all parts of the gasoline loading process and shall discontinue the loading of gasoline if any of the following are observed:

i. Liquid leaks
ii. Visible vapor leaks
iii. Significant odors

b. The owner or operator of a gasoline dispensing facility shall immediately stop using a stage I vapor recovery system or component if one or more of the following system or component defects occur:

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

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

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

1. Spill containment buckets are cracked, rusted, or not clean and empty of liquid; sidewalls are not attached or are otherwise improperly installed; and drain valves are non-functioning or do not seal;

2. A fill adaptor collar or vapor poppet (drybreak) is loose, damaged or has a fill or vapor cap that is not installed or is missing, broken, not securely attached, or missing gaskets;

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

4. A fill tube is missing, broken, or not sealed, has holes or damaged overfill prevention; or the high point of the bottom opening is more than 6 inches above the tank bottom.

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

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

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

d. The owner or operator of the gasoline dispensing facility, or the owner or operator of the gasoline cargo tank, shall not allow the loading of gasoline from any cargo tank into any stationary gasoline storage tank unless the cargo tank clearly displays a valid Maricopa County Vapor Tightness Test decal that is permanently mounted near the front right (passenger) side of the gasoline cargo tank.

5. CONTROL OF VOC VAPORS:
   a. Gasoline vapors displaced from a stationary dispensing tank by gasoline being delivered shall be handled by a Stage 1 Vapor Recovery System, unless the tank is exempted by §5-20-100.3 of this rule.
   b. Stage 1 Vapor-Recovery System Configuration:
      i. Replacement: No part of a vapor recovery system for which there is a CARB specification shall be replaced with anything but CARB-certified components.
      ii. Vapor Valves:
         1. All vapor return lines from a stationary dispensing tank shall be equipped with CARB-certified, spring-loaded, vapor-tight, poppetted dry break valves.
         2. Vapor valves shall be inspected weekly to determine if closure is complete and gaskets are intact; a record shall be made pursuant to §5-20-500.~~2~~4 of this rule.
      iii. Above Ground Systems: An above ground dispensing tank shall have CARB-certified fittings wherever CARB so specifies.
      iv. Installation of New Gasoline Tank: Each new gasoline tank installation shall use CARB-certified fittings exclusively wherever CARB so specifies, and:
         1. Shall have its own separate, functioning dual-point vapor return line;
         2. Is allowed to have a combination vapor recovery system that in addition to having a separate dual-point vapor return line, also has vapor

piping/fittings linking it to one or more (other) stationary gasoline dispensing tanks.

v. New Coaxial Prohibited:
1. No coaxial fill pipes shall be installed in new installations; and
2. No coaxial fill pipes shall be reinstalled in major modifications in which the top of the tank is exposed and the vapor port bung is pre-configured to accept vapor recovery piping.

c. Equipment Maintenance and Use Required:
i. All vapor loss control equipment shall be:
1. CARB certified and installed ~~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. IDENTIFYING A POTENTIAL VAPOR LEAK: For purposes of identifying a potential vapor leak, the use of sight, sound or smell are acceptable. If a potential vapor leak is detected through the use of sight, sound or smell, an owner or operator or Control Officer shall conduct one of the test procedures in §5-20-500.1.a or §5-20-500.1.b.

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

      i. Spray a soap solution over all potential leak sources. The soap solution may be a commercially available leak detection solution or may be prepared using concentrated detergent and water. A pressure sprayer or squeeze bottle may be used to dispense the solution.

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

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

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

   b. Optical Gas Imaging: An owner or operator may use a calibrated optical gas imaging instrument to identify a potential leak. If a vapor leak is detected, the instrument techniques listed in Section §5-20-500.2.a of this rule shall be used to determine if a vapor tight condition exists.

~~1~~2.. ~~MONITORING FOR LEAKS~~DETERMINING VAPOR TIGHT STATUS: An owner or operator or Control Officer shall follow the test procedure in §5-20-500.2.a to determine the vapor tight status on a vapor balance system or spill containment equipment at a stationary gas dispensing facility or on a gasoline cargo tank.

a. Combustible Gas Detector or Organic Vapor Analyzer – Test Procedure: ~~During loading of gasoline into storage tanks, the~~ Check the peripheries of all potential sources of leakage during storage or ~~at the~~ loading of gasoline at the gasoline dispensing 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~~ lower explosive limit (20% LEL) response~~,~~ or calibrated with methane for a 10,000 ppm response.
   ii. Probe Distance: The probe inlet shall be one inch (2.5 cm) or less from the potential leak source when searching for leaks. The probe inlet shall be one inch (2.5 cm) from the leak source when the highest detector reading is being determined for a discovered leak. When the probe is obstructed from moving within one inch (2.5 cm) of an actual or potential leak source, the closest practicable probe distance shall be used.
   iii. Probe Movement: The probe shall be moved slowly, not faster than 1.6 inches per second (4 centimeters per second). If there is any meter deflection at a potential or actual leak source, the probe shall be positioned to locate the point of highest meter response.
   iv. Probe Position: The probe inlet shall be positioned in the path of the vapor flow from a leak such that the central axis of the probe-tube inlet shall be positioned coaxial with the path of the most concentrated vapors.

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

vi. Data Recording: The highest detector reading and location for each incidence of detected leakage shall be recorded, along with the date and time. If no gasoline vapor is detected, that fact shall be entered into the record.

~~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.~~ 3. COMPLIANCE INSPECTIONS: Any gasoline dispensing facility required by this rule to be equipped with vapor loss control devices may be subject to monitoring for vapor tightness and liquid leak tightness during any working hours. Such a tank may be opened for gauging or inspection when loading operations are not in progress, provided that such tank is part of an open system or is served by a positive-pressure relief valve with a relief setting not exceeding + 1/2 lb psig.

~~3.~~ 4. GASOLINE DISPENSING FACILITY RECORDKEEPING: The owner or operator of each gasoline dispensing facility in the Pinal County portion of the Phoenix 8-hour ozone nonattainment area shall maintain records as follows:

a. The total amount of gasoline received each month shall be recorded by the end of the following month.

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

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

ii. If the gasoline dispensing facilities receives gasoline loads less than once per calendar week, the owner or operator shall record the inspection within three days after the receipt of the load of gasoline.

iii. These records and any reports or supporting information required by this rule or by the Control Officer shall be retained for at least 5 years.

iv. Records of the past 12 months shall be in a readily accessible location and must be made available to the Control Officer within 24 hours upon verbal or written request.

~~4.~~ 5. COMPLIANCE DETERMINATION: The test methods referenced in §5-20-500.~~5~~6 of this rule, shall be used in the ways given in the subsections that immediately follow. When more than one test method is permitted for a determination, an exceedance of the limits established in this rule determined by any of the applicable test methods constitutes a violation of this rule. For routine information collection, the Control Officer may accept a manufacturer's data sheet

(MSDS), data certified by an officer of the supplying company, or test data for the product of inquiry.

a. Control efficiency of vapor loss control equipment and ~~vapor collection/ processing systems~~ a closed vent system and control device shall be determined according to EPA Method 2A and either EPA Method 25A or 25B, or by EPA approved CARB~~-approved~~ test methods listed in §5-20-500.6.c. EPA Method 2B shall be used for vapor incineration devices.

b. Vapor pressure of gasoline shall be determined using ASTM D323-~~15~~06a Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method) or ASTM D4953-~~15~~06, Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method). ASTM D323-~~15~~06 shall be used for gasoline either containing no oxygenates or MTBE (methyl tertiary butyl ether) as the sole oxygenate. Method ASTM D4953-~~15~~06 shall be used for oxygenated gasoline.

c. Vapor Leaks:

i. If a determination of leak tight status is to be made on Stage 1VR system or spill containment equipment at a gasoline dispensing facility or on a cargo tank at the station, the method in §~~5-20-500(4)(c)~~ 5-20-500.2 of this rule shall be used.

ii. ~~§5-20-500(4)(c) of this rule probe distance and movement parameters not withstanding, if~~ If it has been established that there are no other interfering vapor escapes, it is an exceedance if a reading by the Control Officer from an established vapor escape above 1/5 LEL (or 10,000 ppmv as methane) is sustained for at least 5 seconds, and the probe is either consistently further than 1 inch from the source and/or the probe is consistently being moved faster than 1.6 inches per second ~~4 cm per second~~.

iii. The Control Officer may count it as a failure to perform weekly inspections pursuant to §~~5-20-300.3~~ 5-20-400 of this rule if foreign material is found in a spill containment receptacle and there is no record of an inspection's being performed in the preceding 10 days.

~~5.~~ 6. TEST METHODS: The EPA test methods as they exist in the Code of Federal Regulations (CFR) as listed below, are adopted by reference. The CARB test methods as they exist in Stationary Source Test Methods, Volume 2, on April 8, 1999, as listed in §5-20-500(~~5~~6)(c) of this rule, are adopted by reference. The other test methods listed here are also adopted by reference, each having paired with it a specific date that identifies the particular version/revision of the method that is adopted by reference. These adoptions by reference include no future editions or amendments.

a. EPA Test Methods:

i. EPA Methods 2a (''Direct Measurement of Gas Volume Through Pipes and Small Ducts''), and 2b (''Determination of Exhaust-Gas Volume Flow-Rate From Gasoline Vapor Incinerators'').40 CFR 60, Appendix A.

ii. EPA Method 21 - Determination of Volatile Organic Compound Leaks.

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

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

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

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

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

~~vi.~~ viii. Optical Gas Imaging: Alternative Work Practice for Monitoring Equipment Leaks, 40 CFR 60.18(g), (h) and (i). ~~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~~ ASTM D323-06 ''Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method).

ii. ~~ASTM D4953-15~~ ASTM D4953-06 ''Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method)

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

i. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1B, Static Torque of Rotatable Phase 1 Adaptors, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.

ii. California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003.

iii. CARB Test Procedure TP-201.1A - ''Determination of Efficiency of Phase I Vapor Recovery Systems of Dispensing Facilities with Assist Processors''.

iv. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.

v. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1C, Leak Rate of Drop Tube/Drain Valve Assembly, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.

vi. California Environmental Protection Agency, Air Resources Board Vapor Recovery Test Procedure TP-201.1D, Leak Rate of Drop Tube Overfill Protection Devices and Spill Container Drain Valves, October 8, 2003 edition, California Air Resources Board, P.O. Box 2815, 2020 L. Street, Sacramento, California 95812-2815.

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

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

d. Additional Test Methods:

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

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