



Report to the Board of Health To Approve For Expedited Process

Prepared by the Maricopa County Air Quality Department

Case #/Title:	AQ-2015-008-Rule 350
Meeting Date:	April 25, 2016
Supervisor Districts:	All Districts
Applicant:	Staff
Request:	Approve for Expedited Process revisions to Rule 350 (Storage Of Organic Liquids At Bulk Plants And Bulk Terminals)

Discussion:

Rule 350 limits the emission of volatile organic compounds (VOCs) from organic liquids under actual storage conditions. The rule is applicable to bulk storage of organic liquids in a bulk plant or bulk terminal stationary storage tank which is used primarily to fill delivery vessels for both the organic liquid (non-gasoline) and the gasoline industries. Rule 350 was last revised over twenty-five years ago. Technologies have changed over time. The organic liquid (non-gasoline) and gasoline storage and distribution industries use different terminology, definitions and methods of operation. Proposed rule revisions include the separation of organic liquids (non-gasoline) from the gasoline storage requirements. In addition the proposed rule will add the organic liquid transfer requirements to Rule 351. The gasoline storage requirements currently in Rule 350 are proposed to be moved to Rule 351 (Loading Of Organic Liquids). The proposed revisions in Rule 350 will update and clarify the county regulatory requirements and authority for the organic liquid (non-gasoline) industry and the gasoline industry. In addition, the proposed revisions in Rule 350 will address the requirements of the State Implementation Plan (SIP) for "moderate" nonattainment for the 2008 eight-hour ozone national ambient air quality standard (NAAQS).

Support/Opposition:

Stakeholders expressed concerns that the proposed Rule 350 would include any organic liquid stored at any site. The rule title was revised. The purpose and applicability of the proposed rule were revised to clarify the proposed rule was applicable to the storage and transfer of organic liquids at a distribution facility and not at a facility that is the end user of the organic liquid. The proposed rule does not apply to the storage and transfer of organic liquids at a facility that does not distribute the organic liquid to be "consumed by other parties." (Rule 350 definition of "Organic Liquid Distribution Facility")

In addition, questions were raised regarding the following:

- Definitions and how they pertain to the gasoline industry
- The applicability of the proposed rule to storage containers used for organic liquids
- Requirements for organic liquid storage tanks

For a detailed discussion of comments received during and after the Stakeholder Workshops, please refer to Section 5 in the attached Notice of Proposed Rulemaking.

Department Recommendation: Approve for Expedited Process

Per the Enhanced Regulatory Outreach Program Policy, Section IV(E), the Expedited Process may only be used if the following criteria have been met:

1. The proposed amendment has been subject to at least one Stakeholder Workshop (posted on the County's web site at least two weeks in advance) and one Citizens' Board or Commission meeting;

2. A draft of the regulatory change was available on the Enhanced Regulatory Outreach Program web site at least two weeks prior to the Citizens' Board or Commission meeting and was forwarded to the Board/Commission at least one week in advance of their review meeting;
3. No comments of opposition to the amendment have been received from the public;
4. The Citizens' Board or Commission reviewing the amendment recommends approval.

AQ-2015-008-Rule 350 has met the criteria for the Expedited Process:

1. Three Stakeholder Workshops were held: June 29, 2015, September 14, 2015, and February 22, 2016. Announcements of the workshops were posted on the County's web site at least two weeks in advance;
2. A draft of the regulatory change was available on the Enhanced Regulatory Outreach Program web site at least two weeks prior to the Board of Health meeting;
3. No comments of opposition to the amendment have been received from the public;
4. The department is requesting the Board of Health approve for Expedited Process.

Regulatory Process:

This regulatory change will follow the Enhanced Regulatory Outreach Program Policy and workflow process. The County Manager briefed the Board of Supervisors (BOS) regarding this rulemaking in May 2015.

Three Stakeholder Workshops were held: June 29, 2015, September 14, 2015, and February 22, 2016. Comments from the workshops have been incorporated into this rulemaking.

If the Board of Health approves this regulatory change for the Expedited Process, then this regulatory change will proceed with a 30-day public comment period through May 2016 and an anticipated Board of Supervisors' public hearing in late 2016. This regulatory change will take immediate effect upon approval by the Board of Supervisors.

Presented By: Philip A. McNeely, R.G., Director

Prepared By: Hether Krause

Attachments: [Preamble required by A.R.S. § 49-471.05](#) (See Notice of Proposed Rulemaking)

[Summary of the proposed regulatory change](#) (See Item 5 of the Notice of Proposed Rulemaking)

[Language of the proposed regulatory changes](#) (See Item 14 of the Notice of Proposed Rulemaking)

[Copies of all written and electronic Stakeholder input](#)

[County Manager Case Approval](#)

DRAFT – FOR PURPOSES OF BOARD OF HEALTH MEETING ON APRIL 25, 2016

NOTICE OF PROPOSED RULEMAKING

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MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS

REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 350: STORAGE OF ORGANIC LIQUIDS AT BULK PLANTS AND BULK TERMINALS

PREAMBLE

- 1. Rule affected** **Rulemaking action**
Rule 350: Storage Of Organic Liquids At Bulk Plants And Bulk Terminals Amend
- 2. Statutory authority for the rulemaking:**
Authorizing statutes: A.R.S. §§ 49-474, 49-479, and 49-480
Implementing Statute: A.R.S. § 49-112
- 3. List of all previous notices appearing in the Register addressing the rulemaking:**
Notice Of Briefing To Maricopa County Manager: May 2015
Notice Of Stakeholder Workshops: June 29, 2015, September 14, 2015, and February 22, 2016
- 4. Name and address of department personnel with whom persons may communicate regarding the rulemaking:**
Name: Cheri Dale or Hether Krause
Maricopa County Air Quality Department
Planning and Analysis Division
Address: 1001 N Central Avenue, Suite 125
Phoenix, Arizona 85004
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E-mail: aqplanning@mail.maricopa.gov [Return to list of Attachments](#)

5. Explanation of the rule, including the department's reasons for initiating the rulemaking:

Summary: Rule 350 limits the emission of volatile organic compounds (VOCs) from organic liquids under actual storage conditions. The rule is applicable to bulk storage of organic liquids in a bulk plant or bulk terminal stationary storage tank which is used primarily to fill delivery vessels for both the organic liquid (non-gasoline) and the gasoline industries.

Rule 350 was last revised over twenty-five years ago. Technologies have changed over time. The organic liquid (non-gasoline) and gasoline storage and distribution industries use different terminology, definitions and methods of operation. Proposed rule revisions include the separation of organic liquids (non-gasoline) from the gasoline storage requirements. In addition the proposed rule will add the organic liquid transfer requirements to Rule 351. The gasoline storage requirements currently in Rule 350 are proposed to be moved to Rule 351 (Loading Of Organic Liquids). The proposed revisions in Rule 350 will update and clarify the county regulatory requirements and authority for the organic liquid (non-gasoline) industry and the gasoline industry. In addition, the proposed revisions to Rule 350 will address the requirements of the

State Implementation Plan (SIP) for “moderate” nonattainment for the 2008 eight-hour ozone national ambient air quality standard (NAAQS).

In addition, the proposed amendments correct typographical or other clerical errors; make minor grammatical changes to improve readability or clarity; modify the format, numbering, order, capitalization, punctuation, or syntax of certain text to increase standardization within and among rules; or make various other minor changes of a purely editorial nature. As these changes do not alter the sense, meaning, or effect of the rules, they are not described in detail here, but can be readily discerned in the “underline/ strikeout” version of the rules contained in Item 14 of this notice.

Background: As early as the 1960’s, the Maricopa County Health Department (as the department was then called), Air Pollution Control regulations, Section IV, Handling of Materials, Regulation 1, required “Material such as... gasoline or other volatile compounds... be kept, processed, used, and transported in such a manner and by such means that they will not unreasonably leak, escape, evaporate or be otherwise discharged into the ambient air so as to cause or contribute to air pollution...”¹ This early rulemaking established the basis for the current Rule 350. In 1970, the passage of the Clean Air Act established federal air quality standards.

Congress established the basic structure of the Clean Air Act (CAA) in 1970. The CAA requires the U.S. Environmental Protection Agency (EPA) to establish national ambient air quality standards (NAAQS) for common and widespread pollutants based on the most current science available. For areas that were determined to be in nonattainment of the NAAQS, the state was required to adopt federally enforceable state implementation plans (SIP) in order to achieve and maintain air quality and meet the federally established air quality standards (the NAAQS)². The states were responsible for developing and implementing rules that require reasonably available control technology (RACT) for sources of VOCs located in the designated ozone nonattainment areas. Local air agencies were required to establish RACT for source categories not already covered by EPA's Control Techniques Guidelines (CTGs) as well as tighten RACT for source categories for which RACT had already been defined in the NAAQS³. EPA defined RACT as “the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility” (44 FR 53762; September 17, 1979).

In the 1970’s, using the EPA NAAQS and CTGs to identify the established RACT standards, the Maricopa County Bureau of Air Pollution Control (as the department was then called) revised and renumbered the county air pollution rules and regulations. The revised county rules established specific requirements for petroleum products in Regulation III, Rule 33: Storage and Handling of Petroleum Products⁴. This rule established requirements to control vapor loss during storage; submerged filling of tanks; loading dock requirements; and leak proof fill pipe connections.

On March 3, 1978, EPA promulgated a list of ozone nonattainment areas under the provisions of the Clean Air Act, as amended in 1977 (1977 CAA or pre-amended Act). Maricopa County was included on such list

43 FR 8964, March 3, 1978). On February 24, 1984, EPA notified the Governor of Arizona, that the Maricopa County Air Pollution Control District's (MCAPCD, as the department was then called) portion of the Arizona SIP was inadequate and requested that deficiencies in the existing SIP be corrected (EPA's SIP-Call, 49 FR 18827, May 3, 1984). The department was in the process of revising Rule 33 to create Rules 350, 351, 352, and 353 to address the RACT requirements when EPA again notified the Governor of Arizona (May 26, 1988) that MCAPCD's portion of the Arizona SIP was inadequate and requested that deficiencies relating to VOC controls and the application of RACT in the existing SIP be corrected (EPA's second SIP-Call, 53 FR 34500, September 7, 1988).

On November 15, 1990, the Clean Air Act Amendments of 1990 were enacted. In an amended section of the CAA, Congress statutorily adopted the requirement that nonattainment areas fix their deficient RACT rules and established a deadline of May 15, 1991 for states to submit corrections of those deficiencies. The department further revised Rules 350, 351, 352, and 353 to meet the RACT standards. Rule 350 (Storage of Organic Liquids at Bulk Plants), revised July 13, 1988, and April 6, 1992, was approved by the EPA effective October 5, 1995 (60 FR 46024). Rule 351 (Loading Organic Liquids) revised July 13, 1988 and November 16, 1992, was approved effective October 5, 1995 (60 FR 46024). Rule 352 (Gasoline Delivery Vessel Testing and Use), revised July 13, 1988, and November 16, 1992, was approved effective October 5, 1995, (60 FR 46024). Rule 353 (Transfer of Gasoline into Stationary Dispensing Tanks) revised July 13, 1988, and April 6, 1992, was approved effective March 4, 1996 (61 FR 3578).

More recently, EPA developed national emission standards for hazardous air pollutants (NESHAPS) for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (73 FR 1933, Jan. 10, 2008); a NESHAP for Gasoline-Dispensing Facilities (73 FR 1945, Jan. 10, 2008); and the NESHAP for Organic Liquid Distribution (non-gasoline) (69 FR 5063, Feb. 3, 2004). These NESHAPS are often referred to as the maximum achievable control technology (MACT) standards since they were developed to reflect the maximum achievable degree of HAP emission reduction. New MACT standards required additional or new emissions testing requirements reflecting the new technologies. New and revised test methods and leak detection methods were required in these MACT standards. Although the MACT standards typically apply to large sources, there are test methods and other good practices that are or may be applicable to small area sources of VOC emissions.

Current Rulemaking Background: The department originally adopted Rule 350 (Storage of Organic Liquids at Bulk Plants and Terminals) and Rule 351 (Loading of Organic Liquids) to be inclusive of both non-gasoline and gasoline organic liquids. The purpose of the rules was to control the emission of volatile organic compounds (VOCs) from all organic liquids. These rules were required in order for the county to comply with the reasonably available control technology (RACT) documents and other policy statements published by the U.S. Environmental Protection Agency (EPA). Since that time, the organic liquid (non-gasoline) and the gasoline industry have evolved into two distinct industries. The use of different terminology, definitions and methods of operation have created confusion in the applicability of Rule 350

to each industry. In this rulemaking, the department is proposing to draft rules specific to the organic liquid (non-gasoline) storage and distribution industry and for the gasoline storage and distribution industry. This rulemaking is not proposing new rules for the industries but rather proposing revisions to current rules that will improve the clarity and enforceability of the regulatory requirements for each industry.

The proposed revisions include the separation of the organic liquid (non-gasoline) requirements and the gasoline requirements of Rule 350. The organic liquid (non-gasoline) storage requirements in Rule 350 and the organic liquid “loading” requirements Rule 351 (Loading of Organic Liquids) are proposed to be combined and included into one rule, Rule 350. The gasoline storage requirements in Rule 350 are proposed to be moved into Rule 351. Along with this proposed separation of the two industry requirements, the department is proposing to rename the rule to reflect the proposed rule revisions.

In addition, the department proposes to lower the rule applicability to include organic liquids (non-gasoline) with a true vapor pressure of 0.5 psia. The lowering of the applicability is proposed to meet current RACT.

Other proposed revisions include the relocation of any exemptions to Section 100; inclusion of definitions and terms specific to the organic liquid industry; to specify the organic liquid regulatory requirements for transferring the organic liquid; to add monthly equipment leak inspection requirement; to add optical gas imaging as an alternative work practice to monitor and identify leaking equipment.

Issues Raised and Discussed During This Rulemaking Process:

The department held three Stakeholder workshops: June 29, 2015, September 14, 2016, and February 22, 2016. Stakeholders included representatives from APS, Caljet, CDM Smith, Cemex, City of Glendale, City of Mesa, City of Phoenix, EnCore Consulting, EnviroSure Solutions, Kiewit, Pinal County, SRP, Washington Elementary School, and EPA.

During the workshops, Stakeholders expressed concerns that the proposed Rule 350 would include any organic liquid stored at any site. The rule title was revised. The purpose and applicability of the proposed rule were revised to clarify the proposed rule was applicable to the storage and transfer of organic liquids at a distribution facility and not at a facility that is the end user of the organic liquid. The proposed rule does not apply to the storage and transfer of organic liquids at a facility that does not distribute the organic liquid to be “consumed by other parties.” (Rule 350 definition of “Organic Liquid Distribution Facility”)

Definitions pertaining to the gasoline industry are proposed to be deleted. The definition of GASOLINE was left in the rule because the proposed exemption section specifically exempts gasoline from the proposed rule. The proposed exemptions were taken from 40 CFR 63.2406, the Organic Liquid Distribution NESHAP. The proposed partial exemptions in proposed Rule 350 were either retained from current Rule 350 or taken from current Rule 351 if they pertained to organic liquid (non-gasoline).

Stakeholders were concerned that the applicability of the proposed rule would include all storage containers used for organic liquids. The department is proposing to include partial exemptions for organic liquids with a true vapor pressure less than 0.5 psia; storage containers with a capacity less than 250 gallons; a pressure tank; the floating of a floating roof tank; and gap inspections.

Stakeholders also requested the addition or revision of numerous definitions to reflect the rule applicability to the organic liquid industry and not the gasoline industry. The department is proposing to revise the definitions in the proposed rule.

To further clarify the requirements for organic liquid storage tanks, the department proposed to the Stakeholders to add a table describing tank size and the applicable rule section number that describes the VOC emission control requirements. Stakeholders supported this addition to the rule.

Description of Proposed Amendments:

Propose to revise the following throughout the rule:

- To delete references to gasoline loading and storage
- To change the word “loading” to “transfer”
- To delete the word “person” and inset the words “owner or operator”
- To delete past compliance dates
- To add or revise specific rule section references

Propose the following in Section 100:

- To revise Section 101 (Purpose) to include the storage and transfer of organic liquid (non-gasoline) at an organic liquid distribution facility
- To revise Section 102 (Applicability) to apply to the bulk storage and transfer of organic liquid (non-gasoline) at an organic liquid distribution facility
- To add Section 103 (Exemptions) to include total exemptions and partial exemptions

Propose the following in Section 200:

- To delete BULK PLANT
- To delete BULK TERMINAL
- To delete DELIVERY VESSEL
- To add CARGO TANK
- To add CONTAINER
- To add EXCESS ORGANIC LIQUID DRAINAGE
- To add EXTERNAL FLOATING ROOF STATIONARY STORAGE
- To delete GAS TIGHT
- To add INTERNAL FLOATING ROOF STATIONARY STORAGE TANK WITH FIXED ROOF
- To add LEAK FREE
- To delete LOADING FACILITY
- To revise ORGANIC LIQUID

- To revise SUBMERGED FILL
- To add VAPOR COLLECTION/PROCESSING SYSTEM
- To add VAPOR BALANCE SYSTEM

Propose the following in Section 300:

- Section 301: To clarify the requirements of a stationary storage tanks
- Section 301.2: To list requirements of a stationary storage tank with a capacity greater than 250 gallons to have a gasketed covered fill pipe; submerged fill and a pressure/vacuum vent valve
- Section 302: To delete the gasoline storage tank requirement
- Section 303: To renumber to Section 301.2 and to list requirements of stationary storage tanks with a capacity of 20,000-40,000 gallons to include the requirements of proposed Section 301.1 and to comply with one method of vapor loss control
- Section 304: To renumber to Section 301.3 and to list requirements of stationary storage tanks with a capacity of 40,000 gallons or more to include the installation of a floating roof tank or a vapor collection/processing system
- Section 305: To renumber to Section 301.4 and to list out the existing requirements
- To add Table 350-1 Summary of Organic Liquid (Non-Gasoline) Stationary Storage Tank VOC Emission Control Requirements
- Section 306: To renumber to Section 302 Vapor Loss Control System and list out existing requirements for floating roof tanks and vapor balance systems
- Section 307: To renumber to Section 302.2 Internal Floating Roof Stationary Storage Tanks with Fixed Covering.
- Section 308: To renumber to Section 302.4 Vapor Collection/Processing System
- To add proposed Section 302.5 - equipment maintenance and repair requirements
- To add proposed Section 303: General Requirements for the Transfer of Organic Liquid into Storage Tanks and Into Cargo Tankers
- To delete Section 309
- To delete Section 310

Propose the following in Section 400:

- To add Section 403 Annual Leak Detection Test
- Section 403: To renumber to Section 404 and to delete past compliance date
- Section 404: To renumber to Section 405
- To delete Section 405
- To add Section 406 Monthly Organic Liquid Transfer Equipment Leak Inspections
- To add Section 407 Cargo Tank Inspection

Propose the following in Section 500:

- To delete Section 501
- To delete Section 502
- To add Section 501 Compliance Inspections
- To add Section 502 Record Retention

- To add Section 503 Vapor Pressure Records
- To add Section 504 Leak Inspection Records
- To add Section 505 Leak Concentrations
- To add Section 506 Compliance Determination – Test Methods to include EPA Test Methods; California Air Resources Board (CARB) Test Procedure; ASTM Standard Test Methods; and Leak Detection Test Procedure

6. Demonstration of compliance with A.R.S. §49-112:

Under A.R.S. § 49-479(C), a county may not adopt a rule or ordinance that is more stringent than the rules adopted by the Director of the Arizona Department of Environmental Quality (ADEQ) for similar sources unless it demonstrates compliance with the applicable requirements of A.R.S. §49-112.

§ 49-112 County regulation; standards

§ 49-112(A)

When authorized by law, a county may adopt a rule, ordinance or other regulation that is more stringent than or in addition to a provision of this title or rule adopted by the director or any board or commission authorized to adopt rules pursuant to this title if all of the following conditions are met:

1. The rule, ordinance or other regulation is necessary to address a peculiar local condition.
2. There is credible evidence that the rule, ordinance or other regulation is either;
 - (a) Necessary to prevent a significant threat to public health or the environment that results from a peculiar local condition and is technically and economically feasible.
 - (b) Required under a federal statute or regulation, or authorized pursuant to an intergovernmental agreement with the federal government to enforce federal statutes or regulations if the county rule, ordinance or other regulation is equivalent to federal statutes or regulation.
3. Any fee or tax adopted under the rule, ordinance or other regulation will not exceed the reasonable costs of the county to issue and administer that permit or plan approval program.

§ 49-112(B)

When authorized by law, a county may adopt rules, ordinances or other regulations in lieu of a state program that are as stringent as a provision of this title or rule adopted by the director or any board or commission authorized to adopt rules pursuant to this title if the county demonstrates that the cost of obtaining permits or other approvals from the county will approximately equal or be less than the fee or cost of obtaining similar permits or approvals under this title or any rule adopted pursuant to this title. If the state has not adopted a fee or tax for similar permits or approvals, the county may adopt a fee when authorized by law in the rule, ordinance or other regulation that does not exceed the reasonable costs of the county to issue and administer that permit or plan approval program.

The department complies with A.R.S. § 49-112(A) in that Maricopa County fails to meet the National Ambient Air Quality Standards for both ozone and particulates. While currently classified as a “marginal” ozone nonattainment area, the county recently failed to meet 2008 8-hour ozone standard by the marginal area attainment date and anticipates EPA will issue a notice proposing to re-classify the area to “moderate”. Further, a portion of the county was classified as a serious ozone nonattainment area under the previous 1-hour ozone standard requiring the county to continue to maintain the measures and requirements that allowed the county to attain that standard. Currently, a portion of Maricopa County and Apache Junction in Pinal County is designated serious nonattainment for the PM₁₀ 24-hour standard. This is the only serious PM₁₀ nonattainment area in Arizona. Revisions to Rule 350 are being proposed to address the requirements of the State Implementation Plan (SIP) for “moderate” nonattainment for the 2008 eight-hour ozone national ambient air quality standard (NAAQS).

The department complies with A.R.S. § 49-112(B) in that the proposed amendments to Rule 350 are not more stringent than or in addition to a provision of Title 49 or rule adopted by the director or any board or commission authorized to adopt rules pursuant to Title 49, address the peculiar local conditions in Maricopa County, are authorized under A.R.S. Title 49, Chapter 3, Article 3, and are not in lieu of a state program.

7. Reference to any study relevant to the rule that the department reviewed and either proposes to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

Not applicable

8. Showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision:

Not applicable

9. Preliminary summary of the economic, small business, and consumer impact:

A detailed preliminary summary of the economic, small business, and consumer impact will appear in the Notice of Proposed Rulemaking that is anticipated to be published in the Arizona Administrative Register on May 6, 2016.

There are about 300 sources in Maricopa County subject to this rule.

Permit fees are not changing due to this rulemaking.

10. Name and address of department personnel with whom persons may communicate regarding the accuracy of the economic, small business, and consumer impact:

Name: Cheri Dale or Hether Krause
Maricopa County Air Quality Department
Planning and Analysis Division

Address: 1001 N Central Avenue, Suite 125
Phoenix, AZ 85004

Telephone: (602) 506-6010

Fax: (602) 506-6179
E-mail: aqplanning@mail.maricopa.gov

11. Time, place, and nature of the proceedings for the rulemaking:

Written oral proceeding requests or written comments or both will be accepted until the record is closed on June 6, 2016, 5:00 p.m. Written oral proceeding requests or written comments or both may be mailed, e-mailed, or hand delivered to the department (see Item #4 of this notice). An oral proceeding will be scheduled only upon receipt of a written request before the record is closed on June 6, 2016, 5:00 p.m. Written comments received during the comment period and before the record is closed on June 6, 2016, 5:00 p.m. will be considered formal comments to the Notice of Proposed Rulemaking and will be responded to in the Notice of Final Rulemaking.

12. Any other matters prescribed by statute that are applicable to the specific department or to any specific rule or class of rules:

Not applicable

13. Incorporations by reference and their location in the rule:

The following test methods are incorporated by reference in Rule 350, Section 506:

- EPA Method 2A - Direct Measurement of Gas Volume Through Pipes and Small Ducts
- EPA Method 18 - Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
- EPA Method 21 - Determination of Volatile Organic Compound Leaks
- EPA Method 25A - Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer
- EPA Method 25A - Determination of Total Gaseous Organic Concentration Using a Nondispersive Infrared Analyzer
- EPA Method 27 - Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure Vacuum Test
- Optical Gas Imaging: Alternative Work Practice for Monitoring Equipment Leaks, 40 CFR 60.18(g)
- California Air Resources Board (CARB) - Test Procedure TP-201.1E Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, October 8, 2003
- ASTM D2879-10 Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope
- ASTM D6420-99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry

14. Full text of the rule follows:

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REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 350

**STORAGE ~~AND TRANSFER OF ORGANIC LIQUIDS (NON-GASOLINE)~~ AT BULK PLANTS AND
BULK TERMINALS AN ORGANIC LIQUID DISTRIBUTION FACILITY**

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Revised 07/13/88

Revised 04/06/92

Revised 07/13/1988; Revised 04/06/1992; Revised MM/DD/YYYY

**MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS
REGULATION III – CONTROL OF AIR CONTAMINANTS**

RULE 350

STORAGE ~~AND TRANSFER~~ OF ORGANIC LIQUIDS (NON-GASOLINE) AT BULK PLANTS AND TERMINALS AN ORGANIC LIQUID DISTRIBUTION FACILITY

SECTION 100 – GENERAL

101 PURPOSE: To limit emissions of volatile organic compounds from organic liquids (non-gasoline) under actual storage and transfer conditions at an organic liquid distribution facility.

102 APPLICABILITY: This rule is applicable to the ~~transfer and bulk storage and transfer~~ of any organic liquid (non-gasoline) with a vapor pressure greater than 0.5 psia ~~in a bulk plant or bulk terminal stationary storage tank which is used primarily to fill delivery vessels~~ at an organic liquid distribution facility. Compliance with the provisions of this rule shall not relieve any person subject to the requirements of this rule from complying with any other federally enforceable New Sources Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAP). In such cases, the most stringent standard shall apply.

103 EXEMPTIONS:

103.1 Total Exemptions: For the purposes of this rule, the following are exempt from this rule:

- a. Gasoline facilities subject to Rule 351 of these rules;
- b. Gasoline, including aviation gasoline, kerosene, diesel fuel, asphalt and heavier distillate oils and fuel oils;
- c. Fuel consumed or dispensed at the facility directly to user such as fleet refueling, that support the operation of the facility;
- d. Hazardous waste;
- e. Wastewater or ballast water; and
- f. Any non-crude oil liquid with an annual average true vapor pressure less than 0.7 kilopascals (0.1 psia). [40 CFR §63.2406]

103.2 Partial Exemptions:

- a. Organic liquids having a true vapor pressure less than 0.5 psia (25.8 mm Hg) as determined by test methods in Section 500 of this rule are exempt from the organic liquid transfer requirements of Section [XXX] of this rule.
- b. Stationary storage tanks and containers with a capacity of less than 250 gallons (946.35 L) are exempt from Section [XXX] of this rule.

- c. An organic liquid distribution facility built prior to October 2, 1978, is not required to have a vapor loss control system at the transfer rack when all of the following are complied with:
- (1) The distribution facility transfers less than 120,000 gallons (454,800 l) of organic liquid (non-gasoline) into cargo tanks in any consecutive 30-day period.
 - (2) Any organic liquid distribution facility that becomes subject to all of the provisions of this rule by exceeding the threshold in Section 103.2(c)(i) of this rule, will remain subject to the rule provisions even if its output later falls below the threshold.
 - (3) Keep current records of amount of organic liquid transferred and keep them readily accessible to the Department upon request for at least five (5) years.
 - (4) Transfer organic liquid using submerged fill only.
 - (5) The owners or operators of the organic liquid distribution facility shall observe all parts of the transfer and shall discontinue the transfer if any liquid or vapor leaks are observed.
 - (6) The owners or operators of the cargo tank shall observe all parts of the transfer and shall discontinue the transfer if any liquid or vapor leaks are observed.
- d. A stationary pressure tank maintaining working pressure sufficient at all times to prevent organic vapor or gas loss to the atmosphere is exempt from Section 302 of this rule.
- e. An owner or operator is exempt from the requirement that the roof be floating when the tank is being drained completely and when it is being filled, as long as both processes are accomplished continuously and as rapidly as practicable.
- f. The owner or operator is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal.
- g. Opening of Hatches: When VOC vapors from organic liquids are present within a non-exempt cargo tank, authorized government agents as well as owners or operator and their contractors may open vapor containment equipment while performing operations required by Department rules or by other statutory entities, but shall be restricted as follows unless approved in advance by the Control Officer:
- (1) Wait at least 3 minutes after transfer is complete or cargo tank has stopped before opening hatch or other vapor seal.
 - (2) Reclose hatch or other sealing device within 3 minutes of opening.
 - (3) Limit wind speed at opened hatch or other opened sealing device to not more than 3 mph (1.34 m/sec).

SECTION 200 – DEFINITIONS: For the purpose of this rule, the following definitions shall apply; in addition to those definitions found in Rule 100 (General Provisions and Definitions) of these rules. In the event of any inconsistency between any of the Maricopa County air pollution control rules, the definitions in this rule take precedence.

201 ~~BULK PLANT—Any loading facility at which gasoline and/or other organic liquids with a true vapor pressure of 1.5 psia (77.5 mm Hg) or greater under any actual storage conditions are received from delivery vessels for storage in on-site stationary tanks, and from which such liquids also are transferred to delivery vessels.~~

202 ~~BULK TERMINAL—Any primary distributing loading facility which has ever received in any consecutive 30-day period over 600,000 gallons (2,271,180 l) of gasoline and/or other organic liquids with a true vapor pressure of 1.5 psia (77.5 mm Hg) or greater under actual storage conditions; or any loading facility where delivery of such liquids to the facility is primarily by pipeline.~~

203 ~~DELIVERY VESSEL—Any vehicular mounted container such as a railroad tank car, tanker truck, tank trailer or any other mobile container used to transport organic liquids.~~

201 CARGO TANK : A liquid-carrying tank permanently attached and forming an integral part of a motor vehicle or truck trailer. For the purposes of this rule, vacuum trucks used exclusively for maintenance or spill response are not considered cargo tanks. [40 CFR §63.2406]

202 CONTAINER: A portable unit in which a material can be stored, transported, treated, disposed of, or otherwise handled. Examples of containers include, but are not limited to, drums and portable cargo containers known as “portable tanks” or “totes.” [40 CFR §63.2406]

203 EXCESS ORGANIC LIQUID DRAINAGE: More than 10 milliliters (0.34 fluid ounces or 2 teaspoonsful) ~~per disconnect.~~ of organic liquid lost from the end of a fill hose (or vapor hose if one is in use) in the process of connecting or disconnecting the hose; or any quantity of organic liquid escaping out the end of such a hose that wets any area(s) on the ground having an aggregate area greater than 113 square inches, or the perimeter of which would encompass a circle of 12 inches (30.5 cm) diameter.

204 EXTERNAL FLOATING ROOF STATIONARY STORAGE TANK: An open top storage tank with a floating roof consisting of a double deck or pontoon single deck that rests upon and is supported by the liquid being contained.

204 ~~GAS TIGHT—Having no leak of gaseous organic compound(s) exceeding 10,000 ppm above background when measurements are made using EPA Method 21 with a methane calibration standard.~~

205 GASOLINE: Any petroleum distillate; or petroleum distillate/alcohol blend; petroleum distillate/organic compound blend; or alcohol having a true vapor pressure of 1.5 psia (77.5 mm Hg) or greater under any

~~actual conditions of storage and handling,~~ having a Reid vapor pressure of 27.6 kilopascals (4.0 pounds per square inch absolute (psia)) or greater and which is used as a fuel for internal combustion engines. [40 CFR 63.11100]

206 **INTERNAL FLOATING ROOF STATIONARY STORAGE TANK WITH FIXED COVERING:** A stationary storage tank with a floating cover or roof that rests upon or is floated upon the liquid being contained, and that also has a fixed roof on top of the tank shell. For the purposes of this rule, an external floating roof stationary storage tank that has been retrofitted with a geodesic dome or other fixed roof shall be considered to be an internal floating roof stationary storage tank.

207 **LEAK FREE:** An organic liquid leak of more than three drops per minute from any single leak source other than the disconnect operation of liquid fill line and vapor line.

~~206~~ LOADING FACILITY—Any operation or facility such as a gasoline storage tank farm, pipeline terminal, bulk plant, loading dock or combination thereof, where organic liquids are transferred or loaded into or out of delivery vessels for future distribution. Included are all related pollutant emitting activities which are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control.

~~207~~ **208** **ORGANIC LIQUID:** Any organic compound which exists as a liquid under any actual conditions of use, transport or storage. For the purposes of this rule, gasoline is not considered an organic liquid.

209 **ORGANIC LIQUID DISTRIBUTION FACILITY:** A stationary source that primarily receives and distributes organic liquids that are manufactured and consumed by other parties. This includes the combination of activities and equipment used to store or transfer organic liquids into, out of, or within a plant site regardless of the specific activity being performed. Activities include, but are not limited to, storage, transfer, blending, compounding and packaging. [40 CFR 63.2406]

~~208~~ **210** **STATIONARY STORAGE TANK:** Any tank, reservoir or other container used to store, but not transport, organic liquids.

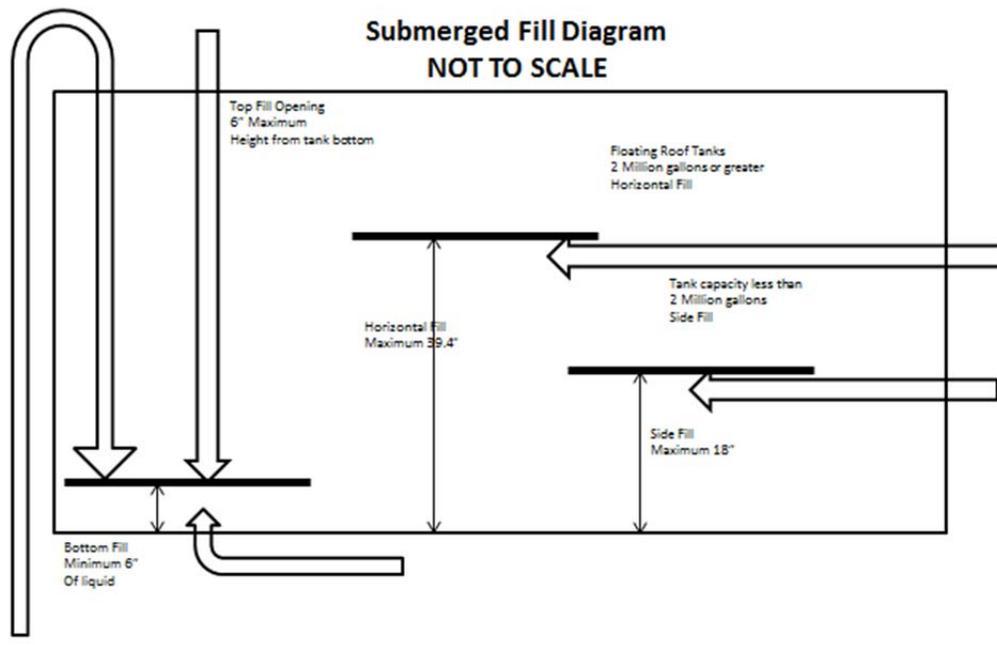
~~209~~ **211** **SUBMERGED FILL PIPE:** Any discharge pipe or nozzle which meets the applicable specification as follows:

~~209.1~~ **211.1** **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.

~~209.2~~ **211.2** **Side-Fill:** ~~At its highest point within the storage tank,~~ ~~The~~ 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.

211.3 **Horizontal Fill:** At its highest point within a floating roof tank 2,000,000 gallons or greater (7,580,000 l) 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.

211.4 **API Standard 650 Compliant:** A floating roof of an organic liquid storage tank with a capacity of 2,000,000 gallons or greater (7,580,000 l) capacity, may meet the calculated API Standard 650 discharge pipe height 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.



210 **212** **TRUE VAPOR PRESSURE (TVP):** Absolute vapor pressure of a liquid at its existing temperature of storage and handling.

213 **VAPOR COLLECTION/PROCESSING SYSTEM:** A vapor loss control system consisting of a vapor gathering subsystem capable of collecting the organic vapors and organic gases plus a second subsystem capable of processing such vapors and gases, preventing at least 95 percent of the volatile organic compounds entering it from entering the atmosphere.

211 **214** **VAPOR LOSS CONTROL DEVICE SYSTEM:** Any piping, hoses, equipment, and devices which are used to collect, store and/or process organic vapors at a bulk terminal, bulk plant, service station or other operation handling gasoline and/or other organic liquids. A system for reducing emissions to the

atmosphere, consisting of an abatement device and a collection system which achieves the abatement efficiency or emission limit during the transfer operation at an organic liquid distribution facility.

215 **VAPOR BALANCE SYSTEM:** A system of vapor tight piping, hoses, equipment and devices which collect and return displaced vapors between a cargo tank and a storage tank.

212 **216** **VAPOR TIGHT:** A condition where no organic vapor leak reaches or exceeds 100 percent of the lower explosive limit at a distance of one inch (2.5 cm) from a leak when measured with a combustible gas detector or an organic vapor analyzer, both calibrated with propane.

SECTION 300 – STANDARDS

301 **ORGANIC LIQUID STATIONARY STORAGE TANK REQUIREMENTS:**

301.1 All **Stationary Storage Tanks With A Capacity Greater Than 250 Gallons (946 L):** ~~No person~~ An owner or operator shall install or use of a stationary storage tank with a capacity greater than 250 gallons (946 l) shall store for storing organic liquids liquid with a true vapor pressure of 1.5 psia (77.5 mm Hg) or more unless such in a stationary storage tank meets meeting all of the following requirements:

- a. Each stationary storage tank has a fill pipe that is always covered with a gasketed seal when organic liquid is not in the process of being transferred.
- 301.1** b. ~~The~~ Each stationary storage tank has a permanently installed submerged fill pipe. Where because of government regulation, including, but not limited to, Fire Department codes, such submerged fill pipe cannot be installed, a nozzle extension that reaches within 6 inches of the tank bottom shall be used to fill the tank.

Note[†]

301.2 c. Each fixed roof stationary storage ~~The~~ tank has a pressure/vacuum valve that complies with both Section 301.2(c)(i) and 301.2(c)(ii) of this rule, which is set within ten percent of the tank's maximum, safe working pressure. ~~An owner or operator shall:~~

- (1) Install a pressure/vacuum vent valve that is either:
 - (a) Set the within ten percent of the tank's maximum, safe working-pressure; or
 - (b) Set at least at 1.5 psia (77.5 mm Hg)
- (2) Maintain the pressure/vacuum vent in good working order.

[†]This note is not part of Rule 350, but is provided for the reader's convenience. The requirement of subsection 301.2 for a pressure/vacuum valve is not applicable to floating roof tanks.

302 ~~GASOLINE STORAGE TANKS BETWEEN 250 AND 40,000 GALLONS (946 – 151,400 L): No person shall store gasoline in a stationary storage tank with a capacity less than 40,000 gallons (151,400 l) but greater than 250 gallons (946 l) unless the tank is equipped with a vapor recovery system which collects and returns displaced vapors to the delivery vessel using vapor tight fittings and lines; or such tank uses at least one of the vapor loss control methods in Sections 306, 307, or 308 of this rule.~~

303 **301.2 Organic Liquid Stationary Storage Tanks With A Capacity Of 20,000 Through 39,999 Gallons To Less Than 40,000 Gallons Capacity (75,700 (946 L - 151,396 L):** ~~No person An~~ owner or operator of an organic liquid stationary storage tank with a capacity between 20,000 gallons but less than 40,000 gallons, shall store organic liquids liquid with a true vapor pressure (TVP) of 1.5 psia through 11.0 psia (77.5 mm - 569 mm Hg) in a stationary storage tank ~~with a~~ capacity from 20,000 through 39,999 gallons (75,700 – 151,396 l) unless the tank ~~meeting all of~~ the following requirements: ~~is equipped with a vapor recovery system which collects and returns~~ displaced vapors to the delivery vessel using vapor tight fittings and lines; or such tank uses at least one of the vapor loss control methods specified in Sections 306, 307, or 308 of this rule.

- a. An owner or operator shall equip each stationary storage tank to meet the requirements of Section 301 of this rule.
- b. An owner or operator shall store organic liquid using at least one of the following methods:
 - (1) **Fixed Roof Stationary Storage Tank:** An owner or operator shall store organic liquid in a fixed roof stationary storage tank that meets the requirements in Section 301.1 of this rule.
 - (2) **External Floating Roof Stationary Storage Tank:** An owner or operator shall store organic liquid in an external floating roof stationary storage tank that meets the requirements in Section 302.1 of this rule.
 - (3) **Internal Floating Fixed Roof Stationary Storage Tank:** An owner or operator shall store organic liquid in an internal floating fixed roof stationary storage tank with a fixed roof covering that meets the requirements in Section 302.2 of this rule.
- c. An owner or operator shall install and maintain at least one of the following vapor loss control systems as described in Section 302 of this rule:
 - (1) Install and maintain a vapor recovery system which collects and returns displaced vapors to the cargo tank using vapor-tight fittings and lines; or
 - (2) Install and maintain an external floating roof stationary storage tank; or
 - (3) Install and maintain an internal floating roof stationary storage tank with a fixed cover; or
 - (4) Install and maintain a vapor collection/processing system.

304 **301.3 Organic Liquid Stationary Storage Tanks With A Capacity Equal To Or Greater Than 40,000 Gallons (151,400 L) Or More:** ~~No person~~ An owner or operator of organic liquid stationary storage tanks with a capacity equal to or greater than 40,000 gallons, shall ~~place, store or hold~~ in any stationary storage tank having a capacity of 40,000 gallons (151,400 L) or more, ~~any gasoline or~~ any organic liquid ~~having a~~ with a true vapor pressure (TVP) of 1.5 or greater 1.5 through 11.0 psia (77.5 mm Hg - 569 mm Hg) ~~under actual storage conditions~~, in a stationary storage tank unless such stationary storage tank is equipped with at least one of the vapor loss control ~~devices~~ systems specified in Sections 306, 307, or 308, described in Section 302 of this rule.:

- a. Install and maintain an external floating roof stationary storage tank; or
- b. Install and maintain an internal floating roof stationary storage tank with a fixed cover; or
- c. Install and maintain a vapor collection/processing system.

305 **301.4 Organic Liquid Stationary Storage Tanks Storing Liquids Having Vapor Pressures Exceeding 11 Psia:** ~~No person~~ An owner or operator shall place, store, or hold ~~in a stationary tank having a capacity over 250 gallons (946 L)~~ organic liquid(s) liquid with a true vapor pressure above 11.0 psia (569 mm Hg) in a stationary storage tank that meets at least one of the vapor loss control methods specified in below; unless such a tank is either a pressure tank maintaining working pressure sufficient at all times to prevent organic vapor/gas loss to the atmosphere or is equipped with a vapor collection/processing system specified in Section 308 of this rule.

- a. Maintain a working pressure in the stationary storage tank that is sufficient at all times to prevent organic vapor/gas loss to the atmosphere.
- b. Equip the stationary storage tank with a vapor collection/processing system as described in Section 302 of this rule.

Table 350-1

Summary of Organic Liquid (Non-Gasoline) Stationary Storage Tank VOC Emission Control Requirements

	True Vapor Pressure of Organic Liquid In Tank		
	0.5 ≥ psia < 1.5	1.5 ≥ psia < 11.0	≥ 11.0 psia
Tank Capacity		<u>Applicable Rule 350</u>	<u>Applicable Rule 350</u>
		<u>Section:</u>	<u>Section:</u>
<u>All organic liquid (non-gasoline) stationary storage tanks >250 gallons</u>	<u>Section 301.1</u>	<u>Section 301.1</u>	<u>Section 301.4</u>
<u>All organic liquid (non-gasoline) storage tanks 20,000 gallons to</u>	<u>Section 301.1</u>	<u>Section 301.1 and</u> <u>Section 301.2</u>	<u>Section 301.4</u>

<40,000 gallons			
All organic liquid (non-gasoline) storage tanks ≥40,000 gallons	Section 301.1	Sections 301.1 and Section 301.3	Section 301.4

302 VAPOR LOSS CONTROL SYSTEM:

~~306~~ **302.1 External Floating Roof Stationary Storage Tanks:** This vapor loss control ~~device~~ system is an uncovered floating roof consisting of either a pontoon type or a double-deck type roof. ~~It must rest on and be supported by the surface of the liquid contents, be equipped with a continuous primary seal to close the space between the roof eave and tank wall, except as provided in subsection 309.1 and have a continuous secondary seal which is of a design that is in accordance with accepted standards of the petroleum industry. The secondary seal shall meet the following requirements:~~ An external floating roof storage tank must meet the following requirements:

a. The owner or operator of an external floating roof tank and associated emission control equipment shall properly install, properly maintain and operate the equipment.

b. Floating Roof Requirements:

(1) The floating roof shall rest on and be supported by the surface of the liquid contents.

(2) The floating roof shall be equipped with a continuous primary seal to close the space between the roof eave and tank wall, except as provided in Section 103.2 of this rule.

(3) The floating roof shall have a continuous secondary seal which is of a design that is in accordance with accepted standards of the petroleum industry. The secondary seal shall meet the following requirements: of Section 302.1(b) of this rule.

c. Secondary Seal Requirements:

~~306.1~~ **(1)** The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge or primary seal and the tank wall, except as provided in ~~subsection 306.2~~ Section 302.1(c)(2) of this rule. Storage tanks constructed after July 13, 1988, shall have a secondary seal that is rim-mounted. Except for tanks having metallic shoe primary seals onto which secondary seals were installed prior to July 13, 1988, ~~by October 6, 1993 no person~~ an owner or operator shall operate an external floating roof tank subject to the provisions of this rule unless a secondary seal extends from the roof to the tank shell (a rim-mounted seal) and is not attached to the primary seal.

~~306.2~~ **(2)** The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 1.0 square inch per foot (21.2 cm² per meter) of tank diameter. Determinations of gap area shall only be made at the point(s) where the gaps exceed 1/8 inch (3 mm). The width of any portion of any gap shall not exceed 1/2 inch (1.27 cm).

~~306.3 The owner or operator is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal.~~

d. Floating Roof Openings:

- (1) Floating roof tanks subject to the provisions of Section 302.1 of this rule shall have no visible holes, tears or other openings in the seal or in any seal fabric.
- (2) The accumulated area of gaps between a tank's wall and primary seal shall not exceed 10 square inches per foot of tank diameter (212 cm² per meter)
- (3) The width of any portion of any gap shall not exceed 1½ inches (3.8 cm).
- (4) Where applicable, all openings except drains shall be equipped with a cover seal or lid.
- (5) Where applicable, the cover seal or lid shall be in a closed position at all times, except when the system is in actual use.
- (6) Automatic bleeder vents shall be closed at all times, except when the roof is floated off or landed on the roof leg supports.
- (7) Rim vents, if provided, shall be set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

~~307 **302.2 Internal Floating Roof Stationary Storage Tanks With Fixed Covering:** This vapor loss control device is a covered tank with an internal floating roof resting on the contained liquid. This stationary storage tank and its appurtenances shall meet the applicable requirements as follows:~~

~~a. The owner or operator of an internal floating roof stationary storage tank and associated emission control equipment shall properly install, maintain and operate the equipment.~~

~~307.1 b. Bulk terminal tanks Organic liquid stationary storage tanks for which construction, reconstruction or modification commenced after July 23, 1984, must comply with all applicable requirements of the EPA New Source Performance Standard (NSPS), 40 CFR Part 60, Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, as incorporated by reference July 1, 2016.~~

~~307.2 c. All stationary storage tanks not subject to subsection ~~307.1~~ Section 302.2(b) of this rule must comply with one of the following:~~

- ~~(1) Comply with 40 CFR Part 60, Subpart Kb, notwithstanding the type of facility and the date of tank construction, reconstruction or modification; or~~
- ~~(2) Have at least one continuous seal which completely covers the space between the roof edge and tank wall, except as provided in subsection 309.1, and meet at least one of the following requirements:~~

- (a) Have a contact-type roof resting completely on the liquid surface.
- (b) Have a liquid mounted seal.
- (c) Have two seals, a primary and a secondary.

d. Floating Roof Openings:

- (1) Floating roof tanks subject to the provisions of Section 306 of this rule shall have no visible holes, tears or other openings in the seal or in any seal fabric.
- (2) The accumulated area of gaps between a tank's wall and primary seal shall not exceed 10 square inches per foot of tank diameter (212 cm² per meter)
- (3) The width of any portion of any gap shall not exceed 1½ inches (3.8 cm).
- (4) Where applicable, all openings except drains shall be equipped with a cover seal or lid.
- (5) Where applicable, the cover seal or lid shall be in a closed position at all times, except when the system is in actual use.
- (6) Automatic bleeder vents shall be closed at all times, except when the roof is floated off or landed on the roof leg supports.
- (7) Rim vents, if provided, shall be set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

308 **302.3 Vapor Collection/Processing System:** This vapor loss control ~~device~~ system consists of a vapor gathering subsystem capable of collecting the organic vapors and organic gases plus a second subsystem capable of processing such vapors and gases, preventing at least 95 percent by weight of the volatile organic compounds entering it from escaping to the atmosphere.

a. An owner or operator of an organic liquid distribution facility that has an organic liquid throughput greater than 800,000 gallons in any consecutive 30-day period, shall install, operate and maintain a vapor loss control system.

308.1 **b.** The vapor processing subsystem shall be ~~gas-tight~~ vapor-tight except for the designated exhaust.

308.2 **c.** Any tank gauging or sampling device on a tank, vented to such a vapor ~~collection/processing~~ loss control system, shall be equipped with a ~~gas-tight~~ vapor-tight cover which shall be closed at all times except during gauging or sampling procedures.

308.3 **d.** All pressure-vacuum vent valves shall be constructed and maintained in a ~~gas-tight~~ vapor-tight condition except when the operating pressure exceeds the valve release setting.

303 EQUIPMENT MAINTENANCE AND REPAIR: The owner or operator of an organic liquid distribution facility shall:

303.1. Maintain the equipment associated with the storage and transfer of organic liquid to be all of the following:

- a.** Leak free;
- b.** Vapor tight; and
- c.** In good working order.

303.2. Repair and Retest: Except as superseded by Rule 100, Section 501 of these rules, the owner or operator of a vapor loss control system that exceeds the standards of this rule shall notify the Control Officer and observe the following time schedule in ending such exceedances:

- a.** Concentrations at or above the lower explosive limit must be brought into compliance within 24 hours of detection.
- b.** Leak concentrations exceeding 10,000 ppm but less than 50,000 ppm as methane for vapor collection/processing equipment subject to gas-tight standard shall be brought into compliance within 5 days of detection.
- c.** Except as the Control Officer otherwise specifies, a leak source subject to 302.5(b)(i) or 302.5(b)(ii) must be tested after presumed leak-correction within 15 minutes of recommencing use; if leak standards are exceeded in this test, the use of the faulty equipment shall be discontinued within 15 minutes until correction is verified by retesting.

304 **GENERAL REQUIREMENTS FOR THE TRANSFER OF ORGANIC LIQUID:** The owner or operator of an organic liquid distribution facility shall comply with the following:

304.1 **Transfer of Organic Liquid into Stationary Storage Tanks:**

- a.** Comply with Section 303.1 of this rule.
- b.** Verify the proper connection to a vapor balance system or other vapor loss control systems prior to an organic liquid transfer at facilities that utilize a vapor balance system.
- c.** Verify the proper disconnection from a vapor balance system or other vapor loss control systems at the completion of an organic liquid transfer at facilities that utilize a vapor balance system.
- d.** Minimize spills during storage and transfer of organic liquids.
- e.** Clean up spills as expeditiously as practicable.
- f.** Cover all open organic liquid containers when not in use.

g. Minimize organic liquid sent to open waste collection systems that collect and transport organic liquid to reclamation and recycling devices, such as oil/water separators.

304.2 Transfer of Organic Liquids Into Cargo Tankers:

- a. Verify that the cargo tanker has been demonstrated to be vapor tight.
- b. Verify the proper connection to a vapor balance system or other vapor loss control systems prior to an organic liquid transfer.
- c. Verify the proper disconnection from a vapor balance system or other vapor loss control systems at the completion of an organic liquid transfer.
- d. Minimize spills during storage and transfer of organic liquids.
- e. Clean up spills as expeditiously as practicable.
- f. Cover all open organic liquid containers when not in use.
- g. Minimize organic liquid sent to open waste collection systems that collect and transport organic liquid to reclamation and recycling devices, such as oil/water separators.

309 ~~ADDITIONAL REQUIREMENTS:~~

~~309.1 Prohibition—Floating Roof Openings: Floating roof tanks subject to the provisions of Section 306 or 307 of this rule shall have no visible holes, tears or other openings in the seal or in any seal fabric. The accumulated area of gaps between a tank's wall and primary seal shall not exceed 10 square inches per foot of tank diameter (212 cm² per meter) and the width of any portion of any gap shall not exceed 1½ inches (3.8 cm). Where applicable, all openings except drains shall be equipped with a cover seal or lid. The cover seal or lid shall be in a closed position at all times, except when the device is in actual use. Automatic bleeder vents shall be closed at all times, except when the roof is floated off or landed on the roof leg supports. Rim vents, if provided, shall be set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.~~

~~309.2 Tanks and all required emission control equipment shall be properly installed, properly maintained and be properly operating.~~

310 ~~EXEMPTIONS:~~

~~310.1 A pressure tank maintaining working pressure sufficient at all times to prevent organic vapor or gas loss to the atmosphere is exempt from Sections 301, 302, 303, and 304 of this rule.~~

~~310.2 During the following periods a floating roof is exempt from the requirement that its roof be floating: when the tank is being drained completely and when it is being filled, as long as both processes are accomplished continuously and as rapidly as practicable.~~

310.3 ~~A horizontal filling nozzle at its highest point within a floating roof tank exceeding 2,000,000 gallons (7,580,000 l) capacity may be up to 39.4 inches (1 meter) above the tank bottom if: except when the tank is emptied completely, the nozzle is kept completely submerged, including when the roof rests on its legs.~~

SECTION 400 – ADMINISTRATIVE REQUIREMENTS

401 ORGANIC LIQUID STORAGE TANK INSPECTIONS

401.1 SEMI-ANNUAL INSPECTIONS BY OWNER OR OPERATOR: The owner or operator of any floating roof tank subject to this rule shall inspect the tank and seals at least once every six months to determine ongoing compliance with both the applicable standards of this rule and any permit conditions pertaining to the tank. Determinations of secondary seal gap area on external floating roofs need be made only once per year. Records of these inspections shall be maintained and shall be made available to the Control Officer upon request.

401.2 INSPECTIONS OF EXTERNAL FLOATING ROOF TANKS:

a. The owner or operator of any tank which uses an external floating roof to meet the vapor loss control requirements of this rule shall conduct a visual inspection each time the external floating roof tank is emptied and degassed or at least once a year. The visual inspection shall include all of the following:

(1) Verify the secondary seal covers the space between the roof edge and the tank.

(2) Measure the gaps between the tank wall and the secondary seal. The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

(3) Verify there are no holes, tears, or other openings in the seal or seal fabric.

401.3 INSPECTIONS OF INTERNAL FLOATING ROOF TANKS:

a. The owner or operator of any tank which uses an internal floating roof to meet the vapor loss control requirements of this rule shall conduct a visual inspection each time the internal floating roof tank is emptied and degassed or at least once a year. The visual inspection shall include all of the following:

(1) The internal floating roof shall be free of any defects.

(2) The primary seal shall not have any holes, tears or other openings.

(3) The secondary seal if one is in service, shall not have any holes, tears or other openings.

(4) Gaskets shall prevent liquid surfaces from exposure to atmosphere.

(5) The slotted membrane shall not have more than a ten percent (10%) open area.

401.4 FIVE-YEAR, FULL CIRCUMFERENCE INSPECTIONS OF EXTERNAL FLOATING

ROOF TANKS: The owner or operator of a floating roof tank of 20,000 gallons (75,700 l) or more storing organic liquid shall conduct a complete inspection of the external floating roof tank each time the tank is emptied and degassed or at least once every five (5) years. This inspection can be performed while the tank is in-service. The inspection shall include all of the following:

a. Perform a complete inspection of the organic liquid storage tank as described in Section 401.2 of this rule.

b. Perform a complete inspection of the primary seal and floating roof.

c. Measure gap areas and maximum gap. The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.

402 ANNUAL LEAK DETECTION TEST: The owner or operator of each organic liquid distribution facility shall conduct an annual leak detection test. Testing shall be done according to procedures in Section 500, except that EPA Method 21 shall be used to test for leaks from a vapor collection/ processing unit and its associated piping outside the organic liquid transfer area. Equipment shall conform to the specifications of those test methods cited in Section 506. Prior to testing, the owner shall notify the Control Officer of the date, time and location of the testing. The Control Officer or his representatives shall at their discretion observe the tests.

403 ORGANIC LIQUID STORAGE TANK INSPECTIONS-AVAILABILITY TO CONTROL OFFICER:

401403.1 ANNUAL INSPECTIONS OF EXTERNAL FLOATING ROOF STATIONARY STORAGE

TANKS: The owner or operator of any tank which uses an external floating roof to meet the vapor loss control requirements of this rule shall make the primary seal envelope and the secondary seal available for unobstructed inspection by the Control Officer on an annual basis. The primary seal envelope shall be made available for inspection at a minimum of four locations selected along its circumference at random by the Control Officer. If the Control Officer detects a violation as a result of any such inspection, the Control Officer may require such further unobstructed inspection of the seals as may be necessary to determine the seal condition for its entire circumference.

402403.2 ANNUAL INSPECTIONS OF INTERNAL FLOATING ROOF STATIONARY STORAGE

TANKS: The owner or operator of any stationary storage tank which uses an internal floating roof to meet the vapor loss control system requirements of this rule shall make the entire stationary storage tank including the internal floating roof available for inspection prior to filling. It shall be made available for

visual inspection through the manholes or roof hatches on the fixed covering on an annual basis. ~~Roofs which practicably can be walked on shall annually be made available for hands-on inspection.~~

403 **403.4 FIVE-YEAR, FULL CIRCUMFERENCE INSPECTIONS:** ~~As of July 13, 1988, the~~ The owner or operator of a floating roof tank of 20,000 gallons (75,700 l) or more storing an organic liquid with a TVP of 1.5 psia (77.5 mm Hg) or greater shall make the primary seal envelope available for inspection by the Control Officer for its full length every five years. This inspection can be performed while the tank is in-service. However, if prior thereto the secondary seal is removed or if the tank is drained and cleaned by the owner or operator for any reason, it shall be made available for such inspection at that time. The owner or operator shall provide notification to the Control Officer no less than seven working days prior to removal of the secondary seal. The owner or operator shall perform a complete inspection of the primary seal and floating roof, including measurement of gap area and maximum gap, whenever the tank is emptied for non-operational reasons or at least every five years, whichever is more frequent.

404 **403.5 SEMI-ANNUAL INSPECTIONS BY OWNER OR OPERATOR:** The owner or operator of any floating roof tank subject to this rule shall inspect the tank and seals at least once every six months to determine ongoing compliance with both the applicable standards of this rule and any permit conditions pertaining to the tank. Determinations of secondary seal gap area on external floating roofs need be made only once per year. Records of these inspections shall be maintained and shall be made available to the Control Officer upon request.

405 ~~COMPLIANCE SCHEDULE: By October 6, 1992, any person subject to Section 300 who does not comply with all its provisions shall submit to the Control Officer for approval an emission control plan describing the method(s) to be used to achieve full compliance by October 6, 1993. This plan shall specify dates for completing increments of progress, such as the contractual arrival date of new control equipment. The Control Officer may require a person submitting such an emission control plan to submit subsequent reports on progress in achieving compliance.~~

404 MONTHLY ORGANIC LIQUID TRANSFER EQUIPMENT LEAK INSPECTIONS: The owner or operator shall perform monthly inspections, while organic liquid is being transferred, for liquid and vapor leaks and for faulty equipment. Monthly inspections detection methods can include one or more of the following:

404.1 Incorporation of sight, sound, smell and/or touch.

404.2 Use of an optical gas imaging instrument calibrated according to manufacturing specifications.

405 CARGO TANK INSPECTION: The owner or operator of a cargo tank subject to this Rule 350 shall periodically verify the vapor tightness of each cargo tank as described in Section 407.1 or 407.2 of this rule.

405.1 The owner or operator of a cargo tank equipped with vapor balance equipment shall annually demonstrate that the cargo tank maintains a pressure change of no more than 250 pascals (1 inch of water) within 5 minutes after it is pressurized to 4,500 pascals (18 inches of water) by using the procedures specified in EPA Method 27 - Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure Vacuum Test.

405.2 The owner or operator of a cargo tank that is not equipped with vapor balance equipment shall demonstrate that the cargo tank meets the United States Department of Transportation Requirements for Test and Inspection of Specification Cargo Tanks as described in 49 CFR 180.407.

406 **OTHER AGENCIES' REQUIREMENTS:** Compliance with this rule does not relieve or otherwise affect a person's obligation to comply with any other applicable federal, state, or local legal requirement, including, but not limited to, rules promulgated by the Arizona Department of Weights and Measures, local fire department codes, and local zoning ordinances.

SECTION 500 – MONITORING AND RECORDS

~~501 VAPOR PRESSURE RECORDS: A person whose tanks are subject to the provisions of this rule shall keep accurate records of liquids stored in such tanks including either the true or the Reid vapor pressure ranges of each such liquid. The temperature of the contents of each affected tank located at bulk terminals shall be recorded at least weekly and the true vapor pressure of each shall be recorded at least once each month. These records shall be kept a minimum of three years.~~

~~502 COMPLIANCE DETERMINATION— TEST METHODS: 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.~~

~~502.1 Determination Of Vapor Tight Condition: Applicable procedures of Rule 351, Section 501.~~

~~502.2 Emission Rates And Control Device Efficiency: EPA Reference Methods 2A, 2B, 18 and 25A.~~

~~502.3 Gaseous Leak Detection And Determination Of Gas Tight Condition: EPA Method 21.~~

~~502.4 Reid Vapor Pressure: Reid vapor pressure shall be determined by ASTM Method D323-82 or by ASTM Method D-5191.~~

~~502.5 True Vapor Pressure: True vapor pressure shall be determined by ASTM Method 2879-83 and by temperature measurement under actual conditions using an instrument accurate to within ± 1 degree Fahrenheit or ± 0.5 degree Celsius. For purposes of recording and reporting, the Reid vapor pressure and the foregoing temperature determination may be used in conjunction with the method of American Petroleum Institute Bulletin 2517, February, 1980, to determine true vapor pressure, unless the Control Officer specifies ASTM Method 2879-83.~~

501 MONITORING FOR LEAKS

501.1 COMBUSTIBLE GAS DETECTOR OR ORGANIC VAPOR ANALYZER (OVA) - TEST

PROCEDURE: During the transfer of organic liquids into a cargo tank, the peripheries of all potential sources of leakage at the organic liquid distribution facility are checked with a combustible gas detector or organic vapor analyzer (OVA) as follows:

- a. Calibration:** Within 4 hours prior to monitoring the combustible gas detector or OVA shall be calibrated with 10,600 ppm propane by volume in air for a 50 percent lower explosive limit (LEL) response.
- b. 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.
- c. Probe Movement:** The probe shall be moved slowly, not faster than 1.6 inches per second (4 centimeters per second). If there is any meter deflection at a potential or actual leak source, the probe shall be positioned to locate the point of highest meter response.
- d. Probe Position:** The probe inlet shall be positioned in the path of the vapor flow from a leak such that the central axis of the probe-tube inlet shall be positioned coaxial with the path of the most concentrated vapors.
- e. Wind:** Wind shall be blocked as much as possible from the space being monitored. The annual leak detection test required by Section 402 shall be valid only when wind speed in the space being monitored is 5 mph or less.
- f. Data Recording:** The highest detector reading and location for each incidence of leakage shall be recorded along with the date and time.

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

- a.** Spray a soap solution over all potential leak sources. The soap solution may be a commercially available leak detection solution or may be prepared using concentrated detergent and water. A pressure sprayer or squeeze bottle may be used to dispense the solution.
- b.** Observe the potential leak sites to determine if any bubbles are formed.
 - (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 Section 501.1 of this rule shall be used to determine if a vapor leak exists.

501.3 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 501.1 of this rule shall be used to determine if a vapor leak exists.

501.4 Any instrument used for the measurement of organic compound concentration shall be calibrated according to manufacturer's instructions or in accordance with EPA Reference Method 21 as incorporated by reference in Maricopa County Air Pollution Control Regulations, Appendix G, Incorporated Materials.

502 **VAPOR PRESSURE RECORDS:** The owner or operator of an organic liquid distribution facility shall keep accurate records including, but not limited to the records listed in Section 501.1, 501.2, 501.3 and 501.4 of this rule.

502.1 An owner or operator shall keep accurate records of liquids stored in each storage tank subject to this Rule 350.

502.2 The temperature of the contents of each storage tank subject to this Rule 350, shall be recorded at least weekly.

502.3 The true vapor pressure of each organic liquid in each storage tank subject to this Rule 350, shall be recorded at least once each month.

503 **LEAK INSPECTION RECORDS:** The owner or operator of an organic liquid distribution facility shall keep a log documenting each leak inspection. The log shall include, but is not limited to the items listed in Section 502.1, 502.2, 503.3, 502.5 and 502.5 of this rule.

503.1 The owner or operator shall sign the log at the completion of each monthly inspection for equipment leaks.

503.2 Each monthly inspection shall include shall contain a list, summary description or diagram(s) showing the location of all equipment at the organic liquid distribution facility.

503.3 Each monthly inspection shall include any maintenance that occurred.

503.4 Each annual inspection shall include any maintenance that occurred.

503.5 These records shall be kept a minimum of five years.

503.6 Additional Record Requirements for use of optical gas imaging instruments: An owner or operator using an optical gas imaging instrument for leak inspections shall date and time stamp the video records of every monitoring event where an optical gas imaging instrument was used.

504 **COMPLIANCE INSPECTIONS:** The Control Officer, at any time, may monitor a cargo tank's vapor collection system, an organic liquid transfer rack's vapor loss control systems, a transfer facility or a vapor collection/processing system for vapor leaks by the test methods described in Section 506 of this rule.

505 **RECORDS RETENTION:** Records and information required by this rule shall be retained for at least five years.

502 **506** **COMPLIANCE DETERMINATION - TEST METHODS:** 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. Copies of the code of federal regulations are available electronically at: <http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR>; at the Maricopa County Air Quality Department, 1001 N. Central Ave., Suite 125, Phoenix, AZ, 85004; or by calling (602) 506-6010 for information. ASTM standards are available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428, or from its website at www.astm.org.

506.1 EPA Test Methods:

- a.** EPA Method 2A - Direct Measurement of Gas Volume Through Pipes and Small Ducts.
- b.** EPA Method 18 - Measurement of Gaseous Organic Compound Emissions by Gas Chromatography.
- c.** EPA Method 21 - Determination of Volatile Organic Compound Leaks.
- d.** EPA Method 25A - Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer.
- e.** EPA Method 25A - Determination of Total Gaseous Organic Concentration Using a Nondispersive Infrared Analyzer.
- f.** EPA Method 27 - Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure Vacuum Test.
- g.** 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 to comply with the alternative work practice requirements in 40 CFR 40.18(g) instead of using the 40 CFR 60, Appendix A-7, Method 21 monitor to identify leaking equipment.

506.2 California Air Resources Board (CARB) - Test Procedure:

- a.** TP-201.1E Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, October 8, 2003.

506.3 ASTM

- a.** ASTM D2879-10 Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.
- b.** ASTM D6420-99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry.

Last Formatted—Fall 1997

[Return to list of Attachments](#)

COPIES OF ALL WRITTEN AND ELECTRONIC STAKEHOLDER INPUT

From: Cheri Dale - AQDX
Sent: Thursday, June 11, 2015 4:11 PM
To: todd@tamuraenv.com
Cc: Johanna Kuspert - AQDX
Subject: Stakeholder Workshop Information for Maricopa County, AZ

Todd,

Good talking with you this afternoon. Per your inquiry concerning Maricopa County Air Quality Rules 350, 351 352 and 353, the Maricopa County Board of Supervisors has recently approved the revision of several County rules that control the emissions of volatile organic compounds (VOCs) and Nitrogen Oxides (NOx) that contribute to the formation of ground-level ozone. The revisions will serve to reduce the levels of these ozone precursors while also providing technology updates and clarification of rule elements.

If you are interested in these rule revisions please visit the County's Enhanced Regulatory Outreach Program (EROP) Website at <http://www.maricopa.gov/regulations/aa/process.aspx>. The EROP page will also post notices of future workshops – the first already scheduled for June 29 and 30, 2015. The workshop notices will contain first draft language for the rule revisions. Attending a workshop will also provide the opportunity to receive rule updates on a regular basis. For more information contact Johanna Kuspert at 602-506-6710 or JohannaKuspert@mail.maricopa.gov.

I will look into accessing the workshop via teleconference and get back with you by June 19, 2015. Have a great day.

Cheri

Cheri Dale, MEPM, REHS/RS
Senior Planner
Maricopa County Air Quality Department
1001 N. Central Avenue, #125 | Phoenix, AZ 85004
Located at the Central Ave. & Roosevelt METRO stop
Desk 602.506.3476 | CleanAirMakeMore.com



From: Hether Krause - ENVX
Sent: Friday, June 12, 2015 4:58 PM
To: Johanna Kuspert - AQDX
Subject: FW: Regulatory Outreach

Please cc me on your response. Thank you

Hether Krause, R.S., CPM

Ombudsman | Citizen Advocate

Air Quality & Environmental Services Departments
Maricopa County

1001 N. Central Avenue, Phoenix, AZ 85004
Desk: 602.506.6707 | Fax: 602.506.6179
hkrause@mail.maricopa.gov

From: Regulatory [<mailto:regulations@mail.maricopa.gov>]
Sent: Friday, June 12, 2015 4:47 PM
To: Hether Krause - ENVX; Valerie Beckett - PLANDEVX; Jennifer Pokorski - FCDX
Subject: FW: Regulatory Outreach

From: todd@tamuraenv.com[SMTP:TODD@TAMURAENV.COM]
Sent: Friday, June 12, 2015 4:46:46 PM
To: Regulatory
Subject: Regulatory Outreach
Auto forwarded by a Rule

Citizen Comments

Issue: AQ-2015-008 Rule 350, Rule 351, Rule 352, Rule 353

Citizen's Name: Todd Tamura
Organization: Tamura Environmental, Inc.
City: Petaluma
Zip: 94952
Phone Number: 707-773-3737
Phone Type: work
Email: todd@tamuraenv.com

Does citizen want to be contacted: no

Comment is regarding: other

Comments:

I would like to attend the June 29 and June 30 workshops by telephone or webcast.

Time of Request: 6/12/2015 4:46:46 PM

From: Cheri Dale - AQDX
Sent: Thursday, June 18, 2015 9:36 AM
To: Johanna Kuspert - AQDX; Corky Martinkovic - AQDX
Subject: FW: Maricopa County Gasoline Rules 350, 351, 352 and 353

Johanna and Corky,

*Below is the first draft of a response to Amanda. Should I direct her to submit her question through EROP; reply via email; or just give her a call with a follow-up email requesting further questions route through EROP comments?
Cheri*

Hi Amanda,

Maricopa County Monday, June 29, 2015, the Rule 350 and 351 discussion will describe the PROPOSED revision of Rules 350 and 351 into separate rules; one rule specifically for non-gasoline organic liquid storage and transfer and one rule specifically for gasoline storage and loading. After a brief description of the separation of the rules, the focus of Monday's discussion will be organic liquids and not gasoline. The focus of Tuesday's workshops will again describe the PROPOSED revision of Rules 350 and 351 into separate rules with the focus being on the gasoline storage and loading at bulk plants and bulk terminals as well as requirements for gasoline cargo tanker trucks. The second workshop for Rules 352 and 353 will focus on the PROPOSED rule revisions for gasoline cargo tanker truck requirements; and gasoline loading and storage at gasoline dispensing facilities.

Further rule comments are encouraged to be submitted through the County's Enhanced Regulatory Outreach Program (EROP) Website at <http://www.maricopa.gov/regulations/aq/process.aspx>. Comments submitted through EROP are included verbatim in the rulemaking documents. For more information contact Johanna Kuspert at 602-506-6710 or JohannaKuspert@mail.maricopa.gov. Thank you for your interest in the AQ-3015-008 rulemaking.

Cheri

From: Amanda Gray [mailto:amanda@apma4u.org]
Sent: Wednesday, June 17, 2015 8:57 AM
To: Cheri Dale - AQDX
Subject: Re: Maricopa County Gasoline Rules 350, 351, 352 and 353

Cheri,

I saw the Stakeholder Workshop notification for these rules posted online. Can you tell me why Rules 350 and 351 are noticed for workshops on both Monday 6/29 AND Tuesday 6/30? Want to be clear with my membership if these are either/or or if there will different topics addressed on the different days...

Thanks,
Amanda

Amanda Gray

Executive Director

Arizona Petroleum Marketers Association



From: Cheri Dale - AQDX <CheriDale@mail.maricopa.gov>
Date: Thursday, May 7, 2015 at 11:37 AM
To: "danderso@circlek.com" <danderso@circlek.com>, Amanda Gray <amanda@apma4u.org>
Cc: Johanna Kuspert - AQDX <JKuspert@mail.maricopa.gov>, Michelle Wilson <mwilson@azdwm.gov>
Subject: Maricopa County Gasoline Rules 350, 351, 352 and 353

Amanda and Denise,

Good to talk with you at yesterday's ADWM Oral Proceeding. Per our brief conversation, I have been researching the following rules that may be of interest to you:

- Rule 350: Storage Of Organic Liquids At Bulk Plants And Terminals;
- Rule 351: Loading Of Organic Liquids;
- Rule 352: Gasoline Delivery Vessel Testing And Use; and
- Rule 353: Gasoline In Stationary Dispensing Tanks.

On May 01, 2015, a meeting with Philip McNeely, MCAQD Director, and other staff members was held to discuss a timeline per the Maricopa County Enhanced Regulatory Outreach Program (EROP) for revisions to the above rules. We are anticipating Director McNeely to brief the Maricopa County Board of Supervisors on the proposed rulemaking sometime in June 2015 with the first stakeholder meeting to be scheduled in July 2015.

If you have specific concerns with any of the above rules, please email me or submit your comments, concerns and suggestions through the [EROP website comment page](#). Your comments early on will allow me time to research and revise the rules so the process proceeds smoothly. Please note, at this time a case number has not been assigned so this proposed rulemaking has NOT been posted on the EROP website as of today. By signing up for automatic notices of meetings and board hearings and to review department documents submitted through the EROP process, go to the [Maricopa County EROP website](#) and click on the "Stay Informed" icon located in the upper right of the page. This will ensure you will receive notices and have up-to-date draft documents to review and comment on.



My goal is to work together with regulators and stakeholders to draft a rule that is understandable, reasonable and timely. I appreciate your comments and look forward to working with you.

Cheri

Cheri Dale, MEPM, REHS/RS

Senior Planner

Maricopa County Air Quality Department

1001 N. Central Avenue, #125 | Phoenix, AZ 85004

Located at the Central Ave. & Roosevelt METRO stop

Desk 602.506.3476 | CleanAirMakeMore.com



From: Cheri Dale - AQDX
Sent: Thursday, June 18, 2015 11:27 AM
To: amanda@apma4u.org
Subject: FW: Maricopa County Gasoline Rules 350, 351, 352 and 353

Amanda,
AQ-3015-008 should be AQ-2015-008 rulemaking.
Thanks.
Cheri

From: Cheri Dale - AQDX
Sent: Thursday, June 18, 2015 11:23 AM
To: 'Amanda Gray'
Subject: RE: Maricopa County Gasoline Rules 350, 351, 352 and 353

Hi Amanda,

On Monday, June 29, 2015, the Maricopa County Air Quality stakeholder workshop for Rule 350 and 351 will describe the PROPOSED revision of Rules 350 and 351 into separate rules; one rule specifically for non-gasoline organic liquid storage and transfer and one rule specifically for gasoline storage and loading. After a brief description of the separation of the rules, the focus of Monday's discussion will be organic liquids and not gasoline. The focus of Tuesday's workshops will again describe the PROPOSED revision of Rules 350 and 351 into separate rules with the focus being on the gasoline storage and loading at bulk plants and bulk terminals as well as requirements for gasoline cargo tanker trucks. The second workshop for Rules 352 and 353 will focus on the PROPOSED rule revisions for gasoline cargo tanker truck requirements; and gasoline loading and storage at gasoline dispensing facilities.

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Thank you for your interest in the AQ-3015-008 rulemaking.

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Senior Planner
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Sent: Wednesday, June 17, 2015 8:57 AM
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Amanda Gray

Executive Director

Arizona Petroleum Marketers Association

602-330-6762



From: Cheri Dale - AQDX <CheriDale@mail.maricopa.gov>
Date: Thursday, May 7, 2015 at 11:37 AM
To: "danderso@circlek.com" <danderso@circlek.com>, Amanda Gray <amanda@apma4u.org>
Cc: Johanna Kuspert - AQDX <JKuspert@mail.maricopa.gov>, Michelle Wilson <mwilson@azdwm.gov>
Subject: Maricopa County Gasoline Rules 350, 351, 352 and 353

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From: Cheri Dale - AQDX
Sent: Friday, June 19, 2015 2:39 PM
To: todd@tamuraenv.com
Cc: Johanna Kuspert - AQDX
Subject: UPDATE: Teleconference Request for Stakeholder Workshop Information for Maricopa County, AZ

Todd,

We are making progress on your request for a teleconference but are still working on some logistics. I will keep in touch and forward you the teleconference information when I know it. Have a great weekend.

Cheri

From: Cheri Dale - AQDX
Sent: Thursday, June 11, 2015 4:11 PM
To: 'todd@tamuraenv.com'
Cc: Johanna Kuspert - AQDX
Subject: Stakeholder Workshop Information for Maricopa County, AZ

Todd,

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If you are interested in these rule revisions please visit the County's Enhanced Regulatory Outreach Program (EROP) Website at <http://www.maricopa.gov/regulations/aq/process.aspx>. The EROP page will also post notices of future workshops – the first already scheduled for June 29 and 30, 2015. The workshop notices will contain first draft language for the rule revisions. Attending a workshop will also provide the opportunity to receive rule updates on a regular basis. For more information contact Johanna Kuspert at 602-506-6710 or JohannaKuspert@mail.maricopa.gov.

I will look into accessing the workshop via teleconference and get back with you by June 19, 2015. Have a great day.

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Cheri Dale, MEPM, REHS/RS

Senior Planner

Maricopa County Air Quality Department

1001 N. Central Avenue, #125 | Phoenix, AZ 85004

Located at the Central Ave. & Roosevelt METRO stop

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From: Cheri Dale - AQDX
Sent: Friday, June 26, 2015 3:06 PM
To: Todd Tamura
Cc: Johanna Kuspert - AQDX
Subject: RE: UPDATE: Teleconference Request for Stakeholder Workshop Information for Maricopa County, AZ

Todd,

We have just successfully completed a test run of the "Go To Meeting" access. I will be sending you a meeting invitation for the Rule 350 and Rule 351 Organic Liquids (non-gasoline) PROPOSED rulemaking workshop. This brings up the next question, are you interested in all three of the stakeholder workshops concerning Maricopa County Air Quality Rules 350, 351, 352 and 353? If so, I will need to create two additional meeting invitations in order for you to "attend." Let me know if you are interested in "attending" the additional workshops scheduled for June 30, 2015.

Thanks for your inquiry as well as your patience as we learn how to use a new tool for our meetings. Have a great weekend.

Cheri

Cheri Dale, MEPM, REHS/RS
Senior Planner
Maricopa County Air Quality Department
1001 N. Central Avenue, #125 | Phoenix, AZ 85004
Located at the Central Ave. & Roosevelt METRO stop
Desk 602.506.3476 | CleanAirMakeMore.com



From: Todd Tamura [<mailto:todd@tamuraenv.com>]
Sent: Friday, June 19, 2015 3:15 PM
To: Cheri Dale - AQDX
Subject: RE: UPDATE: Teleconference Request for Stakeholder Workshop Information for Maricopa County, AZ

oK thank you Cheri

From: Cheri Dale - AQDX [<mailto:CheriDale@mail.maricopa.gov>]
Sent: Friday, June 19, 2015 2:39 PM
To: todd@tamuraenv.com
Cc: Johanna Kuspert - AQDX
Subject: UPDATE: Teleconference Request for Stakeholder Workshop Information for Maricopa County, AZ

Todd,

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Sent: Thursday, June 11, 2015 4:11 PM
To: 'todd@tamuraenv.com'
Cc: Johanna Kuspert - AQDX
Subject: Stakeholder Workshop Information for Maricopa County, AZ

Todd,

Good talking with you this afternoon. Per your inquiry concerning Maricopa County Air Quality Rules 350, 351 352 and 353, the Maricopa County Board of Supervisors has recently approved the revision of several County rules that control the emissions of volatile organic compounds (VOCs) and Nitrogen Oxides (NOx) that contribute to the formation of ground-level ozone. The revisions will serve to reduce the levels of these ozone precursors while also providing technology updates and clarification of rule elements.

If you are interested in these rule revisions please visit the County's Enhanced Regulatory Outreach Program (EROP) Website at <http://www.maricopa.gov/regulations/aq/process.aspx>. The EROP page will also post notices of future workshops – the first already scheduled for June 29 and 30, 2015. The workshop notices will contain first draft language for the rule revisions. Attending a workshop will also provide the opportunity to receive rule updates on a regular basis. For more information contact Johanna Kuspert at 602-506-6710 or JohannaKuspert@mail.maricopa.gov.

I will look into accessing the workshop via teleconference and get back with you by June 19, 2015. Have a great day.

Cheri

Cheri Dale, MEPM, REHS/RS
Senior Planner
Maricopa County Air Quality Department
1001 N. Central Avenue, #125 | Phoenix, AZ 85004
Located at the Central Ave. & Roosevelt METRO stop
Desk 602.506.3476 | CleanAirMakeMore.com

**CLEAN
MAKE
MORE**



From: Johanna Kuspert - AQDX
Sent: Thursday, August 20, 2015 1:57 PM
To: Cheri Dale - AQDX
Cc: Corky Martinkovic - AQDX; Hether Krause - ENVX
Subject: FW: Comments regarding Proposed Rules 350 and 351
Attachments: MCAQD Proposed Rule Comments.pdf

Cheri:

Attached are comments that were submitted to EROP. If you would send Martin Hook an e-mail message (with cc. to Hether, Corky, and me) letting him know that we received his comments and that we're reviewing them, I'd appreciate it.

Thanks.
Johanna.

From: Hether Krause - ENVX
Sent: Thursday, August 20, 2015 1:10 PM
To: Johanna Kuspert - AQDX
Cc: Corky Martinkovic - AQDX; Jennifer Pokorski - FCDX
Subject: FW: Comments regarding Proposed Rules 350 and 351

Johanna,
Please notify me upon response. Thank you

From: Regulatory [<mailto:regulations@mail.maricopa.gov>]
Sent: Thursday, August 20, 2015 12:54 PM
To: Hether Krause - ENVX; Valerie Beckett - PLANDEVX; Jennifer Pokorski - FCDX
Subject: FW: Comments regarding Proposed Rules 350 and 351

From: Martin Hook [SMTP:MHOOK@CALJET.COM]
Sent: Thursday, August 20, 2015 12:52:28 PM
To: Regulatory
Subject: Comments regarding Proposed Rules 350 and 351
Auto forwarded by a Rule

Please see the attached comments.

Martin A. Hook, P.E.
The Jet Companies, Inc.
5601 W. Van Buren St.
Phoenix, AZ 85043
Office (602) 272-5522 x-106
Cel (602) 909-8582

From: Cheri Dale - AQDX
Sent: Thursday, August 20, 2015 2:20 PM
To: 'MHOOK@CALJET.COM'
Cc: Hether Krause - ENVX; Johanna Kuspert - AQDX; Corky Martinkovic - AQDX
Subject: Comments on Maricopa County rulemaking AQ 2015-008

Martin,

Thank you for your comments on specific sections of the proposed Rules 350 and 351. The department will review your comments. The next stakeholder workshop on Proposed Rules 350 and 351 is tentatively being scheduled for September 14, 2015. You should be receiving a Stakeholder Workshop notice in a couple weeks. I encourage you to attend the workshop to further discuss your comments with department staff and other attendees. I really would like the workshops to be discussion sessions rather than me just reviewing proposed rule language. This helps me to better understand the process and draft a rule that is acceptable to all involved. Thanks again for your comments and don't hesitate to submit additional comments or suggestions as we move through the rulemaking process. Hope to see you in September.

Cheri

The Air Quality Department strives to provide excellent customer service to residents of Maricopa County.
How are we doing? [Send us your feedback.](#)

Cheri Dale, MEPM, REHS/RS
Senior Planner
Maricopa County Air Quality Department
1001 N. Central Avenue, #125 | Phoenix, AZ 85004
Located at the Central Ave. & Roosevelt METRO stop
Desk 602.506.3476



From: Harbin Zachary J <Zachary.Harbin@srpnet.com>
Sent: Thursday, October 08, 2015 4:52 PM
To: Cheri Dale - AQDX
Subject: Proposed Rules 351 and 353 Comments
Attachments: Rule 351 Comments on Second Draft_9_28_15.docx; Rule 353 Comments on Second Draft_9_28_15.docx

Ms. Dale,

SRP appreciates the opportunity to provide feedback to MCAQD on the proposed Rules 351 and 353. Attached are two documents which contain comments for proposed Rule 351 and Rule 353. If you have any questions or comments please feel free to contact me.

Thank you,

Zachary J. Harbin
Salt River Project
Environmental Compliance Engineer
(w) 602-236-5779 - (m) 480-217-0126
Mail Station PAB352 – PO Box 52025 – Phoenix, AZ 85072

Rule 351 Comments on Second Draft 9/14/15

Rule Clarifications and Comments	
Section	Comment
General	PR351 is for “Storage and Loading of Gasoline at Bulk Plants and Bulk Terminals”. It is requested that all requirements associated with cargo tanks and their testing be retained as a separate rule (i.e., Rule 352.). The owners and operators of cargo tanks are not necessarily the same as the owners and operators of bulk plants and bulk terminals. Retaining the requirements as two separate rules more easily differentiates the two.
201	Define “gasoline dispensing facilities” as defined in PR353.
201	Need to include a threshold that determines applicability to the rule. The current Rule 350 Section 102 states “...stationary storage tank which is used primarily to fill delivery vessels.” It is recommended that this language also be used to determine the applicability of the proposed rule.
202	Include the following language, “...and subsequently loads gasoline into gasoline cargo tanks for transport to gasoline dispensing facilities...” This language is found currently in Section 201.
205	Definition of gasoline should be consistent with PR 353.
306	It is recommended that the reference to JP-4 be removed as JP-4 is not applicable to this rule.
401	Please expand on each subsection contained within as the requirements are very unclear. What facilities are subject to these submittal requirements? What are the content requirements? When do the documents need to be submitted?
401	The proposed language requires all bulk plants and bulk terminals to submit an O&M Plan. If an Emission Control System is not installed, there would be no additional monitoring parameters to record. Therefore, an O&M plan should not be required in this situation.
501	Please clarify applicability to this rule. Who is required to install an emissions control system to control particulate matter?
501	Please clarify the requirements of this section. How is proper installation and operation of the system determined? Is this based on manufacturer’s recommendations, good engineering practices, etc?
506	The current Rule 350 allows the owner or operator to record either the true vapor pressure or the Reid vapor pressure. It is recommended that the same language be used to provide the owner or operator flexibility.
511	This section does not state any requirements for testing and is not referenced within the rule. It is recommended that references be made to each applicable test method.

Grammar and References	
Section	Comment
General	Review all references to Sections and update as needed. Add placeholder references.
101	The wording of this section should be revised to reflect the current Rule 351 language. "...gasoline under actual storage and loading conditions ..."
302.2	Should this be its own section "303"? It currently references Section 302.
402.1 and 403	Section 402.1 and 403 are duplicate.
507.2	Paragraph f, g, and h are not currently required information on the "Application for Air Pollution Vapor Recovery Certification." It is recommended that Paragraphs f, g, and h be moved to a new subsection.
511.1b	References Section 503.2 of Rule 352.

Rule Clarifications and Comments	
Section	Comment
General	PR353 is for “Storage and Loading of Gasoline at Gasoline Dispensing Facilities”. It is requested that all requirements associated with cargo tanks and their testing be retained as a separate rule (i.e., Rule 352.). The owners and operators of cargo tanks are not necessarily the same as the owners and operators of gasoline dispensing facilities. Retaining the requirements as two separate rules more easily differentiates the two.
104.1	An exemption is currently provided for “Bulk Tank or Bulk Terminal” as defined in PR351. Should “Bulk Tank” be “Bulk Gasoline Plant”? PR351 covers “Bulk Gasoline Plants” and “Bulk Tank” is not defined in PR351.
104.3a.	Define “Non-Farm Tanks”.
303.1b	Please defined “GDF”. It is assumed that “GDF” is gasoline dispensing facility but this is not defined anywhere in the rule.
502.2	Records of weekly inspections are required to be maintained, but the rule does not specify what the inspection requirements are. Also, it is recommended that if deliveries are less than once a week, inspections are then required to be during each delivery rather than weekly.

Grammar and Reference	
Section	Comment
General	Review all references to Sections and update as needed. Add placeholder references.

From: Cheri Dale - AQDX
Sent: Thursday, October 08, 2015 5:02 PM
To: Harbin Zachary J (Zachary.Harbin@srpnet.com)
Cc: Johanna Kuspert - AQDX; 'Hether Krause - ENVX'
Subject: FW: Proposed Rules 351 and 353 Comments
Attachments: Rule 351 Comments on Second Draft_9_28_15.docx; Rule 353 Comments on Second Draft_9_28_15.docx

Zachary,
Thank you for your comments on Maricopa County Air Quality Rules 351 and 353.
Cheri

The Air Quality Department strives to provide excellent customer service to residents of Maricopa County. How are we doing? [Send us your feedback.](#)

Cheri Dale, MEPM, REHS/RS
Senior Planner
Maricopa County Air Quality Department
1001 N. Central Avenue, #125 | Phoenix, AZ 85004
Located at the Central Ave. & Roosevelt METRO stop
Desk 602.506.3476



From: Harbin Zachary J [<mailto:Zachary.Harbin@srpnet.com>]
Sent: Thursday, October 08, 2015 4:52 PM
To: Cheri Dale - AQDX
Subject: Proposed Rules 351 and 353 Comments

Ms. Dale,

SRP appreciates the opportunity to provide feedback to MCAQD on the proposed Rules 351 and 353. Attached are two documents which contain comments for proposed Rule 351 and Rule 353. If you have any questions or comments please feel free to contact me.

Thank you,

Zachary J. Harbin
Salt River Project
Environmental Compliance Engineer
(w) 602-236-5779 - (m) 480-217-0126
Mail Station PAB352 – PO Box 52025 – Phoenix, AZ 85072

Rule 351 Comments on Second Draft 9/14/15

Rule Clarifications and Comments	
Section	Comment
General	PR351 is for “Storage and Loading of Gasoline at Bulk Plants and Bulk Terminals”. It is requested that all requirements associated with cargo tanks and their testing be retained as a separate rule (i.e., Rule 352.). The owners and operators of cargo tanks are not necessarily the same as the owners and operators of bulk plants and bulk terminals. Retaining the requirements as two separate rules more easily differentiates the two.
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Section	Comment
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Rule Clarifications and Comments	
Section	Comment
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502.2	Records of weekly inspections are required to be maintained, but the rule does not specify what the inspection requirements are. Also, it is recommended that if deliveries are less than once a week, inspections are then required to be during each delivery rather than weekly.

Grammar and Reference	
Section	Comment
General	Review all references to Sections and update as needed. Add placeholder references.

From: Hether Krause - AQDX
Sent: Tuesday, March 15, 2016 4:41 PM
To: Johanna Kuspert - AQDX
Subject: FW: Regulatory Outreach

From: Jennifer Pokorski - FCDX
Sent: Tuesday, March 15, 2016 4:19 PM
To: Hether Krause - AQDX
Cc: Lynne Hilliard - MCDOTX
Subject: FW: Regulatory Outreach

From: Regulatory [<mailto:regulations@mail.maricopa.gov>]
Sent: Tuesday, March 15, 2016 4:17 PM
To: Hether Krause - ENVX; Valerie Beckett - PLANDEVX; Jennifer Pokorski - FCDX
Subject: FW: Regulatory Outreach

From: anne.carlton@aps.com[SMTP:ANNE.CARLTON@APS.COM]
Sent: Tuesday, March 15, 2016 4:17:02 PM
To: Regulatory
Subject: Regulatory Outreach
Auto forwarded by a Rule

Citizen Comments

Issue: AQ-2015-008 Rule 350, Rule 351, Rule 352, Rule 353

Citizen's Name: Anne Carlton
Organization: APS
City: Phoenix
Zip: 85004
Phone Number: 4803229313
Phone Type: mobile
Email: anne.carlton@aps.com

Does citizen want to be contacted: yes

Comment is regarding: other

Comments:

Regarding Rule 353: 301.1: Do our existing tanks need to be marked with stated identifiers? 301.4: How do we show that stage 1 vapor recovery equipment is functional? What is an inspector going to ask for? 301.5 The decal comes from testing the cargo tanks which is required by rule 352. The owners/operators of the cargo tanks should be responsible for their own compliance, not us. Also, how is compliance shown – a record indicating that the decal was present? Also, what if gasoline is delivered to an unmanned facility and there is no one there to check for a decal? 302.1e: What is proper disposal of VOC containing material? I know what this means because I am familiar with VOC rules, but the general public

may need clarification. 303.2g & h– We have been told time and time again by inspectors and compliance managers that spill containment is not required on ASTs even though the existing rule requires them. The language in section 303.2g and 303.2h is confusing. In section 303.2 g they state IF a spill containment is installed then ensure it is kept clean, but section 303.2 h states that spill containment is required. So is a spill containment receptacle required or not?? 304: Loading of Gasoline I don't believe anyone should be required to this for the reasons stated above in 301.5. Also, this requirement is already stated in 301.5. If it is going to stay in the rule, why have it stated twice?

Time of Request: 3/15/2016 4:17:02 PM

From: Cheri Dale - AQDX
Sent: Thursday, March 24, 2016 4:44 PM
To: Hether Krause - AQDX; Johanna Kuspert - AQDX
Subject: FW: Maricopa County (AZ) Rule 353 Follow-up

FYI

From: Shears, James [mailto:Shears.James@epa.gov]
Sent: Friday, March 18, 2016 11:06 AM
To: Cheri Dale - AQDX
Subject: RE: Maricopa County (AZ) Rule 353 Follow-up

Hi Cheri,

Thank you for this info. Your summary pretty much agrees with what we discussed, but I would point out for the exempted farm tanks submerged fill pipe issue, that not having a submerged fill pipe requirement on these tanks may be considered to be a RACT rule approvability issue. Hopefully they are so equipped, and a minor language clarification is all that is needed.

Re your suggested test procedures, in TP-201.1E, in several instances throughout the procedure, it references the certification procedure CP-201. I guess my point is CARB-certified vapor recovery systems are certified under CP-201, and as such, most, if not all, gasoline facilities in Maricopa would already comply with the CP-201 VOC reduction spec as long as they are operating correctly. So there should be no tightening of the current VOC reduction requirement in my view – the 90% number is just out of date. Please let me know if you find otherwise.

I've read the statutes below about the "3rd party" vapor recovery systems, but the AZ Dept of Weights and Measures document interpretation of R-20-903 seems clear: "The piping of both a stage I and stage II vapor recovery system shall be designed and constructed as certified by CARB for that specific vapor recovery system.""Interpretation: The Department feels the use of non-CARB certified components would the violate the State Implementation Plan." That is our concern too unless we can put in some kind of safeguard in the rule language.

Just a point to keep in mind: Since this is to be a RACT SIP rule, it is usually necessary for air districts to adopt measures that are similar to RACT measures established by other districts in order to be considered RACT and approvable.

Thanks again for your info.

Jim

From: Cheri Dale - AQDX [mailto:CheriDale@mail.maricopa.gov]
Sent: Friday, March 18, 2016 9:18 AM
To: Shears, James <Shears.James@epa.gov>
Cc: Hether Krause - AQDX <HetherKrause@mail.maricopa.gov>; Johanna Kuspert - AQDX <JKuspert@mail.maricopa.gov>
Subject: Maricopa County (AZ) Rule 353 Follow-up

Jim,

Thank you for your phone call this morning.

To summarize our conversation:

- Maricopa County Air Quality Rule 353 is intended to be submitted for the RACT SIP.
- Section 103.3 of Rule 353, Farm Tank exemption.
 - I don't know how many farm tanks as described in Rule 353 are in Maricopa County.
 - I will investigate further if submerged fill is required for these farm tanks over the 250 gallon capacity.
 - You suggested clarifying that submerged fill is required, if it is intended to be required.
 - Overall, the EPA may have concerns that farm tanks are totally exempt from Rule 353.
- Section 213 definition of Stage I Vapor Recovery System. A 95% reduction rate has been suggested. An alternative to stating a VOC reduction rate may be to reference a compliance with CARB CP-201.
 - CARB CP-201, Table 3-1 requires a Phase I efficiency of $\geq 98.0\%$ (Page 6, accessed at http://www.arb.ca.gov/testmeth/vol2/cp201_april2013.pdf)
 - Suggestion: Define Stage I as complying with the Arizona Department of Weights and Measures test procedures for Stage I: TP-201.3 (Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities); TP-201.1E (Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves); and TP-201.3C (Determination of Piping Connections to Underground Gasoline Storage Tanks (Tie-Tank Test)) <https://dwm.az.gov/resource/vapor-recovery>
- Background information on the third party certification of vapor recovery equipment is listed below.
- Section 305.2 requirement for CARB certified equipment date issue. I will work on this to clarify compliance dates within rule.

Thanks for your time today to discuss these items. I am including Hether and Johanna on this email so they are aware of your questions and suggestions.

Cheri

Third party certified vapor recovery components:

Arizona Revised Statute 41-2132. [Stage I vapor recovery systems](#)

(L14, Ch. 132, sec. 7. Eff. [until](#) 7/1/16)

- A. A person shall not offer for sale, sell, install or use a new gasoline stage I vapor recovery system, or any new or rebuilt component parts of the system, unless the system or component part has been certified by the California air resources board as of March 31, 2001 or after that date, or **has been approved by a third party accredited to test equipment and recognized by industry and the department**, and has not been rejected by the department. Accessed at <http://www.azleg.state.az.us/FormatDocument.asp?inDoc=/ars/41/02132.htm&Title=41&DocType=ARS>

R20-2-1003. Equipment and Installation

A. The Department shall reject a vapor recovery system or component from future installation if:

1. Federal regulations prohibit its use;
2. The vapor recovery system or component does not meet the manufacturer's specifications as certified by CARB using test methods approved in R20-2-1001; or
3. The vapor recovery system or component fails greater than 20% of Department inspections for that system or component or the Department receives equivalent failure results from a vapor recovery registered service agency or from another jurisdiction's vapor recovery program, and the Department provides at least 30 days public notice of its proposed rejection.

B. The piping of a stage I vapor recovery system shall be designed and constructed as certified by CARB for that specific vapor recovery system. A person shall not alter a stage I vapor recovery system or component from the CARB-certified configuration without obtaining Department approval under R20-2-1004. **All components installed with the stage I vapor recovery system shall be certified by CARB or approved by the Department as required under A.R.S. § 41-2132.**

Notice of Final Rulemaking, 21 A.A.R. 1693, August 28, 2015. Accessed at

<https://dwm.az.gov/sites/default/files/documents/files/StageII2015.pdf>

Equipment certified by a third part and approved for use in the State of Arizona can be accessed from the Arizona Department of Weights and Measures website, at <https://dwm.az.gov/resource/approved-equipment>

APPROVED EQUIPMENT

APPROVED STAGE I AND STAGE II VAPOR RECOVERY EQUIPMENT

Arizona Revised Statutes §41-2132 requires vapor recovery systems and components that have been certified by CARB or that have been approved by a third party accredited to test equipment and recognized by industry and the department. Additionally, equipment that has been rejected by the department may not be used. Listed below are the vapor recovery systems and components that are approved by department.

More information regarding the certification process for equipment by a third party.

EQUIPMENT APPROVED BY THE DEPARTMENT:

CARB-APPROVED EQUIPMENT:

- Phase I Pre-EVR or EVR equipment certified by CARB as identified in the CARB Executive Order or approval letter <http://www.arb.ca.gov/vapor/eo.htm>
- Phase II Pre-EVR, EVR, or Pre-EVR ORVR Compatible equipment certified by CARB as identified in the CARB Executive Order or approval letter <http://www.arb.ca.gov/vapor/eo.htm>
- Clarification of Department Policy Use of CARB EVR Phase I Pressure/Vacuum Vent (PV) Valves with Pre-EVR Stage II Vapor Recovery Systems.

EQUIPMENT CERTIFIED BY A THIRD PARTY AND APPROVED BY THE DEPARTMENT:

The equipment listed below has been approved in accordance with Arizona Revised Statutes (ARS) 41-2132 (A) for use as indicated in the approval letter for the system or component.

- April 24-2013 - Husky V34-6200 for use with Gilbarco VaporVac Vapor Recovery System.
- Title "February 7, 2014 - Catlow Model CTMVA Coaxial Breakaway for use with CARB Executive Orders G-70-150AE, G-70-153AD, G-70-204A, G-70-209".

Statement of Interpretation, November 2004, for CARB Certified components

<https://dwm.az.gov/sites/all/themes/azdwmomega/documents/EVR%20STATEMENT%20OF%20INTERPRETATION.pdf>

The Air Quality Department strives to provide excellent customer service to residents of Maricopa County. How are we doing? [Send us your feedback.](#)

Cheri Dale, MEPM, REHS/RS

Senior Planner

Maricopa County Air Quality Department

1001 N. Central Avenue, #125 | Phoenix, AZ 85004

Located at the Central Ave. & Roosevelt METRO stop

Desk 602.506.3476



From: Hether Krause - AQDX
Sent: Monday, March 28, 2016 11:30 AM
To: Johanna Kuspert - AQDX
Subject: FW: EPA comments on Maricopa Rules 300-304

From: Steckel, Andrew [<mailto:Steckel.Andrew@epa.gov>]
Sent: Friday, March 25, 2016 1:39 PM
To: Hether Krause - AQDX; Marina Mejia (Mejia.Marina@azdeq.gov)
Cc: Shears, James; McKaughan, Colleen
Subject: EPA comments on Maricopa Rules 300-304



**United States Environmental
Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901**

March 25, 2016

Transmittal of EPA Rule Review Comments

To: Hether Krause, Maricopa County Environmental Services Department
hkrause@mail.maricopa.gov
Marina Mejia, Arizona Department Of Environmental Quality
mejia.marina@azdeq.gov

From: Andrew Steckel, Rulemaking Office Chief
steckel.andrew@epa.gov

Re: Maricopa Rule 350; Storage and Transfer of Organic Liquids (Non-Gasoline) at an Organic Liquid Distribution Facility, March 15, 2016; Rule 351; Storage and Loading of Gasoline at Bulk Gasoline Plants and Bulk Gasoline Terminals, March 15, 2016; Rule 352; Cargo Tank Testing and Use, March 14, 2016; Rule 353; Storage and Loading of Gasoline at Gasoline Dispensing Facilities, March 9, 2016.

We are providing comments based on our preliminary review of the draft rules identified above. Please direct any questions about our comments to me at (415) 947-4115 or to James Shears at (213) 244-1810

1. Rule 350, Section 502: we recommend requiring an annual compliance inspection of the vapor recovery system in addition to the inspection at the APCO's discretion (see e.g., BAAQMD Rule 8-5-502).
2. Rule 351: we have no comments at this time.
3. Rule 352: we have no comments at this time.
4. Rule 353, Section 103.3: this rule exempts agricultural stationary gasoline dispensing tanks from vapor control

requirements except for general housekeeping. We recommend instead a 550 gallon tank exemption limit, with a provision stating that such exempt tanks must have a permanent submerged fill pipe (see, e.g., SJVUAPCD Rule 4621, Section 4.1, and Placer County APCD Rule 213, Section 102.1.1).

5. Rule 353, Section 213: for Stage 1 vapor recovery, the rule requires 90% VOC reduction. This older value generally no longer represents the state of CARB-certified vapor recovery technology. Please revise to at least a 95% reduction requirement (see, e.g., Placer County APCD Rule 213, Section 301.1.1 (95% for all storage tanks), SCAQMD Rule 461(c)(1)(A) (98% for underground storage tanks) and SCAQMD Rule 461(c)(1)(B) (95% for above ground storage tanks)).

6. Rule 353, Section 301.1c: we recommend deleting this option for a non-CARB certified vapor recovery system. We do not believe there is a technical need to provide this option for a non-CARB-certified system as a number of CARB-certified vapor recovery systems are available. In addition, this section seems to conflict with Section 305.2a which requires that, "...no part of a vapor recovery system for which there is a CARB specification shall be replaced with anything but CARB-certified components." We concur with Section 305.2a..

[Return to list of Attachments](#)

COUNTY MANAGER CASE APPROVAL



Maricopa County
Air Quality Department

MEMORANDUM

Date: May 4, 2015
To: Tom Manos, County Manager
Via: Joy Rich, AICP, Deputy County Manager
From: Philip A. McNeely, R.G., Director 
Subject: AQ-2015-008-Organic Liquids And Gasoline Rulemaking – County Manager's Approval

In accordance with the "Moratorium on Increased Regulatory Burdens", the Air Quality Department is seeking your approval to proceed with revisions to the following rules which constitute AQ-2015-008-Organic Liquids And Gasoline Rulemaking:

- Rule 350: Storage Of Organic Liquids At Bulk Plants And Terminals
- Rule 351: Loading Of Organic Liquids
- Rule 352: Gasoline Delivery Vessel Testing And Use
- Rule 353: Gasoline In Stationary Dispensing Tanks

The Air Quality Department originally adopted (early 1990s) Rules 350, 351, 352 and 353 to be inclusive of both non-gasoline and gasoline organic liquids. The purpose of the rules was to control the emission of volatile organic compounds (VOCs) from all organic liquids. These rules were required in order for the county to comply with the reasonably available control technology (RACT) documents and other policy statements published by the U.S. Environmental Protection Agency (EPA).

As the organic liquid (non-gasoline) industry and the gasoline industry have evolved, it has become increasingly apparent to both the regulated community and the Air Quality Department that there are different requirements for the two industries. In this rulemaking, the Air Quality Department is proposing to draft rules specific to the organic liquid (non-gasoline) storage and distribution industry and to the gasoline storage and distribution industry. This rulemaking is not proposing new rules for the industries but rather proposing revisions to current rules that will improve the clarity and enforceability of the regulatory requirements for each industry.

In addition, the revisions being proposed in Rule 353 will coincide with the Arizona Department of Weights and Measures' rule revisions regarding the decommissioning of Stage II vapor recovery.

These rule revisions qualify for County Manager approval under the moratorium, as the rule revisions will lessen or ease a regulatory burden and will comply with a federal statutory or regulatory requirement or state statutory requirement. We are requesting your approval to move these rule revisions, to be referenced as "AQ-2015-008-Organic Liquids And Gasoline Rulemaking," forward in accordance with the "Moratorium on Increased Regulatory Burdens".



Approved by Tom Manos, County Manager