



**COMMENTS AND RESPONSES ON  
PROPOSED AMENDMENT**

**10 CSR 10-5.220**

**CONTROL OF PETROLEUM LIQUID STORAGE, LOADING AND TRANSFER  
AND**

**RECOMMENDATION FOR ADOPTION**

On May 29, 2014, the Missouri Air Conservation Commission held a public hearing concerning the proposed amendment to 10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer. The following is a summary of comments received and the Missouri Department of Natural Resources' Air Pollution Control Program corresponding responses. Any changes to the proposed amendment are identified in the responses to the comments.

The Missouri Department of Natural Resources' Air Pollution Control Program recommends the commission adopt the rule action as revised.

*NOTE 1 - Legend for rule actions to be voted on is as follows:*

- \* *Shaded Text - Rule sections or subsections unchanged from Public Hearing. This text is only for reference.*
- \* *Unshaded Text - Rule sections or subsections that are changed from the proposed text presented at the Public Hearing, as a result of comments received during the public comment period.*

*NOTE 2 - All unshaded text below this line will be printed in the Missouri Register.*

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**Title 10—DEPARTMENT OF  
NATURAL RESOURCES**

**Division 10—Air Conservation Commission**

**Chapter 5—Air Quality Standards and Air Pollution Control Rules Specific  
to the St. Louis Metropolitan Area**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Air Conservation Commission under section 643.050, RSMo Supp. 2013, the commission amends a rule as follows:

10 CSR 10-5.220 is amended.

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on April 1, 2014 (39 MoReg 769-782). Those sections with changes are reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

**SUMMARY OF COMMENTS:** The Missouri Department of Natural Resources' Air Pollution Control Program received seventeen (17) comments from six (6) sources: General Motors Vehicle Manufacturing, Regulatory Environmental Group for Missouri, Missouri Petroleum Marketers & Convenience Store Association (MPCA), Wallis Companies, St. Louis County Air Pollution Control Program and Missouri Petroleum Storage Tank Insurance fund.

Due to the similarity in the following five (5) comments, one (1) response that addresses these comments is presented after the five (5) comments.

**COMMENT #1:** General Motors commented that they agree with most of the changes in the proposed amendment, but expressed concerns with the provisions for aboveground storage tanks (ASTs) used for initial fueling of motor vehicles, as stated in comment 6 below.

**COMMENT #2:** MPCA supports removal of Stage II requirements and elimination of all reference to the Missouri Performance Evaluation Testing Procedures (MOPETP). They expressed appreciation for the ongoing dialogue the department has maintained with MPCA members and other interested parties. They expressed concern with the AST provisions, resolution of the vent cap/vacuum issue, permitting provisions, and permitting fees as stated in comments 8 through 14 below.

**COMMENT #3:** Wallis Companies expressed their thanks and appreciation to the department for their quick, efficient, and systematic removal of Stage II requirements. They thanked the department for their ongoing dialogue with industry representative during the rulemaking process. They expressed concern with the AST provisions, resolution of the vent cap/vacuum issue, permitting provisions, and permitting fees as stated in comments 8 through 14 below.

**COMMENT #4:** St. Louis County supports the rule revisions and appreciates the department's efforts to balance the needs of both the industry and the regulators to ensure the continual environmental protection provided by vapor recovery system. They also offered recommended rule language for fueling of motor vehicles at gasoline dispensing facilities (GDFs) and operating permits as stated in comments fifteen (15) through seventeen (17) below. They also supported the oversight provided by the Construction Permitting program.

**COMMENT #5:** The Missouri Petroleum Storage Tank Insurance Fund (PSTIF) supports removal of Stage II requirements. They expressed appreciation for the time the department spent discussing the proposed amendment with stakeholders and the department's willingness to work with interested parties to find reasonable solutions to compliance problems. They expressed concern with the AST provisions, resolution of the vent cap/vacuum issue, permitting provisions, and permitting fees as stated in comments 8 through 14 below.

**RESPONSE:** The Missouri Department of Natural Resources' Air Pollution Control Program appreciates the support of the above commenters and will address other noted concerns in comments below. No changes have been made to the rule text as a result of these comments.

**COMMENT #6:** General Motors commented that they are concerned with the change to paragraph (3)(C)4., which prohibits the use of aboveground gasoline storage tanks at gasoline dispensing facilities with a capacity greater than one thousand (1,000) gallons. The General

Motors assembly plant uses an initial fueling system with two (2) twenty thousand (20,000) gallon storage tanks for initial fueling of vehicles assembled at the plant. The system has been in place as an integral part of the assembly process since the plant was built in the early 1980's. They believe the proposed language does not take into account their existing tanks, and they provided suggested text changes intended to ensure their tanks will not be prohibited.

RESPONSE: The prohibition on ASTs greater than one-thousand (1,000) gallons in paragraph (3)(C)4. of the proposed amendment only applies to gasoline dispensing facilities (GDFs) in the St. Louis ozone non-attainment area. ASTs at facilities other than GDFs are not affected by the prohibition. The General Motors assembly plant is not a GDF, therefore the ASTs at that facility are not affected by the prohibition. To clarify the distinction between GDFs and other facilities that operate gasoline dispensers, the definition of Gasoline Dispensing Facility in 10 CSR 10-6.020 Definitions and Common Reference Tables is being revised in a separate rulemaking to clarify that vehicle assembly plants and gasoline distribution facilities are not considered GDFs. The proposed rulemaking that will revise the definition of GDF is tentatively scheduled to be filed with the Secretary of State in late 2014. No changes have been made to the rule text as a result of this comment.

COMMENT #7: The Regulatory Environmental Group for Missouri (REGFORM) commented at the public hearing that a conversation with department staff just prior to the hearing answered questions with respect to the purpose of changes in the proposed amendment and the impact they will have on commercial gas dispensing facilities. REGFORM stated that the concerns that were going to be raised in a letter in conjunction with a public hearing comment will be held since clarifications being made address those concerns.

RESPONSE: Department staff is pleased they were able to allay REGFORM's concerns about the effect of the proposed amendment changes on commercial gas dispensing facilities. No changes have been made to the rule text as a result of this comment.

COMMENT #8: MPCA, Wallis Companies, and PSTIF commented that the proposed amendment would prohibit aboveground storage tanks (ASTs) larger than 1,000 gallons at gasoline dispensing facilities. This would place a hardship on some businesses that currently have such tanks in use. They requested that DNR "grandfather" all existing aboveground storage tanks, as doing so will not cause any deterioration of air quality from what it currently is. In addition, they noted that other metropolitan areas, including East St. Louis, allow installation of new ASTs larger than 1,000 gallons for certain commercial/industrial facilities. They requested that the rule be revised to allow for waiver of the prohibition by the DNR on a case-by-case basis.

RESPONSE: The current version of the rule does not allow ASTs greater than one thousand (1,000) gallons at GDFs because MOPETP never approved vapor recovery equipment for ASTs. This rulemaking would simply codify this long-standing prohibition. We are not aware of any ASTs at GDFs in the St. Louis area. ASTs at facilities other than GDFs, such as commercial or industrial facilities, are not affected by the prohibition. Since ASTs inherently emit more volatile organic compounds (VOCs) than equivalent underground tanks, allowing new ASTs above 1,000 gallons at GDFs would increase emissions, adversely impact air quality in the St. Louis ozone nonattainment area, and jeopardize the U.S. Environmental Protection Agency's approval of the revised rule. The Department would be willing to consider allowing CARB approved, Enhanced

Vapor Recovery (EVR) ASTs in a future rulemaking. No changes have been made to the rule text as a result of this comment.

COMMENT #9: MPCA, Wallis Companies, and PSTIF commented that the current requirement specifying use of a pressure/vacuum valve certified by the California Air Resources Board (CARB) at 3”wcp and 8”wcv does not work in the real world, and owners who meet this requirement are often then forced into non-compliance with the department’s underground storage tank (UST) rules, as the valves cause their automatic tank gauges to malfunction. They do not oppose the requirement that valves have a 3”wcp feature to prevent emission of volatile hydrocarbons during fuel delivery, but the vacuum requirement is problematic. They appreciate that the proposed rule attempts to alleviate this problem by stating “Owners and operator of GDFs with monthly throughput greater than one hundred thousand (100,000) gallons may use a vapor recovery system that deviates from the requirements of subparagraph (3)(C)2A. of this rule only if the vapor recovery system is approved by the director and has a collection efficiency of at least ninety-eight percent (98%).” They stated the proposed language is inadequate because the problem also occurs at some facilities with smaller throughputs and appears to require each tank owner to approach the department individually to request approval of his/her alternate equipment. They requested that, once a particular device has been demonstrated to the department’s satisfaction that it has a collection efficiency of at least 98%, the rule should authorize the director of the department’s Air Pollution Control Program to approve the device one time, after which any UST owner/operator could use that device and be in compliance with the rule.

RESPONSE AND EXPLANATION OF CHANGE: The department is aware of the problem of excessive tank vacuum and is committed to working with industry representatives to develop a solution. To allow implementation of a future solution and address the concerns of the commenters, section (3)(C) has been revised to include language that would allow the director to approve a vapor recovery system or component that deviates from the requirements of subparagraph (3)(C)2.A. when provided documentation that the system or component has a collection efficiency of at least ninety-eight percent (98%) and that compliance with the requirements of subparagraph (3)(C)2.A. would lead to noncompliance with other state or federal regulations or to improper functioning of the gasoline storage tank system. Any approved system or component could then be used at any GDF in the St. Louis area.

COMMENT #10: MPCA, Wallis Companies, and PSTIF commented that they would prefer elimination of the permit requirement for new installations. They noted that the department would still know of such new installations because the department’s underground storage tank (UST) rules require notification prior to installation and Missouri’s Emergency Planning and Community Right-To-Know Act (EPCRA) requires annual notice of such facilities. They stated the requirement in this rule to obtain a permit prior to undertaking any “modification” of the tank/piping or dispensing equipment creates a barrier to compliance with the UST rules, and requested the proposed rule be revised so it simply requires the owner/operator to give notice of such work via electronic submission.

RESPONSE AND EXPLANATION OF CHANGE: St. Louis is a nonattainment area for ozone and strict control and oversight of VOC emissions is required by the Missouri State Implementation Plan (SIP). Permitting of new GDFs is a tool for tracking VOC emission sources to assure SIP ozone control requirements are met. Decommissioning of Stage II systems

and major modifications at existing GDFs must also be approved by the department to ensure no increases in VOC emissions result. Therefore, approved construction permits are required for these activities. As a result of this comment, the department is revising the permitting provisions for minor modifications at existing GDFs to allow for construction permit notifications in place of the full construction permit approval process. This should lessen the burden on owners or operators of existing GDFs making minor modifications that do not have the potential to increase emissions. Specifically, the rule text in subsection (3)(G) is being revised to require construction permit application and approval for construction of new GDFs, decommissioning of Stage II systems at existing GDFs, and major modifications at existing GDFs where the fixed capital costs of the new components will exceed fifty percent (50%) of the fixed capital cost of a new gasoline dispensing system. For minor modifications at existing GDFs where the fixed capital costs of the new components will not exceed fifty percent (50%) of the fixed capital cost of a new gasoline dispensing system, the owner or operator would submit a construction permit notification and may then proceed with the modification after submittal of the notification.

COMMENT #11: MPCA, Wallis Companies, and PSTIF commented that they appreciate the effort to accommodate emergencies or other urgent situations, but believe the proposed language is needlessly complex. They requested eliminating paragraph (3)(G)4., as it would be unnecessary if the department agrees to change the requirement from a permit to a notice when making repairs. They further requested that paragraph (3)(G)5. be made simpler and provided suggested language.

RESPONSE AND EXPLANATION OF CHANGE: As explained in the response to comment #10, subsection (3)(G) has been revised to allow owners or operators of GDFs making minor modifications to begin work upon submittal of the construction permit notification. Therefore, the proposed language in paragraph (3)(G)4. is redundant and has been deleted. The emergency repair provision in subsection (3)(G) specifies the conditions that constitute an emergency which requires immediate corrective construction. Simplifying the language by removing the conditions that constitute an emergency may lead to confusion between the regulated community and the department. Therefore, the language for emergency repairs in subsection (3)(G) is being retained as proposed.

COMMENT #12: MPCA, Wallis Companies, and PSTIF commented that subparagraph (3)(G)3.C. eliminates the need for the department to respond to construction permit applications within 30 days. They oppose the change and requested the rule retain the requirement for timely response by the department.

RESPONSE AND EXPLANATION OF CHANGE: Subsection (3)(G) has been revised to add a provision which requires the department to issue a construction permit or a permit rejection within thirty (30) days of receipt of all construction permit applications for construction of a new GDF that requires a Stage I vapor recovery system, decommission of an existing Stage II vapor recovery system, or major modification to an existing GDF.

COMMENT #13: MPCA, Wallis Companies, and PSTIF requested adding language to explicitly state that the owner/operator need not wait for department inspectors to be present to conduct tests after repairs.

**RESPONSE AND EXPLANATION OF CHANGE:** Language has been added to subsection (3)(H) stating that the staff director may observe the test at the completion of repairs, but it is not required that the staff director be present and observe the test.

**COMMENT #14:** MPCA, Wallis Companies, and PSTIF commented that they strongly believe the fees associated with this rule and proposed amendments should be eliminated or at the very least drastically reduced. They, however, are willing to work with the department on the fee issue assuming the other issues commented on are equitably resolved.

**RESPONSE:** The proposed amendment codifies the present \$100 permitting fee and does not constitute a fee increase for stakeholders. These fees are necessary to help fund the department's vapor recovery activities. As noted in the Private Entity Fiscal Note, the overall financial impact on GDFs in the St. Louis area is overwhelmingly positive due to the elimination of Stage II systems, which are expensive to install and maintain. No changes have been made to the rule text as a result of this comment.

**COMMENT #15:** St. Louis County commented that provisions for fueling of motor vehicles at GDFs in subsection (3)(E) of the proposed amendment do not clearly state the ability of the director to inspect and require repairs of existing Stage I facilities. They suggested rule language to clearly state the department has the ability to inspect Stage I and Stage II vapor recovery systems, add an out-of-order procedure for defective Stage I systems and components similar to that of Stage II systems, and revise the introductory statement. They noted that the recommendations are consistent with current policies and field practices.

**RESPONSE:** The suggested change to the introductory statement has the same meaning as the language proposed and, therefore, no change is needed. The ability of the department to inspect vapor recovery systems is contained in 643.050.1, RSMo and adding rule language to restate this authority is not necessary. The out-of-order procedure for defective Stage II systems in the current rule is present because of the complexity of the systems and their inherently high duty cycle, i.e. they are used at all times during vehicle refueling. Adding a similar out-of-order procedure for defective Stage I systems is not necessary because Stage I systems are much simpler and have low duty cycles, i.e. they are only used during fuel transfer into the storage tanks. In addition, facility compliance expectations are outlined in the Department's Operations and Compliance manuals (available publicly on the Department's website) for review. No changes have been made to the rule text as a result of this comment.

**COMMENT #16:** St. Louis County commented that the operating permit provisions in subsection (3)(H) of the proposed amendment do not clearly state the requirements for testing notification and information required prior to testing. They suggested language to change the notification on post-construction testing from seven (7) days to fourteen (14) days, add a requirement that all testing be conducted in a time frame that allows for department observation of the test, add a provision that the department may reject testing conducted without notice to the department, add a requirement that testing results must be supplied to the department in a specific format within ten (10) days of test completion, clarify the testing requirements for renewal of operating permits, and revise the recordkeeping requirement for operating permits at completion of construction.

**RESPONSE AND EXPLANATION OF CHANGE:** With the exception of revising the recordkeeping requirements for operating permits at the completion of construction, the changes

suggested by St. Louis County either restate current permitting policies and practices or increase the regulatory burden on owners or operators of GDFs. The suggested revision to the recordkeeping requirements at completion of construction removes any ambiguity in the requirements by citing specific rule requirements instead of relying on department approval. Therefore, the recordkeeping requirements for operating permits at completion of construction has been revised to state that the requirements of subsection (4)(D) of the rule must be met instead of meeting the staff director's requirements. The other requirements suggested by St. Louis County are not being added to the rule because the benefits derived by the department do not justify the additional regulatory burden and bureaucracy placed on the regulated entities.

COMMENT #17: St. Louis County commented that they support proposed language in subsection (3)(G) allowing for immediate repair or replacement and emergency repairs to vapor recovery systems. The proposed amendment clarifies the requirements and defines what constitutes an immediate repair or replacement and an emergency.

RESPONSE: The provisions for emergency repairs are retained as proposed. The provisions for immediate repair or replacement have been removed since they are no longer needed with the changes in subsection (3)(G) that allow for construction permit notification for minor modification. No changes have been made to the rule text as a result of this comment.

#### **10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer.**

- (1) Applicability.
  - (A) This rule shall apply throughout St. Louis City and Jefferson, St. Charles, Franklin and St. Louis Counties.
  - (B) Compliance with this rule does not relieve the owner or operator of the responsibility to comply with other applicable governmental requirements.
  - (C) Exemptions to This Rule and/or Specific Areas of This Rule.
    - 1. Petroleum storage tanks. Subsection (3)(A) of this rule shall not apply to petroleum storage tanks that—
      - A. Store processed and/or treated petroleum or condensate at a drilling and production installation prior to custody transfer;
      - B. Contain a petroleum liquid with a true vapor pressure less than 27.6 kilopascals (kPa) (4.0 psia) at ninety degrees Fahrenheit (90°F);
      - C. Are welded construction, and equipped with a metallic-type shoe primary seal and have a shoe-mounted secondary seal or closure devices of demonstrated equivalence approved by the staff director; and
      - D. Store waxy, heavy pour crude oil.
    - 2. Gasoline loading.
      - A. Subsection (3)(B) of this rule shall not apply to a gasoline loading installation whose average monthly throughput of gasoline is less than or equal to one hundred twenty thousand (120,000) gallons when averaged over the most recent calendar year, provided the gasoline loading installation loads gasoline by submerged filling and—

- (I) Owners or operators of gasoline loading installations submit a report to the staff director on a form supplied by the department stating the gasoline throughput for each month of the previous calendar year. The report shall be submitted no later than February 1 of each year;
- (II) Delivery vessels purchased after December 31, 1995, are Stage I equipped;
- (III) Owners or operators of gasoline loading installations maintain records of gasoline throughput and gasoline delivery; and
- (IV) Delivery vessels operated by an exempt installation do not deliver to Stage I controlled tanks unless the delivery vessel is equipped with and employs Stage I controls.

B. A gasoline loading installation that fails to meet the requirements of the exemption in subparagraph (1)(C)2.A. of this rule for one (1) calendar year shall not qualify for the exemption again.

- 3. This rule does not apply to stationary gasoline tanks with a capacity of less than or equal to five hundred (500) gallons.
- 4. Subsection (3)(E) of this rule does not apply to any gasoline dispensing facility (GDF) with one thousand (1,000) gallon or smaller tank(s) and monthly throughput of less than or equal to ten thousand (10,000) gallons of gasoline through the tanks.
- 5. Paragraph (3)(C)2. of this rule does not apply to gasoline transfers made to storage tanks equipped with floating roofs or their equivalent.
- 6. Subsection (3)(C) of this rule does not apply to any storage tank having a capacity less than or equal to two thousand (2,000) gallons used exclusively for the fueling of agricultural equipment.
- 7. Subsection (3)(E) of this rule does not apply to any stationary storage tank used primarily for the fueling of agricultural equipment.

(2) Definitions.

- (A) Agricultural equipment—Any equipment used exclusively for agricultural purposes on land owned or leased for the production of farm products.
- (B) Definitions of certain terms specified in this rule, other than those defined in this rule section, may be found in 10 CSR 10-6.020.

(3) General Provisions.

(A) Petroleum Storage Tanks.

- 1. No owner or operator of petroleum storage tanks shall cause or permit the storage in any stationary storage tank of more than forty thousand (40,000) gallons capacity of any petroleum liquid having a true vapor pressure of one and five-tenths (1.5) pounds per square inch absolute (psia) or greater at ninety degrees Fahrenheit (90°F), unless the storage tank is a pressure tank capable of maintaining working pressures sufficient at all times to prevent volatile organic compound (VOC) vapor

or gas loss to the atmosphere or is equipped with one (1) of the following vapor loss control devices:

- A. A floating roof, consisting of a pontoon type, double-deck type or internal floating cover or external floating cover, that rests on the surface of the liquid contents and is equipped with a closure seal(s) to close the space between the roof edge and tank wall. Storage tanks with external floating roofs shall meet the additional following requirements:
- (I) The storage tank must be fitted with—
    - (a) A continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal); or
    - (b) A closure or other device approved by the staff director that controls VOC emissions with an effectiveness equal to or greater than a seal required under subpart (3)(A)1.A.(I)(a) of this rule;
  - (II) All seal closure devices must meet the following requirements:
    - (a) There are no visible holes, tears or other openings in the seal(s) or seal fabric;
    - (b) The seal(s) is intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and
    - (c) For vapor-mounted primary seals, the accumulated area of gaps exceeding 0.32 centimeters, one-eighth inch (1/8") width, between the secondary seal and the tank wall shall not exceed 21.2 cm<sup>2</sup> per meter of tank diameter (1.0 in<sup>2</sup> per foot of tank diameter);
  - (III) All openings in the external floating roof, except for automatic bleeder vents, rim space vents and leg sleeves, must be equipped with—
    - (a) Covers, seals or lids in the closed position except when the openings are in actual use; and
    - (b) Projections into the tank which remain below the liquid surface at all times;
  - (IV) Automatic bleeder vents must be closed at all times except when the roof is floated off or landed on the roof leg supports;
  - (V) Rim vents must be set to open when the roof is being floated off the leg supports or at the manufacturer's recommended setting; and
  - (VI) Emergency roof drains must be provided with slotted membrane fabric covers or equivalent covers which cover at least ninety percent (90%) of the area of the opening;

- B. A vapor recovery system with all storage tank gauging and sampling devices gas-tight, except when gauging or sampling is taking place. The vapor disposal portion of the vapor recovery system shall consist of an absorber system, condensation system, membrane system or equivalent vapor disposal system that processes the vapor and gases from the equipment being controlled; or
  - C. Other equipment or means of equal efficiency for purposes of air pollution control that may be approved by the staff director.
2. Control equipment described in subparagraph (3)(A)1.A. of this rule shall not be allowed if the petroleum liquid other than gasoline has a true vapor pressure of 11.1 psia or greater at ninety degrees Fahrenheit (90°F). All storage tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
3. Reporting and record keeping shall be per subsection (4)(A) of this rule.
- (B) Gasoline Loading.
- 1. No owner or operator of a gasoline loading installation or delivery vessel shall cause or permit the loading of gasoline into any delivery vessel from a gasoline loading installation unless the gasoline loading installation is equipped with a vapor recovery system or equivalent. This system or system equivalent shall be approved by the staff director and the delivery vessel shall be in compliance with subsection (3)(D) of this rule.
  - 2. Gasoline loading shall be accomplished in a manner that the displaced vapors and air will be vented only to the vapor recovery system. Measures shall be taken to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected. The vapor disposal portion of the vapor recovery system shall consist of one (1) of the following:
    - A. An absorber system, condensation system, membrane system, or equivalent vapor disposal system that processes the vapors and gases from the equipment being controlled and limits the discharge of VOC into the atmosphere to ten (10) milligrams of VOC vapor per liter of gasoline loaded;
    - B. A vapor handling system that directs the vapor to a fuel gas system; or
    - C. Other equipment of an efficiency equal to or greater than subparagraph (3)(B)2.A. or B. of this rule if approved by the staff director.
  - 3. Reporting and record keeping shall be per subsection (4)(B) of this rule.
- (C) Gasoline Transfer at GDFs.
- 1. No owner or operator of a gasoline storage tank or delivery vessel shall cause or permit the transfer of gasoline from a delivery vessel into a gasoline storage tank with a capacity greater than five hundred (500) gallons and less than or equal to one thousand (1,000) gallons unless—

- A. The gasoline storage tank is equipped with a submerged fill pipe extending unrestricted to within six inches (6") of the bottom of the tank, and not touching the bottom of the tank, or the storage tank is equipped with a system that allows a bottom fill condition;
  - B. All gasoline storage tank caps and fittings are vapor-tight when gasoline transfer is not taking place; and
  - C. Each gasoline storage tank is vented via a conduit that is—
    - (I) At least two inches (2") inside diameter; and
    - (II) At least twelve feet (12') in height above grade; and
    - (III) Equipped with a pressure/vacuum valve that is certified by the California Air Resources Board (CARB) at three inches water column pressure/eight inches water column vacuum (3"wcp/8"wcv) except when the owner or operator provides documentation that the vapor recovery system is CARB-certified for a different valve and will not function properly with a 3"wcp/8"wcv valve.
2. No owner or operator of a gasoline storage tank or delivery vessel shall cause or permit the transfer of gasoline from a delivery vessel into a gasoline storage tank with a capacity greater than one thousand (1,000) and less than forty thousand (40,000) gallons unless—
- A. The gasoline storage tank is equipped with a Stage I vapor recovery system that is certified by a CARB Executive Order as having a collection efficiency of at least ninety-eight percent (98%);
  - B. The delivery vessel to these tanks is in compliance with subsection (3)(D) of this rule;
  - C. All vapor ports are poppeted fittings;
  - D. The delivery vessel is reloaded at installations complying with the provisions of subsection (3)(B) of this rule;
  - E. The vapor recovery system employs one (1) vapor line per product line during the transfer. The staff director may approve other delivery systems submitted to the department with test data demonstrating compliance with subparagraph (3)(C)2.A. of this rule;
  - F. All vapor hoses are at least three inches (3") inside diameter; and
  - G. All product hoses are less than or equal to four inches (4") inside diameter.
3. The Director may approve a vapor recovery system or component that deviates from the requirements of subparagraph (3)(C)2.A. of this rule when provided documentation that—
- A. The system or component has a collection efficiency of at least ninety-eight percent (98%); and
  - B. Compliance with the requirements of subparagraph (3)(C)2.A. of this rule would lead to noncompliance with other state or federal

regulations or to improper functioning of the gasoline storage tank system.

4. Aboveground gasoline storage tanks at GDFs shall not have a capacity greater than one thousand (1,000) gallons.
5. This subsection does not prohibit safety valves or other devices required by government regulations.

(D) Gasoline Delivery Vessels.

1. No owner or operator of a gasoline delivery vessel shall operate or use a gasoline delivery vessel which is loaded or unloaded at an installation subject to subsection (3)(B) or (3)(C) of this rule unless—
  - A. The delivery vessel is tested annually to demonstrate compliance with the test method specified in 40 CFR 63.425(e);
  - B. The owner or operator obtains the completed test results signed by a representative of the testing installation upon successful completion of the leak test.
  - C. A copy of the vessel's current test results are kept with the delivery vessel at all times and made immediately available to the staff director upon request; and
  - D. The delivery vessel is repaired by the owner or operator and retested within fifteen (15) business days of testing if it does not meet the leak test criteria of subparagraph (3)(D)1.A. of this rule.
2. An owner or operator of a gasoline delivery vessel who can demonstrate to the satisfaction of the staff director that the vessel has passed a current annual leak test in another state shall be deemed to have satisfied the requirements of subparagraph (3)(D)1.A. of this rule, if the other state's leak test program requires the same gauge pressure and test procedures as specified in subparagraph (3)(D)1.A. of this rule.
3. Reporting and record keeping shall be performed as specified in subsection (4)(C) of this rule.
4. This subsection does not prohibit safety valves or other devices required by government regulations.

(E) Fueling of Motor Vehicles at GDFs.

1. GDFs not equipped with a Stage II vapor recovery system. Owners or operators shall—
  - A. Employ vapor-tight tank gauging and sampling sites or ports, valves, breakaways, joints, and disconnects on the vapor recovery systems to prevent emissions of volatile organic compounds except during gauging or sampling; and
  - B. Ensure that motor vehicle refueling meets the requirements of 40 CFR 80.22(j) promulgated June 26, 1996, and hereby incorporated by reference in this rule, as published by the Office of Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, D.C. 20408. This rule does not incorporate any subsequent amendments or additions.
2. GDFs equipped with a Stage II vapor recovery system.
  - A. Owners or operators shall—

- (I) Comply with the requirements of subparagraphs (3)(E)1.A.–B. of this rule.
  - (II) Maintain the Stage II vapor recovery system in good working order in accordance with the manufacturer's specifications and with no indication of visible liquid leaks. Vapor recovery system components may only be replaced with components that have equivalent performance;
  - (III) Post operation instructions conspicuously in the gasoline dispensing area for the vapor recovery system in use at each GDF. The instructions shall clearly describe how to fuel vehicles correctly with vapor recovery nozzles utilized at that GDF. The instructions shall also include a warning that repeated attempts to continue dispensing gasoline after the system has indicated that the vehicle fuel tank is full may result in spillage of gasoline;
  - (IV) Decommission the Stage II vapor recovery system no later than December 31, 2015. The decommissioning must be performed in accordance with the department's Stage II Decommissioning Checklist.
- B. The staff director shall identify and list specific defects that substantially impair the effectiveness of components or systems used for the control of gasoline vapors resulting from motor vehicle fueling operations. This ongoing list shall be used by the staff director as a basis for marking the components or systems out-of-order and shall be made available to any GDF with a Stage II vapor recovery system in place.
- C. Upon the staff director's identification of substantial defects in equipment or installation of a Stage II vapor recovery system, the system or components shall be marked "out-of-order" and no person shall use or permit the use of that system or component until those defects and all other defects have been repaired, replaced, or adjusted to establish compliance. The components or system may be released into operation when the staff director has reinspected the installation; found the system and components to be in good working order; and removed the "out-of-order" notice. The staff director shall reinspect the previously marked "out-of-order" system or component and other noted defects as expeditiously as possible after notification from the operator that the repairs have been completed. In no case shall the reinspection be more than four (4) business days from the operator's notification that the repairs have been completed. In those cases in which the reinspection cannot be scheduled within the required time, the owner or operator may remove the "out-of-order" notice with permission of the staff director. If reinspection reveals that compliance has not been established, the system or

components shall remain tagged “out-of-order.” The staff director shall conduct a second reinspection within seven (7) business days from the operator’s notification that repairs have been completed.

3. After the effective date of this rule, no owner or operator of a GDF may install a new Stage II vapor recovery system.

(F) Permits Required.

1. No owner or operator of a GDF subject to subsections (3)(C) or (3)(E) of this rule may construct or modify a Stage I or Stage II vapor recovery system without obtaining a construction permit according to subsection (3)(G) of this rule; and

2. No owner or operator of a GDF subject to subsections (3)(C) or (3)(E) of this rule shall operate without an operating permit obtained according to subsection (3)(H) of this rule.

(G) Construction Permits for Vapor Recovery Systems for New GDFs, Vapor Recovery System Modification for Existing GDFs, and Stage I experimental technology.

1. Construction of a new GDF that requires a Stage I vapor recovery system, decommission of an existing Stage II vapor recovery system, or major modification to an existing GDF. An owner or operator constructing a new GDF that requires a Stage I vapor recovery system, decommissioning an existing Stage II vapor recovery system, or modifying an existing vapor recovery system such that the fixed capital costs of the new components will exceed fifty percent (50%) of the fixed capital cost of a new gasoline dispensing system (including only those components directly related to gasoline dispensing and storage) shall—

A. Submit an application on a form supplied by the department for a permit to construct at least thirty (30) days prior to beginning construction. The application shall include:

(I) Complete diagrams and a thorough description of the planned installation;

(II) Plumbing diagrams including vent lines and material of all underground and aboveground plumbing;

(III) For gasoline storage tanks subject to paragraph (3)(C)2. of this rule, current CARB Executive Orders for the proposed Stage I vapor recovery system;

(IV) Detailed description of the storage tank(s); and

(V) Schedule of construction;

B. Obtain a construction permit prior to beginning construction;

C. Display the construction permit in a prominent location during construction;

D. Establish compliance with all rules and requirements of Division 10 of Title 10 of the Code of State Regulations;

E. Obtain staff director approval of final test methods and procedures that will be used to demonstrate compliance;

- F. Meet the testing requirements in subparagraph (3)(H)1.B. of this rule; and
  - G. Obtain and maintain on-site in a prominent location the current operating permit from the director for the site and the specific vapor recovery system that was installed. The operating permit shall be maintained according to subsection (3)(H) of this rule.
2. Minor modification to existing GDF. An owner or operator of an existing GDF modifying an existing vapor recovery system such that the fixed capital costs of the new components will not exceed fifty percent (50%) of the fixed capital cost of a new gasoline dispensing system (including only those components directly related to gasoline dispensing and storage) shall—
- A. Submit a construction permit notification prior to construction for projects that include, but are not limited to, any modification that—
    - (I) Requires breaking concrete in an area within fifteen (15) feet of the vapor lines or vent lines;
    - (II) Modifies vapor lines or vent lines themselves;
    - (III) Affects the operation of the vapor recovery system; or
    - (IV) Could result in improper functioning of the vapor recovery system;
  - B. Supply any information requested by the staff director for the specific installation. Such information may include, but is not limited to, plumbing diagrams, including vapor or vent lines; material of all underground and aboveground plumbing; current CARB executive orders for the proposed vapor recovery system and equipment; and proof of compliance with all rules and requirements of Division 10 of Title 10 of the Code of State Regulations;
  - C. Modify the vapor recovery system in accordance with the rules and requirements of Division 10 of Title 10 of the Code of State Regulations. If after review of the application, or inspection of the modification to the vapor recovery system, it is discovered that the modification is not in compliance with the rules and requirements of Division 10 of Title 10 of the Code of State Regulations, the owner or operator will be subject to enforcement action, and must bring the facility back into compliance with the rules and requirements of Division 10 of Title 10 of the Code of State Regulations;
  - D. Meet the testing requirements in paragraph (3)(H)1. of this rule; and
  - E. Upon completion of testing, obtain and display in a prominent location on-site the current operating permit from the director for the specific site and the specific vapor recovery system that was installed. The operating permit shall be maintained according to subsection (3)(H) of this rule.

3. Experimental Stage I technology. The director may approve Stage I experimental technology for a specific GDF. Experimental technology may be approved for up to three (3) years for a limited number of GDFs under specific conditions determined by the staff director. GDFs applying for approval of experimental technology shall—
  - A. Submit an application for director approval at least ninety (90) days prior to beginning construction. The application shall include, but not be limited to:
    - (I) Complete diagrams and a thorough description of the planned installation;
    - (II) Plumbing diagrams including vent lines and material of all underground and aboveground plumbing; and
    - (III) Standards, test data, history, and related information for the proposed system;
  - B. Submit to the staff director a detailed plan for the construction and operation of the system. The plan shall include a description of the planned testing and record keeping for the GDF. The director may issue the construction permit when all conditions of the testing GDF are deemed satisfactory;
  - C. Display the construction permit in a prominent location during construction;
  - D. Install monitoring equipment to prove that the vapor recovery system is leak-tight if requested by the staff director; and
  - E. Upon completion of testing, obtain and maintain on-site in a prominent location a current operating permit from the director for the specific innovative technology that is in operation. The permit shall specify the technology, the location, and the time period the technology will be tested.
4. Emergency Repairs.
  - A. Owners or operators of GDFs requiring emergency repair or replacement of vapor recovery system components may immediately begin corrective construction if the construction is in response to an accident or event that—
    - (I) Creates an abnormally high threat of fire;
    - (II) Poses an environmental hazard by allowing release of liquid product onto the ground or abnormal release of vapor into the air; and/or
    - (III) Threatens public safety; and
  - B. Owners or operators of GDFs electing to make emergency repair or replacement per subparagraph (3)(G)4.A. of this rule shall contact the department within forty-eight (48) hours of the commencement of the repair or replacement to determine what future action is required for compliance with this rule.
5. Owners or operators of GDFs making minor modifications per subsection (3)(G)2. of this rule may begin modification upon submittal of the construction permit notification.

6. The director shall issue a construction permit or a permit rejection within thirty (30) days of receipt of all construction permit applications submitted per paragraph (3)(G)1. of this rule.
  7. Owners or operators of GDFs shall pay the department a fee of one hundred dollars (\$100) for each construction permit application submitted in accordance with subsection (3)(G) of this rule.
- (H) Operating Permits. All owners or operators of installations subject to subsection (3)(C) or (3)(E) of this rule shall apply to the director for an operating permit.
1. Completion of construction. To obtain an operating permit after the completion of construction, the owner or operator of a GDF shall—
    - A. Apply to the director for an operating permit within thirty (30) days of construction completion;
    - B. Conduct and pass a department-approved pressure decay test, pressure/vacuum valve test, and, where a Stage II vapor recovery system is in place, a dynamic back pressure/liquid blockage test;
    - C. Schedule the test and notify the staff director at least seven (7) days prior to the test date. The staff director may observe the test, but it is not required that the staff director be present and observe the test;
    - D. Provide the test results to the staff director;
    - E. Demonstrate that the installation maintains a system of record keeping that meets the requirements of subsection (4)(D) of this rule; and
    - F. Establish compliance with all rules and requirements of Division 10 of Title 10 of the Code of State Regulations.
  2. Renewal of operating permits. The operating permit is renewable on the date specified in the initial operating permit and for periods of three (3) years after the initial permit term expires. In order to renew the operating permit the owner or operator of a GDF shall—
    - A. Apply to the director for renewal of the operating permit and test within ninety (90) days prior to the renewal date;
    - B. Demonstrate that the GDF maintained all vapor recovery system components in good operating order during the preceding operating permit term including prompt efforts to establish compliance following “out-of-order” notices;
    - C. Conduct and pass a department-approved pressure decay test, pressure/vacuum valve test, and, where a Stage II vapor recovery system is in place, a dynamic back pressure/liquid blockage test, prior to the expiration date of the permit;
    - D. Schedule the test and notify the staff director at least seven (7) days prior to the test date. The staff director may observe the test, but it is not required that the staff director be present and observe the test;
    - E. Provide the test results to the staff director; and
    - F. Maintain records according to subsection (4)(D) of this rule.

3. Owners or operators of an installation using a vapor recovery system that is decertified by CARB shall establish compliance with this rule within one (1) year or by the next renewal date of the operating permit whichever is longer. Failure to establish compliance will result in nonrenewal of the operating permit.
4. Owners or operators of GDFs shall pay the department a fee of one hundred dollars (\$100) for each operating permit.

(I) Owner/Operator Compliance. The owner or operator of a vapor recovery system subject to this rule shall—

1. Operate the vapor recovery system and the gasoline loading equipment in a manner that prevents—
  - A. Gauge pressure from exceeding four thousand five hundred (4,500) pascals (eighteen inches (18") of H<sub>2</sub>O) in the delivery vessel;
  - B. A reading equal to or greater than one hundred percent (100%) of the lower explosive limit (LEL), measured as propane at two point five (2.5) centimeters from all points on the perimeter of a potential leak source when measured by the method referenced in 10 CSR 10-6.030(14)(E) during loading or transfer operations; and
  - C. Visible liquid leaks during loading or transfer operations; and
2. Repair and retest within fifteen (15) days, a vapor recovery system that exceeds the limits in paragraph (3)(I)1. of this rule; and
3. Reporting and record keeping shall be per subsection (4)(D) of this rule.

(4) Reporting and Record Keeping.

- (A) Owners and operators of petroleum storage tanks subject to subsection (3)(A) of this rule shall maintain written records of maintenance (both routine and unscheduled) performed on the tanks, all repairs made, the results of all tests performed and the type and quantity of petroleum liquid stored in them. Records shall be kept for two (2) years and made available to the staff director within five (5) business days of a request.
- (B) Owners or operators of gasoline loading installations subject to subsection (3)(B) of this rule shall keep complete records documenting the number of delivery vessels loaded and their owners. Records shall be kept for two (2) years and made available to the staff director within five (5) business days of a request.
- (C) Owners or operators of gasoline delivery vessels subject to subsection (3)(D) of this rule shall keep records of all tests and maintenance performed on the vessels. Records shall be kept for two (2) years and made available to the staff director within five (5) business days of a request. Also a copy of the vessel's current Tank Truck Tightness Test results shall be kept with the delivery vessel at all times and made immediately available to the staff director upon request.
- (D) Owner/Operator Compliance. The owner or operator of a vapor recovery system subject to subsection (3)(C), (3)(E), or (3)(I) of this rule shall maintain records of department permits, inspection reports, enforcement documents, training

certifications, gasoline deliveries, routine and unscheduled maintenance, repairs, and all results of tests conducted. Unless otherwise specified in this rule, records shall be kept for two (2) years and made available to the staff director within five (5) business days of a request.

(5) Test Methods.

- (A) Gasoline Loading. Gasoline loading testing procedures to determine compliance with subparagraph (3)(B)2.A. of this rule shall be according to 10 CSR 10-6.030 subsection (14)(A) or by any method determined by the staff director. The staff director, at any time, may monitor an installation subject to subsection (3)(B) of this rule to confirm compliance with this rule.
- (B) Gasoline Delivery Vessels. Testing procedures for gasoline delivery vessels to determine compliance with subsection (3)(D) of this rule shall be according to 10 CSR 10-6.030 subsection (14)(B) or by any method determined by the staff director. The staff director, at any time, may monitor a gasoline delivery vessel subject to subsection (3)(D) of this rule to confirm compliance with this rule.
- (C) Fueling of Motor Vehicles and Gasoline Transfer at GDFs. The staff director, at any time, may monitor a GDF subject to subsection (3)(C) or (3)(E) of this rule to confirm compliance with this rule. The staff director may require a leak test, a back pressure blockage test, a pressure/vacuum valve test, or may require any test or monitoring procedure in order to determine compliance with this rule.
- (D) All emission controls that are approved by the director will not be considered federally enforceable and will not shield a source from the obligation to comply with the underlying federal emission controls until submitted to EPA and approved by EPA in the state implementation plan.



**COMMENTS AND RESPONSES ON  
PROPOSED AMENDMENT**

**10 CSR 10-6.040**

**REFERENCE METHODS**

**AND**

**RECOMMENDATION FOR ADOPTION**

On May 29, 2014, the Missouri Air Conservation Commission held a public hearing concerning the proposed amendment to 10 CSR 10-6.040 Reference Methods. The following is a summary of comments received and the Missouri Department of Natural Resources' Air Pollution Control Program corresponding responses. Any changes to the proposed amendment are identified in the responses to the comments.

The Missouri Department of Natural Resources' Air Pollution Control Program recommends the commission adopt the rule action as proposed.

*NOTE 1 - Legend for rule actions to be voted on is as follows:*

- \* *Shaded Text - Rule sections or subsections unchanged from Public Hearing. This text is only for reference.*
- \* *Unshaded Text - Rule sections or subsections that are changed from the proposed text presented at the Public Hearing, as a result of comments received during the public comment period.*

*NOTE 2 - All unshaded text below this line will be printed in the Missouri Register.*

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**Title 10—DEPARTMENT OF  
NATURAL RESOURCES**

**Division 10—Air Conservation Commission**

**Chapter 6—Air Quality Standards, Definitions, Sampling and Reference Methods and Air  
Pollution Control Regulations for the Entire State of Missouri**

**ORDER OF RULEMAKING**

By the authority vested in the Missouri Air Conservation Commission under section 643.050, RSMo Supp. 2013, the commission amends a rule as follows:

**10 CSR 10-6.040 Reference Methods is amended.**

A notice of proposed rulemaking containing the text of the proposed amendment was published in the *Missouri Register* on April 15, 2014 (39 MoReg 853-854). No changes have been made in the text of the proposed amendment, so it is not reprinted here. This proposed amendment becomes effective thirty (30) days after publication in the *Code of State Regulations*.

SUMMARY OF COMMENTS: The Missouri Department of Natural Resources' Air Pollution Control Program received no comments on the proposed rule.

#### **10 CSR 10-6.040 Reference Methods.**

- (1) The percent sulfur in solid fuels shall be determined as specified by American Society of Testing and Materials (ASTM) D4239 - 12 *Standard Test Method for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion*, as approved and published February 1, 2012. This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.
- (2) The heat content or higher heating value (HHV) of solid fuels shall be determined by use of the Adiabatic Bomb Calorimeter as specified by ASTM D5865 - 12 *Standard Test Method for Gross Calorific Value of Coal and Coke*, as approved and published December 1, 2012. This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.
- (3) The heat content or HHV of liquid hydrocarbons shall be determined as specified by ASTM D240 - 09 *Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter*, as approved and published July 1, 2009. This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.
- (4) The methods for determining the concentrations of the following air contaminants shall be as specified in 40 CFR 50, Appendices A–R or equivalent methods as specified in 40 CFR 53. The provisions of 40 CFR 50, Appendices A–R and 40 CFR 53, promulgated as of July 1, 2013, and *Federal Register* Notice 78 FR 40000–40011, promulgated July 3, 2013, shall apply and are hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.
  - (A) The concentration of sulfur dioxide shall be determined as specified in 40 CFR 50, Appendix A—*Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method)* or an equivalent method as approved by 40 CFR 53.

- (B) The concentration of total suspended particulate shall be determined as specified in 40 CFR 50, Appendix B—*Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method)*.
- (C) The concentration of carbon monoxide shall be determined as specified in 40 CFR 50, Appendix C—*Measurement Principle and Calibration Procedure for the Measurement of Carbon Monoxide in the Atmosphere (Non-Dispersive Infrared Photometry)* or equivalent methods as approved by 40 CFR 53.
- (D) The concentration of ozone shall be determined as specified in 40 CFR 50, Appendix D—*Measurement Principle and Calibration Procedure for the Measurement of Ozone in the Atmosphere* or equivalent methods as approved by 40 CFR 53.
- (E) *Reserved.*
- (F) The concentration of nitrogen dioxide shall be determined as specified in 40 CFR 50, Appendix F—*Measurement Principle and Calibration Procedure for the Measurement of Nitrogen Dioxide in the Atmosphere (Gas Phase Chemiluminescence)* or equivalent methods as approved by 40 CFR 53.
- (G) The concentration of lead shall be determined as specified in 40 CFR 50, Appendix G—*Reference Method for the Determination of Lead in Suspended Particulate Matter Collected From Ambient Air* or in 40 CFR 50, Appendix Q—*Reference Method for the Determination of Lead in Particulate Matter as PM<sub>10</sub> Collected From Ambient Air* or equivalent methods as approved by 40 CFR 53.
- (H) Compliance with the one (1) hour ozone standard shall be determined as specified in 40 CFR 50, Appendix H—*Interpretation of the 1-Hour Primary and Secondary National Ambient Air Quality Standards for Ozone*.
- (I) Compliance with the eight (8) hour ozone standards shall be determined as specified in 40 CFR 50, Appendix I—*Interpretation of the 8-Hour Primary and Secondary National Ambient Air Quality Standards for Ozone*.
- (J) The concentration of particulate matter 10 micron (PM<sub>10</sub>) shall be determined as specified in 40 CFR 50, Appendix J—*Reference Method for the Determination of Particulate Matter as PM<sub>10</sub> in the Atmosphere*, or an equivalent method as approved in 40 CFR 53.
- (K) Compliance with particulate matter 10 PM<sub>10</sub> standards shall be determined as specified in 40 CFR 50, Appendix K—*Interpretation of the National Ambient Air Quality Standards for Particulate Matter*.
- (L) The concentration of particulate matter 2.5 micron (PM<sub>2.5</sub>) shall be determined as specified in 40 CFR 50, Appendix L—*Reference Method for the Determination of Fine Particulate Matter as PM<sub>2.5</sub> in the Atmosphere*, or an equivalent method as approved in 40 CFR 53.
- (M) Compliance with particulate matter 2.5 (PM<sub>2.5</sub>) standards shall be determined as specified in 40 CFR 50, Appendix N—*Interpretation of the National Ambient Air Quality Standards for PM<sub>2.5</sub>*.
- (N) Compliance with the eight (8)-hour ozone standards shall be determined as specified in 40 CFR 50, Appendix P—*Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone*.

- (O) Compliance with the lead standards shall be determined as specified in 40 CFR 50, Appendix R—*Interpretation of the National Ambient Air Quality Standards for Lead*.
- (5) The concentration of hydrogen sulfide (H<sub>2</sub>S) shall be determined by scrubbing all sulfur dioxide (SO<sub>2</sub>) present in the sample and then converting each molecule of H<sub>2</sub>S to SO<sub>2</sub> with a thermal converter so that the resulting SO<sub>2</sub> is detected by an analyzer as specified in 40 CFR 50, Appendix A—*Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method)* or an equivalent method approved by 40 CFR 53, in which case the calibration gas used must be National Institute of Standards and Technology traceable H<sub>2</sub>S gas.
- (6) The concentration of sulfuric acid mist shall be determined as specified in the *Compendium Method IO-4-2, Determination of Reactive Acidic and Basic Gases and Strong Acidity of Fine-Particles (<2.5 μm)*, Center for Environmental Research Information, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, OH 45268, EPA/625/R-96/010a.
  - (A) The concentration of total sulfur shall be determined as specified in section (4) of this rule by sampling for sulfur dioxide without removing other sulfur compound interferences.
  - (B) The concentration of sulfur dioxide shall be determined as specified by section (4) of this rule.
  - (C) The concentration of hydrogen sulfide shall be determined as specified by section (5) of this rule.
- (7) The percent sulfur in liquid hydrocarbons shall be determined as specified by ASTM D2622 - 10 *Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry*, as approved and published February 15, 2010. This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.
- (8) The amount of solvent present in earth filters and distillation wastes shall be determined as specified by ASTM D322 - 97(2012) *Standard Test Method for Gasoline Diluent in Used Gasoline Engine Oils by Distillation*, as approved and published November 1, 2012. This standard is incorporated by reference in this rule, as published by American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions.