

**ENVIRONMENTAL PROTECTION AGENCY****40 CFR Parts 9 and 63**

[EPA-HQ-OAR-2006-0406, FRL-9092-1]

RIN 2060-AP16

**National Emission Standards for Hazardous Air Pollutants for Source Categories: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities; and Gasoline Dispensing Facilities**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule; reconsideration.

**SUMMARY:** EPA received two petitions for reconsideration from trade associations representing their stakeholders regarding the National Emission Standards for Hazardous Air Pollutants for Source Categories: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities; and Gasoline Dispensing Facilities, which EPA promulgated on January 10, 2008, and amended on March 7, 2008. In this action, EPA is proposing amendments and clarifications to certain definitions and applicability provisions of the final rules in response to some of the issues raised in the petitions for reconsideration. In addition, several other compliance-related questions posed by various individual stakeholders and State and local agency representatives are addressed in this proposed action. We are seeking comments only on the proposed amendments presented in this action. We will not respond to any comments addressing other provisions of the final rules or any related rulemakings.

**DATES:** Comments. Written comments must be received on or before February 16, 2010.

**Public Hearing.** If anyone contacts EPA requesting to speak at a public hearing by December 28, 2009, a public hearing will be held on December 30, 2009.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2006-0406, by one of the following methods:

- <http://www.regulations.gov>. Follow the online instructions for submitting comments.

- *E-mail:* [a-and-r-Docket@epa.gov](mailto:a-and-r-Docket@epa.gov).

- *Fax:* (202) 566-9744.

- *Mail:* Air and Radiation Docket, Environmental Protection Agency, Mailcode: 2822T, 1200 Pennsylvania Ave., NW., Washington, DC 20460. Please include a total of two copies.

- *Hand Delivery:* In person or by courier, deliver your comments to: Air and Radiation Docket, Public Reading Room, EPA West Building, Room 3334, 1301 Constitution Ave., NW., Washington, DC 20004. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information. Please include a total of two copies.

**Instructions:** Direct your comments to Docket ID No. EPA-HQ-OAR-2006-0406. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be confidential business information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <http://www.regulations.gov> or e-mail. The <http://www.regulations.gov> Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through <http://www.regulations.gov>, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment.

Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket, visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

**Docket:** All documents in the docket are listed in the <http://www.regulations.gov> docket index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in <http://www.regulations.gov> or in hard copy at the Air and Radiation Docket, EPA West Building, Room 3334, 1301 Constitution Ave., NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket is (202) 566-1742.

We request that you also send a separate copy of each comment to the contact persons listed below (see **FOR FURTHER INFORMATION CONTACT**).

**FOR FURTHER INFORMATION CONTACT:**

**General and Technical Information:** Mr. Stephen Shedd, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, Coatings and Chemicals Group (E143-01), U.S. EPA, Research Triangle Park, NC 27711, telephone: (919) 541-5397, facsimile number: (919) 685-3195, e-mail address: [shedd.steve@epa.gov](mailto:shedd.steve@epa.gov).

**Compliance Information:** Ms. Rebecca Kane, Office of Compliance, Air Compliance Branch (2223A), U.S. EPA, Ariel Rios Building, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, telephone: (202) 564-5960, facsimile number: (202) 564-0050, e-mail address: [kane.rebecca@epa.gov](mailto:kane.rebecca@epa.gov).

**SUPPLEMENTARY INFORMATION:**

**Regulated Entities.** Categories and entities potentially regulated by this action include:

Category	NAICS*	Examples of regulated entities
Industry .....	324110 493190 486910 424710 447110 447190	Operations at area sources that transfer and store gasoline, including bulk terminals, bulk plants, pipeline facilities, and gasoline dispensing facilities.
Federal/State/local/tribal governments.		

\* North American Industry Classification System.

monitoring provisions in § 63.11120, paragraph (a).

Additionally, we are proposing to clarify the requirements for the annual certification testing of cargo tanks by adding a new paragraph (c) to § 63.11120. In the January 10, 2008 final rule, Table 2 item (vi) requires that cargo tanks meet the specifications of EPA Method 27, but does not specifically state what the maximum allowable pressure and vacuum changes are. Proposed paragraph (c) would clarify that the maximum allowable pressure and vacuum change, as measured by EPA Method 27, for all affected gasoline cargo tanks is 3 inches of water, or less, in 5 minutes.

#### 11. Definition of Gasoline

A number of stakeholders have asked what the definition of gasoline is for this rule. Additionally, they have asked if E85, E10, denatured ethanol, and transmix are considered gasoline and how are they handled under this rule.

The definition of gasoline is the same as the definition developed for the NSPS in 40 CFR part 60, subpart XX, Bulk Gasoline Terminals, and used in many State Implementation Plans for Ozone Attainment, as well as 40 CFR part 63, subpart R, the major source NESHAP for gasoline distribution. Gasoline is defined in § 60.501 as follows: "Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater which is used as a fuel for internal combustion engines." Even though the NSPS is cross-referenced in the definitions of 40 CFR part 63, subparts BBBBBB and CCCCCC, for clarity we are proposing to add the definition to these subparts as well.

Both E85 and E10 are petroleum distillate/alcohol blends of 85- or 10-percent ethanol, respectively, with gasoline. Ethanol has a Reid vapor pressure of about 2 pounds per square inch (psi), but when mixed with gasoline at the highest percentage of ethanol (E85), the vapor pressure of the blend is 6 to 12 psi for the different volatility classes of gasoline. Thus, the vapor pressure of E85 and E10 is over the lower limit in the definition of gasoline of 4 psi (27.6 kilopascals is about 4 psi) and considered gasoline under the definition used. Gasoline storage tanks containing E10 and E85 at bulk facilities and GDF would be subject to applicable controls.

The ethanol used in fuel blends is denatured ("poisoned" to prevent human consumption) at the ethanol plant and can contain up to 5-percent hydrocarbons (gasoline or gasoline-like

additives) before blending. As discussed earlier, emissions at ethanol plants are already subject to and controlled under 40 CFR part 63, subpart VVVVVV. Thus, the applicable question becomes how emissions downstream of the ethanol plant are addressed. Based on limited information, denatured ethanol mixed with normal gasoline appears to have a vapor pressure of about 4 psi or less. Thus, it is unclear if the mixture meets our vapor pressure threshold for the various blends and volatility of gasoline. We are requesting information during the comment period as to the vapor pressure of denatured ethanol over the full normal range of amount of ethanol mixed with the range of gasoline volatilities used for denaturing ethanol. Secondly, given that the storage of denatured ethanol to mix with additional gasoline normally occurs at gasoline bulk terminals, we believe these storage emissions should be addressed and controlled whether the liquid meets or does not meet the current definition of gasoline criteria of at or above 4 psi. Thus, we are proposing that any gasoline mixture with alcohol be considered gasoline and be controlled under the current control requirements in subpart BBBBBB and CCCCCC. We are asking for comment on including any mixture, on whether this level of control is appropriate, and if not, we are requesting data on what level of control of those emissions is appropriate.

Another stakeholder asked if transmix (the combined product mix at the interface between different products conveyed in the pipeline) is considered a regulated gasoline under this standard. This issue was discussed in the December 19, 2007, Memorandum, "Summary of Comments and Responses to Public Comments on November 9, 2006 Proposal for Gasoline Distribution Area Sources" (Docket No. EPA-HQ-OAR-2006-0406, item 0141) and in the preamble to the final major source NESHAP (59 FR 64303 (December 14, 1994)). We must set standards for all the gasoline operations. The transmix contains various concentrations of gasoline and other products to the degree that it would not be feasible to specify in advance the percentage and concentration of gasoline in the mixture; thus, as discussed in the responses to comment for both standards, it should be stored and considered gasoline for the purposes of these regulations. Additionally, industry has indicated that many of the tanks that store transmix may have low throughputs and that they are often smaller tanks, thereby many are in the lesser control

option of installing a fixed roof and maintaining all openings in a closed position at all times when not in use (see item 1 in Table 2 of 40 CFR part 63, subpart BBBBBB).

#### 12. Table 1 Requirements for "New" Storage Tanks

Item 2 in Table 1 to 40 CFR part 63, subpart CCCCCC currently specifies that dual-point vapor balance systems be used "For new or reconstructed GDF, or new storage tank(s) at an existing affected facility subject to § 63.11118." As a result of questions regarding the construction date that establishes when a tank is considered new, we are proposing to amend the text of item 2 to read as follows: "A new or reconstructed GDF, or any storage tank(s) constructed after November 9, 2006, at an existing affected facility subject to § 63.11118." Under § 63.11112(b), an affected source constructed after November 9, 2006, is considered to be a new source (a new GDF), and we intended that the same date apply for newly constructed storage tanks at existing facilities. The proposed text would clarify that our intent was for the term "new storage tank(s)" to refer to storage tanks constructed after the publication date of the proposed rule.

#### 13. Requirements for Gasoline Containers

One stakeholder stated that some plastic gasoline containers that do not have gaskets may, nevertheless, meet the stringent emission reduction requirements established in the 2007 Mobile Source Air Toxics rulemaking (72 FR 8428) and should be allowed as an acceptable alternative to the requirements of § 63.11116(a)(3), which requires that gasoline containers be covered with a gasketed seal. The stakeholder recommended that EPA allow facilities to comply with § 63.11116(a)(3) by using gasoline containers that meet the evaporative emission standards of 40 CFR part 59, subpart F, sections 59.600–59.699.

We reviewed the requirements of §§ 59.600–59.699 and agree with the stakeholder that the 0.3 grams per gallon per day emission standard found in § 59.611(a) can only be met through the use of tight-fitting closures. We are proposing to add a paragraph (d) to § 63.11116 that reads as follows: "Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with § 63.11116(a)(3)."



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### ASTM D4953 Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method)

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**ASTM D4953 Document Information:**

**Title**  
Standard Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method)

**ASTM International**

**Publication Date:**  
Aug 1, 2006

**Scope:**

This test method covers and is applicable to gasolines and gasoline-oxygenate blends with a vapor pressure range from 35 to 100 kPa (5 to 15 psi) (see Note 2). This test method, a modification of Test Method D 323 (Reid Method), provides two procedures to determine the vapor pressure (Note 1) of gasoline and gasoline-oxygenate blends.

NOTE 1—Because the external atmospheric pressure is counteracted by the atmospheric pressure initially present in the air chamber, this vapor pressure is an absolute pressure at 37.8°C (100°F) in kilopascals (pounds-force per square inch). This vapor pressure differs from the true vapor pressure of the sample due to some small vaporization of the sample and air in the confined space.

NOTE 2—Vapor pressure of gasoline or gasoline-oxygenate blends below 35 kPa (5 psi) or greater than 100 kPa (15 psi) can be determined with this test method but the precision and bias (Section 11) do not apply. For materials with a vapor pressure greater than 100 kPa (15 psi), use a 0 to 200 kPa (0 to 30 psi) gauge as specified in the annex of Test Method D 323.

Some gasoline-oxygenate blends may show a haze when cooled to 0 to 1°C. If a haze is observed in 9.4, it shall be indicated in the reporting of results. The precision and bias statements for hazy samples have not been determined (see Note 7).

The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

*This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.* Specific warnings are given in 7.5, 8.4.1, 8.5.1, 9.1, A1.1, and A1.1.3.

**\*A Summary of Changes section appears at the end of this standard.**

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## ASTM D323 - 08

### ASTM D323 - 08 Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)

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## ASTM D323

### Significance and Use

Vapor pressure is an important physical property of volatile liquids. This test method is used to determine the vapor pressure at 37.8°C (100°F) of petroleum products and crude oils with initial boiling point above 0°C (32°F).

Vapor pressure is critically important for both automotive and aviation gasolines, affecting starting, warm-up, and tendency to vapor lock with high operating temperatures or high altitudes. Maximum vapor pressure limits for gasoline are legally mandated in some areas as a measure of air pollution control.

Vapor pressure of crude oils is of importance to the crude producer and the refiner for general handling and initial refinery treatment.

Vapor pressure is also used as an indirect measure of the evaporation rate of volatile petroleum solvents.

### 1. Scope

1.1 This test method covers procedures for the determination of vapor pressure (see Note 1) of gasoline, volatile crude oil, and other volatile petroleum products.

1.2 Procedure A is applicable to gasoline and other petroleum products with a vapor pressure of less than 180 kPa (26 psi).

1.3 Procedure B may also be applicable to these other materials, but only gasoline was included in the interlaboratory test program to determine the

precision of this test method.

1.4 Procedure C is for materials with a vapor pressure of greater than 180 kPa (26 psi).

1.5 Procedure D for aviation gasoline with a vapor pressure of approximately 50 kPa (7 psi).

Note 1—Because the external atmospheric pressure is counteracted by the atmospheric pressure initially present in the vapor chamber, the Reid vapor pressure is an absolute pressure at 37.8°C (100°F) in kilopascals (pounds-force per square inch). The Reid vapor pressure differs from the true vapor pressure of the sample due to some small sample vaporization and the presence of water vapor and air in the confined space.

1.6 This test method is not applicable to liquefied petroleum gases or fuels containing oxygenated compounds other than methyl t-butyl ether (MTBE). For determination of the vapor pressure of liquefied petroleum gases, refer to Test Method D 1267 or Test Method D 6897. For determination of the vapor pressure of gasoline-oxygenate blends, refer to Test Method D 4953. The precision for crude oil has not been determined since the early 1950s (see Note 3). Test Method D 6377 has been approved as a method for determination of vapor pressure of crude oil. IP 481 is a test method for determination of the air-saturated vapor pressure of crude oil.

1.7 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.8 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. Specific warning statements are given in Sections 7 and 18, and 12.5.3, 15.5, 21.2, A1.1.2, A1.1.6, and A2.3.

## 2. Referenced Documents

### ASTM Standards

D1267 Test Method for Gage Vapor Pressure of Liquefied Petroleum (LP) Gases (LP-Gas Method)

D4057 Practice for Manual Sampling of Petroleum and Petroleum Products

D4175 Terminology Relating to Petroleum, Petroleum Products, and Lubricants

D4953 Test Method for Vapor Pressure of Gasoline and Gasoline-Oxygenate Blends (Dry Method)

D6377 Test Method for Determination of Vapor Pressure of Crude Oil: VPCR<sub>x</sub> (Expansion Method)

D6897 Test Method for Vapor Pressure of Liquefied Petroleum Gases (LPG) (Expansion Method)

E1 Specification for ASTM Liquid-in-Glass Thermometers

### Energy Institute Standards

IP481 Test Method for Determination of the Air Saturated Vapour Pressure (ASVP) of Crude Oil

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### Index Terms

crude oils; gasoline; Reid vapor pressure; spark-ignition engine fuel; vapor pressure; volatility; Reid vapor pressure; Vapor pressure (VP<sub>x</sub>)--petroleum products; ICS Number Code 75.080 (Petroleum products in general)

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DOI: 10.1520/D0323-08

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