

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 80

[EPA-OAR-2005-0048; FRL - - ]

RIN 2060-AM42

Regulation of Fuel and Fuel Additives: Gasoline and Diesel Fuel Test Methods

**AGENCY:** Environmental Protection Agency (EPA)

**ACTION:** Direct final rule

**SUMMARY:** The Environmental Protection Agency (EPA) is taking direct final action to allow refiners and laboratories to use more current and improved fuel testing procedures for five American Society for Testing and Materials (ASTM) analytical test methods. Once these test method changes are adopted, they will supersede the corresponding earlier versions of these test methods in EPA's motor vehicle fuel regulations. EPA is also taking direct final action to change the designated test method for sulfur in butane. EPA will take direct final action to replace an approved ASTM Committee D.16 sulfur test method with the ASTM Committee D.02 version of the test method for gasoline and diesel fuel, and allow an additional ASTM test method for sulfur

in gasoline. EPA is also taking direct final action to remove a September 1, 2004 sunset provision for two alternative ASTM test methods for gasoline. Finally, EPA is taking direct final action to add a new section to the motor vehicle fuels regulations. This new section would reference the rounding method in an ASTM standard practice as the procedure to follow for rounding a test result when determining compliance with EPA's motor vehicle fuels standards listed in the regulations. As explained further below in the preamble of this document, EPA views these changes as non-controversial and we anticipate no adverse comment.

**DATES:** This direct final rule is effective **[insert a date 60 days after date of publication in the Federal Register]**, unless EPA receives adverse comments or a request for public hearing by **[insert a date 30 days after date of publication in the Federal Register]**. If the Agency receives adverse comment or a request for public hearing, we will withdraw this direct final rule by publishing a timely withdrawal notice in the Federal Register. The incorporation by reference of certain publications in this rule is approved by the Director of the Office of the Federal Register as of **[insert date, 60 days after date of publication in the Federal Register]**.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2005-0048, by one of the following methods:

- [www.regulations.gov](http://www.regulations.gov): Follow the on-line instructions for submitting comments.
- E-mail: [a-and-r-Docket@epa.gov](mailto:a-and-r-Docket@epa.gov)
- Fax: (202) 566-1741
- Mail: "EPA-HQ-OAR-2005-0048, Environmental Protection Agency, Mailcode:6102T,

1200 Pennsylvania Ave., N.W., Washington, DC 20460.”

- Hand Delivery: EPA/DC, EPA West, Room B102, 1301 Constitution Ave., N.W., Washington, DC. Such deliveries are only accepted during the Docket’s normal hours of operation, and special arrangements should be made for deliveries of boxed information.

*Instructions:* Direct your comments to Docket ID No. EPA-HQ-OAR-2005-0048. EPA’s policy is that all comments will be included in the public docket without change and may be made available online at [www.regulations.gov](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 [www.regulations.gov](http://www.regulations.gov) or e-mail. The [www.regulations.gov](http://www.regulations.gov) website 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 [www.regulations.gov](http://www.regulations.gov) your email 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 instructions on submitting comments, go to Unit 1.B of the **SUPPLEMENTARY INFORMATION** section of this document.

*Docket:* All documents in the docket are listed in the [www.regulations.gov](http://www.regulations.gov) 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 [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Air Docket, EPA/DC, EPA West, Room B102, 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 holidays. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the telephone number for the Air Docket is (202) 566-1742.

**FOR FURTHER INFORMATION CONTACT:** Joe Sopata, Chemist, Transportation and Regional Programs Division, Office of Transportation and Air Quality (6406J), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460; telephone number: (202) 343-9034; fax number: (202) 343-2801; e-mail address: [sopata.joe@epa.gov](mailto:sopata.joe@epa.gov).

**SUPPLEMENTARY INFORMATION:**

EPA is publishing this rule without prior proposal because we view this as a noncontroversial amendment and anticipate no adverse comment. However, in the “Proposed Rules” section of today’s *Federal Register* publication, we are publishing a separate document that will serve as the proposal if adverse comments are filed. This rule will be effective on **[insert**

**a date 60 days after date of publication in the Federal Register]** without further notice unless we receive adverse comment by **[insert a date 30 days after date of publication in the Federal Register]**. If EPA receives adverse comment, we will publish a timely withdrawal in the *Federal Register* informing the public that the rule will not take effect. We will address all public comments in a subsequent final rule based on the proposed rule. We will not institute a second comment period on this action. Any parties interested in commenting must do so at this time.

The contents of today's preamble are listed in the following outline.

I. General Information

- A. Does this Action Apply to Me?
- B. What Should I Consider as I Prepare My Comments for EPA?

II. Rule Changes

- A. Updating ASTM Test Methods to Their Most Recent Version
- B. Replacing ASTM D 6428-99 with ASTM D 6920-03
- C. Test Method for Sulfur in Butane
- D. Additional Alternative Test Method for Sulfur in Gasoline
- E. Removal of Sunset Provision for Alternative Test Methods
- F. Using Rounding when Determining Conformance with a Fuels Standard

III. Administrative Requirements

- A. Executive Order 12866: Regulatory Planning and Review
- B. Paperwork Reduction Act
- C. Regulatory Flexibility Act (RFA)

- D. Unfunded Mandates Reform Act
  - E. Executive Order 13132: Federalism
  - F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments
  - G. Executive Order 13045: Protection of Children from Environmental Health & Safety Risks
  - H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use
  - I. National Technology Transfer Advancement Act
  - J. Congressional Review Act
- VI. Statutory Provisions and Legal Authority

**I. General Information**

**A. Does this Action Apply to Me?**

Regulated categories and entities potentially affected by this action include those involved with the production, importation, distribution, sale and storage of gasoline motor fuel and diesel motor fuel.

The table below is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that

EPA is now aware could be potentially regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether an entity is regulated by this action, one should carefully examine the existing regulations in 40 CFR part 80. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding “FOR FURTHER INFORMATION CONTACT” section.

<b>Category</b>	<b>NAICSs Codes<sup>a</sup></b>	<b>SIC Codes<sup>b</sup></b>	<b>Examples of potentially regulated parties</b>
Industry	324110	2911	Petroleum refiners
Industry	54138	8734	Testing Laboratories
Industry	422710 422720	5171 5172	Gasoline Marketers and Distributors

<sup>a</sup> North American Industry Classification System (NAICS).

<sup>b</sup> Standard Industrial Classification (SIC) system code.

## **B. What Should I Consider as I Prepare My Comments for EPA?**

1. *Submitting CBI.* Do not submit this information to EPA through EDOCKET, regulations.gov or e-mail. Clearly mark the part of all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information

claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

*2. Tips for Preparing Your Comments.* When submitting comments, remember to:

- i. Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).
- ii. Follow directions - The agency may ask you to respond to specific questions or organize comments referencing a Code of Federal Regulations (CFR) part or section number.
- iii. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- iv. Describe any assumptions and provide any technical information and/or data that you used.
- v. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- vi. Provide specific examples to illustrate your concerns, and suggest alternatives.
- vii. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- viii. Make sure to submit your comments by the comment period deadline identified.

## **II. Rule Changes**



## **A. Updating ASTM Test Methods to Their Most Recent Version**

Refiners, importers and oxygenate blenders producing gasoline and diesel motor vehicle fuel are required to test reformulated gasoline (RFG), conventional gasoline (CG) and diesel fuel for various fuel parameters including sulfur, olefins, aromatics, and oxygenate content. American Society for Testing and Materials (ASTM) test method D2622 is currently a designated test method for measuring sulfur<sup>1</sup> in gasoline. ASTM test method D 3120 and ASTM D 5453 are currently alternative test methods for measuring sulfur<sup>2,3</sup> in gasoline. ASTM test method D 1319 is currently a designated test method for measuring olefins<sup>4</sup> in gasoline and aromatics<sup>5</sup> in diesel fuel and is also allowed as an alternative test method for measuring aromatics<sup>6</sup> in gasoline. ASTM test method D 4815 is currently an alternative test method for measuring oxygenate content<sup>7</sup> in gasoline.

The American Petroleum Institute (API) recommended in a letter to EPA that EPA update

---

<sup>1</sup> 40 CFR 80.46(a)(1).

<sup>2</sup> 40 CFR 80.46(a)(3)(iii).

<sup>3</sup> 40 CFR 80.46(a)(3)(i).

<sup>4</sup> 40 CFR 80.46(b).

<sup>5</sup> 40 CFR 80.2(z).

<sup>6</sup> 40 CFR 80.46(f)(3).

<sup>7</sup> 40 CFR 80.46(g)(2).

the ASTM test methods mentioned above to their most recent ASTM version.<sup>8</sup> API asked EPA to refer to the 2003 year version of ASTM test method D 2622 in all references involving gasoline and diesel fuels because this version of ASTM D 2622 includes an updated precision statement as determined in a recent ASTM sulfur round robin. API also recommended EPA adopt in the motor vehicle fuels regulations the 2003a version of ASTM 3120, the 2003a version of ASTM D 5453, the 2003 version of ASTM D1319, and the 2003 year version of ASTM D 4815.

Table 1 lists the designated analytical test methods and alternative analytical test methods which are being updated for parameters measured under RFG, CG, and diesel fuels program in today's action. The Agency has reviewed these updated ASTM test methods and we are in agreement with the revisions contained in them which will result in improvements in the utilization of these test methods for the regulated industry. We believe that the revisions in the test method changes in today's action are not significant changes that would cause a user of an older version of the same method to incur significant costs. All of the revisions were deemed necessary by ASTM so that improvements in the test method's procedures would ensure better operation for the user of the test method. Thus, EPA is taking action today to update the regulations for the following ASTM test methods: 1) ASTM D 2622-03, the designated test method for measuring sulfur in RFG, and CG, 2) ASTM D 3120-03a and ASTM D 5453-03a alternative test methods for sulfur in gasoline, 3) ASTM D 1319-03, designated test method for measuring olefins in gasoline and aromatics in diesel fuel, as well as the alternative test method for measuring aromatics in gasoline, and 4) ASTM 4815-03, alternative test method for measuring

---

<sup>8</sup> See Air Docket # EPA-HQ-OAR-2005-0048-0002.

oxygenate content in gasoline.

Table 1. - Designated & Alternative ASTM Analytical Test Methods Under RFG, CG & Diesel Motor Vehicle Fuel Programs

Fuel Parameter	ASTM Analytical Test Method
Sulfur (gasoline).....	ASTM D 2622-03, entitled “Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry”
Sulfur (gasoline).....	ASTM D 5453-03a, entitled, “Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence”
Sulfur (gasoline).....	ASTM D 3120-03a, entitled, “Standard Test Method for Trace Quantities of Sulfur in Light Petroleum Hydrocarbons by Oxidative Microcoulometry”
Oxygen content (gasoline).....	ASTM D 4815-03, entitled “Standard Test Method for Determination of MTBE, ETBE, TAME, DIPE, tertiary-Amyl Alcohol and C <sub>1</sub> to C <sub>4</sub> Alcohols in Gasoline by Gas Chromatography”
Olefins (gasoline).....	ASTM D 1319-03, entitled “Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption”
Aromatics(gasoline and diesel).....	ASTM D 1319-03, entitled, “Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Absorption”, for diesel fuel, this method is the designated test method, for gasoline, this method is an alternative test method and if used as an alternative method, its results, must be correlated to ASTM D 5769-98.

## **B. Replacing ASTM D 6428-99 with ASTM D 6920-03**

Refiners, importers and oxygenate blenders producing gasoline and diesel motor vehicle fuels are required to test RFG, CG, and diesel fuel for various fuel parameters including sulfur content. ASTM test method D 6428-99 is currently the designated test method for measuring the sulfur content of on-highway diesel fuel at the 15 ppm level<sup>9</sup>, an alternative test method for measuring the sulfur content on-highway diesel fuel at the 500 ppm level<sup>10</sup>, and an alternative test method for measuring the sulfur content of gasoline.<sup>11</sup>

ASTM D 6428-99 was developed by the ASTM D.16 Committee for Aromatic Hydrocarbons and Related Chemicals. ASTM D 6428-99 does not contain a precision statement in the test method for its use with gasoline and diesel fuel. ASTM D.02, the Committee for Petroleum Products and Lubricants, recently determined the precision for this method with respect to gasoline and diesel fuels, and named the new method containing the precision statement ASTM D 6920-03. Since ASTM D 6920-03 contains precision statements for the method as it applies to gasoline and diesel, API requested that EPA refer to ASTM D 6920-03 in all references with respect to gasoline and diesel fuel involving test method ASTM D 6428-99.<sup>12</sup> The Agency has evaluated API's request and agrees that since ASTM D 6920-03 contains precision estimates for

---

<sup>9</sup> 40 CFR 80.580(a)(2).

<sup>10</sup> 40 CFR 80.580(a)(3)(ii).

<sup>11</sup> 40 CFR 80.46(a)(3)(ii).

<sup>12</sup> See Air Docket # EPA-HQ-OAR-2005-0048-0002.

use of the method with gasoline and diesel fuels, ASTM D 6920-03 is more practical for use with our gasoline and diesel fuels programs compared to ASTM D 6428-99. Thus, EPA is changing the regulations by replacing ASTM D 6428-99 with ASTM D 6920-03 for the alternative test method for measuring the sulfur content of diesel fuel at the 500 ppm level, and the alternative test method for measuring the sulfur content of gasoline.

The regulations state that until December 27, 2004, for 15 ppm diesel fuel, regulated parties may use ASTM D 6428-99, the designated test method, or ASTM D 5453-03a or ASTM D 3120-03a, two alternative test methods, provided the alternative test method results are correlated to the designated test method. After December 27, 2004, regulated parties measuring motor vehicle diesel fuel and fuel additives subject to the 15 ppm diesel sulfur standard must qualify their test method on a site specific basis under the precision and accuracy criteria specified in the regulations at 40 CFR 80.584. Once they have completed this testing, they must submit their precision and accuracy results to the Agency for approval to use their test method as specified in the regulations at 40 CFR 80.585. Thus, after December 27, 2004, regulated parties may only use test methods that have been qualified on a site specific basis that meet the accuracy and precision criteria specified in the regulations at 40 CFR 80.584 and that have been approved under the process specified in the regulations at 40 CFR 80.585. The December 27, 2004, date, provided regulated parties 180 days of lead time to qualify their test methods for use at each site for measuring 15 ppm sulfur diesel fuel. Since today's rule will be effective after December 27, 2004, the Agency is revising the regulations by removing the now irrelevant designated and alternative test method paragraphs that allow the use of ASTM D 6428-99, ASTM D 5453-03a,

and ASTM D 3120-03a for 15 ppm sulfur diesel fuel (i.e., 40 CFR 80.580(b)(1) and 40 CFR 80.580(c)(1)). The regulations will then only reflect the present situation in the regulations that all test methods must qualify under the precision and accuracy criteria in the regulations.

### **C. Test Method for Sulfur in Butane**

Certain parties blend butane into gasoline which has already been manufactured and certified under EPA regulations. Effective January 1, 2004, the parties that blend butane into already made gasoline were required to test the butane for sulfur content.<sup>13</sup> Currently, ASTM D 3246-96 is the designated test method for measuring the sulfur content of butane.

Recently, API said in a letter to EPA that ASTM D 6667 is more readily available, more reliable, and a better test method than ASTM D 3246.<sup>14</sup> Thus, API requested EPA to change the designated test method for measuring sulfur in butane to ASTM D 6667-01, and to continue to allow ASTM D 3246-96 as an alternative test method. EPA has evaluated API's request on this test method issue and agrees. Thus, EPA is taking action to change the regulations making ASTM D 6667-01 the designated test method for measuring the sulfur content of butane. Additionally, ASTM test method D 3246-96 will continue to be allowed as an alternative test method, provided its test results are correlated to ASTM D 6667-01, the designated test method for sulfur in butane.

---

<sup>13</sup> 40 CFR 80.46(a)(2).

<sup>14</sup> See Air Docket # EPA-HQ-OAR-2005-0048-0002.

In the future, EPA intends to establish a performance-based test method approach (PBTM) rule which would provide criteria for the qualification of alternative test methods. Once a PBTM rule has been established by the Agency, ASTM D 3246-96 may qualify under the PBTM rule's criteria as an alternative test method.

**D. Additional Alternative Test Method for Sulfur in Gasoline**

Refiners, importers and oxygenate blenders producing gasoline and diesel motor vehicle fuel are required to test RFG, CG and diesel fuel for various fuel parameters including sulfur. Test methods for determining sulfur content are specified in the regulation.

Recently, X-Ray Optical Systems, Incorporated (XOS<sup>®</sup>) requested in a letter to EPA that ASTM D 7039-04 be designated by EPA as an alternative test method in the regulations for sulfur in gasoline.<sup>15</sup> EPA has evaluated XOS<sup>®</sup>'s request on this test method issue and agrees. Thus, EPA is taking action to allow ASTM D 7039-04 as an alternative test method in the regulations for sulfur in gasoline, provided that its results are correlated to ASTM D 2622. The allowance of this additional alternative test method for sulfur in gasoline will provide the regulated community additional flexibility in meeting their testing requirements.

As stated above, EPA plans to establish a PBTM rule for the qualification of alternative test methods. Once this PBTM rule is effective, ASTM D 7039 may qualify as an alternative test

---

<sup>15</sup> See Air Docket # EPA-HQ-OAR-2005-0048-0003.

method under the PBTM rule's criteria.

#### **E. Removal of Sunset Provision for Alternative Test Methods**

As explained previously, ASTM D 1319 is an alternative test method for measuring total aromatics in gasoline, and ASTM D 4815 is an alternative test method for measuring oxygenates in gasoline. Both of these alternative methods have sunset provisions under which their use as an alternative test method expired on September 1, 2004. On June 16, 2004, EPA issued an enforcement discretion letter allowing the use of these two alternative test methods until December 31, 2005, or until such time that a rulemaking was promulgated by the Agency to continue to allow the use of these two alternative test methods, whichever is earlier.<sup>16</sup>

Recently, API requested in a letter that the sunset provisions for these two alternative test methods be removed until a PBTM approach for qualifying analytical test methods is promulgated by EPA.<sup>17</sup> Since EPA believes the use of these two alternative test methods has been effective, we are continuing to allow their use until the PBTM rule mentioned previously is promulgated by the Agency. Once a PBTM rule has been established, these two alternative test methods may qualify under the PBTM rule's criteria. The rule change that is the subject of this notice would remove the current sunset provision of September 1, 2004, for both ASTM D 1319 and ASTM D 4815 and allow their use as alternative test methods until a PBTM rule is established by the Agency.

---

<sup>16</sup> See Air Docket # EPA-HQ-OAR-2005-0048-0004.

<sup>17</sup> See Air Docket # EPA-HQ-OAR-2005-0048-0005.



## **F. Using Rounding when Determining Conformance with a Fuels Standard**

Refiners, importers and oxygenate blenders producing gasoline and diesel motor vehicle fuel are required to test RFG, CG and diesel fuel for various fuel parameters to determine compliance with EPA's motor vehicle fuels standards. These fuels standards are listed in the regulations at 40 CFR Part 80.

Each of EPA's motor vehicle fuel standards indicates the number of significant digits which should be present in an observed measurement number to be compared to the standard for the purpose of demonstrating compliance. The appropriate number of significant digits to determine compliance with a fuel standard regulation or to report on a reporting form should be determined from the method outlined in section 3.1 of the ASTM standard practice E 29-02<sup>e1</sup>, entitled, "Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications". Regulated parties measuring a fuel parameter to determine compliance with a fuel standard must report their test result out to the number of significant digits specified in the applicable fuel standard. However, a test method used to measure a certain fuel parameter may provide more significant digits in its output than specified in the standard. When this situation occurs, the regulated party should round their test result to determine if they are in compliance with the standard. The American Society for Testing and Materials (ASTM) has developed the

standard practice, ASTM E 29-02<sup>e1</sup>, for this situation. The rounding method<sup>18</sup> in this standard practice provides a procedure for rounding a test result to the number of significant digits specified in some standard. After using the rounding method specified in ASTM E 29-02<sup>e1</sup>, the regulated party may compare the resulting number to the standard to determine whether they are in compliance.

The Agency has reviewed the rounding method referenced in the standard practice ASTM E 29-02<sup>e1</sup>, and we are in agreement with its use for this purpose. The Agency believes referencing the “rounding” method (as contrasted with the “absolute” method) in this ASTM standard practice in EPA’s regulations will help to avoid confusion in the fuels distribution system. Therefore, EPA is adding a new section to the motor vehicle fuels regulations at 40 CFR 80.9. This new section would reference the rounding method in ASTM E 29-02<sup>e1</sup>. The rounding method is the procedure to follow for rounding a test result when determining compliance with EPA’s motor vehicle fuels standards listed at 40 CFR Part 80.

In the “Proposed Rules” section of today’s Federal Register, we are publishing a proposed rule that matches the substance of this direct final rule. If the Agency receives adverse comment or a request for public hearing by **[insert a date 30 days after publication in the Federal**

---

<sup>18</sup> The Rounding Method in ASTM E 29-02<sup>e1</sup> applies where it is the intent that a limited number of digits in an observed value or calculated value are to be considered significant for purposes of determining conformance to the number of figures listed in a fuels standard. The rounded value should be compared to the specified limit in the fuels standard, and conformance or non-conformance with the specification in the fuels standard should be based on this comparison.

**Register]**, we will withdraw the direct final rule by publishing a timely withdrawal notice in the Federal Register. If the Agency receives no adverse comment or a request for public hearing by **[insert a date 30 days after publication in the Federal Register]**, these test method changes will be effective sixty (60) days after publication of this direct final rule in the federal register. We are confident that sixty(60) days is sufficient lead time for industry to become familiar and implement these ASTM test methods changes for the applications mentioned above.

### **III. Administrative Requirements**

#### **A. Executive Order 12866: Regulatory Planning and Review**

Under Executive Order 12866, (58 FR 51735 (October 4, 1993)) the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

- (1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
- (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order."

It has been determined that this rule is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to OMB review.

#### **B. Paperwork Reduction Act**

This action does not impose any new information collection burden. However, the Office of Management and Budget (OMB), under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., has approved the information collection requirements contained in the final RFG and anti-dumping rulemaking and gasoline sulfur control rulemaking, and has assigned OMB control number 2060-0277, EPA ICR number 1591.14. OMB, under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., has also approved the information collection requirements contained in the final Tax Exempt (Dyed) Highway Diesel Fuel rulemaking, and has assigned OMB control number 2060-0308, EPA ICR number 1718.03. Copies of the OMB approved Information Collection Requests (ICR) may be obtained from Susan Auby, Collection Strategies Division; U.S. Environmental Protection Agency (2822T); 1200 Pennsylvania Ave., NW, Washington, DC 20460 or by calling (202) 566-1672.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

### **C. Regulatory Flexibility Act (RFA)**

The RFA generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions. EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule.

For purposes of assessing the impacts of today's direct final rule on small entities, small entity is defined as: (1) a small business as defined by the Small Business Administrations' regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's direct final rule on small entities, EPA has concluded that this action would not have a significant economic impact on a substantial number of small entities. In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant adverse economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives "which minimize any significant economic impact of the rule on small entities." 5 U.S.C. Sections 603 and 604. Thus, an agency may conclude that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule.

All of the test method updates in today's action will improve the performance and/or utilization by industry of the test methods. For the two alternative test methods, ASTM D 1319 and ASTM D 4815, today's action will continue to provide flexibility to the regulated community. The allowance of ASTM D 7039-04 will provide additional flexibility to the regulated community

in meeting sulfur in gasoline testing requirements. Referencing the rounding method in ASTM E 29-02<sup>e1</sup> provides consistent guidance for the regulated community when determining whether a test result is in conformance with our motor vehicle fuels standards. Finally, for the measurement of sulfur in butane, today's action will provide industry with a more reliable, more readily available and better test method. We have therefore concluded that today's rule will relieve regulatory burden for all small entities.

#### **D. Unfunded Mandates Reform Act**

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on state, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to state, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA

establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

Today's direct final rule contains no Federal mandates (under the regulatory provisions of Title II of the UMRA) for state, local or tribal governments or the private sector. The rule would impose no enforceable duty on any State, local or tribal governments or the private sector.

#### **E. Executive Order 13132: Federalism**

Executive Order 13132, entitled “Federalism” (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure “meaningful and timely input by state and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” is defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”



This direct final rule does not have federalism implications. It would not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. All of the test method updates in today's action will improve the performance and/or utilization by industry of the test methods. For the two alternative test methods, ASTM D 1319 and ASTM D 4815, today's action will continue to provide flexibility to the regulated community. The allowance of ASTM D 7039-04 will provide additional flexibility to the regulated community in meeting sulfur in gasoline testing requirements. Referencing the rounding method in ASTM E 29-02<sup>e1</sup> provides consistent guidance for the regulated community when determining whether a test result is in conformance with our motor vehicle fuels standards. Finally, for the measurement of sulfur in butane, today's action will provide industry with a more reliable, more readily available and better test method. Thus, Executive Order 13132 does not apply to this direct final rule.

**F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments**

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." "Policies that have tribal implications" are defined in the Executive Order to include regulations that have "substantial direct effects on one or more Indian

tribes, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes.”

This direct final rule does not have tribal implications. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in Executive Order 13175. This direct final rule applies to gasoline refiners, blenders and importers that supply gasoline or diesel fuel. All of the test method updates in today’s action will improve the performance and/or utilization by industry of the test methods. For the two alternative test methods, ASTM D 1319 and ASTM D 4815, today’s action will continue to provide flexibility to the regulated community. The allowance of ASTM D 7039-04 will provide additional flexibility to the regulated community in meeting sulfur in gasoline testing requirements. Referencing the rounding method in ASTM E 29-02<sup>e1</sup> provides consistent guidance for the regulated community when determining whether a test result is in conformance with our motor vehicle fuels standards. Finally, for the measurement of sulfur in butane, today’s action will provide industry with a more reliable, more readily available and better test method. Thus, Executive Order 13175 does not apply to this direct final rule.

**G. Executive Order 13045: Protection of Children from Environmental Health & Safety Risks**

Executive Order 13045: Protection of Children from Environmental health Risks and

Safety Risks (62 FR 19885, April 23, 1997) applies to any rule that: (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Order has the potential to influence the regulation. This rule is not subject to Executive Order 13045 because it does not establish an environmental standard intended to mitigate health or safety risks that may disproportionately affect children.

**H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use**

This direct final rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355 (May 22, 2001)) because it is not a significant regulatory action under Executive Order 12866.

**I. National Technology Transfer Advancement Act**

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law No. 104-113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards. This rulemaking involves technical standards. EPA has decided to use ASTM standards as described in Units II.A, II.B, II.C, II.D and II.F of the **SUPPLEMENTARY INFORMATION** section of this document. All technical standards included in today's rule are standards developed by ASTM, a voluntary consensus standards body, and thus raises no issues under the NTTAA.

## **J. Congressional Review Act**

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U. S. Senate, the U. S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A “major rule” cannot take effect until 60 days after it is published in the Federal Register. This action is not a “major rule” as defined by 5 U.S.C. 804(a).

## **VI. Statutory provisions and Legal Authority**

Statutory authority for today's direct final rule comes from sections 211(c), 211(i) and 211(k) of the CAA (42.U.S.C. 7545(c) and (k)). Section 211(c) and 211(i) allows EPA to regulate fuels that contribute to air pollution which endangers public health or welfare, or which impairs emission control equipment. Section 211(k) prescribes requirements for RFG and CG and requires EPA to promulgate regulations establishing these requirements. Additional support for the fuels controls in today's rule comes from sections 114(a) and 301(a) of the CAA.

**List of Subjects in 40 CFR Part 80**

Environmental protection, Air pollution control, Fuel additives, Gasoline, Diesel, Imports, Incorporation by reference, Motor vehicle pollution, Reporting and recordkeeping requirements.

Dated:

---

Administrator

For the reasons set forth in the preamble, part 80 of title 40, chapter I of the Code of Federal Regulations is amended as follows:

**PART 80-REGULATION OF FUELS AND FUEL ADDITIVES**

1. The authority citation for part 80 continues to read as follows:

Authority: 42 U.S.C. 7414, 7545 and 7601(a).

Subpart A - [Amended]

2. Section 80.2 is amended by revising paragraph (z) to read as follows:

**§ 80.2 Definitions.**

\* \* \* \* \*

(z) *Aromatic content* is the aromatic hydrocarbon content in volume percent as determined by ASTM standard test method D 1319-03, entitled, “Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption”. ASTM test method D 1319-03 is incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Dr., West Conshohocken, PA 19428-2959. Copies may be inspected at the Air Docket, EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW, Washington, D.C., or at the



National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to:

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

\* \* \* \* \*

3. Section 80.9 is added to Subpart A to read as follows:

**§ 80.9 Rounding a test result for determining conformance with a fuels standard.**

(a) For purposes of determining compliance with the fuel standards of 40 CFR Part 80, a test result will be rounded to the nearest unit of significant digits specified in the applicable fuel standard in accordance with the rounding method described in the ASTM standard practice, ASTM E 29-02<sup>e1</sup>, entitled, “Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications”.

(b) ASTM standard practice, E 29-02<sup>e1</sup> is incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. A copy may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Dr., West Conshohocken, PA 19428-2959. Copies may be inspected at the Air Docket, EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW, Washington, D.C., or at the National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call 202-741-6030 or go to:

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

\* \* \* \* \*

Subpart D - [Amended]

3. Section 80.46 is amended as follows:

- a. By revising paragraphs (a)(1), (a)(2), (a)(3)(i) through (a)(3)(iii) and (a)(4).
- b. By adding paragraph (a)(3)(iv).
- c. Revising paragraph (b).
- d. Revising paragraph (f)(3)(i).
- e. Revising paragraph (g)(2)(i).
- f. Revising paragraph (h).

**§ 80.46 Measurement of reformulated gasoline fuel parameters.**

(a) \* \* \*

(1) The sulfur content of gasoline must be determined by use of American Society for Testing and Materials (ASTM) standard method D 2622-03, entitled “Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry” or by one of the alternative method specified in paragraph (a)(3) of this section.

(2) Beginning January 1, 2004, the sulfur content of butane must be determined by the use of ASTM standard test method D 6667-01, entitled, “Standard Test Method for Determination of

Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence” or by the alternative method specified in paragraph (a)(4) of this section.

(3) \* \* \*

(i) ASTM standard method D 5453-03a, entitled, “Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Motor Oils by Ultraviolet Fluorescence,” or

(ii) ASTM standard method D 6920-03, entitled, “Standard Test Method for Total Sulfur in Naphthas, Distillates, Reformulated Gasolines, Diesels, Biodiesels, and Motor Fuels by Oxidative Combustion and Electrochemical Detection,” or

(iii) ASTM standard method D 3120-03a, entitled, “Standard Test Method for Trace Quantities of Sulfur in Light Liquid Petroleum Hydrocarbons by Oxidative Microcoulometry.”

(iv) ASTM standard method D 7039-04, entitled, “Standard Test Method for Sulfur in Gasoline and Diesel Fuel by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry.”

(4) Beginning January 1, 2004, any refiner or importer may determine the sulfur content of butane using any of the following methods; provided the refiner or importer test result is correlated with the method specified in paragraph (a)(2) of this section:

(i) ASTM standard method D 4468-85 (Reapproved 2000), “Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry,” or

(ii) ASTM standard method D 3246-96, entitled, “Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulemetry.”

(b) *Olefins*. Olefin content shall be determined using ASTM standard method D 1319-03, entitled “Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption.”

\* \* \* \* \*

(f) \* \* \*

(3) (i) Any refiner or importer may determine aromatics content using ASTM standard method D 1319-03, entitled “Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption,” for purposes of meeting any testing requirement involving aromatics content; provided that

\* \* \* \* \*

(g) \* \* \*

(2)(i) When oxygenates present are limited to MTBE, ETBE, TAME, DIPE, tertiary-amyl alcohol and C<sub>1</sub> to C<sub>4</sub> alcohols, any refiner, importer, or oxygenate blender may determine oxygen and oxygen content using ASTM standard method D 4815-03 entitled, “Standard Test Method for Determination of MTBE, ETBE, TAME, DIPE, tertiary-Amyl Alcohol and C<sub>1</sub> to C<sub>4</sub> Alcohols in

Gasoline by Gas Chromatography,” for purposes of meeting any testing requirement; provided that

\* \* \* \* \*

(h) *Incorporations by reference.* ASTM standard methods D 3606-99, entitled “Standard Test Method for Determination of Benzene and Toluene in Finished Motor and Aviation Gasoline by Gas Chromatography;” D 1319-03, entitled “Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption;” D 4815-03, entitled “Standard Test Method for Determination of MTBE, ETBE, TAME, DIPE, tertiary-Amyl Alcohol and C<sub>1</sub> to C<sub>4</sub> Alcohols in Gasoline by Gas Chromatography;” D 2622-03, entitled “Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry;” D 3246-96, entitled “Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry;” D 5191-01, entitled, “Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method);” D 5599-00, entitled, “Standard Test Method for Determination of Oxygenates in Gasoline by Gas Chromatography and Oxygen Selective Flame Ionization Detection;” D 5769-98, entitled, “Standard Test Method for Determination of Benzene, Toluene, and Total Aromatics in Finished Gasolines by Gas Chromatography/Mass Spectrometry,” and D 86-01, entitled, “Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure;” D 5453-03a, entitled, “Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence,” D 6920-03, entitled, “Standard Test Method for Total Sulfur in

Naphthas, Distillates, Reformulated Gasolines, Diesels, Biodiesels, and Motor Fuels by Oxidative Combustion and Electrochemical Detection,” D 3120-03a, entitled, “Standard Test Method for Trace Quantities of Sulfur in Light Petroleum Hydrocarbons by Oxidative Microcoulometry,” D 7039-04, entitled, “Standard Test Method for Sulfur in Gasoline and Diesel Fuel by Monochromatic Wavelength Dispersive X-ray Fluorescence Spectrometry,” D 6667-01, entitled, “Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence,” and D 4468-85 (Reapproved 2000), “Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry” are incorporated by reference in this section. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Dr., West Conshohocken, PA 19428-2959. Copies may be inspected at the Air Docket, EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC., or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to:

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

#### Subpart I - [Amended]

4. Section 80.580 is amended as follows:
  - a. By removing and reserving paragraphs (b)(1) and (c)(1).
  - b. By revising paragraph (c)(2)(i).

c. By revising paragraph (e)(1)(v).

**§ 80.580      What are the sampling and testing methods for sulfur?**

\*      \*      \*      \*      \*

(b) Test method for sulfur. (1) [Reserved]

\*      \*      \*      \*      \*

(c) Alternative test methods for sulfur. (1) [Reserved]

(2) Options for testing sulfur content of 500 ppm diesel fuel. (i) For motor vehicle diesel fuel and diesel fuel additives subject to the 500 ppm sulfur standard of § 80.520(c), and for NRLM diesel fuel subject to the 500 ppm sulfur standard of § 80.510(a), sulfur content may be determined using ASTM D 4294-03, ASTM D 5453-03a, or ASTM D 6920-03, provided that the refiner or importer test result is correlated with the appropriate method specified in paragraph (b)(2) of this section; or

\*      \*      \*      \*      \*

(e)      \*      \*      \*

(1)      \*      \*      \*

(v)      D 6920-03, Standard Test Method for Total Sulfur in Naphthas, Distillates, Reformulated Gasolines, Diesels, Biodiesels, and Motor Fuels by Oxidative Combustion and Electrochemical Detection.

\*      \*      \*      \*      \*