

## TITLE 13. CALIFORNIA AIR RESOURCES BOARD

### NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE REGULATIONS FOR GASOLINE AND DIESEL FUEL TEST METHODS

The Air Resources Board (ARB or Board) will conduct a public hearing at the time and place noted below to consider adoption of amendments to regulations for Gasoline and Diesel Fuel Test Methods.

DATE: January 25, 2013

TIME: 9:00 a.m.

PLACE: South Coast Air Quality Management District Office  
21865 E. Copley Drive  
Diamond Bar, CA 91765

This item will be considered at the second day of the Board's January meeting, which will commence at 9:00 a.m., on January 25, 2013. Please consult the agenda for the hearing, which will be available at least 10 days before January 24, 2013, to determine the order on which this item will be considered.

#### **INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW**

**Sections Affected:** Proposed amendments to California Code of Regulations, title 13, sections 2262.9, 2263, and 2282.

#### **Documents Incorporated by Reference:**

The following documents are incorporated by reference:

ASTM (2009), 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, in *Annual Book of ASTM Standards*, Method D4815-09, ASTM International, West Conshohocken, Pennsylvania, 2009.

ASTM (2009), Standard Test Method for Determination of Aromatic Content and Polynuclear Aromatic Content of Diesel Fuels and Aviation Turbine Fuels by Supercritical Fluid Chromatography, in *Annual Book of ASTM Standards*, method D5186-03(2009), ASTM International, West Conshohocken, Pennsylvania, 2003, reapproved without change, 2009.

ASTM (2007), Standard Test Method for Determination of Benzene, Toluene, Ethylbenzene, p/m Xylene, o Xylene, C<sub>9</sub> and Heavier Aromatics, and Total Aromatics in Finished Gasoline by Gas Chromatography, in *Annual Book of ASTM Standards*, method D5580-02(2007), ASTM International, West Conshohocken, Pennsylvania, 2002, reapproved without change, 2007.

ASTM (2010), Standard Test Method for Determination of Olefin Content of Gasolines by Supercritical Fluid Chromatography, in *Annual Book of ASTM Standards*, method D6550-10, ASTM International, West Conshohocken, Pennsylvania, 2010.

ASTM (2007), Standard Test Method for Determination of Olefin Content in Denatured Ethanol by Supercritical Fluid Chromatography, in *Annual Book of ASTM Standards*, method D7347-07e1, ASTM International, West Conshohocken, Pennsylvania, 2007.

ASTM (2010), Standard Test Method for Determination of Benzene and Total Aromatics in Denatured Fuel Ethanol by Gas Chromatography, in *Annual Book of ASTM Standards*, method D7576-10, ASTM International, West Conshohocken, Pennsylvania, 2010.

ASTM (2011), Standard Test Method for Determination of Trace Oxygenates in Automotive Spark Ignition Engine Fuel by Multidimensional Gas Chromatography, in *Annual Book of ASTM Standards*, method D7754-11, ASTM International, West Conshohocken, Pennsylvania, 2011.

### **Background:**

ARB regulates the physical and chemical properties of California reformulated gasoline (CARFG) and California diesel fuel (CDF) in order to reduce harmful vehicle emissions. The regulations specify a test method to determine the presence and amount of each regulated property in a fuel sample. These test methods are updated when better methods become available or when newer versions of existing methods offer improvements in accuracy, precision, or ease of use.

ARB adopted Phase 3 CARFG regulations in December, 1999, taking effect in December, 2003. The primary change implemented in Phase 3 was the prohibition of methyl *tert*-butyl ether (MTBE) and most other oxygenates, with ethanol as the only permitted oxygenate remaining, unless a multimedia evaluation allows for an alternative. Specifications for allowable levels of MTBE and other prohibited oxygenates were added, along with specifications for denatured ethanol intended for blending with California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB).

The test method currently specified for measuring MTBE and other prohibited oxygenates is not capable of measuring these compounds at the levels specified in the regulations, and therefore neither ARB nor stakeholders have the means to determine whether a gasoline meets these regulatory requirements.

The specifications for denatured ethanol adopted in the Phase 3 CARFG regulations include limits on the allowable concentrations of benzene, total aromatic hydrocarbons, and olefins. These classes of compounds do not exist naturally in ethanol. Their presence is due to the addition of the denaturant, which is typically gasoline, and is added to discourage human ingestion of the ethanol. Since no test methods for measuring these compounds in denatured ethanol existed at the time, the regulations state that compliance is to be determined by analyzing the denaturant before it is

blended into the pure ethanol. The vast majority of denatured ethanol used in California is produced outside the state, and as a result, ARB cannot adequately enforce these denatured ethanol specifications. Additionally, stakeholders such as terminal operators and fuel blenders have no way to check whether the denatured ethanol they use meets the state's requirements.

### **Objectives and Benefits:**

ARB is required to adopt and implement motor vehicle fuel specifications for the control of air contaminants and sources of air pollution, to eliminate MTBE from California gasoline, and to achieve the maximum feasible reductions from motor vehicles and motor vehicle fuels in order to attain state standards at the earliest practicable date. The CARFG and CDF regulations were designed with these goals in mind, taking into account cost-effectiveness and technological feasibility.

The proposed amendments will better enable ARB and stakeholders to adequately measure the chemical properties of CARFG and denatured ethanol to determine their compliance with ARB's fuel regulations. In addition, updates to the more recent versions of the test methods will correct errors, provide additional information, and streamline test procedures. A more detailed discussion of the purpose and benefits of the proposed amendments may be found in the Initial Statement of Reasons.

### **Staff's Proposal:**

***New test for MTBE and other prohibited oxygenates*** – ARB staff has worked with the Western States Petroleum Association (WSPA), ASTM International (formerly the American Society for Testing and Materials), and other stakeholders to develop a new test method, ASTM D7754-11, for measuring oxygenates at the low levels specified in the Phase 3 CARFG regulations. Staff is proposing the adoption of this new test method, enabling improved enforcement of the CARFG regulations.

***New test methods for denatured ethanol*** - ARB staff has worked WSPA, ASTM International, and other stakeholders to develop new test methods for measuring benzene, total aromatic hydrocarbons, and olefins in denatured ethanol. Staff is proposing the adoption of these new test methods (ASTM D7576-10 for aromatic hydrocarbons and benzene; ASTM D7347-07e1 for olefins), enabling improved enforcement of the CARFG regulations and providing the capability of testing denatured ethanol to stakeholders such as terminal operators and fuel blenders. Staff is proposing to retain the existing method of indirectly measuring these compounds in the denaturant and applying a dilution factor to determine the concentration in the denatured ethanol. However, in the event of a discrepancy between the direct testing of the denatured ethanol and the indirect testing of the denaturant, the results of testing the denatured ethanol shall take precedence.

**Updates to existing test methods** – ARB staff works with WSPA, ASTM International, and other stakeholders on an ongoing basis to improve existing test methods. Staff is proposing to update the test methods for measuring benzene, aromatic hydrocarbons, olefins, and ethanol in CARFG and aromatics in CDF to their most recent published versions. Specifically, staff proposes that the test method for future analyses of olefins in California gasoline be updated from ASTM D6550-00 to ASTM D6550-10, for future analyses of permitted oxygenates in California gasoline be updated from ASTM D4815-04 to ASTM D4815-09, future analyses of benzene and aromatic hydrocarbons in gasoline be updated from ASTM D5580-00 to ASTM D5580-07, and future analyses of aromatic hydrocarbons and polycyclic aromatic hydrocarbons in California diesel fuel be updated from ASTM D5186-96 to ASTM D5186-03(2009). These updates offer corrections of minor errors, new precision statements, and/or simplified test procedures.

**Change in test method for sulfur in California gasoline** – The CARFG regulations currently allow the use of either ASTM D2622-94 or ASTM D5453-93 for the measurement of sulfur in California gasoline. Staff is proposing to eliminate the use of ASTM D2622-94 and to refer exclusively on ASTM D5453-93 for future tests, because ASTM D5453-93 is more sensitive, and therefore, more appropriate for lower levels of sulfur in gasoline.

## **CONSISTENCY AND COMPATIBILITY WITH EXISTING STATE REGULATIONS**

The proposed amendments are neither inconsistent nor incompatible with existing state regulations.

## **COMPARABLE FEDERAL REGULATIONS**

The United States Environmental Protection Agency (U.S. EPA) administers federal RFG regulations requiring that gasoline sold in various areas of the country with poor air quality meet standards for federal reformulated gasoline. Most gasoline sold in California is subject to the federal RFG standards as well as having to meet the CARFG standards. All diesel fuel sold in California is subject to both California and federal standards. These standards work complementarily.

The ARB has worked with U.S. EPA and fuel producers to avoid unnecessary duplication and conflicts between the federal and state enforcement agencies. As a result of this cooperative effort, the federal regulations allow producers and importers of California gasoline and diesel fuel to use test methods specified in the ARB's regulations in lieu of the otherwise applicable federal methods (40 CFR section 80.81(h)).

## **STATE IMPLEMENTATION PLAN REVISION**

If adopted by ARB, ARB plans to submit the proposed regulatory action to the U.S. EPA for approval as a revision to the California State Implementation Plan (SIP) required by the federal Clean Air Act (CAA). The adopted regulatory action would be submitted as a SIP revision because it amends regulations intended to reduce emissions of air

pollutants in order to attain and maintain the National Ambient Air Quality Standards promulgated by U.S. EPA pursuant to the CAA.

### **AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS**

ARB staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the economic and environmental impacts of the proposal. The report is entitled: "Initial Statement of Reasons for Proposed Rulemaking, Public Hearing to Consider Amendments to the Regulations for Gasoline and Diesel Fuel Test Methods."

Copies of the ISOR and the full text of the proposed regulatory language, in underline and strikethrough format to allow for comparison with the existing regulations, may be accessed on ARB's website listed below, or may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814, (916) 322-2990, on December 5, 2012.

### **Final Statement of Reasons Availability**

Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on ARB's website listed below.

### **Agency Contact Persons**

Inquiries concerning the substance of the proposed regulation may be directed to the designated agency contact persons, Dr. Judson Cohan at (626) 575-6792 or Mr. Paul Rieger at (626) 575-6876.

Further, the agency representative and designated back-up contact persons, to whom nonsubstantive inquiries concerning the proposed administrative action may be directed are Ms. Lori Andreoni, Manager, Board Administration and Regulatory Coordination Unit, (916) 322-4011, or Ms. Trini Balcazar, Regulations Coordinator, (916) 445-9564. The Board staff has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

### **Internet Access**

This notice, the ISOR and all subsequent regulatory documents, including the FSOR, when completed, are available on ARB's website for this rulemaking at <http://www.arb.ca.gov/regact/2013/diesel2013/diesel2013.htm>

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulations are presented below.

## **DISCLOSURES REGARDING THE PROPOSED REGULATION**

Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action would create costs to ARB of approximately \$90,000 over a five year period. The proposed regulatory action would not create costs or savings to any other State agency or in federal funding to the State, costs or mandate to any local agency or school district, whether or not reimbursable by the State pursuant to Government Code, title 2, division 4, part 7 (commencing with section 17500), or other nondiscretionary cost or savings to State or local agencies.

## **COST IMPACTS ON REPRESENTATIVE PRIVATE PERSONS OR BUSINESSES**

In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on representative private persons or businesses. The CARFG and CDF regulations do not require refiners, producers, or importers to test their fuels. However, if the refiners, producers, or importers were to voluntarily choose to test their fuels using the test methods specified in the proposed amendments, they would incur costs of approximately \$1.2 million over a five year period, equal to approximately 0.002 cents per gallon of CARFG produced. The only proposed amendment to the CDF regulations is an update to one test method; that proposed amendment streamlines the testing of CDF by reducing the number of quality control (QC) samples. As a result, if CDF refiners, producers, or importers were to test their CDF using the test method specified in the proposed amendment, they would reduce their costs due to less time performing QC and less materials and waste associated with the QC. The ARB is not aware of any cost impacts that a representative private person or any other business would necessarily incur in reasonable compliance with the proposed action. This is because the proposed amendments do not change the specifications of the CARFG or CDF and are not expected to increase the production costs.

## **SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESS, INCLUDING ABILITY TO COMPETE**

The Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

## **STATEMENT OF THE RESULTS OF THE ECONOMIC IMPACT ASSESSMENT PREPARED PURSUANT TO GOVERNMENT CODE SEC. 11346.3(b)**

The Executive Officer has determined that the proposed regulatory action would not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

## **BENEFITS OF THE PROPOSED REGULATION:**

The proposed amendments are simply changing or updating test methods that are specified in CaRFG and CDF regulations. No direct impacts to the health, safety, and welfare of California residents, worker safety, or the state's environment and quality of life are anticipated. No economic benefits are expected from the proposed regulatory action.

## **EFFECT ON SMALL BUSINESS**

The Executive Officer has also determined, pursuant to California Code of Regulations, title 1, section 4, that the proposed regulatory action would not affect small businesses because only gasoline refiners are affected, and no gasoline refiners are small businesses.

## **ALTERNATIVES**

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the Board, or that has otherwise been identified and brought to the attention of the Board (which includes during preliminary workshop activities), would be more effective in carrying out the purpose for which the action is proposed, or would be as effective and less burdensome to affected private persons than the proposed action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

## **ENVIRONMENTAL ANALYSIS**

In accordance with ARB's certified regulatory program, California Code of Regulations, title 17, sections 60006 through 60007, and the California Environmental Quality Act, Public Resources Code section 21080.5, ARB has conducted an analysis of the potential for significant adverse and beneficial environmental impacts associated with the proposed regulatory action. The environmental analysis of the proposed regulatory action can be found in Chapter 6 of the ISOR.

## **SUBMITTAL OF COMMENTS AND WRITTEN COMMENT PERIOD**

Interested members of the public may also present comments orally or in writing at the meeting, and comments may be submitted by postal mail or by electronic submittal before the meeting. The public comment period for this regulatory action will begin on December 10, 2012. To be considered by the Board, written comments, not physically submitted at the meeting, must be submitted on or after December 10, 2012 and received no later than 12:00 noon January 23, 2013, and must be addressed to the following:

Postal mail: Clerk of the Board, Air Resources Board  
1001 I Street, Sacramento, California 95814

Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

**You can sign up online in advance to speak at the Board meeting** when you submit an electronic board item comment. For more information go to:

<http://www.arb.ca.gov/board/online-signup.htm>

Please note that under the California Public Records Act (Gov. Code, § 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request.

ARB requests that written and email statements on this item be filed at least 10 days prior to the hearing so that ARB staff and Board members have additional time to consider each comment. The Board encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

Additionally, the Board requests but does not require that persons who submit written comments to the Board reference the title of the proposal in their comments to facilitate review.

### **STATUTORY AUTHORITY AND REFERENCES**

This regulatory action is proposed under that authority granted in Health and Safety Code sections 39600, 39601, 43013, 43013.1, 43018, and 43101, Health and Safety Code, and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975). This regulatory action is proposed to implement, interpret, and make specific sections 39000, 39001, 39002, 39003, 39010, 39500, 39515, 39516, 41511, 43000, 43013, 43013.1, 43016, 43018, 43101, and 43830.8, Health and Safety Code, and *Western Oil and Gas Ass'n. v. Orange County Air Pollution Control District*, 14 Cal.3d 411, 121 Cal.Rptr. 249 (1975).

### **HEARING PROCEDURES**

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Government Code, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340).

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with non-substantial or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately

placed on notice and that the regulatory language as modified could result from the proposed regulatory action; in such event, the full regulatory text, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15-days before it is adopted.

The public may request a copy of the modified regulatory text from ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814, (916) 322-2990.

### **SPECIAL ACCOMMODATION REQUEST**

Special accommodation or language needs can be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language; or
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 10 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Comodidad especial o necesidad de otro idioma puede ser proveído para alguna de las siguientes:

- Un intérprete que esté disponible en la audiencia.
- Documentos disponibles en un formato alterno u otro idioma.
- Una acomodación razonable relacionados con una incapacidad.

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envíe un fax a (916) 322-3928 lo más pronto posible, pero no menos de 10 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

CALIFORNIA AIR RESOURCES BOARD

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James N. Goldstene  
Executive Officer

Date: November 27, 2012