

## TITLE 13. CALIFORNIA AIR RESOURCES BOARD

### NOTICE OF PUBLIC HEARING TO CONSIDER 2011 AMENDMENTS TO THE CALIFORNIA REFORMULATED GASOLINE REGULATIONS

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 the California Reformulated Gasoline (CaRFG) Regulations. The proposed amendments would: (1) help preserve the benefits of the Phase 2 CaRFG standards and to correct errors of coefficients in the Predictive Model and (2) include other miscellaneous changes to improve consistency, flexibility, and enforceability.

DATE: October 20, 2011

TIME: 9:00 a.m.

PLACE: California Environmental Protection Agency  
Air Resources Board  
Byron Sher Auditorium, Second Floor  
1001 I Street  
Sacramento, California 95814

This item may be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., October 20, 2011. This item is scheduled to be heard on the Board's Consent Calendar. All items on the consent calendar can be voted on by the Board immediately after the start of the public meeting. An item will be removed from the consent calendar at the request of a Board member or if someone in the audience would like to speak on that item.

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

**Sections Affected:** Proposed repeal of section 2258, and proposed amendments to sections 2260, 2261, 2264, 2265 (and the incorporated "California Procedures for Evaluating Alternative Specifications for Phase 3 Reformulated Gasoline Using the California Predictive Model" as last amended August 7, 2008), 2265.1, 2266, 2266.5, and 2271, of title 13, California Code of Regulations (CCR).

## **Background**

The ARB administers the CaRFG regulations, which have applied to all California gasoline since March 1996; the Phase 3 CaRFG standards have applied since December 31, 2003. The CaRFG regulations establish specifications for the following eight gasoline properties: sulfur, benzene, olefins, aromatic hydrocarbons, and oxygen content, 50 percent distillation temperature (T50), 90 percent distillation temperature (T90), and summertime Reid vapor pressure (RVP). The Phase 3 CaRFG regulations also prohibit the use of oxygenated compounds (oxygenates) other than ethanol in CaRFG, and regulate the composition of denatured ethanol that can be blended with California reformulated gasoline blendstock for oxygenate blending (CARBOB) to produce CaRFG.

The CaRFG regulations allow refiners to use a “Predictive Model” to certify alternative formulations<sup>1</sup>. The Predictive Model is a set of mathematical equations that relate emission rates of exhaust and evaporative hydrocarbons and carbon monoxide (CO), oxides of nitrogen (NOx), and potency-weighted toxics for four toxic air contaminants (benzene, 1,3-butadiene, formaldehyde, and acetaldehyde) to the values of the eight regulated gasoline properties. An alternative gasoline formulation based on the Predictive Model is acceptable if emissions of reactivity-weighted hydrocarbons and CO (total ozone forming potential), NOx, and potency-weighted toxics resulting from this formulation are no greater than emissions from gasoline having the specifications set forth in the CaRFG standards. Currently, most of the gasoline sold in California complies with the CaRFG regulations through the use of the Predictive Model.

Since 1995, most of the State’s gasoline has contained about two percent oxygen by weight. From 1995 to 2002, methyl tertiary-butyl ether (MTBE) was the oxygenated compound used in most California gasoline. Since December 31, 2003—the Phase 3 CaRFG compliance deadline—ethanol has been the only oxygenate allowed in California gasoline<sup>2</sup>. Since the phase-out of MTBE, most California gasoline contained 5.7 percent by ethanol. Since January 2010, refiners have begun producing most California gasoline with 10 percent ethanol. This recent increase in ethanol can be traced to the Federal Renewable Fuels Standard (RFS2), the 2007 amendments to the CaRFG regulations, and California’s Low Carbon Fuel Standard. RFS2 requires increasing amounts of biofuels, such as ethanol, to be used in transportation fuels. The 2007 amendments to the CaRFG regulations required emissions associated with permeation to be mitigated. Permeation refers to the diffusive process whereby fuel molecules migrate through the materials of a vehicle’s fuel system. Eventually, the fuel molecules are emitted into the air where they contribute to evaporative emissions from the vehicle. Increasing oxygen content in gasoline helps to mitigate evaporative hydrocarbon emissions such as permeation. The Low Carbon Fuel Standard requires the reduction of carbon intensity in transportation fuels, mostly through the increased use of low carbon biofuels, such as cellulosic ethanol.

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<sup>1</sup> California Code of Regulations Title 13, Section 2265

<sup>2</sup> California Code of Regulations Title 13, Section 2262.6

## The Proposed Amendments

Health and Safety Code section 43013.1 requires that the Phase 3 CaRFG regulations preserve the emissions and air quality benefits of the Phase 2 CaRFG program. The purpose of the proposed amendments is to correct drafting errors in the *California Procedures for Evaluating Alternative Specifications for Phase 3 Reformulated Gasoline Using the California Predictive Model* (Procedures Guide). There are nine coefficients that are proposed to be amended in the Procedures Guide. Eight of the coefficients have a very slight effect on the potency-weighted toxics (PWT) emission portion of the Predictive Model. The last coefficient does not affect the emissions output of the Predictive Model but is being amended for consistency with the correct values. The proposed coefficients would slightly ease the PWT emission standard as compared to the current incorrect coefficients in the Predictive Model, but still preserve the air quality benefits of CaRFG2 as required by Health and Safety Code section 43013.1. Staff is also proposing several additional amendments below.

In addition to correcting the coefficients, staff is proposing to require that gasoline with an RVP of 7.2 psi or less (5.99 psi or less for CARBOB) be certified as an RVP-controlled gasoline. This change would ensure that summertime gasoline produced early would meet all the requirements for summertime gasoline.

Staff is also proposing to delete an outdated provision for gasoline produced in 1992 through 1996. For gasoline sold or supplied between November 1, 1992, and February 29, 1996, California Code of Regulations, title 13, section 2258 specifies the oxygen content of gasoline during the wintertime. Section 2262.5 specifies the oxygen content of gasoline sold or supplied during the wintertime beginning on March 1, 1996. As section 2258 is no longer applicable, staff proposes to repeal this outdated section.

Staff is proposing to amend section 2266 to comport with the intent that any producer or importer intending to sell, offer, or supply a final blend of test-certified alternative gasoline formulation shall notify the Executive Officer sufficiently in advance to allow ARB inspectors an opportunity to sample and test the gasoline. Notification by the producers or importers after the gasoline has been transferred or commingled defeats these purposes.

Staff is proposing to amend section 2266.5(f)(1) to comport with the intent that no person may combine any CARBOB that has been supplied from the facility at which it was produced or imported with anything other than what is listed in the regulation.

Staff is proposing to amend the definition of racing vehicle to add clarity and more closely align with U.S. Environmental Protection Agency's (EPA) definition.

The staff is also proposing other amendments to the CaRFG regulations to improve consistency, flexibility, and enforceability.

## **COMPARABLE FEDERAL REGULATIONS**

The federal reformulated gasoline (RFG) regulations apply to about 80 percent of California's gasoline and are set forth in Code of Federal Regulations (CFR), title 40, part 80, section 40 et seq. The CaRFG regulations apply to all gasoline sold, supplied, or offered in California. All CaRFG meets or exceeds the requirements of the federal RFG regulations, resulting in significant additional emission reductions. Under 40 CFR § 80.81, gasoline meeting the Phase 3 CaRFG standards is exempt from several of the enforcement requirements of the federal RFG regulations.

Congress adopted a renewable fuels standard in 2005 (RFS) and strengthened it in December 2007 (RFS2) as part of the Energy Independence and Security Act (EISA). The RFS2 requires that 36 billion gallons of biofuels be sold annually by 2022, of which 21 billion gallons must be "advanced" biofuels and the other 15 billion gallons can be corn ethanol (See 40 CFR § 80.81100 et seq.).

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

The ARB staff has prepared a Staff Report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the environmental and economic impacts of the proposal and supporting technical documentation. The report is entitled "Proposed Amendments to the California Reformulated Gasoline Regulations."

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 the 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 August 31, 2011.

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

Inquiries concerning the substance of the proposed amendments may be directed to the designated agency contact persons: Mr. Mike Waugh, Chief, Transportation Fuels Branch, (916) 322-6020 or Mr. Adrian Cayabyab, Air Resources Engineer, Fuels Section, (916) 327-1515.

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 & Regulatory Coordination Unit, (916) 322-4011, or Ms. Amy Whiting, Regulations Coordinator, (916) 322-6533. The



ARB 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.

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/2011/carfg11/carfg11.htm>

### **COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED**

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

In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on representative private persons or businesses. The ARB staff is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

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.

In accordance with Government Code section 11346.3, 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.

The Executive Officer has also determined, pursuant to title 1, CCR, section 4, that the proposed regulatory action would not affect small businesses because the affected refineries are not small businesses.

In accordance with Government Code sections 11346.3(c) and 11346.5(a)(11), the Executive Officer has found that the reporting requirements of the CaRFG regulations that apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

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 not create costs or savings to any 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 costs or savings to State or local agencies.

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, 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. Alternatives that staff considered are discussed in the ISOR.

### **SUBMITTAL OF COMMENTS**

Interested members of the public may present comments orally or in writing at the meeting, or 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 **September 3, 2011**. To be considered by the Board, written comments not physically submitted at the meeting must be submitted on or after **September 3, 2011**, and received **no later than 12:00 noon on October 19, 2011**, 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>

**\*New Feature\***

**You can now 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. Additionally, this information may become available via Google, Yahoo, and any other search engines.

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 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, 39048, 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 (i.e., Braille, large print, etc.) or another language;
- 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.

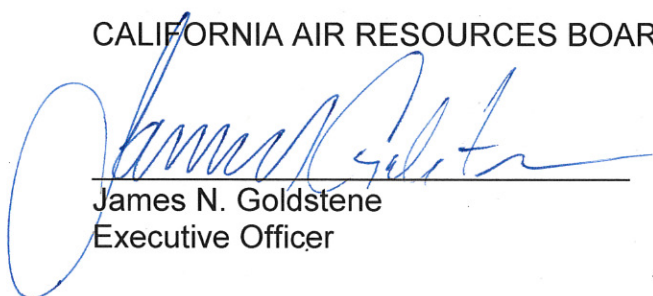


Comodidad especial o necesidad de otro idioma puede ser proveído para alguna de las siguientes:

- Un intérprete que esté disponible en la audiencia.
- Documentos disponibles en un formato alterno (por decir, sistema Braille, o en impresión grande) 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



James N. Goldstene  
Executive Officer

Date: August 23, 2011

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at [www.arb.ca.gov](http://www.arb.ca.gov).*