TITLE 17. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER AMENDMENTS TO THE LOW CARBON FUEL STANDARD REGULATION

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 Low Carbon Fuel Standard (LCFS) regulation. The LCFS is a greenhouse gas (GHG) control measure adopted pursuant to AB 32 (California Warming Solutions Act of 2006). It is intended to reduce, on a full-fuel lifecycle basis, the carbon intensity of transportation fuels used in California.

- DATE: December 15, 2011
- TIME: 9:00 a.m.
- PLACE: California Environmental Protection Agency Air Resources Board Byron Sher Auditorium 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., December 15, 2011, and may continue at 8:30 a.m., on December 16, 2011. This item may not be considered until December 16, 2011. Please consult the agenda for the hearing, which will be available at least 10 days before December 15, 2011, to determine the day on which this item will be considered.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW

<u>Sections Affected</u>: Proposed amendments to California Code of Regulations (CCR), title 17, sections 95480.1, 95481, 95482, 95484, 95485, 95486, and 95488. Proposed adoption of new sections 95480.2, 95480.3, 95480.4, and 95480.5 title 17, CCR.

The following documents are incorporated in the regulation by reference: (1) *Credit Transfer Form* (October 28, 2011), (2) *Credit Allocation Form* (October 28, 2011), (3) Supplement (October 28, 2011) to "Stationary Source Division, Air Resources Board (February 27, 2009, v.2.1), Detailed California-Modified GREET Pathway for California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB) from Average Crude Refined in California;" (4) Supplement (October 28, 2011) to "Stationary Source Division, Air Resources Board (February 28, 2009, v.2.1), Detailed California-Modified GREET Pathway for Ultra Low Sulfur Diesel (ULSD) from Average Crude Refined in California;" and (5) Supplement (October 28, 2022) to "Stationary Source Division, Air Resources Board (February 27, 2009, v.2.1), Detailed California-Modified GREET Pathway for California Reformulated Gasoline (CaRFG);" all of which are available at the ARB website noted below for this rulemaking.

Background:

The Board approved the LCFS regulation for adoption on April 23, 2009. Background information for the LCFS regulation was provided in the original notice of proposed rulemaking for the April 2009 Board hearing.¹ The regulation entered into full effect on April 15, 2010. Implementation of the carbon intensity (CI) reduction requirements and compliance schedules began on January 1, 2011. The compliance schedules are designed to reduce the CI of transportation fuels used in California by at least 10 percent by the year 2020.²

Since the regulation went into effect, regulated parties have operated under the LCFS program with no significant compliance issues. In short, the LCFS is working as designed. Regulated parties are using the LCFS Reporting Tool (LRT) to submit electronically their quarterly progress and annual compliance reports with no known significant problems. Further, fuel producers are innovating and achieving material reductions in their fuel pathways' carbon intensity, an effect the LCFS regulation is expressly designed to encourage, which is reflected in the large number of applications submitted under the "Method 2A/2B" process. To date, ARB staff has posted 26 submittals for Method 2A/2B applications, representing over 100 individual new or modified fuel pathways with substantially lower carbon intensities than those provided in the "Look Up" tables in the regulation,³ on the LCFS portal.⁴ Substantial credit generation also indicates successful implementation of the program; in the first quarter of 2011 alone, regulated parties reported generating about 225,000 metric tons (MT) of LCFS credits versus about 150,000 MTs of deficits.

To the extent questions from stakeholders have arisen, they have been addressed through regulatory advisories widely broadcast to stakeholders on the LCFS list serve,⁵ issuance of an LCFS Guidance Document that responds to frequently asked questions,⁶ and communications with individual stakeholders on their specific questions.

However, complex regulations like the LCFS generally can benefit from further refinements. Based on feedback from regulated parties as well as other stakeholders, and a review of lessons learned since implementation began, staff has identified

¹ See "Background" section in "Notice of Public Hearing to Consider Adoption of a Proposed Regulation to Implement the Low Carbon Fuel Standard" for the original April 2009 public hearing, which is incorporated herein by reference and is available at <u>http://www.arb.ca.gov/regact/2009/lcfs09/lcfs09/lcfsnot.pdf</u>.

² The LCFS regulation is described in detail in the staff report for the original rulemaking, which was released to the public on March 5, 2009, along with other rulemaking materials available at http://www.arb.ca.gov/regact/2009/lcfs09.htm

³See 17 CCR section 95486(b), available at <u>http://www.arb.ca.gov/regact/2009/lcfs09/lcfscombofinal.pdf</u>.

⁴ Pursuant to LCFS Regulatory Advisory 10-04, regulated parties are permitted to use the Method 2A/2B pathways and carbon intensities when they are posted by ARB staff prior to a hearing by the Executive Officer to consider taking action on such proposed pathways. See http://www.arb.ca.gov/fuels/lcfs/122310lcfs-rep-adv.pdf.

⁵ See Advisories 10-02, 10-03, 10-04, and 10-04A at http://www.arb.ca.gov/fuels/lcfs/lcfs.htm.

⁶ See <u>http://www.arb.ca.gov/fuels/lcfs/LCFS_Guidance_(Final_v.1.0).pdf</u>.

specific areas of the regulation for clarification and other improvements. These proposed improvements are expected to better ensure the successful implementation of the LCFS.

Description of the Proposed Regulatory Action

As noted, the proposal clarifies, streamlines, and improves certain provisions of the LCFS regulation; collectively, these changes are expected to help ensure the successful implementation of the program.

The proposed amendments address several aspects of the regulation, including: reporting requirements, credit trading, regulated parties, opt-in and opt-out provisions, definitions, and other clarifying language. A summary description of each of the proposed amendments is provided below; a more detailed discussion of the changes can be found in the ISOR for this proposed regulatory action.

Opt-In and Opt-Out Provisions

Various low-carbon and exempted fuel providers, already meeting 2020 carbon intensity standards, have expressed their intent and desire to opt into the LCFS program as a regulated party, but they are unsure of the process and if they can opt out in the future. To address this concern, staff is proposing to add specific opt-in and opt-out provisions in the regulation. These provisions would specify the process and information submittals needed for a fuel provider to opt in or opt out as a regulated party.

In addition, several out-of-state fuel producers and intermediate fuel suppliers expressed the desire to opt into the program as regulated parties. The current regulatory language does not confer regulated party status to these out-of-state entities because of jurisdictional concerns. These parties are further upstream and closer to the starting point of fuel production than currently designated regulated parties (i.e., fuel importers and California producers). To address this, staff is proposing regulatory amendments that would permit such out-of-state entities to voluntarily elect to become regulated parties and thereby become subject to California jurisdiction.

Further, several gas utilities have expressed a desire to opt into the program when a person, who would normally be qualified to opt in as a regulated party for compressed natural gas (CNG), decides not to do so. An example of this is a school district that operates its own CNG fueling station; if it chooses not to opt into the LCFS program,⁷ the gas utilities would be able to opt into the regulation in the school district's place under specified conditions. By opting into the program in lieu of an entity that chooses not to opt in, the gas utility will be able to capture LCFS credits that otherwise would have been orphaned and unavailable for use in the credit market.

⁷ Under section 95480.1(b) of the current LCFS regulation, an entity that provides certain low CI fuels for transportation use, such as CNG for school buses, is normally exempt from the regulation and would need to opt into the program in order to become a regulated party and generate LCFS credits.

These proposed opt-in/opt-out provisions are intended to work in tandem with the enhanced regulated party changes described below.

Enhanced Regulated Party

Staff has identified several ways to enhance the regulated party definitions so that more fuel producers and suppliers will become or can become regulated parties. First, as noted above, several out-of-state fuel providers and intermediate entities have expressed their desire to be able to opt in as a regulated party under the regulation. Accordingly, staff is proposing to amend the definition for "producer" to include producers in California and outside the State, and amendments to facilitate regulated party status for intermediate entities. Once an out-of-state producer opts in, it can pass the compliance obligation down to an intermediate entity before the California importer; the intermediate entity, in turn, would need to opt in to formalize its status as the regulated party for that fuel.

Second, several fuel marketers that operate transloading⁸ facilities expressed their desire to be regulated under the program as "importers." The current regulatory text would prohibit such entities from becoming regulated parties. This is because the current definition for "import facility" requires the presence of a stationary storage tank into which the fuel is transferred after delivery into the State. Therefore, to confer regulated party status to those marketers, staff is proposing to change the definitions of "import facility" such that the regulated party status is conferred to those entities that own title to a fuel in the transportation equipment when the fuel is delivered in California.

Method 2A/2B Certification

The approval of new or modified fuel pathways (i.e., a Method 2A/2B approval)⁹ under the regulation currently requires a formal rulemaking. A formal rulemaking is a lengthy and resource-intensive undertaking, requiring an "initial statement of reasons;" a 45-day comment period; a "final statement of reasons," which provides the agency's responses to comments received on the proposal; and a public hearing. This formal process typically takes about six months to a year. Based on the potential efficiency gains, the Board directed staff under Resolution 09-31 to investigate the feasibility of converting the rulemaking process into a more streamlined certification process.¹⁰ From this investigation, staff is proposing to convert the current process into an application program to facilitate more expeditious reviews of Method 2A/2B submittals.

⁸ A "transloading" facility is one in which fuel (e.g., ethanol) is delivered by rail tank car and transferred directly into a cargo tanker truck without first going into a stationary storage tank. Indeed, transloading facilities do not have stationary storage tanks for the fuel that is delivered by rail.

⁹ See 17 CCR section 95486(c) through (f).

¹⁰ See <u>http://www.arb.ca.gov/regact/2009/lcfs09/res0931.pdf</u>.

Credit Trading

The current LCFS regulation allows regulated parties to trade and transact LCFS credits, but it does not specify ARB's role in the transactions, information about the credit market to be published by ARB, and other relevant provisions and requirements. Therefore, staff is proposing a new section to be added to the LCFS regulation to provide more detail on how credits and deficits will be tracked. The proposal also specifies the process for regulated parties to use for acquiring, banking, transferring, and retiring credits. Other provisions relevant to credit trading are also proposed.

High Carbon-Intensity Crude Oil

The current regulation contains a provision requiring regulated parties of petroleum-based fuels to account for their use of high carbon-intensity crude oil (HCICO) in their crude slates. The purpose of the HCICO provisions is to ensure that increases in the overall CI of CARBOB¹¹ and ULSD that might occur over time due to the use of more-carbon-intensive crudes are mitigated and do not diminish the emission reductions anticipated from the LCFS regulation. A regulated party is required to use the average CI value shown in the Lookup Table if the fuel/blendstock is derived from crude oil that is either not a HCICO¹², or was included in the 2006 California baseline crude mix (i.e., originated from a location which contributed two percent or more of the total crude oil refined in California in 2006 ["crude basket"]). A crude oil that does not satisfy both of these conditions is referred to as non-basket HCICO.

The current regulation requires the regulated party to account for a "baseline deficit" (the difference in CI between the compliance standard and average CI for CARBOB/ULSD as shown in the Lookup Table), as well as an "incremental deficit" incurred from using a non-basket HCICO (the difference between the average CI for all crudes, including HCICO, and the actual CI of the HCICO used). Petroleum refiners in California assert that the current HCICO provisions are overly burdensome to their industry, while other stakeholders maintain that the LCFS should continue to prevent increases in lifecycle carbon emissions that could occur if higher intensity crudes are used to replace existing supplies. ARB staff worked with stakeholders to determine if there were better options that would both meet the intent of the regulation (to ensure that the LCFS benefits are not diminished due to increases in GHG emissions from higher carbon intensity crude supplies) and address, to the extent possible, the concerns laid out by the various stakeholders.

Accordingly, staff is proposing a refined accounting approach that would improve the regulation in a number of ways. The proposal is similar to the existing provision in that it would continue to require refiners to account for both a "baseline deficit" and an "incremental deficit". This would maintain the requirement that refiners account for sector-wide changes over time due to the CI of crudes processed in California.

¹¹ CARBOB means the California reformulated gasoline blendstock for oxygenate blending.

¹² HCICO is defined as any crude oil that has a total production and transport carbon-intensity value greater than 15.00 g CO2e/MJ. See section 95486(b)(2)(A).

However, the proposal differs from the existing provision in several ways. First, the concept of a grandfathered "basket" of crudes would be replaced with a "baseline" from which additional HCICO use would be calculated. Second, the baseline deficit would be based on a more recent baseline year to reflect more accurate data than were available for the 2009 rulemaking. Third, the incremental deficit would not apply a 15.00 g CO_2e/MJ bright line for differentiating between HCICOs and non-HCICOs. Instead, the proposal would eliminate the distinction entirely and simply require refiners to account for the difference in actual crude CIs that occur over time relative to a specified baseline. Thus, this would eliminate the "either/or" approach in the current provision and replace it with a continuum-based approach.

It should be noted that ARB is continuing to work with stakeholders on the development of alternatives and may propose additional modifications to this provision. Any additional modifications to this proposal would be made available for a 15-day comment period after the December 2011 Board hearing.

Electricity Regulated Party Revisions

The Board directed staff in Resolution 09-31 to review the provisions applicable to regulated parties for electricity and propose amendments if appropriate. Since the Board approved the regulation in 2009, the markets for electric vehicles and EV fueling infrastructure have evolved and continue to evolve. To reflect this market transformation, staff is proposing amendments that clearly designate the regulated parties for various electric vehicle (EV) charging scenarios, the requirements that would apply to designated regulated parties, and, to maximize the number of electricity-generated credits available for use in the LCFS, the default regulated party if the first-in-line regulated parties such as electric utilities, non-utilities installing electric vehicle service equipment (EVSE) with a customer contract, business owners, and fleet operators who include three or more EVs in their fleets.

Energy Economy Ratios

In Resolution 09-31, the Board directed staff to reevaluate the Energy Economy Ratios (EER) for heavy-duty vehicles burning CNG or liquefied natural gas (LNG) vehicles and update them if appropriate. Accordingly, staff has reevaluated those EERs and is proposing to revise them to reflect updated information. In addition, staff has reevaluated and proposes revisions to the EERs for light-duty battery electric vehicles (BEV), plug-in-hybrid electric vehicles (PHEV), and light-duty fuel cell vehicles (FCV). These proposed changes, including proposed changes to how the EERs are used in specified LCFS calculations, reflect engine efficiency and fuel economy data that were not available during the original 2009 rulemaking. These proposed changes will affect how LCFS credits and deficits are calculated, with an overall effect of increasing LCFS credits available for trading.

Reporting Requirements

Staff is proposing several amendments to various reporting requirements, including elimination of the requirement to report renewable identification numbers (RINs) and energy volumes in "gasoline gallon equivalent" (GGE) units. The proposed amendments would also require reporting of volumes in their native units to the nearest whole number. Further, staff is proposing to require the use of the LCFS Reporting Tool (LRT) for reporting purposes. Although the current regulatory text does not explicitly require use of the LRT, it has become the *de facto* standard for reporting purposes by all parties registered as regulated parties, and the proposal would simply formalize what is already occurring in practice.

Miscellaneous Changes

The proposal contains a number of miscellaneous changes. This includes deleting the reference to the alternative fuel specification in the definitions of "compressed natural gas," "biogas," and "liquefied natural gas." This change is proposed to better reflect the GHG basis of the regulation. Further, staff is proposing amendments that would codify a number of provisions specified in the LCFS regulatory advisories released to date. Finally, staff is proposing a number of grammatical, typographical, or other non-substantial corrections.

COMPARABLE FEDERAL REGULATIONS

As noted in the 2009 notice of proposed rulemaking, there were no federal regulations that were comparable to the LCFS regulation at that time. This remains true. Therefore, there are no federal regulations that are comparable to the LCFS regulation or the proposed amendments to the LCFS regulation.

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 ISOR is entitled: Proposed Amendments to the Low Carbon Fuel Standard Regulation.

Copies of the ISOR and the full text of the proposed regulatory language, in underline and strikeout 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 October 26, 2011.

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.

Inquiries concerning the substance of the proposed regulation may be directed to the designated agency contact persons: Aubrey Sideco, Air Resources Engineer, Substance Evaluation Section, at (916) 324-3334; Floyd Vergara, Chief of the Alternative Fuels Branch, at (916) 327-5986; or Mike Waugh, Chief of the Transportation Fuels Branch, at (916) 322-6020.

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. Amy Whiting, Regulations Coordinator, (916) 322-6533. 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.

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/lcfs2011/lcfs2011.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 and private persons and businesses in reasonable compliance with the proposed regulations are presented below.

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 cost or savings to State or local agencies.

In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on representative private persons or businesses. The ARB 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 made an initial determination 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 the 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 California Code of Regulations, title 1, section 4, that the proposed regulatory action would not affect small businesses, because as most, if not all regulated parties are relatively large businesses, and the proposed amendments clarify, streamline, and enhance the current regulation.

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

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.

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 staff 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 V of the ISOR.

SUBMITTAL OF COMMENTS

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 October 31, 2011. To be considered by the Board, written comments, not physically submitted at the meeting, must be submitted on or after October 31, 2011, and received **no later than 12:00 noon on December 14, 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: <u>http://www.arb.ca.gov/lispub/comm/bclist.php</u>

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: <u>http://www.arb.ca.gov/board/online-signup.htm</u>. 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 the authority granted in Health and Safety Code, sections 38510, 38560, 38560.5, 38571, 38580, 39600, 39601, 41510, and 41511; and *Western Oil and Gas Ass'n v. Orange County Air Pollution Control District*, 14 Cal. 3d 411, 121 Cal. Rptr. 249 (1975). This action is proposed to implement, interpret, and make specific sections 38501, 38510, 38560, 38560.5, 38571, 38580, 39000, 39001, 39002, 39003, 39515, 39516, 41510, and 41511, 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, ARB may adopt the regulatory language as originally proposed, or with non-substantial or grammatical modifications. ARB 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;
- 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

/s/

James N. Goldstene Executive Officer

Date: October 18, 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 <u>www.arb.ca.gov</u>.