At its April 23, 2009 public hearing, the Air Resources Board (Board or ARB) approved the adoption to the California Code of Regulations (CCR), title 17, sections 95480, 95480.1, 95481, 95482, 95483, 95484, 95485, 95486, 95487, 95488, 95489, and 94590. The approved sections comprise a regulation for implementing the Low Carbon Fuel Standard (LCFS). The LCFS regulation applies to any transportation fuel, as defined in the regulation, which is sold, supplied, or offered for sale in California, and to any regulated party, as defined in the regulation, which is responsible for a transportation fuel in a calendar year. These sections will be referred to collectively hereinafter as the “LCFS regulation.”

The LCFS regulation would reduce greenhouse gas (GHG) emissions by reducing the carbon intensity of transportation fuels used in California by an average of 10 percent by the year 2020. Carbon intensity is a measure of the direct and indirect GHG emissions associated with each of the steps in the full fuel cycle of a transportation fuel (also referred to as the “well-to-wheels” for fossil fuels, or “seed or field-to-wheels” for biofuels). Depending on the circumstances, GHG emissions from each step can include carbon dioxide (CO₂), methane, nitrous oxide (N₂O), and other GHG contributors.

The LCFS achieves a 10 percent reduction in average carbon intensity by starting specified providers of transportation fuels (referred to as “regulated parties”) at an initial level and incrementally lowering the allowable carbon intensity for transportation fuels used in California in each subsequent year. A regulated party’s overall carbon intensity for its pool of transportation fuels would then need to meet each year’s specified carbon intensity level. Regulated parties can meet these annual carbon intensity levels with any combination of fuels they produce or supply and with LCFS credits acquired in previous years or from other regulated parties.

**The Board’s Action**

At the hearing, the staff presented, and the Board approved, modifications to the regulation originally proposed in the Staff Report released on March 5, 2009, in
response to comments received since the Staff Report was published. These modifications are noted below in “Summary of Proposed Modifications.”

Board Resolution 09-31 (Resolution) approved the new sections (appended to this notice as Attachment 1), with several modifications. Appended to the Resolution were the initially noticed regulatory text (as Attachment A) and the staff’s suggested modifications to that text (as Attachment B), both of which were made available at the hearing. In approving the regulation, the Board directed the Executive Officer to incorporate the approved modifications to the initially noticed text, along with such other conforming modifications as may be appropriate, and to make such modifications available for a supplemental comment period of at least 15 days.

The staff’s proposed substantive modifications are discussed below and set forth in detail in the document appended to this notice as Attachment 2. Additions to the initially noticed regulatory text are denoted by underline and deletions by strikeout.

**Modified Text Being Made Available**

Board Resolution 09-31 (Attachment 1) and the revised regulatory text (Attachment 2), may be downloaded from ARB’s website at the following address: [http://www.arb.ca.gov/regact/2009/lcfs09/lcfs09.htm](http://www.arb.ca.gov/regact/2009/lcfs09/lcfs09.htm). If you would like a hardcopy of any of these attachments sent to you through postal mail, please call Ms. Manisha Singh at (916) 323-0014 and give your name, company name, if any, and mailing address.

**Summary of Proposed Modifications**

The following is a summary of the proposed substantive modifications to the regulation and staff’s rationale for making them. All references to sections 95480, 95480.1, 95481, 95482, 95483, 95484, 95485, 95486, 95487, 95488, 95489, and 94590 are to title 17, CCR, unless otherwise noted. The following list does not include modifications to correct typographical and citation errors, numbering errors, grammar errors, or the rearranging of sections and paragraphs for structural improvements, nor does it include all of the minor revisions made to improve clarity. For a complete account of all modifications in the proposed regulation, please refer to the underline and strikeout in Attachment 2.

**Applicability (section 95480.1(a) and (d))**

To improve clarity, language was added in section 95480.1(a) stating that the reporting and recordkeeping requirements and violations provision of the LCFS (sections 95484(c), (d) and (e), respectively) apply starting on January 1, 2010, and the remaining provisions of the LCFS regulation apply starting on January 1, 2011. This change clarifies the intent of the provision.
Tactical support equipment, as defined in title 17, CCR, section 9316.2(a)(36), was added to the list of specific applications exempted from the LCFS regulation pursuant to the Board’s direction in Resolution 09-31.

Definitions (section 95481)

Staff clarified the definition for “biogas” to provide a more accurate description of how biogas is produced and cite a few examples of the processes and source materials used to produce biogas. (section 95481(a)(5)).

Staff added a definition for “liquefied petroleum gas (LPG or propane)” because it was not previously defined in the initially proposed regulatory text. (section 95481(a)(30)).

Staff deleted definitions for “oil sands” and “oil shale” because those terms were not used elsewhere in the regulation approved for adoption under Resolution 09-31. (formerly section 95481(a)(34) and (35)).

Reporting Requirements (section 94584(c)(3)(C))

Pursuant to Resolution 09-31, staff modified the reporting requirements for residential charging stations to permit alternative reporting methods that are shown to the Executive Officer to be substantially similar to direct metering (also called “submetering”). This alternative reporting would be allowed prior to January 1, 2015, but only for those households and residences in which direct metering has not been installed; effective January 1, 2015, regulated parties would need to use direct metering to report the amount of electricity sold for transportation purposes at all residential charging stations if the regulated party chooses to generate credits. (section 95484(c)(3)(C)1.).

Demonstration of Physical Pathways (section 95484(d)(2))

Pursuant to Resolution 09-31, staff modified the provisions for the demonstration of physical pathways to allow demonstrations by fuel producers who are not regulated parties. This would allow a regulated party to meet at least part of its physical pathway requirements by citing pathway demonstrations submitted by non-regulated party fuel producers whose fuels are used by the regulated party. (section 95484(d)(2)). Also, staff modified the provisions to clarify the effects a material change or non-material change would have to an approved physical pathway and when such changes have to be reported to the Executive Officer. (formerly section 95484(d)(2)(D), renumbered to 95484(d)(2)(F)). Further, staff clarified that LCFS credits based on an approved pathway can be claimed retroactively no earlier than January 1, 2011. (formerly section 95484(d)(2)(E)1., renumbered to section 95484(d)(2)(G)1.). Finally, staff added a provision requiring the Executive Officer to post on the ARB website the names and contact information for regulated parties that have obtained approval for their physical pathways, as well as the transportation fuels subject to such approved physical pathways. (new section 95484(d)(5)).
LCFS Credits and Deficits (section 95485(c))

Staff clarified that the prohibition on third-party sales, trades, or purchases of LCFS credits does not apply when the regulated party that owns the credits is exporting such credits for compliance with other greenhouse gas reduction initiatives. (section 95485(c)(1)(B)). Also, staff made grammatical edits to the language for clarity. (section 95485(c)(2)(A)).

Determination of Carbon Intensity Values (section 95486)

Because the carbon intensity lookup tables will now be incorporated directly into the regulatory text, staff deleted the language that provided for Executive Officer certification of an initial set of carbon intensity values and new or modified pathways to be added to that initial set. In lieu of that certification process, staff incorporated the carbon intensity lookup tables from the Staff Report, with modifications as directed by the Board. (section 95486(b)(1)).

It should be noted that staff added language to section 95486(b)(1) to clarify that the carbon intensity values in the lookup tables for the enumerated pathways are described in the supporting documents listed in section 95486(b)(1)(A) through (P), which are incorporated therein by reference. However, as noted below, only the documents shown in (J) through (P) constitute entirely new supporting documents that are being added to the rulemaking record. These new supporting documents comprise a portion of the additional documents subject to the 30 day supplemental comment period described in this notice. By contrast, the documents shown in (A) through (I) were cited in the Staff Report and are already part of the rulemaking record. Initial Statement of Reasons (ISOR) at IV-6. Staff indicated the documents in (A) through (I) in underline format merely to clarify the versions and dates of the existing pathway documents that are already part of the rulemaking record. Because the documents in (A) through (I) are already part of the rulemaking record, we are not soliciting comments on those documents.

In addition, staff added language that would require regulated parties for gasoline, CARBOB, or diesel fuel derived from high carbon-intensity crude oil (HCICO) to calculate deficits relative to the carbon intensity standards in sections 95482 separately for the HCICO and non-HCICO feedstocks. (section 95486(b)(2)(A)2.). This new language was added pursuant to the Board’s direction under Resolution 09-31.

Further, staff revised the public review and the Executive Officer approval process for the use of Method 2A or 2B (section 95486(f)(4) and (5)) to be consistent with the Administrative Procedure Act (Government Code section 11346 et seq.) in accordance with Resolution 09-31.
**Regulation Review (section 95489)**

Pursuant to Resolution 09-31, staff added extensive language specifying the substantive content of two Executive Officer reviews of the LCFS implementation (by January 1, 2012 and January 1, 2015, respectively), as well as the establishment of an advisory panel to participate in these reviews. The Board directed that such reviews be conducted in a public process. (section 95489(a)-(c)).

**Enforcement Protocols (new section 95490)**

Pursuant to Resolution 09-31, staff added a provision that permits the Executive Officer to enter into enforceable written protocols with regulated parties under specified conditions. (new section 95490).

**Supporting Documents and Information**

In accordance with Government Code section 11347.1, staff has added the following documents to the rulemaking record in support of the proposed action:


Further, staff completed work on supporting documentation for the following seven fuel pathways in accordance with the Board’s directives:

- Stationary Source Division, Air Resources Board (July 20, 2009, v.1). “Detailed California-Modified GREET Pathways for Liquefied Natural Gas (LNG) from North American and Remote Natural Gas Sources.”

- Stationary Source Division, Air Resources Board (July 20, 2009, v.1). “Detailed California-Modified GREET Pathway for Liquefied Natural Gas (LNG) from Landfill Gas (LFG).”

- Stationary Source Division, Air Resources Board (July 20, 2009, v.1). “Detailed California-Modified GREET Pathway for Compressed Natural Gas (CNG) from Dairy Digester Biogas.”

- Stationary Source Division, Air Resources Board (July 20, 2009, v.1). “Detailed California-Modified GREET Pathway for Liquefied Natural Gas (LNG) from Dairy Digester Biogas.”
• Stationary Source Division, Air Resources Board (July 20, 2009, v.1). “Detailed California-Modified GREET Pathway for Biodiesel Produced in California from Used Cooking Oil.”

• Stationary Source Division, Air Resources Board (July 20, 2009, v.1). “Detailed California-Modified GREET Pathway for Renewable Diesel Produced in California from Tallow (U.S. Sourced).”

• Stationary Source Division, Air Resources Board (July 20, 2009, v.2.2). “Detailed California-Modified GREET Pathways for Brazilian Sugarcane Ethanol: Average Brazilian Ethanol, With Mechanized Harvesting and Electricity Co-product Credit, With Electricity Co-product Credit.”

As noted previously, these seven pathway documents will be added to the rulemaking record, in accordance with Government Code section 11347.1, to support new pathway values that are proposed for addition to the carbon intensity lookup tables in section 95486(b)(1). See section 95486(b)(1)(J) through (P).

Availability of the Attachments and Other Materials

By this notice, the modified regulation and supplemental documents added to the rulemaking record and identified above are being made available for public comment prior to the final action by the Board’s Executive Officer. As noted above, the documents listed above as attachments to this notice can be obtained from ARB’s website at the following address: http://www.arb.ca.gov/regact/2009/lcfs09/lcfs09.htm, or from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, California, 95814. If you would like a paper copy of any of these attachments sent to you through postal mail, please call Ms. Manisha Singh at (916) 323-0014 and give your name, company name, if any, and mailing address.

Comments and Subsequent Action

In accordance with section 11346.8 of the Government Code, the Board directed the Executive Officer to adopt sections 95480, 95480.1, 95481, 95482, 95483, 95484, 95485, 95486, 95487, 95488, 95489, and 94590, title 17, CCR, after making the modified regulatory language available to the public for a supplemental written comment period of at least 15 days. Pursuant to Resolution 09-31, the Board directed that this supplemental comment period be 30 days. The Board further provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such modifications as may be appropriate in light of comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

Written comments on the modifications and other supplemental documents must be submitted by postal mail, electronic mail, or facsimile as follows:
Postal mail is to be sent to:

Clerk of the Board
Air Resources Board
1001 “I” Street, 23rd Floor
Sacramento, California 95814

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

Unless otherwise indicated, please note that under the California Public Records Act (Government Code section 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 other search engines.

In order to be considered by the Executive Officer, comments must be directed to the ARB in one of the three forms described above and received by ARB by 5:00 p.m., on the deadline date for public comment listed at the beginning of this notice. Only comments relating to the modifications to the text of the regulation or to the additional documents referenced above shall be considered by the Executive Officer.

For individuals with sensory disabilities, this document and other related material can be made available in Braille, large print, audiocassette, or computer disk. For assistance, please contact the Clerk of the Board at (916) 322-5594 as soon as possible.

Please note that staff is planning to conduct a public workshop during the 30-day comment period. At the workshop, staff will discuss the proposed modifications and any comments received from the public at that time. Unless submitted in writing by the end of the comment period as noted above, oral comments made at this workshop will not be incorporated into the rulemaking record.

Attachments (2)