

State of California  
AIR RESOURCES BOARD

**Amendments to the Low Carbon Fuel Standard Regulation**

Resolution 11-39

December 16, 2011

Agenda Item No.: 11-10-2

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or the Board) to adopt standards, rules, and regulations, and to do such acts as may be necessary for the proper execution of the powers and duties granted to and imposed upon the Board by law;

WHEREAS, the California Global Warming Solutions Act of 2006 (AB 32; Stats 2006, ch. 488, Health and Safety Code sections 38500-38599) declares that global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California, and creates a comprehensive multi-year program to reduce California's greenhouse gas (GHG) emissions to 1990 levels by 2020;

WHEREAS, section 38510 of the Health and Safety Code designates ARB as the State agency charged with monitoring and regulating sources of GHG emissions that cause global warming in order to reduce such emissions;

WHEREAS, section 38560 of the Health and Safety Code directs the Board to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG emission reductions from sources or categories of sources, subject to the criteria and schedules specified in Part 4 of Division 25.5 of the Health and Safety Code;

WHEREAS, section 38560.5 of the Health and Safety Code requires the Board to publish and make available to the public a list of discrete early action GHG reduction measures (Discrete Early Action Measures) on or before June 30, 2007, and directs the Board to adopt regulations on or before January 1, 2010 to implement the Discrete Early Action Measures; these regulations are to be enforceable no later than January 1, 2010;

WHEREAS, section 38560.5(c) of the Health and Safety Code provides that the regulations adopted to implement Discrete Early Action Measures must achieve the maximum technologically feasible and cost-effective reductions in GHG emissions;

WHEREAS, section 38562 of the Health and Safety Code requires ARB to adopt GHG emissions limits and emissions reduction measures by regulation to achieve the maximum technologically feasible and cost-effective reductions in GHG emissions in furtherance of achieving the statewide GHG emissions limit;

WHEREAS, section 38562 of the Health and Safety Code requires ARB in adopting GHG emission reduction regulations, to the extent feasible and in furtherance of achieving the statewide GHG emissions limit, to consider a number of factors such as cost-effectiveness and overall societal benefit of regulations, and to ensure that activities undertaken to comply with regulations do not disproportionately impact low-income communities;

WHEREAS, section 43830.8(a) of the Health and Safety Code prohibits the Board from adopting a regulation that establishes a specification for a motor vehicle fuel unless a multimedia evaluation for the regulation undergoes the review process specified in the statute; however, the multimedia requirement does not apply if the regulation does not establish a motor vehicle fuel specification.

WHEREAS, the Board approved a list of early GHG actions at its June 21, 2007 hearing and approved additions to the list at its October 25, 2007 hearing, and a subset of nine of these early actions were designated as Discrete Early Action Measures, including the "Low Carbon Fuel Standard" (LCFS) measure to reduce GHG emissions from transportation fuels used in California;

WHEREAS, after several years of development in close consultation with stakeholders and in consideration of public comments received, the Board approved at its April 2009 hearing the LCFS regulation in Resolution 09-31 after making the findings, determinations, and conclusions required by State law;

WHEREAS, the LCFS entered into full force on April 15, 2010, and is codified in title 17, California Code of Regulations, sections 95480 – 95490;

WHEREAS, the Board heard an update from staff on implementation of the LCFS at its November 2010 hearing, where the Board affirmed staff's plans to implement the LCFS and provided additional direction to staff in Resolution 10-49;

WHEREAS, in consideration of staff's report on the program review conducted pursuant to section 95489 of the LCFS regulation, the Board hereby generally reaffirms its findings, determinations, conclusions, and delegations in Resolutions 09-31 and 10-49;

WHEREAS, the Board believes the greenhouse gas emission reductions expected to result from continued implementation of the LCFS regulation will incrementally reduce effects of climate change and the associated potential adverse impacts identified in Health and Safety Code section 38501(a).

WHEREAS, to date, staff has issued LCFS regulatory advisories, which have been effective in addressing several key implementation and enforcement questions raised by stakeholders;

WHEREAS, in Resolutions 09-31, the Board directed the Executive Officer, among other follow up directives, to:

Re-evaluate the Energy Economy Ratio (EER) for heavy duty vehicles fueled by compressed and liquefied natural gas and update as necessary;

Review the provisions applicable to regulated parties for electricity; and

Work with interested stakeholders to develop robust, transparent and specific criteria for conducting Carbon Intensity Look Up Table modifications for new or modified fuel pathways through a certification process.

WHEREAS, in Resolution 10-49, the Board directed ARB staff to return to the Board with amendments including, but not limited to:

Identification of methods to be used to identify and quantify values for high intensity crude oils, including provisions for a screening process and an Executive Officer certification procedure to assign additional values to high intensity crude oils and other provisions necessary to facilitate the determination of compliance and the banking of credits; and

Creation of a certification process that allows the Executive Officer to establish the carbon intensity values for the direct portion of new or modified fuel pathways through an Executive Order process.

WHEREAS, by Resolution 09-31 and Resolution 10-49, the Board directed staff to work with affected stakeholders on follow up activities to enhance the implementation of the LCFS regulation, and the Board finds that as directed:

Staff convened the LCFS Electricity Workgroup and held three meetings to assist in the development of the staff's proposed electricity regulated party revisions;

Staff convened the LCFS High Carbon Intensity Crude Oil (HCICO) Screening Workgroup and met six times between March 2010 and February 2011 to explore various options to consider in staff's effort to update the LCFS regulation to more accurately account for a regulated party's use of high carbon intensity crude oils; and

Staff considered the comments, data, presentations, analyses, and evaluations provided by both the electricity and HCICO expert workgroups and other interested parties in developing the proposed amendments.

WHEREAS, in reviewing the LCFS implementation in its initial years (2010-2011) and from comments received from stakeholders, staff has determined that, while the overall LCFS remains sound and robust, there are a number of specific areas in the regulation which could benefit from further refinements and improvements;

WHEREAS, the staff has proposed amendments to the LCFS regulation that support the purpose of the regulation in reducing the carbon intensity of transportation fuel used in California and will help ensure the continued successful implementation of the LCFS. The proposed amendments are set forth in Attachment A hereto and include various modifications and clarifications to the existing regulatory language, including the following elements:

Establish specific opt-in and opt-out provisions in the regulation and permit out-of-state entities to voluntarily elect to become regulated parties, and thereby become subject to California jurisdiction;

Revise the regulated party definitions so that more fuel providers and suppliers may become regulated parties, including out-of-state fuel providers, intermediate entities, and transloading facility operators;

Convert the current process of approving new or modified fuel pathways (Method 2A/2B approvals) into an application program to facilitate more expeditious review of Method 2A/2B submittals;

Add a new credit trading section in the regulation to provide more details on how credits and deficits will be calculated, generated, acquired, banked, transferred, tracked, retired and reported;

Revise the existing provisions for addressing high carbon intensity crude oil (HCICO) to eliminate the grandfather clause for crude oils in the 2006 California baseline crude mix; establish a newer baseline based on more recent data; revise the compliance schedule based on this new baseline but maintain the requirement that carbon intensity be reduced by 10 percent by 2020; eliminate the distinction between HCICO and non-HCICO; establish provisions that require refiners and other petroleum regulated parties to account for GHG emissions, via baseline and incremental deficits, from crude oils being processed in California with carbon intensities that are above the compliance standards; and establish provisions for recognizing a regulated party's use of innovative techniques to substantially reduce the GHG emissions from the crude oils processed (e.g., by using carbon capture and sequestration);

Designate regulated parties for electricity and maximize the number of electricity-generated credits available for use in the LCFS;

Revise the EER for heavy-duty vehicles burning compressed natural gas (CNG) or liquefied natural gas (LNG) vehicles, light-duty battery electric vehicles (BEV), plug-in-hybrid vehicles (PHEV), and light-duty fuel cell vehicles (FCV) to reflect updated information;

Revise several reporting requirements, including eliminating the requirement to report renewable identification numbers (RINs) and energy volumes in "gasoline gallon equivalent" (GGE) units, adding a requirement to report volumes in their native units to the nearest whole number, and requiring the mandatory use of the LCFS Reporting Tool (LRT);

Modify the definitions for CNG, LNG, and biogas to remove references to the motor vehicle fuel specifications in title 13, California Code of Regulations, section 2292.5;

Codify the default CI values, as well as the conditions under which those values would apply, which were specified in LCFS Regulatory Advisories 10-04 and 10-04A for use with ethanol and biomass-based diesel, respectively, when the CI values for those fuels are incapable of being reasonably determined; and

Revise the regulation with a number of minor changes and grammatical, typographical, and other non-substantive corrections that improve clarity.

WHEREAS, ARB staff conducted three public workshops to discuss the proposed amendments and also participated in numerous other meetings with various stakeholders in order to include the public and affected stakeholders in the regulatory development process;

WHEREAS, ARB staff has prepared a document entitled "Staff Report: Initial Statement of Reasons for Proposed Amendments to the Low Carbon Fuel Standard" (ISOR), which presents the rationale and basis for the proposed amendments and identifies the data, reports and information relied upon;

WHEREAS, the ISOR and proposed regulatory language were made available to the public for at least 45 days prior to the public hearing to consider the proposed regulation;

WHEREAS, the Board has considered the impact of the proposed regulation on the economy of the State and the potential for adverse economic impacts on California business enterprises and individuals;

WHEREAS, the Board has considered the community impacts of the proposed amendments, including environmental justice concerns;

WHEREAS, the California Environmental Quality Act (CEQA) requires that no project which may have significant adverse environmental impacts may be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts, unless specific overriding considerations are identified which outweigh the potential adverse consequences of any unmitigated impacts;

WHEREAS, Public Resources Code section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Resources Agency has certified the regulatory program;

WHEREAS, that portion of the ARB's regulatory program that involves the adoption, approval, amendment, or repeal of standards, rules, regulations has been certified by the Secretary of Resources Agency (CEQA Guidelines section 15251(d));

WHEREAS, in accordance with ARB's certified regulatory program, and the policy and substantive requirements of CEQA, ARB staff prepared an environmental analysis that assessed the potential for significant long or short term adverse and beneficial environmental impacts associated with the proposed action and included this analysis in Chapter 5 of the ISOR (title 17, California Code of Regulations section 60005 (b)); the environmental analysis found that the amendments will not have any significant adverse effect on the environment;

WHEREAS, a public hearing and other administrative proceedings have been held in accordance with the provisions of chapter 3.5 (commencing with section 11340), part 1, division 3, title 2 of the Government Code;

WHEREAS, in consideration of the ISOR, written comments, and public testimony it has received, the Board finds that:

The amendments approved herein were developed using the best available economic and scientific information and will further achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions;

The amendments approved herein were developed in an open public process, in consultation with affected parties through numerous public workshops, individual meetings, and other outreach efforts;

The amendments approved herein meet the statutory requirements for a Discrete Early Action Measure under section 38560.5 of the Health and Safety Code and also satisfies the requirements of section 38560 of the Health and Safety Code;

The amendments approved herein meet the criteria set forth in section 38562 of the Health and Safety Code;

The benefits to human health, public safety, public welfare, or the environment justify the costs of the amendments;

The cost-effectiveness of the amendments has been considered, and their cost-effectiveness will be comparable to the existing regulation;

The amendments are consistent with ARB's environmental justice policies and equally benefit residents of any race, culture or income;

The reporting requirements of the amendments which apply to businesses are necessary for the health, safety, and welfare of the people of the State;

No reasonable alternative considered or that has otherwise been identified and brought to the attention of ARB would be more effective in carrying out the purpose for which the amendments are proposed, or be as effective and less burdensome to affected private persons and businesses than the proposed amendments; and

Adoption of the amendments approved herein will not in itself constitute the establishment of a motor-vehicle fuel specification and therefore does not trigger a multimedia evaluation requirement under Health and Safety Code section 43830.8.

WHEREAS, the Board further finds that:

The economic impacts of the proposed amendments have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the ISOR;

Staff estimates that the proposed amendments will generally have a positive economic impact on regulated parties, largely due to additional credits expected to be introduced into the LCFS credit market;

Most of the proposed amendments will not result in any fiscal or economic impacts and several of the amendments will result in additional credits being generated and used within the program, thereby reducing the cost of credits and reducing compliance costs; and

Staff expects the proposed amendments will have no fiscal impacts on local, State, and federally-funded programs.

WHEREAS, pursuant to the requirements of the California Environmental Quality Act and the Board's regulations, the Board further finds that:

On the basis of the whole record, including the environmental analysis included in the ISOR and comments received, there is no substantial evidence that the proposed amendments will have a significant adverse effect on the environment;

Most of the proposed amendments consist of administrative changes intended to make the implementation of the LCFS run more smoothly and do not result in a physical change to the environment, directly or indirectly;

Staff does not anticipate local adverse environmental impacts; and

The Executive Officer is the decision maker for the purposes title 17, California Code of Regulations section 60007, and no final decision will be made until comments on the environmental analysis are fully considered and the written responses approved by the decision maker. By approving this Resolution 11-39 the Board is not prejudging any of the responses that will be made by the Executive Officer to these environmental issues.

WHEREAS, the Board further finds that no external scientific peer review of the scientific basis or portions of the proposed amendments was required under Health and Safety Code section 57004 because such a review was already conducted and approved by the Board in Resolution 09-31 as part of the original 2009 rulemaking, and the staff's proposed amendments introduces no new scientific basis, portions, or principles that have not been reviewed and approved already under the original rulemaking; and

WHEREAS, the Board further finds that a strong collaboration with the California Energy Commission is necessary to ensure that California's policies for transportation fuels are coordinated and help ensure that economic supplies of transportation fuels are available.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the adoption of the proposed amendments to sections 95480.1, 95481, 95482, 95484, 95485, 95486, 95488, and 95490, and the proposed new sections 95480.2, 95480.3, 95480.4, and 95480.5 of subarticle 7, article 4, subchapter 10, chapter 1 of division 3, title 17, CCR, as set forth in Attachment A hereto, with the modifications described in Attachment B hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to take the following actions:

Make the modified regulatory language as set forth in Attachment B, and such other conforming modifications as may be appropriate, available for public comment for a period of at least 15 days, 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 the comments received, and shall present the regulation to the Board for further consideration if the Executive Officer determines that this is warranted;

As the final decision maker, conduct any further environmental analysis as may be deemed necessary for a regulatory program certified under Public Resource Code section 21080.5, consider all comments raising significant environmental issues and approve the written responses to such comments, in accordance with title 17, California Code of Regulations section 60007, prior to taking final action to adopt the regulatory amendments; and

Take final action to adopt the amendments set forth in Attachment A, with the modifications set forth in Attachment B, as well as any additional conforming modifications that may be appropriate, and any modifications that are necessary to ensure that all feasible mitigation measures or feasible alternatives that would substantially reduce any significant adverse environmental impacts that may be identified upon further environmental analysis, or return the proposed amendments and findings to the Board for further consideration before taking final action, if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to continue work with interested stakeholders to develop additional calculation methodologies, accounting procedures, or other measures that can further refine the provisions addressing the carbon intensity of petroleum crude oils, blendstocks, intermediates, and finished products either refined in California or imported into the State, and to propose modifications to the Board for further consideration if the Executive Officer determines that this is warranted.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to continue working with interested stakeholders to update the indirect land use change (ILUC) carbon intensity values for various biofuels, as the Executive Officer deems appropriate and as warranted by available information.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to evaluate and propose, as appropriate, an option for individual regulated parties to have their deficits for gasoline and diesel determined on a refinery-specific basis that accounts for the carbon intensity of domestic and imported crude oils, intermediate products and finished fuels.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to work with interested stakeholders to investigate the feasibility of developing into regulatory language for a future rulemaking(s) the following concepts based on work suggested by the LCFS Advisory Panel or its individual panelists, or as suggested by other stakeholders:

- Accounting for lifecycle carbon intensity associated with low-energy refineries;
- Issuing credits for nonroad electricity-based transportation sources, including public mass transit;
- Expansion of the LCFS credit trading market;
- Incorporation of a flexible compliance mechanism or similar mechanism for providing alternative means to comply with the LCFS standards; and
- Any other concepts deemed appropriate by the Executive Officer for consideration and development.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to issue an advisory or other guidance, as the Executive Officer deems appropriate, which addresses the treatment of crude oil carbon intensity in the period up to the effective date the modifications adopted pursuant to this Resolution 11-39 enter into force.

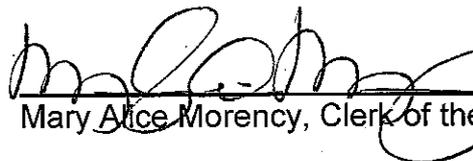
BE IT FURTHER RESOLVED that the Board directs the Executive Officer to monitor the implementation of the regulation and to propose amendments to the regulation for the Board's consideration when warranted.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer, in monitoring implementation and developing proposed amendments, to work with the California Energy Commission to assess, among other appropriate provisions, the effect of the LCFS on the State's transportation fuels market and companies, including any effects on the cost and availability of transportation fuels and credits.

BE IT FURTHER RESOLVED that the Board affirms and approves of staff's plans to further implement and refine the LCFS and directs the Executive Officer to develop advisories, guidance, and policies, as appropriate, to facilitate implementation of the LCFS regulation.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to update the Board on the status of program implementation no later than December 31, 2012, and annually thereafter as necessary.

I hereby certify that the above is a true and correct copy of Resolution 11-39, as adopted by the Air Resources Board.

  
Mary Alice Morency, Clerk of the Board

Resolution 11-39

December 16, 2011

**Identification of Attachments to the Board Resolution**

**Attachment A:** Proposed Amendments to the Low Carbon Fuel Standard, as set forth in Appendix A to the Initial Statement of Reasons, released October 26, 2011.

**Attachment B:** Staff's Suggested Modifications to the Original Proposal, presented at the December 16, 2011 public hearing.