State of California
AIR RESOURCES BOARD

Resolution 10-49

November 18, 2010

Agenda Item No.: 10-10-8

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, 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 under State law;

WHEREAS, the LCFS regulation entered into full effect on April 15, 2010, and is codified in title 13, California Code of Regulations, sections 95480--95490.

WHEREAS, in consideration of the staff's update on the implementation of the LCFS and public comments received, the Board hereby reaffirms its findings, determinations and conclusions in Resolution 09-31;

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

WHEREAS, staff has established stakeholder workgroups to facilitate ongoing dialogue to develop guidance and other materials to further promote a transition to full implementation of the LCFS regulation;

WHEREAS, staff has developed and recently released a production version of the LCFS Reporting Tool for evaluation and use in helping regulated parties meet their reporting obligations under the regulation;

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

Staff convened an Expert Workgroup that met eight times since February 2010 and whose nine subgroups prepared draft recommendations for staff to consider in the treatment of land use change and other indirect effects that will assist the Board in refining and improving the land use and indirect effect analyses of transportation fuels;

Staff, in consideration of the draft recommendations from the various Expert Workgroup subgroups, has presented the Board with a plan to update the land use change and other indirect effects values in the Spring of 2011 or as expeditiously as practical afterward and that staff has indicated that the update will consider modifications that reflect the Group 2 land use modeling conducted by Purdue University;

Staff has coordinated the implementation of the LCFS with other organizations considering the establishment of a low carbon fuel standard, including the United States Environmental Protection Agency, European Union, Northeast States for Coordinated Air Use Management, and Canadian Provinces;

Staff has issued guidelines to assist regulated parties in determining the data, documentation, and other information needed to support the expeditious development of carbon intensity values for new or modified fuel pathways;

Staff has issued guidelines that identify pathways that are expected to have no or inherently negligible land use effects on carbon intensity;

Staff continues to work on developing carbon intensities for key fuel pathways as well as evaluating carbon intensity pathway applications submitted by applicants for subsequent incorporation into the carbon intensity Lookup Table;

Staff continues to work with regulated parties to prioritize the development of key fuel pathways to support full implementation in 2011, and will continue such efforts including the development of carbon intensities for specialized fuel pathways, such as anaerobic digestion, thermochemical conversion of biomass feedstocks, and additional liquefied natural gas pathways;

Staff continues to work with petroleum refiners, environmental advocates, and other stakeholders to develop a screening process to assist regulated parties and other stakeholders in identifying high carbon-intensity crude oils;

Staff has worked with local air districts, regulated parties, environmental advocates, public health experts, and other stakeholders to draft and make available for public comment a "best practices" guidance document for use by siting authorities when they are considering the siting of biofuel and other fuel production facilities in California to assess and mitigate the air quality impacts of these facilities, and will continue to work with these stakeholders during the environmental review of specific projects;

Staff continues to work with the Interagency Forest Work Group (IFWG), appropriate state agencies, environmental advocates, regulated parties, and other interested stakeholders to assess the potential impact of the LCFS on biomass removal from state and federal forests and to develop sustainability provisions to be used in implementing the LCFS regulation;

Staff continues to work with petroleum refiners, biodiesel and renewable diesel producers, and other stakeholders to complete the ongoing multimedia evaluation for biodiesel and renewable diesel;

Staff continues to work with stakeholders to enhance credit trading provisions and to develop a robust and transparent process that includes specific criteria for conducting carbon intensity Lookup Table modifications through a certification process;

Staff continues to work with the California Public Utilities Commission, electric utilities, oil refiners, and other stakeholders to review the provisions applicable to regulated parties for electricity;

Staff has determined that displacing petroleum-based transportation fuels with electricity would not lead to a cross-sector shift in GHG compliance obligations because the electricity projected to be supplied to the State's electric vehicle fleet in the foreseeable future is estimated to be less than one percent of the total

vehicle fleet's energy needs, while having no discernible impact on electrical use in the State;

Staff continues to work with electric utilities, environmental advocates, and other stakeholders to further evaluate the feasibility of generating credits for electricity used in nonroad transportation sources, such as new categories and applications of electric forklifts and other similar nonroad vehicles and equipment; and Staff continues to assess the Energy Economy Ratios (EERs) of light-and heavy-duty vehicles and will notify the Board of the initiation and results of any rulemakings in this regard;

WHEREAS, the Board further finds that there is a need to clarify that the value of 99.4 grams of carbon dioxide equivalent per megajoule (g CO2e/MJ) for average Midwestern corn ethanol was included in the Lookup Table for the intended purpose of allowing its use as the carbon intensity value of "generic" ethanol when the source(s) and carbon intensity(ies) of the ethanol could not be reasonably identified;

WHEREAS, the Board further finds that there is a need to provide guidance on the use of interim values for high carbon intensity crude oils, but that sufficient information and screening protocols do not yet currently exist to help stakeholders make those determinations for a number of crude oil sources;

WHEREAS, the Board further finds that, despite these significant efforts, there remains a need for discretionary enforcement of the LCFS regulation during the initial year of implementation.

WHEREAS, the Board further finds that timely implementation of the LCFS regulation is a significant and important step in California's efforts to reduce greenhouse gas emissions from motor vehicles and is critical for protecting the health, safety, and welfare of the State's citizens and its environment.

NOW, THEREFORE, BE IT RESOLVED that the Board directs the Executive Officer, as appropriate to ensure a smooth transition to 2011 implementation, to establish advisories, guidance, and policies that embody the following direction:

The compliance obligation for 2011 to meet the carbon-intensity reduction standard for gasoline and diesel is necessary to ensure that continuous progress is maintained in implementing the LCFS regulation;

The maintenance of records that demonstrate compliance with the LCFS regulation in 2011 is necessary, and that each regulated party should both maintain these records and make them available for inspection or, if needed later, submit these records to ARB for verification;

The use of the LCFS Reporting Tool (LRT) is an important tool to help regulated parties meet their reporting obligations and ARB staff should work with stakeholders to further test and develop the LRT, but enforcement actions based on noncompliance with reporting obligations should be limited to the failure to make reasonable, good faith efforts to meet the reporting requirements;

Ensuring public transparency about how regulated parties are in compliance with the LCFS is appropriate public policy and necessary to assure public confidence in the program;

In 2011, the use of "generic" ethanol carbon intensity value of 99.40 g CO2e/MJ by an ethanol producer or importer as its carbon intensity value where the production facility of the ethanol cannot be reasonably identified is consistent with the regulation as adopted;

Regulated parties may use proposed draft carbon intensity values for pathways that have been evaluated by ARB staff and posted for public review prior to formal adoption. To implement this directive, the Executive Officer shall issue guidelines to address potential effects of using draft carbon intensity values, such as for the generation and use of credits; and

For 2011, pursue enforcement actions and penalties only for materially egregious violations, such as willful or persistent disregard of material reporting requirements or material non-compliance with the other provisions of the LCFS regulation, taking into account reasonable, good-faith efforts to comply, such as reporting and credits/deficits calculations.

BE IT FURTHER RESOLVED that the Board directs the staff to return to the Board in the Spring of 2011, or as expeditiously as practical afterward, with amendments that may include, but are not limited to, the following:

Identification of methods to be used to identify and quantify values for high carbon intensity crude oils, including provisions for a screening process and an Executive Officer certification procedure to assign additional values to high carbon intensive crude oils and other provisions as necessary to facilitate the determination of compliance and the banking of credits. In the interim, for the first two quarters of 2011, regulated parties may continue to use the carbon intensities for gasoline and diesel in the Lookup Table, which are based on the 2006 California baseline crude slate, for any purchasing contract for crude oil executed by June 30, 2011 for crude oil, provided the crude oil is delivered to California no later than September 30, 2011. A regulated party must use the established values for any crude oil deemed to be a high carbon intensity crude oil established through the rulemaking for any high carbon intensity crude oil procured by a contract executed after July 1, 2011, and any high carbon intensity crude oil delivered to California after September 30, 2011. To implement this

directive, the Executive Officer shall issue guidelines covering items that include, but are not limited to, reporting crude oil purchases that are not part of the 2006 baseline, determining compliance with specified obligations, and banking of credits.

Updates to the land use values for corn ethanol, sugarcane ethanol, and soy biodiesel, and other feedstocks, and other effects using, to the extent appropriate, the draft recommendations of the Expert Workgroup and other available information;

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

Consideration of provisions to address low-energy-use refining processes.

BE IT FURTHER RESOLVED that the Board affirms and approves of staff's plans to implement 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 convene the Advisory Panel beginning in January 2011 to help staff's evaluation of the various implementation issues identified in this Resolution, provisions specified in section 95489 of the regulation, and other issues deemed appropriate by the Chair of the Advisory Panel.

I hereby certify that the above is a true and correct copy of Resolution 10-49, as adopted by the Air Resources Board.

Mary Alice Morency, Clerk of the Board