State of California
AIR RESOURCES BOARD

Resolution 11-36

October 21, 2011

Agenda Item No.: 11-8-5

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (ARB or 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, section 43018(a) of the Health and Safety Code directs the Board to endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of the state ambient air quality standards at the earliest practicable date;

WHEREAS, section 43018(c) of the Health and Safety Code provides that in carrying out section 43018, the Board shall adopt standards and regulations which will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuel, including but not limited to specification of vehicular fuel composition;

WHEREAS, Health and Safety Code section 43013 authorizes the Board to adopt and implement motor vehicle fuel specifications for the control of air contaminants and sources of air pollution which the Board has found necessary, cost-effective, and technologically feasible to carry out the purposes of Division 26 of the Health and Safety Code;

WHEREAS, the Board approved the California Phase 3 reformulated gasoline (CaRFG3) regulations in December 1999, and approved amendments to the CaRFG3 regulations in July 2002;

WHEREAS, the CaRFG3 regulations currently include the following elements:

> Standards for eight gasoline properties – summertime Reid Vapor Pressure (RVP), T50 (50 percent distillation temperature), T90 (90 percent distillation temperature), and aromatic hydrocarbon, benzene, sulfur, olefin, and oxygen contents;
>
> Establishment of an absolute "cap" limit for each specification, applicable throughout the gasoline distribution system;

Establishment of additional, more stringent "refinery" limits applicable to gasoline when it is initially supplied from the production or import facility for all specifications but RVP, and provisions authorizing compliance through a form of averaging T50, T90, and sulfur, aromatic hydrocarbon, benzene and olefin contents;

An alternative compliance mechanism under which a producer or importer may use the CaRFG3 Predictive Model to identify alternative flat and averaging refinery limits, up to the cap limits, that will result in essentially no increase in emissions of exhaust hydrocarbons, oxides of nitrogen (NOx), and potency weighted toxics (benzene, 1,3-butadiene, acetaldehyde and formaldehyde);

A CaRFG3 Predictive Model Procedures document that sets forth mathematical equations, based on 27 vehicle emissions test programs, that predict the changes in exhaust hydrocarbons, NOx, and potency weighted toxics resulting from different gasoline formulations; in addition, the model includes an evaporative hydrocarbons element that allows an alternative RVP flat limit between 6.4 and 7.2 pounds per square inc (psi), when compared against the appropriate flat limit;

In the case of oxygen content, a requirement that CaRFG3 sold throughout the distribution system in Los Angeles, Orange, Riverside, San Bernardino, Ventura and Imperial Counties during specified winter months must contain at least 1.8 percent by weight (wt.%) oxygen, in order to reduce emissions of CO during the season of highest CO concentrations in areas where the CO ambient air quality standards have not yet been attained; during the rest of the year and in the remainder of the state, CaRFG3 being supplied from a production or import facility is subject to an oxygen content refinery limit of 1.8 to 2.2 wt.%, but the producer or importer may use the CaRFG3 Predictive Model to reduce oxygen content to as low as 0.0 wt.%, or raise it as high as 3.5 wt.%; and

A mechanism allowing a refiner to ship a non-oxygenated gasoline blend – called "California reformulated gasoline blendstock for oxygenate blending," or "CARBOB" – from the refinery without complying with the CaRFG standards if it is specially formulated to be combined with oxygenate "downstream" from the refinery and the resulting blend will meet all of the CaRFG standards; this allows entities adding oxygenate downstream from the refinery to take advantage of the contribution it can make to complying with the CaRFG standards, particularly by diluting the concentration of compounds like benzene.

WHEREAS, virtually all current California gasoline is subject to alternative refinery flat or averaging limits designated by the producer or importer using the CaRFG3 Predictive Model;

WHEREAS, ethanol is the only oxygenate approved for use in CaRFG3 and used in the vast majority of California gasoline;

WHEREAS, in 2006, the U.S. Environmental Protection Agency (U.S. EPA), which administers the federal reformulated gasoline regulations, pursuant to the federal Energy Policy Act of 2005, removed the requirement that gasoline sold in the severe and extreme federal ozone non-attainment areas contain 2.0 wt. percent or 2.1 wt. percent on average oxygen, year-round;

WHEREAS, ARB staff has proposed 2011 amendments to the CaRFG3 regulations, which include the following elements:

Amending the incorrect Predictive Model coefficients in the Procedures Guide, which is incorporated by reference in California Code of Regulations, title 13, section 2265;

Amending the Procedures Guide to require that gasoline with an RVP of 7.2 pounds per square inch (psi) or less must be certified as an RVP-controlled gasoline, and to allow RVP-controlled gasoline to be produced all year round;

Repealing California Code of Regulations, title 13, section 2258 because it applies to gasoline no longer commercially available;

Amending 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 must notify the Executive Officer sufficiently in advance to allow ARB inspectors an opportunity to sample and test the gasoline;

Amending 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;

Amending the definition of racing vehicle in section 2260 to more closely align with the U.S. EPA's definition; and

Other miscellaneous changes that would provide clarifications, corrections, or improvements in consistency, compliance flexibility, or enforcement ability.

WHEREAS, the California Environmental Quality Act and Board regulations require that an action not be adopted as proposed where it will have significant adverse environmental impacts if feasible alternatives or mitigation measures are available which would substantially reduce or avoid such impacts;

WHEREAS, the Board has considered the impact of the proposed amendments on the economy of the State;

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, the Board finds that:

The proposed amendments to the coefficients in the proposed CaRFG3 Predictive Model are necessary and appropriate and will improve consistency and enforceability in the model;

The proposed amendment in the Predictive Model to allow RVP-controlled gasoline to be produced all year round will give refiners the flexibility to meet the common carrier pipeline transition requirements between the non-RVP-control period and the RVP-control period at their convenience. The proposed amendment to require that gasoline with an RVP of 7.2 psi or less be certified as an RVP-controlled gasoline will simplify the complex relationship between RVP in gasoline and the Predictive Model by binding RVP levels with RVP-control period requirements;

The proposed repeal of California Code of Regulations, title 13, section 2258 will remove unnecessary language that is no longer applicable to gasoline currently sold in California;

The proposed amendment to section 2266 will 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 in order to allow ARB inspectors an opportunity to sample and test the gasoline;

The proposed amendment to section 2266.5(f)(1) will 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 specifically listed;

The proposed amendment to section 2260 will more closely align the definition of racing vehicle with the U.S. Environmental Protection Agency's (U.S. EPA) definition and will increase enforceability of the California gasoline regulations;

The proposed amendments also include additional minor changes to provide clarifications, corrections, or improvements to the regulatory language that will improve compliance flexibility or enforcement ability; and

The proposed amendments are necessary, cost-effective, and technologically feasible to carry out the purposes of Division 26 of the Health and Safety Code.

WHEREAS, the Board further finds that:

The proposed amendments do not substantially change or establish specifications for motor vehicle fuel, will not require a gasoline ingredient to be added or removed beyond what is allowed by the existing regulations or is currently already used to produce gasoline for sale in California. As a result, the proposed amendments to the CaRFG3 regulations are not subject to the requirement for a multimedia evaluation pursuant to Health and Safety Code section 43830.8;

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

The proposed amendments will not significantly affect the formulation of California gasoline, and accordingly will not have significant adverse air quality or other environmental impacts;

WHEREAS, the Board further finds that:

The proposed regulatory action will 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;

The proposed regulatory action will not significantly affect small businesses because the affected refineries are not small businesses;

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

The proposed regulatory action will not create significant 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 Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code, or other non-discretionary cost or savings to State or local agencies;

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; and

The amendments are necessary to provide clarity, enhance flexibility, and ensure the practical and effective implementation of the CaRFG3 regulations.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the repeal of title 13, California Code of Regulations section 2258; and approves for adoption 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"), 2265.1, 2266, 2266.5, and 2271, of title 13, California Code of Regulations (CCR), set forth in Attachment A hereto, with the modifications to those sections set forth in Attachment B hereto.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt the proposed amendments set forth in Attachment A hereto, including incorporated documents, with the modifications set forth in Attachment B after making the modified regulatory language, with such other conforming modifications as may be appropriate, available for public comment for a period of 15 days, provided that the Executive Officer shall consider all written comments regarding the modifications as may be submitted during this period, shall make modifications as may be appropriate in light of the comments received, and shall present the regulations to the Board for further consideration if he determines that this is warranted.

I hereby certify that the above is a true and correct copy of Resolution 11-36, as adopted by the Air Resources Board.

Mary Alice Morency, Clerk of the Board

Resolution 11-36

October 21, 2011

Identification of Attachments to the Resolution

Attachment A: The Proposed Regulation Order attached as Appendix A to the Staff Report: Initial Statement of Reasons, release date August 31, 2011.

Attachment B: Staff's Suggested Changes to the Original Regulatory Proposal, dated August 31, 2011, and distributed at the October 20-21, 2011 hearing.