State of California
AIR RESOURCES BOARD

Amendments to Regulations for Gasoline and Diesel Fuel Test Methods

Resolution 13-4

January 25, 2013

Agenda Item No.: 13-2-3

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, Health and Safety Code section 43018(a) 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, Health and Safety Code section 43018(c) 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 the specifications 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 to be necessary, cost-effective, and technologically feasible to carry out the purpose of Division 26 of the Health and Safety Code;

WHEREAS, title 13, California Code of Regulations, section 2262 specifies California Phase 3 reformulated gasoline (CaRFG) standards for, inter alia, the contents of benzene, total aromatics, oxygenates, prohibited oxygenates, sulfur, and olefins in California gasoline;

WHEREAS, title 13, California Code of Regulations, section 2263(b), Table 1 designates the test methods to be used in determining compliance with the gasoline standards identified above;

WHEREAS, title 13, California Code of Regulations, section 2262 specifies denatured ethanol standards for, inter alia, benzene, total aromatic hydrocarbons, and olefins; WHEREAS, no test methods are designated for the direct testing of denatured ethanol to determine compliance with the standards identified above; instead, test methods for
the indirect testing of the denaturant alone are specified in title 13, California Code of Regulations, section 2262.9(b), and the resulting values are multiplied by a dilution factor to calculate the concentrations in the denatured ethanol;

WHEREAS, title 13, California Code of Regulations, section 2282 establishes California Diesel Fuel (CDF) standards for the contents of aromatic hydrocarbons and polycyclic aromatic hydrocarbons, as well as designating the test method to be used in determining compliance with these standards;

WHEREAS, ARB staff has identified improved test methods for measuring the concentrations of the analytes in gasoline and diesel identified above;

WHEREAS, ARB staff has identified new test methods capable of directly measuring the concentrations of the analytes in denatured ethanol identified above;

WHEREAS, ARB staff has proposed amendments to the CaRFG and CDF regulations, which include the following elements:

- Specifying a new and more sensitive test procedure, ASTM International (ASTM) D7754-11, for future analyses of MTBE and other prohibited oxygenates in California gasoline.

- Specifying direct testing of denatured ethanol using ASTM D7347-07e1 and D7576-10 for future analyses of benzene, total aromatic hydrocarbons, and olefins, rather than indirectly testing the denaturant alone and applying a dilution factor.

- Deleting reference to the less sensitive ASTM D2622-94 method and specifying the more sensitive ASTM D5453-93 as the only approved method for the future analyses of sulfur in California gasoline.

- Specifying the updated ASTM D4815-09 method for future analyses of permitted oxygenates in California gasoline.


- Specifying the updated ASTM D6550-10 method for future analyses of olefins in gasoline.
WHEREAS, ARB staff has determined that 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 California Environmental Quality Act (CEQA) requires that a public agency not approve a project as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental impacts of such a project; in the event that specific economic, social, or other conditions make infeasible the alternatives or mitigation measures, the project may be approved if it is determined that any remaining unavoidable significant impacts are acceptable due to overriding considerations;

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, or plans has been certified by the Secretary of Resources Agency (CEQA Guidelines, section 15251(d));

WHEREAS, in accordance with ARB's certified regulatory program at title 17, CCR, section 60005 (b), and the policy and substantive requirements of CEQA, as part of the Staff Report, ARB staff has prepared an assessment of the potential for significant adverse and beneficial environmental impacts associated with the proposed amendments and a succinct analysis of those impacts; the environmental analysis found that the amendments will not result in any significant adverse impacts on the environment;

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 designation of ASTM test method D7754-11 will allow the measurement of MTBE and other prohibited oxygenates at the concentration specified in the CaRFG regulations, thus enhancing the effectiveness of the Board’s prohibition of these compounds;

The designation of ASTM test methods D7347-07e1 and D7576-10 will allow the direct measurement of benzene, total aromatic hydrocarbons, and olefins in denatured ethanol, thus enabling enforcement of these standards;
The removal of ASTM test method D2622-94 and exclusive reliance on ASTM D5453-93 will appropriately update the regulations by eliminating a test method which is no longer capable of accurately measuring the sulfur content of gasolines being produced;

The designation of ASTM test methods D4815-09, D5186-03 (2009), D5580-02 (2007), and D6550-10 will eliminate: confusion due to errors in the older version of the test method; the requirement to run multiple quality control samples each day for diesel fuel tests; the need for the analyst to refer to two documents to calculate the precision of benzene and aromatic hydrocarbon content measurements of California gasoline; and the need for the analyst to refer to two documents to calculate the olefin content in California gasoline, respectively; 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 CaRFG regulations are not subject to the requirement for a multimedia evaluation pursuant to Health and Safety Code section 43830.8;

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 amendments will result in any significant adverse impacts on the environment;

The Executive Officer is the final decision maker for the purposes of title 17, CCR section 60007, and no final decision will be made until comments on the environmental analysis are fully considered and the written responses are approved;

The proposed amendments are consistent with ARB's environmental justice policies and do not disproportionately impact people of any race, culture, or income;

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; and

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.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves for adoption amendments to sections 2262.9, 2263, and 2282, Title 13, California Code of Regulations, as set forth in Attachment A, with the Staff’s Suggested Modifications described in Attachment B.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to adopt sections 2262.9, 2263, and 2282, Title 13, as set forth in Attachment A, with the modifications set forth in Attachment B after making the modified regulatory language, and additional supporting documents and information available for public comment for a period of 15 days, provided that the Executive Officer shall consider such written comments regarding the modifications and additional supporting documents and information 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.

BE IT FURTHER RESOLVED that the Executive Officer, as the final decision maker for the purposes of title 17, CCR section 60007, prior to taking final action to adopt the regulatory amendments, shall consider all comments raising significant environmental issues, and if appropriate, conduct any further environmental analysis as required for a regulatory program certified under Public Resource Code section 21080.5, consider any modifications to the regulation to incorporate all feasible mitigation or alternatives that could eliminate or substantially lessen any significant adverse environmental impacts identified, and approve the written responses to comments raising significant environmental issues.

I hereby certify that the above is a true and correct copy of Resolution 13-4, as adopted by the Air Resources Board.

[Signature]

Tracy Jensen, Clerk of the Board
Resolution 13-4
January 25, 2013

Identification of Attachments to the Board Resolution

Attachment A: Proposed Modifications to the Regulation for Amendments to Regulations for Gasoline and Diesel Fuel Test Methods, California Code of Regulations, title 13, sections 2262.9, 2263, and 2282, as set forth in Appendix A to the Initial Statement of Reasons, released December 5, 2012.

Attachment B: Staff's Suggested Modifications to the Original Proposal (Distributed at the January 25, 2013 Board hearing)