State of California AIR RESOURCES BOARD

Resolution 96-54

October 24, 1996

Agenda Item No.: 96-8-3

WHEREAS, Health and Safety Code sections 39600 and 39601 authorize the Air Resources Board (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, 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, sections 2281 and 2282 establish limits on the sulfur and total aromatic hydrocarbon contents, respectively, of California motor vehicle diesel fuel supplied commercially on or after October 1, 1993;

WHEREAS, Title 13, California Code of Regulations, sections 2281(c) and 2282(c) designate the test methods to be used to determine the sulfur and total aromatic hydrocarbon contents, respectively, of California motor vehicle diesel fuels, and authorize the Executive Officer to allow the use of other test methods determined to give results equivalent to the results from the designated test methods;

WHEREAS, Title 13, California Code of Regulations, section 2282 allows refiners to comply by selling a batch of diesel fuel as a certified alternative diesel fuel formulation that has a total aromatic hydrocarbon content greater than the basic total aromatic hydrocarbon limit, as long as:

(a) the certified formulation has been found in an engine test program to result in emissions

equivalent to the emissions resulting from diesel fuel meeting the otherwise applicable aromatic hydrocarbon content limit, and (b) the batch of diesel fuel meets certain specifications of the "candidate" diesel fuel evaluated in the engine test program, including maximum total aromatic hydrocarbon, polynuclear aromatic hydrocarbon, nitrogen and sulfur contents;

WHEREAS, sections 2282(g)(2) and (g)(3) of Title 13, California Code of Regulations, identify the test methods for determining the maximum total aromatic hydrocarbon, polynuclear aromatic hydrocarbon, nitrogen and sulfur contents of diesel fuel used in the engine test program for certifying alternative diesel fuel formulations, and section 2282(g)(6) provides that those test methods are also to be used in determining whether a batch of diesel fuel meets the required specifications of an applicable certified alternative diesel fuel formulation;

WHEREAS, the "California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" (the "Heavy-Duty Test Procedures"), incorporated by reference in section 1956.8(b) of Title 13, California Code of Regulations, identify the specifications for the 10 percent aromatic hydrocarbon content diesel fuel that may optionally be used in the exhaust emission certification tests to determine whether new heavy-duty diesel engines and vehicles meet the Board's exhaust emission standards;

WHEREAS, the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" (the "Light- and Medium-Duty Test Procedures"), incorporated by reference in section 1960.1(k) of Title 13, California Code of Regulations, identify the specifications for the 10 percent aromatic hydrocarbon content diesel fuel that may optionally be used in the exhaust emission certification tests to determine whether new diesel passenger cars, light-duty trucks and medium-duty vehicles meet the Board's exhaust emission standards;

WHEREAS, the staff has proposed the designation of improved test methods for the measurement of sulfur, total aromatic hydrocarbons, polynuclear aromatic hydrocarbons and nitrogen contents in, and distillation temperature of, California commercial and low-aromatic certification diesel fuels:

WHEREAS, the regulatory proposal would be effected by amendments to Title 13, California Code of Regulations, sections 2281(c), 2282(b), (c) and (g), 1956.8(b), and 1960.1(k), as set forth in Attachment A hereto, and to the Heavy-Duty Test Procedures and Light- and Medium-Duty Test Procedures as set forth in Attachments B and C hereto;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project which may have significant adverse environmental impacts be adopted as originally proposed if feasible alternatives or mitigation measures are available to reduce or eliminate such impacts;

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 has considered the effect of the proposed amendments on the economy of the state;

WHEREAS, the method initially proposed by staff for determining the total aromatic hydrocarbon content and polynuclear aromatic hydrocarbon content of diesel fuel was Test Method ASTM D5186-9x (2/2/95 Draft); since release of the staff proposal, the American Society of Testing and Materials (ASTM) has distributed Test Method ASTM D5186-96, which is identical in all material respects to Test Method ASTM D5186-9x (2/2/95 Draft) except that it sets forth the updated reproducibility identified in the Staff Report;

WHEREAS, the method initially proposed by staff for determining the nitrogen content of diesel fuel was Test Method ASTM D4629-91; since release of the staff proposal, ASTM has distributed Test Method ASTM D4629-96, which reflects nonsubstantive updates to Test Method ASTM D4629-91;

WHEREAS, the Board finds that:

The designation of Test Method ASTM D5186-96 for the measurement of the total aromatic hydrocarbon content of California commercial and certification diesel fuels is appropriate and necessary because it has a higher precision, shorter analysis time, no interference from colored samples and better applicability to diesel fuels than the currently designated method;

The designation of Test Method ASTM D5186-96 for the measurement of the polynuclear aromatic hydrocarbon content of California commercial and certification diesel fuels is appropriate and necessary because it will eliminate the need for another procedure and expensive instrumentation, as well as provide a shorter analysis time and less complex procedure than the currently designated method;

The designation of ASTM D4629-96 for the measurement of the nitrogen content of commercial and certification diesel fuels is appropriate and necessary because it makes editorial improvements to the currently designated method;

The designation of ASTM D2622-94 for the measurement of the sulfur content of commercial and certification diesel fuels is appropriate and necessary because it makes improvements to some of the instrument parts specified in the currently designated method;

The designation of ASTM D86-96 for the distillation temperature procedure for commercial and certification diesel fuels is appropriate and necessary because it reflects

extensive editorial improvements, better explains the different steps of the procedure and adds a centering device for the temperature sensor used in the automated procedure compared to the currently designated procedure; and

The amendments adopted herein will not result in any significant adverse environmental impacts and will have an insignificant impact on California business enterprises.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the amendments to sections 2281, 2282, 1956.8(b) and 1960.1(k) of Title 13, California Code of Regulations, as set forth in Attachment A hereto, substituting "D5186-96" for "D5186-9x (2/2/95 draft)" and substituting "D4629-96" for "D4629-91", and approves the amendments to the "California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles" and the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" as set forth in Attachments B and C hereto, substituting "D5186-96" for "D5186-9x (2/2/95 draft)" and substituting "D4629-96" for "D4629-91".

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to make the amendments approved herein available to the public for a supplemental written comment period of 15 days, and then to adopt the amendments with such additional modifications as may be appropriate in light of the comments received, or to present the amendments to the Board for further consideration if he determines that this is warranted after review of the supplemental comments.

BE IT FURTHER RESOLVED that, following approval by the Office of Administrative Law of the amendments adopted herein, the Executive Officer is directed, as appropriate, to adopt the amendments pertaining to commercial diesel fuel as part of the California State Implementation Plan and to submit them to the U.S. Environmental Protection Agency as a revision to the California State Implementation Plan.

BE IT FURTHER RESOLVED that the Board hereby determines that the amendments to the motor vehicle emission test procedures adopted herein will not cause the California motor vehicle emission standards, in the aggregate, to be less protective of public health and welfare than applicable federal standards.

BE IT FURTHER RESOLVED that the Board hereby finds that separate California motor vehicle emission standards remain necessary to meet compelling and extraordinary conditions.

BE IT FURTHER RESOLVED that the Board hereby finds that the California motor vehicle standards and test procedures as amended herein will not cause the California requirements to be inconsistent with section 202(a) of the federal Clean Air Act and raise no new issues affecting previous waiver determinations of the Administrator of the U. S. Environmental Protection Agency pursuant to section 209(b) of the federal Clean Air Act.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the amendments pertaining to the California motor vehicle emission standards and test procedures to the U. S. Environmental Protection Agency with a request for confirmation that the amendments are within the scope of existing waivers of federal preemption pursuant to section 209(b) of the federal Clean Air Act.

I hereby certify that the above is a true and correct copy of Resolution 96-54, as adopted by the Air Resources Board.

Pat Hutchens Clerk of the Board

Resolution 96-54

October 24, 1996

Identification of Attachments to the Board Resolution

Attachment A: Proposed Amendments to Sections 2281(c), 2282(b), (c), and (g), 1956.8(b) and 1960.1(k) of Title 13, California Code of Regulations, as set forth in Attachment C to the Staff Report

Attachment B: Proposed amendments to the "California Exhaust Emission Standards and Test Procedures for 1985 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles," as set forth in Attachment D to the Staff Report

Attachment C: Proposed amendments to the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," as set forth in Attachment E to the Staff Report