

State of California
AIR RESOURCES BOARD

Response to Significant Environmental Issues

Item: Public Hearing to Consider Adoption of and Amendments to Regulations
Limiting the Aromatic Hydrocarbon Content of Motor Vehicle Diesel
Fuel

Agenda Item No.: 90-19-3

Public Hearing Date: December 13, 1990

Issuing Authority: Air Resources Board

Comment: No comments were received identifying any significant
environmental issues pertaining to this item. The staff report
identified no adverse environmental effects.

Response: N/A

Certified: Pat Hutchens
Pat Hutchens
Board Secretary

Date: October 17, 1991

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RESOURCES AGENCY OF CALIFORNIA

State of California
AIR RESOURCES BOARD

Resolution 90-76

December 13, 1990

Agenda Item No.: 90-19-3

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the Board) to adopt standards, rules and regulations 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 43013 authorizes the Board to adopt and implement motor vehicle fuel specifications for the control of air contaminants which the Board has found to be necessary, cost-effective, and technologically feasible to carry out the purposes of Division 26 of the Health and Safety Code;

WHEREAS, Health and Safety Code sections 43018(a) and (b) direct 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, and direct the Board no later than January 1, 1992 to take whatever actions are necessary, cost effective, and technologically feasible in order to achieve, not later than December 31, 2000, specified reductions in the emissions of air pollutants from vehicular sources, including the emissions of oxides of nitrogen (NOx) and particulate matter (PM);

WHEREAS, following a hearing on November 17, 1988, the Board approved and subsequently adopted Title 13, California Code of Regulations, section 2256, which establishes a basic statewide aromatic hydrocarbon limit for motor vehicle diesel fuel of 10 percent by volume, starting October 1, 1993, with a less stringent 20% standard for small refiners and a temporary 20% standard for independent refiners;

WHEREAS, section 2256(g) contains provisions intended to enable diesel fuel producers and importers to comply with the regulation with a set of diesel fuel specifications of their choosing if they can demonstrate that the alternative specifications result in the same emission benefits as the 10 percent aromatic standard (or, in the case of small refiners, the 20 percent standard);

WHEREAS, section 2256(g) identifies a test procedure for comparative testing of a prototype (candidate) fuel and a reference fuel representative of potential 10 percent aromatics diesel fuel, involving back-to-back tests using a specified heavy-duty diesel engine; identifies the statistical methodology to be used in comparing the emissions of NOx, PM, and the soluble organic fraction of the particulate matter ("SOF") resulting from

the two fuels; and establishes a process for certifying formulations of diesel fuel that satisfy the regulatory criteria;

WHEREAS, the staff has proposed amendments to section 2256(g) which include changes to the statistical methods used to compare the candidate and reference fuels, clarifying and expanding the procedures for applying for certification of a candidate fuel, requiring the comparison of emissions of the polycyclic aromatic hydrocarbon (PAH) component of the PM emissions, and specifying the effect of the amendments on any diesel fuel formulation certified prior to the effective date of the amendments;

WHEREAS, at the public hearing to consider this matter the staff has proposed modifications to various elements of the originally-proposed amendments;

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 and alternatives or feasible mitigation measures to the proposed action are available which would substantially reduce or avoid such impacts;

WHEREAS, the Board has considered the impact of the proposed regulations 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; and

WHEREAS, the Board finds that:

Emissions from diesel-powered motor vehicles contribute to ambient concentrations of ozone, nitrogen dioxide, PM10, nitric acid and visibility reducing particles, and increase cancer risk to exposed persons;

The national and/or state ambient air quality standards for ozone, nitrogen dioxide, PM10 and visibility are violated in California;

Reducing the aromatic hydrocarbon content of motor vehicle diesel fuel reduces emissions of NOx (a precursor of ozone) and particulate matter from diesel-powered motor vehicles;

The statistical methodology in existing section 2256(g) for comparing emissions resulting from the candidate and reference fuels does not adequately minimize the likelihood that a candidate fuel with unacceptably higher emissions than the reference fuel will be approved;

The statistical methodology in the amendments approved herein will help assure that candidate fuels having unacceptably

higher emissions than the reference fuel will be disapproved, while also assuring that fuels that do have equivalent emissions to the reference fuel can be certified;

The provisions in the amendments approved herein which pertain to the application, test, and certification procedures are necessary and appropriate to assure the sound and uniform consideration of candidate fuels;

The provisions in the amendments approved herein pertaining to the amendments' effect on any diesel fuel formulation certified prior to the effective date of the amendments are necessary to assure that section 2256(g) does not result in the approval of a candidate fuel that can have a permanent adverse impact on the emissions reductions expected from the underlying regulation;

Requiring a separate comparison of PAH emissions from the candidate and reference fuels is not necessary at this time to provide adequate consideration of the potential toxic effects of the two fuels;

Section 2256 as modified by the amendments approved herein continues to be technologically feasible and to have a cost-effectiveness within the range of other control measures adopted to reduce emissions of NOx and PM; and

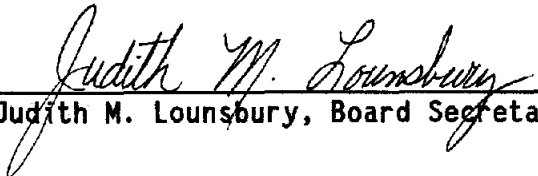
The amendments approved herein are not expected to result in any significant adverse environmental impacts which were not identified and addressed in the rulemaking approving section 2256; to the extent that any additional processing and associated changes at refineries would be required because of the decreased likelihood that a candidate fuel having unacceptably higher emissions than the reference fuel may be certified, the adverse effects of any increases in refinery emissions of sulfur dioxide and NOx not otherwise mitigated would be outweighed by the benefits of reductions in diesel vehicle NOx and PM emissions resulting from the amendments.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the amendments to Title 13, California Code of Regulations, section 2256 set forth in Attachment A hereto, with the modifications contained in Attachment B hereto omitting Attachment 1, and with further modifications, including conforming revisions to the test protocol deemed appropriate by the Executive Officer, to allow the use of only hot start exhaust emission tests provided a minimum of twenty hot start tests are conducted.

BE IT FURTHER RESOLVED that the Board directs the Executive Officer to prepare a text of amendments to Title 13, California Code of Regulations, section 2256 reflecting and showing the modifications approved herein, and to adopt the modified amendments after making them available to the public

for a period of fifteen days, with such further modifications as may be appropriate, provided that the Executive Officer shall present the regulations to the Board for further consideration if the Executive Officer determines that this is warranted in light of supplemental written comments received.

I hereby certify that the above is a true and correct copy of Resolution 90-76, as adopted by the Air Resources Board.


Judith M. Lounsbury
Judith M. Lounsbury, Board Secretary

TO COMMISSIONER
AIR RESOURCES BOARD
SACRAMENTO, CALIFORNIA
JULY 1, 1976