MAIL OUT #95-14

State of California
AIR RESOURCES BOARD

Notice of Public Availability of Modified Text

PUBLIC HEARING TO CONSIDER:

DELAYING IMPLEMENTATION OF THE PERIODIC SMOKE SELF-INSPECTION PROGRAM FOR HEAVY-DUTY DIESEL-POWERED VEHICLE FLEETS

Public Hearing Date: December 9, 1994
Public Availability Date: April 13, 1995
Deadline for Public Comment: April 28, 1995

At a public hearing held December 9, 1994, the Air Resources Board (the "Board") considered the amendment to section 2190, Title 13, California Code of Regulations ("CCR"). The amendment would delay the implementation of the periodic smoke inspection program for heavy duty diesel-powered vehicles from January 1, 1995 to July 1, 1996. The proposed regulatory action is described in detail in the Staff Report, "Public Hearing to Consider Delaying Implementation of the Periodic Smoke Self-Inspection Program for Heavy-Duty Diesel-Powered Vehicle Fleets", released on October 21, 1994.

At the hearing, the Board approved the amendments to section 2190 and 2193, Title 13, CCR, with modifications to the originally proposed regulatory language. The modifications affect:

1. Section 2190

The original proposal specified an 18-month delay in the start-up of the program, from January 1, 1995 to July 1, 1996. This would allow time for the Society of Automotive Engineers (SAE) to finish developing a smoke meter sampling methodology, SAE Recommended Practice J1667. SAE J1667 is expected to result in a number of improvements for the roadside program: the smoke opacity meter sampling requirements are being revised and will be more precisely specified to ensure a standardized opacity sampling methodology, the test procedure will account for the wide variety of exhaust system configurations in use on heavy-duty diesel vehicles by providing guidelines and opacity correction factors for conducting vehicle opacity tests, and it may include an altitude opacity correction model so that heavy-duty diesel vehicles at higher elevations can be tested to high-altitude-adjusted opacity standards. The Board believed that implementation of the fleet self-inspection program before the completion of the SAE work could unnecessarily increase expenses for fleet owners who purchase opacity meters that become obsolete in the event of the opacity meter sampling methodology change by the SAE. Since the Board recognized the significant cost of opacity meters, it acted in the interest of all heavy-duty diesel fleet owners by delaying the implementation of the self-inspection program from January 1, 1995 to January 1, 1996.

Although staff proposed a July 1, 1996 start date, the Board felt that the program should begin earlier on January 1, 1996. Since implementation of the periodic smoke inspection and roadside programs are dependent on SAE J1667, the Board strongly encouraged SAE to expeditiously complete and

approve SAE J1667. The Board directed the ARB staff to field test the new smoke test procedure as soon as the anticipated April 30, 1995 draft version of SAE J1667 is made available. This extra year would allow time for meter manufacturers to make their meters available on the market for purchase by fleet and repair facilities.

2. Section 2193(a)

The original regulations required all fleet owners to inspect at least 25 percent of their vehicles during the first quarter of 1995, followed by the inspection of an additional 25 percent each quarter thereafter. The Board modified this schedule as follows: at least 25 percent of the fleet's vehicles are to be tested within 180 calendar days of the effective date; at least 50 percent of the fleet's vehicles within 270 calendar days; at least 75 percent of the fleet's vehicles within 365 calendar days; and, the remaining fleet's vehicles no later than 455 calendar days after the effective date of these regulations.

Attached is a copy of Board Resolution 94-69, approving the above described regulatory action. Attachment A to the resolution contains the approved regulatory language, with additions to the originally proposed text shown by underline and deletions shown by slashes.

In accordance with section 11346.8 of the Government Code, the Board directed the Executive Officer to adopt amendments to sections 2190 and 2193, as approved, after making the modified regulatory language available to the public for comment for a period of at least 15 days, provided that the Executive Officer shall consider such written comments as may be submitted during this period, shall make such 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.

Written comments must be submitted to the Board Secretary, Air Resources Board, P.O. Box 2815, Sacramento, California, 95812, no later than April 28, 1995 for consideration by the Executive Officer prior to final action. Only comments relating to the modifications described in this notice will be considered by the Executive Officer.

Sincerely,

K. D. Drachand, Chief
Mobile Source Division

Attachments

State of California
AIR RESOURCES BOARD

Resolution 94-69

December 9, 1994

Agenda Item No.: 94-12-4

WHEREAS, Sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the "Board" or "ARB") 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, in Section 43000 of the Health and Safety Code, the Legislature has declared that the emission of air pollutants from motor vehicles is the primary cause of air pollution in many parts of the state and, in Sections 39002 and 39003 of the Health and Safety Code, has charged the Board with the responsibility of systematically attacking the serious air pollution problem caused by motor vehicles;

WHEREAS, in Section 43000.5 of the Health and Safety Code, the Legislature has declared that the burden for achieving needed reductions in vehicle emissions should be distributed equitably among various classes of vehicles, including heavy-duty vehicles, to achieve improvements in both the emissions levels and in-use performance;

WHEREAS, Section 43013 of the Health and Safety Code authorizes the Board to adopt motor vehicle emission standards and in-use performance standards which it finds to be necessary, cost-effective, and technologically feasible;

WHEREAS, Section 43018 of the Health and Safety Code directs the Board to endeavor to achieve the maximum degree of emission reduction from vehicular sources to accomplish the attainment of state ambient air quality standards by the earliest practicable date;

WHEREAS, the Legislature in 1988 enacted Section 44011.6 of the Health and Safety Code which directed the Board to develop a test procedure for the detection of excessive smoke emissions from heavy-duty diesel motor vehicles;

WHEREAS, Section 44011.6 of the Health and Safety Code further directed the Board to prohibit by regulation the use of heavy-duty motor vehicles which are determined to have excessive smoke emissions or other emissions-related defects and to commence inspecting heavy-duty motor vehicles;

WHEREAS, pursuant to Section 44011.6 of the Health and Safety Code, the Board in November 1990 adopted Sections 2180 through 2187, Title 13, California Code of Regulations, which implemented the test procedure for the detection of excessive smoke emissions from heavy-duty diesel motor vehicles

and which established the roadside smoke and emission control system inspection program for in-use heavy-duty diesel and gasoline-powered vehicles (the "roadside smoke inspection program");

WHEREAS, in Section 43700(d) of the Health and Safety code, the Legislature has declared that a reduction of emissions from diesel-powered vehicles, to the maximum extent feasible, is in the best interests of air quality and public health;

WHEREAS, the Legislature in 1990 enacted Section 43701(a) of the Health and Safety Code, mandating that the Board adopt regulations which require that owners or operators of heavy-duty diesel motor vehicles perform regular inspections of their vehicles for excessive emissions of smoke (a "periodic smoke inspection program");

WHEREAS, Section 43701(a) of the Health and Safety Code requires that the Board, in adopting the periodic smoke inspection program regulations, specify the inspection procedure, the frequency of inspections, the emission standards for smoke, and the actions the heavy-duty diesel motor vehicle owner or operator is required to take to remedy excessive smoke emissions;

WHEREAS, pursuant to Section 43701(a) of the Health and Safety Code, on December 10, 1992 the Board adopted Sections 2190 through 2194, Title 13, California Code of Regulations, to establish a periodic smoke self-inspection program for heavy-duty diesel-powered vehicle fleets;

WHEREAS, on December 10, 1992, the Board recognizing that new and alternative technologies are under development for the measurement and recording of heavy-duty diesel vehicle smoke emissions (i.e., analog to digital output and sampling methodology) established a regulation implementation date of January 1, 1995;

WHEREAS, on December 9, 1994, the staff proposed adoption of amendments to Title 13, CCR, Section 2190, which would delay general implementation of the regulation from January 1, 1995 to July 1, 1996;

WHEREAS, staff proposed an effective date of July 1, 1996 for the periodic smoke inspection program to allow additional time for the development and publication of a revised opacity meter sampling methodology for the snap-idle test by the Society of Automotive Engineers (SAE);

WHEREAS, staff also recommended delaying the effective date of the regulation to allow the ARB time to evaluate the SAE approved test method, to adopt the SAE recommendations into regulations, and to allow time for opacity meters meeting the SAE recommendations to be available for purchase;

WHEREAS, the California Environmental Quality Act and Board regulations require that no project having significant adverse environmental impacts be adopted as originally proposed 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 regulatory action on the economy of the state; and

WHEREAS, the Board finds that:

Excessive smoke emissions from heavy-duty diesel-powered motor vehicles contribute significantly to the serious air pollution problem in this state;

Particulates from the excessive smoke emissions of heavy-duty diesel-powered motor vehicles are a significant source of air contaminants;

Attainment of the state ambient air quality standards cannot be accomplished by the earliest practicable date without the reduction of excessive emissions from heavy-duty diesel-powered vehicles;

While the roadside smoke inspection program has been effective in reducing excessive smoke emissions from heavy-duty diesel-powered vehicles, additional action was required to further reduce excessive smoke emissions from heavy-duty diesel-powered vehicles;

The periodic smoke inspection program complements the existing roadside smoke inspection program and further reduce excessive smoke emissions from heavy-duty diesel-powered vehicles;

The periodic smoke inspection program regulations were adopted in December 1992 in order to fulfill the mandate for Health and Safety Code Section 43701(a);

The periodic smoke inspection program applies generally to heavy-duty diesel-powered vehicles with gross vehicle weight ratings of 6,001 pounds or more which operate on the streets or highways within the State of California, excluding only those heavy-duty diesel-powered vehicles which are not part of a fleet of two or more vehicles, which are not based in California, or which operate in California under short-term vehicle registrations or permits;

It is necessary and appropriate that the periodic smoke inspection program regulations utilize the smoke emission test procedures and smoke opacity standards which were developed and adopted for the roadside smoke inspection program, thereby applying consistent test procedures and standards for the two programs;

It is necessary and appropriate to begin the periodic smoke inspection program on January 1, 1996 to allow for additional time for the completion of a revised opacity meter sampling methodology for heavy-duty diesel vehicles by the SAE; to

allow additional time for the ARB to evaluate the test method and the test instrumentation specifications; to allow time for the ARB to adopt the SAE recommendations into regulations and to allow time for opacity meters meeting the SAE recommendations to be made available for purchase;

It is necessary and appropriate to increase the test implementation schedule, required by the regulation, by 90 days to allow equipment manufacturers sufficient time to market complying smoke meters;

WHEREAS, the Board further finds that:

The amendments approved herein will result in a significant adverse environmental impact in that a 12-month delay in implementing the Periodic Smoke Inspection program will result in a loss of program emission benefits of 2920 tons of PM, 2190 tons of HC, and 1825 tons of NOx;

The loss of emission benefits will be only a temporary short-term loss of the benefits for all three pollutants during the 12-month delay before the program begins operation on January 1, 1996;

The ARB has investigated whether there are any feasible mitigation measures or alternatives that would lessen or eliminate the significant adverse emissions impact of the amendment approved herein, and has not identified any such mitigation measures or alternatives which would allow the periodic smoke inspection program to begin on January 1, 1995 without a significant negative economic impact;

The negative economic impact of the "two meter" program of an approximately $20 million expenditure by industry substantially overrides the negative environmental impact of the "one meter" delayed program alternative;

NOW THEREFORE BE IT RESOLVED that the Board hereby approves the amendments to Title 13 California Code of Regulations sections 2190 and 2193, as set forth in Attachment A hereto.

I hereby certify that the above is a true and correct copy of Resolution 94-69, as adopted by the Air Resources Board.

Pat Hutchens

Pat Hutchens, Board Secretary

Resolution 94-69

December 9, 1994

Identification of Attachment to the Resolution

Attachment A: Modifications to the Proposed Regulatory Action as Decided at the Board Hearing on December 9, 1994.

REGULATORY AMENDMENTS

Amend Subchapter 3.6, Sections 2190-2194, Title 13, California Code of Regulations, to read as follows:

[Note: The regulatory amendments proposed in this rulemaking are shown in underline to indicate additions to the text, ~~strikeout~~ to indicate deletions to the original regulations, and *slashes* to indicate modifications made at the December 9, 1994 Board Hearing.]

Subchapter 3.6. Heavy-Duty Diesel-Powered Vehicle Periodic Smoke Inspections

2190. These regulations shall be applicable, effective ~~January 1, 1995~~ *July 1, 1996* January 1, 1996, as follows:

(a) Except as provided in subsections (b), (c), (d), (e) and (f), the requirements of this subchapter apply to all heavy-duty diesel-powered vehicles with gross vehicle weight ratings of 6,001 pounds or more which operate on the streets or highways within the State of California.

(b) Heavy-duty diesel-powered vehicles which are not part of a fleet (as defined in section 2191(a)) are excluded from the requirements of this subchapter.

(c) Heavy-duty diesel-powered vehicles which are registered under the International Registration Plan as authorized by Article 4 (commencing with section 8050), Chapter 4, Division 3 of the Vehicle Code and which have established a base state other than California (non-California based vehicles) are excluded from the requirements of this subchapter.

(d) Heavy-duty diesel-powered vehicles which operate in California under the terms of Interstate Reciprocity Agreements as authorized by Article 3 (commencing with section 8000), Chapter 4, Division 3 of the Vehicle Code and which belong to fleets that are not based in California are excluded from the requirements of this subchapter.

(e) Heavy-duty diesel-powered vehicles operating in California under the terms of any other apportioned registration, reciprocity, or bilateral prorate registration agreement between California and other jurisdictions and which belong to fleets that are not based in California are excluded from the requirements of this subchapter.

(f) Heavy-duty diesel-powered vehicles operating in California under short-term vehicle registrations or permits of 90 days or less (including but not limited to 90-day temporary registrations and 4-day permits under Vehicle Code section 4004) are excluded from the requirements of this subchapter.

NOTE: Authority Cited: Sections 39600, 39601, and 43701(a), Health and Safety Code. Reference: Sections 39002, 39003, 39010, 39033, 43000, 43018, 43701 (a), and 44011.6, Health and Safety Code.

2191. Definitions.

(a) The definitions of this section supplement and are governed by the definitions set forth in Chapter 2 (commencing with Section 39010), Part 1, Division 26 of the Health and Safety Code. The provisions of this subchapter shall also be governed by the definitions set forth in section 2180.1, Title 13, California Code of Regulations including the following modifications:

(1) "Fleet" means any group of 2 or more heavy-duty diesel-powered vehicles which are owned or operated by the same agency or entity.

(2) "Inspector" means an Air Resources Board employee with the duty of enforcing Health and Safety Code section 43701(a) and Title 13, California Code of Regulations, sections 2190 through 2194.

(3) "Test opacity" means the measurement of smoke opacity from a vehicle for the purpose of determining compliance with the standards referenced in section 2193(c).

(4) "Test procedure" means the smoke meter test procedure as specified in section 2193(c).

NOTE: Authority Cited: Sections 39600, 39601, and 43701(a), Health and Safety Code. Reference: Sections 39002, 39003, 39010, 39033, 43000, 43018, 43701(a), and 44011.6, Health and Safety Code.

2192. Vehicle Inspection Responsibilities.

(a) The owner of a heavy-duty diesel-powered vehicle subject to the requirements of this subchapter shall do all of the following:

(1) Test the vehicle for excessive smoke emissions periodically according to the inspection intervals specified in section 2193 (a) and (b).

(2) Measure the smoke emissions for each test using the test procedure specified in section 2193 (c).

(3) Record the smoke test opacity levels and other required test information as specified in section 2194.

(4) Have the vehicle repaired if it exceeds the applicable smoke opacity standard specified in section 2193 (c).

(5) Record the vehicle repair information as specified in section 2194.

(6) Conduct a post-repair smoke test to determine if the vehicle complies with the applicable smoke opacity standard.

(7) Record the post-repair smoke test results as specified in section 2194.

(8) If the vehicle does not comply with the applicable smoke opacity standard, make additional repairs to achieve compliance, and record the smoke test results as specified in section 2194.

(9) Keep the records specified in section 2194 for two years after the date of inspection.

(10) Permit an Air Resources Board inspector to review the inspection records specified in section 2194 at owner/operator designated fleet locations by appointment.

NOTE: Authority Cited: Sections 39600, 39601, and 43701(a), Health and Safety Code. Reference: Sections 39002, 39003, 39033, 43000, 43018, 43701(a), and 44011.6, Health and Safety Code.

2193. Smoke Opacity Inspection Intervals, Test Procedures, and Standards.

(a) Vehicles which are subject to the requirements of this subchapter on the effective date of these regulations shall be tested for smoke opacity (and repaired if the applicable smoke opacity standard is exceeded) in accordance with the requirements of section 2192 pursuant to the following schedule: at least 25 percent of the fleet's vehicles within ~~90~~ 180 calendar days of the effective date of these regulations; at least 50 percent of the fleet's vehicles within ~~180~~ 270 calendar days of the effective date of these regulations; at least 75 percent of the fleet's vehicles within ~~270~~ 365 calendar days of the effective date of these regulations; and, the remaining fleet's vehicles no later than ~~365~~ 455 calendar days after the effective date of these regulations. For fleet of 2 to 4 vehicles, at least one vehicle must be tested in each 90 calendar day period, beginning with the initial ~~90~~ 180 calendar day period, until all vehicles in the fleet have been tested. Fleets which become subject to the requirements of the subchapter subsequent to the effective date of these regulations should be tested in accordance with the above schedule beginning on the date they become subject to these regulations.

(b) After the initial smoke opacity testing under subsection (a), vehicles which are subject to the requirements of this subchapter shall be tested for smoke opacity (and repaired if the applicable smoke opacity standard is exceeded) in accordance with the requirements of section 2192 at least once every 365 days.

(c) The smoke opacity test procedure and applicable opacity standards shall be as specified in section 2182(a) to (e), (g), and (h), and section 2185(b), Title 13, California Code of Regulations.

NOTE: Authority Cited: Sections 39600, 39601, 43013, 43701(a), Health and Safety Code. Reference: Sections 39002, 39003, 39033, 43000, 43013, 43018, 43701(a), and 44011.6, Health and Safety Code.

2194. Record Keeping Requirements.

(a) The owner of a vehicle subject to the requirements of this subchapter shall record the following information when performing the smoke opacity testing:

(1) The brand name and model of the opacity meter.

(2) The brand name and model of the strip chart recorder.

(3) The dates of last calibration of the opacity meter and chart recorder.

(4) The name of the smoke meter operator who conducted the test.

(5) The name and address of the contracted smoke test facility or vehicle repair facility that conducted the test (if applicable).

(6) The applicable smoke opacity standard for the tested vehicle.

(7) Vehicle identification number, vehicle's engine year, engine make, and engine model, and test date. Fleet-designated vehicle identification numbers are also acceptable.

(8) The initial smoke test opacity levels (for three successive test readings).

(9) An indication of whether the vehicle passed or failed the initial smoke test.

(10) The post-repair test date.

(11) The post-repair smoke test opacity levels (for three successive test readings).

(12) An indication of whether the vehicle passed or failed the post-repair smoke test.

(13) For vehicles that have failed the smoke test and have been repaired, the vehicle repair information specified in section 2186(a), Title 13, California Code of Regulations.

NOTE: Authority Cited: Sections 39600, 39601, and 43701(a), Health and Safety Code. Reference: Sections 39002, 39003, 39033, 43000, 43018, 43701 (a), and 44011.6, Health and Safety Code.