

State of California  
AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking,  
Including Summary of Comments and Agency Response

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  
Agenda Item No.: 94-12-4

I. INTRODUCTION

On December 9, 1994, the Air Resources Board (the "Board") conducted a public hearing to consider delaying the implementation of the periodic smoke self-inspection program (PSI) for heavy-duty diesel-powered vehicle fleets.

At the public hearing, the Board adopted Resolution 94-69, approving amendments to the regulations delaying the implementation of the PSI program from January 1, 1995 until January 1, 1996. The amendments modified Title 13, California Code of Regulations (CCR), Sections 2190 and 2193(a). The modifications will also extend the time when an affected fleet must begin smoke testing its vehicles from 90 days to 180 days from the effective date of the regulations.

The approved regulations include modifications made by the Board at the December 9, 1994 hearing. The modified regulations were made available to the public for a 15-day comment period between April 13, 1995 and April 28, 1995 pursuant to Government Code section 11346.8(c). The "Notice of Public Availability of Modified Text" together with a copy of the full text of the regulations, clearly indicating the changes, was mailed on April 13, 1995.

A Staff Report was prepared which constitutes the Initial Statement of Reasons for the proposed rulemaking. This Staff Report was released on October 21, 1994 and is incorporated by reference herein. Based upon the comment received during the 15-day comment period, the Executive Officer determined that additional modifications to the proposed regulations were unnecessary. This Final Statement of Reasons updates the Staff Report, by explaining the rationale for modifying the proposed text. This Final Statement of Reasons also contains a summary of comments received during the formal rulemaking process and the ARB's responses to the comments.

The referenced documents have been available from the ARB upon request pursuant to Title 13, CCR, Section 1902 and were made available in the context of the subject rulemaking in the manner required by Government Code Section 11346.7(a).

The Board has determined that this regulatory action does not impose a mandate on local agencies or school districts.

The Board has further determined, for the reasons set forth in the Initial Statement of Reasons, that no alternatives considered by the agency would be more effective in carrying out the purpose for which the regulatory action

was proposed or would be as effective and less burdensome to affected private persons, than the action taken by the Board.

## II. GENERAL RATIONALE FOR THE REGULATION

The Staff Report sets forth the rationale for the proposed regulation. This section of the Final Statement of Reasons briefly summarizes the general rationale.

During 1988, the California Legislature enacted Health and Safety Code section 44011.6, to address the affects of heavy-duty diesel vehicles' emissions on the state's air pollution problem. This statute authorized the ARB, with support from the California Highway Patrol, to establish a statewide roadside smoke inspection program for all heavy-duty diesel vehicles with a gross vehicle weight ratings of 6,001 pounds or more. The roadside smoke inspection program was approved by the Board at a public hearing during November 1990. The resulting regulations are found at Title 13, CCR, sections 2180 through 2187.

The Legislature, during 1990, took an additional step to address concerns about heavy-duty diesel vehicles' excessive smoke emissions by enacting HSC section 43701(a). This section directed the ARB to adopt regulations requiring the owners or the operators of heavy-duty diesel vehicles to regularly self inspect their vehicles for excessive smoke emissions. In response to this legislative mandate, the Board on December 10, 1992, adopted regulations establishing a periodic smoke self-inspection program for heavy-duty diesel-powered vehicle fleets.

The Society of Automotive Engineers (SAE), formed a committee, during May 1992, to refine and standardize the roadside smoke inspection test procedure. The committee was formed at the suggestion of both the trucking industry and the heavy-duty engine manufacturers in anticipation of many other states initiating similar inspection programs. The SAE Committee's test procedure is known as SAE Recommended Practice J1667. Additionally, the California Legislature passed Assembly Bill (AB) 584 during September 1993. This bill modified the roadside inspection program by specifying criteria for adopting smoke test standards, procedures, and measurement equipment. The bill states that the adoption of SAE J1667 will satisfy these criteria. The ARB is working closely with the SAE to develop the J1667 procedure in an effort to comply with the provisions of AB 584.

The PSI regulations originally specified a start-up date of January 1, 1995 to allow time for the SAE to finish developing Recommended Practice J1667. The Board believes that implementing the PSI program before the SAE completes its work will unnecessarily increase a fleet owner's compliance cost. The Board based its conclusion upon the likelihood that the final version of J1667 will contain new and different meter specifications. Consequently, currently available meters probably will be obsolete soon.

The completion of the SAE J1667 committee's work has unfortunately been delayed by the lengthy resolution of a number of technical issues mainly concerning the development of standardized specifications for opacity meter sampling methodology. These issues need to be resolved and the SAE must approve J1667 before the PSI program can be implemented. SAE J1667 must be completed before smoke opacity meter manufacturers can market properly

configured meters for purchase by heavy-duty diesel fleet owners. As a result, the ARB has had to delay incorporating the SAE J1667 procedure and specifications into the Board's regulations. For these reasons, the ARB cannot initiate the PSI program until after the previously adopted start-up date of January 1, 1995. Consequently, the staff suggested postponing the program's implementation date.

Although staff proposed a July 1, 1996 start-up date at the December 9, 1994 Board hearing, the Board approved an earlier beginning date of January 1, 1996. Along with approving the earlier startup date, the Board also strongly encouraged the SAE to quickly approve J1667, since the ARB cannot implement either the PSI or the roadside inspection programs until after the SAE completes its work on the proposed test procedure. The Board's action at the December 9, 1994 hearing will allow meter manufacturers an extra year to produce conforming meters for purchase by fleet and repair facilities.

Additionally, the 1992 PSI regulations required all fleet owners to inspect at least 25 percent of their vehicles during the first quarter of 1995, followed by a requirement to inspect another 25 percent of the owners fleet during each subsequent quarter. The Board modified the program's initial inspection schedule as follows: at least 25 percent of a fleet's vehicles must be tested within 180 calendar days of January 1, 1996; at least 50 percent of a fleet's vehicles must be inspected within the first 270 calendar days; at least 75 percent of a fleet's vehicles must be inspected within 365 calendar days of the start-up date; and finally, the remaining fleet's vehicles must be inspected, no later than 455 calendar days after the effective date of this regulation.

### III. SUMMARY OF COMMENTS AND AGENCY RESPONSES

Prior to the public hearing on December 9, 1994, the Board received written comments from the Associated California Loggers (ACL), the Fullerton Joint Union High School District, the Metropolitan Water District of Southern California (MWD), the Engine Manufacturers Association (EMA), the Exxon Company, U.S.A., and the American Trucking Associations (ATA).

At its December 9, 1994 meeting, the Board heard testimony from the Los Angeles County Metropolitan Transportation Authority (MTA), Caltest Instruments, Inc., and the California Trucking Association (CTA). One comment letter, from the Planning and Conservation League (PCL), was received in response to the "Notice of Public Availability of Modified Text", released April 13, 1995.

In both the comments made at the Board hearing and in the written submissions received by the Board, the ACL, the Exxon Company, EMA, ATA, CTA, and Caltest Instruments all expressed support for the staff's proposals. Even though these comments were considered by the Board in its decision to delay implementing the PSI program, these favorable written and oral comments are neither summarized nor responded to in this Final Statement of Reasons because they do not contain objections or recommendations specifically addressed to the proposed action.

TABLE OF TOPICS ADDRESSED IN COMMENTS:

- A. Mandatory Testing.
- B. Phasing-In Standardized Opacity Meters.
- C. Alternative Implementation Schedule.
- D. 15-Day Comments.
- A. MANDATORY TESTING

1. Comment: The Fullerton Joint Union High School District questioned the need to smoke test every diesel vehicle because of the considerable expense involved. They suggested, that if a vehicle is reported to be smoking, for example, by the air quality management district's smoking vehicle hot-line number, a notice could be sent to the owner to bring the vehicle into a state station for a quick opacity check. If the vehicle passed, then the vehicle would be exempt from further testing for six months. However, if the vehicle failed, the owner would be required to repair the vehicle before retesting it for compliance. (Fullerton Joint Union High School District)

Agency Response: During 1990, the Legislature enacted Health and Safety Code section 43701(a) directing the ARB to develop a heavy-duty diesel vehicle periodic smoke self-inspection program (PSI). This program, as adopted by the ARB on December 10, 1992, requires owners of heavy-duty diesel vehicles to annually smoke test their vehicles. The PSI program was developed to complement the roadside inspection program. The PSI program provides an incentive for the owners of heavy-duty vehicles, including trucks and buses that are operated locally and rarely pass by roadside weigh stations, to test and repair their vehicles. Therefore, the PSI program will be especially useful in lowering smoke emissions from heavy-duty diesel vehicles operated primarily on streets and local highways.

The PSI program, as contemplated by the regulations, requires fleet owners to conduct regular smoke inspections and to perform vehicle maintenance as needed. The commentator apparently misunderstands a fleet owners testing responsibility under the regulations and instead suggests that diesel powered fleets vehicles should only be tested if they are identified as a gross emitter, by a member of the public, who will report the smoking vehicle to the air quality management district. An ad hoc inspection program, as suggested by the commentator would be relatively ineffective in reducing diesel vehicle smoke emissions, especially when compared to the PSI program, which requires regular smoke inspections of all fleet vehicles, as mandated by statute.

Concerning the expense to fleets, the ARB staff has worked and will continue to work closely with fleet operators by advising them on cost-effective measures for smoke testing, for repairing, and for maintaining their vehicles. For example, the ARB staff has assisted the cities of Carlsbad, Imperial Beach, and Oceanside, as well as the Barstow Marine Base, the March Air Force Base, and the San Diego Unified Port District.

Consequently, the ARB staff will gladly provide the Fullerton Joint Unified High School District information and advice about cost effective testing and maintenance procedures, if requested, when the District is ready to begin smoke testing their vehicles.

**B. PHASING-IN STANDARDIZED OPACITY METERS**

2. Comment: The MWD purchased eight SAE J1243 smoke opacity meters to meet the original PSI program deadline of January 1, 1995. Because of the recent purchase, they requested that the ARB consider phasing-in the new SAE J1667 opacity meter requirement at least one year beyond the new January 1, 1996 deadline. MWD is concerned that the cost of purchasing an entirely new set of opacity meters will result in the MDW incurring a significant additional expense. The MWD suggests that the compliance deadlines could be phased-in to coincide with the expected half-life of previously purchased opacity meters which, according to meter manufacturers, is approximately five years. This strategy, would allow the MWD more time and flexibility to reasonably amortize opacity meter costs. (MWD)

3) Comment: Four years ago, the MTA purchased, at a cost of one hundred thousand dollars, 20 smoke opacity meters for use in testing its fleet. The MTA believes that the number of smoking vehicles in its fleet will soon be significantly reduced. The MTA attributes the projected reduction to three factors; its policy of replacing the MTA's worn out busses with alternative fuel vehicles; the mandate from its board of directors prohibiting any future diesel bus purchases and the South Coast Air Quality Management District's air quality management plan requiring the MTA to have a fleet composition of 70 percent alternative fuels vehicles and 30 percent zero emission vehicles. Therefore, it would not be cost-effective for the MTA to purchase a new set of J1667 smokemeters. (MTA)

Agency Response: This issue is not directly related to this Board action. Nevertheless, the ARB's staff will determine if previously purchased J1243 meters can fulfill the PSI's inspection requirements. Staff will make its recommendation to the Board when the ARB meets to consider incorporating the J1667 procedure and specifications into the heavy duty diesel smoke inspection regulations.

**.C. ALTERNATIVE IMPLEMENTATION SCHEDULE**

4) Comment: Caltest Instruments, Inc. proposed an alternative schedule to implement the PSI program. This proposal suggests delaying the implementation date until January 1996, only if, the J1667 specifications are approved by the SAE on or before August 31, 1995. However, if SAE J1667 is not approved by August 31, 1995, Caltest recommends that the PSI program should be delayed until July 1, 1996. (Caltest Instruments, Inc.)

Agency Response: Although staff proposed a July 1, 1996 start date, the Board agreed with the commentator and approved the earlier program start date of January 1, 1996. However, the Board did not embrace Caltest's alternative suggestion to further delay the start of the PSI program should the SAE fail to approve J1667 by August 31, 1995. Rather than again delay the start of the PSI, the Board strongly encouraged the SAE to quickly complete its work on the J1667 specifications, since the implementation of both the PSI and the roadside inspection programs are

directly dependent on the availability of SAE J1667 opacity meters. Furthermore, 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 was available. Finally, in the event that the SAE does not approve this draft version, the Board instructed the staff to develop alternative diesel smoke test specifications, in accordance with AB 584.

5) Comment: The commentator suggested that the Board write a letter to SAE Executive Vice-President Max Rumbaugh, complaining about the SAE Committee's slow progress towards adopting SAE J1667. (Caltest Instruments, Inc.)

Agency Response: The Board directed the staff to draft a letter for signature by the Executive Officer expressing the Board's concern about the the committee's delay in adopting J1667. The letter was sent to the SAE on February 7, 1995.

D. 15-DAY COMMENTS

6) Comment: PCL agrees with the Board that the PSI program implementation date should be changed to January 1, 1996. However, the PCL also suggests, that the staff not recommend any further delays to implementing the PSI program, because California must soon reduce the excessive particulate emission from heavy duty diesel powered vehicles.(PCL)

Agency Response: See response to comment four.