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Gray Davis
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February 25, 2002

Mail-Out #MSC 02-04

TO: All Interested Parties

SUBJECT: PROPOSED MODIFICATIONS TO THE DIESEL RETROFIT
VERIFICATION PROCEDURE FOR PARTICULATE MATTER (PM)
AND OXIDES OF NITROGEN CONTROL

Background: In August 1998 the California Air Resources Board (ARB or Board) identified PM from diesel-fueled engines as a toxic air contaminant. Following that determination, ARB formed a Diesel Advisory Committee with a wide variety of stakeholders to develop a Diesel Risk Reduction Plan.

In recognition of the important role that diesel emission control strategy will have in reducing public exposure to diesel PM, ARB has developed interim procedures to verify the emission reduction claims of diesel emission control strategies. ARB's role is to determine if a given diesel emission control strategy's emission reductions are real and durable, to establish the emission reduction level, to verify that the diesel emission control strategy has had successful field experience, and to investigate any secondary emissions of concern.

In July 2000 ARB staff issued the interim diesel emission control strategy verification procedure. In May and September of 2001, ARB staff conducted workshops to gather comments on the interim diesel emission control strategy procedure and how to convert the interim procedure to a regulatory proposal. The development of the diesel emission control strategy verification procedure is an on-going process, and ARB has worked closely with all stakeholders to ensure the diesel emission control strategy procedure is technically sound and feasible.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

Revisions to the interim diesel emission control strategy verification procedure:

At this time, staff is giving notice that it is changing the interim procedure used to evaluate in-use emission control strategies. The changes reflect the evolution of the draft regulatory language as set forth in Mail-Out #MSC-02-02.

The specific changes are highlighted below:

1. Verification Levels: PM control strategies will be classified as one of three emission verification levels:

Category	PM Reduction
Level 1	≥ 25 but < 50 percent
Level 2	≥ 50 but < 85 percent
Level 3	≥ 85 percent, or 0.01 g/bhp-hr

As noted in #MSC-02-02, this modification is intended to broaden the spectrum of technologies that ARB will consider in its diesel emission control strategy efforts, such as diesel oxidation catalysts (a number of which have been certified under other programs to achieve 25 percent PM reductions). Although we are proposing a multi-level approach to the verification procedure, we are not deviating from our goal of achieving the maximum reduction in diesel PM emissions that is economically and technologically feasible.

2. Durability Demonstration Requirements: The durability period for on-road applications will be reduced to 50,000 miles or 1,000 hours. Similarly, staff will reduce the durability periods for off-road and stationary applications to 1,000 hours and stationary emergency generator to 500 hours.
3. Minimum warranty period: To partially compensate for a reduced durability test period, the minimum warranty period will increase to equal that of the original durability periods (see table next page).

Minimum Defects Warranty Periods

Engine Type	Engine Size	Minimum Warranty Period
On-Road	Light heavy-duty, generally 70 to 170 hp, GVWR normally less than 19,500 lbs.	5 years or 60,000 miles
	Medium heavy-duty, generally 170 to 250 hp, GVWR normally from 19,500 lbs. to 33,000 lbs.	5 years or 100,000 miles
	Heavy heavy-duty, generally exceeds 250 hp, GVWR normally exceeds 33,000 lbs.	5 years or 150,000 miles
Off-Road (includes portable engines) and Stationary	Under 25 hp, and for constant speed engines rated under 50 hp with rated speeds greater than or equal to 3,000 rpm	3 years or 1,600 hours
	At or above 25 hp and under 50 hp	4 years or 2,600 hours
	At or above 50 hp	5 years or 4,200 hours

Interim Verification:

The ARB has already verified some diesel emission control strategies and continues to review verification requests for the interim period before the diesel emission control strategy verification procedure is presented to the Board.

To begin the verification process, a manufacturer must contact ARB staff to discuss its product and plan to meet the verification requirements. If the diesel emission control strategy is to be used on a certified engine, the manufacturer will also need to apply for a Vehicle Code 27156 exemption. The exemption allows the sale and installation of the reviewed diesel emission control strategy in the State of California (without confirming any emission reduction claims).

To expedite review, the manufacturer's application should follow the format shown in Section 2702 (d) of the draft diesel emission control strategy verification procedure (Mail-Out MSC# 02-02). If ARB determines that the diesel emission control strategy meets the minimum requirements, the manufacturer will be provided with verification of emission reductions in the form of a letter. The verification letter states the ARB has reviewed and verified the claims of emission reductions based on data provided for the diesel emission control strategy.

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ARB staff is available to discuss all the requirements described in the procedure and to provide feedback on the manufacturer's test plan to ensure that the necessary data for the verification process are obtained. It should be stressed that staff is considering existing data in its evaluation of diesel emission control strategy in this interim period.

Submissions should be mailed to:

Air Resources Board
Mobile Source Control Division
9528 Telstar Avenue
El Monte, California 91731
Attn: Ms. Annette Hebert

Should you have any questions regarding the interim verification procedure, please contact Mr. Scott Rowland, Manager, Retrofit Assessment Section, by e-mail at srowland@arb.ca.gov or by phone at (626) 575-6972.

Sincerely,

//s//

Robert H. Cross, Chief
Mobile Source Control Division