State of California
AIR RESOURCES BOARD

Resolution 08 -13

January 24, 2008

Agenda Item No.: 08-1-8

WHEREAS, sections 39600 and 39601 of the Health and Safety Code authorize the Air Resources Board (the "ARB" or "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, 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 addressing the serious air pollution problem caused by motor vehicles;

WHEREAS, sections 43013, 43018, 43101, and 43104 of the Health and Safety Code authorize the Board to adopt motor vehicle emission standards, in-use performance standards, and test procedures, which it finds to be necessary, cost-effective, and technologically feasible;

WHEREAS, California identified diesel particulate matter as a toxic air contaminant by regulation (title 17, California Code of Regulations, section 93000) in August, 1998;

WHEREAS, the Board adopted the Diesel Risk Reduction Plan in 2000 which established discrete goals for reducing emissions from virtually all in-use diesel engines within the State of California by 2010 and 2020;

WHEREAS, diesel emission control systems have been developed that may be applied to in-use diesel-fueled vehicles and equipment;

WHEREAS, the Board has adopted a number of regulations to reduce emissions from in-use diesel vehicles and equipment, including transit vehicles, solid waste collection vehicles, off-road vehicles, and drayage trucks;

WHEREAS, the Board adopted a diesel emission control strategy verification procedure and warranty and in-use compliance requirements for on-road, off-road, and stationary diesel-fueled vehicles and equipment (sections 2700-2710, title 13, California Code of Regulations) in March 2003, and subsequently amended it in October 2004 and February 2007;

WHEREAS, the verification procedure is intended to support the various regulations approved by the Board to reduce emissions from in-use diesel vehicles and equipment

by evaluating the emission reduction claims and durability of the diesel emission control systems and providing a manufacturer warranty for these systems;

WHEREAS, the verification procedure is a voluntary program whereby manufacturers of diesel emission control systems may apply for the verification of a candidate device for sale in California;

WHEREAS, the federal Clean Air Act grants the State of California the authority to adopt standards for the control of emissions from new motor vehicles and engines if the State determines that the State standards will be, in the aggregate, at least as protective of public health and welfare as the applicable federal standards;

WHEREAS, the United States Environmental Protection Agency (U.S. EPA) has published a draft document, "General Verification Protocol for Diesel Exhaust Catalysts, Particulate Filters, and Engine Modification Control Technologies for Highway and Nonroad Use Diesel Engines," but has not promulgated formal regulations for this verification protocol;

WHEREAS, the U.S. EPA verification protocol is intended to support the voluntary retrofit programs initiated by U.S. EPA, while staff's proposal is to support ARB's Diesel Risk Reduction Plan and all the associated in-use fleet regulations.

WHEREAS, there are significant differences between the California verification program and the voluntary U.S. EPA verification protocol, most notably that the U.S. EPA program does not regulate changes in emissions of nitrogen dioxide (NO_2) caused by emission control systems, does not have a mechanism to verify reductions in oxides of nitrogen (NOx), and does not provide any warranty provisions;

WHEREAS, to improve the effectiveness of the California verification program, ARB staff has proposed the adoption of amendments to the verification procedure;

WHEREAS, ARB staff met and worked with affected stakeholders in developing the proposed amendments, including holding numerous meetings with individual affected stakeholders and four public workshops;

WHEREAS, with the information and comments received from such meetings, ARB staff prepared a report entitled "Staff Report: Initial Statement of Reasons for Proposed Rulemaking -- Amendments to the Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines," released December 7, 2007 (ISOR);

WHEREAS, the Board has considered the effects of the proposed amendments on the economy of the State;

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 Executive Officer has determined that the proposed regulations will not have a significant, if any, impact on the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within California, or the expansion of businesses currently doing business within California;

WHEREAS, the Board finds that:

In California diesel particulate matter (PM) accounted for approximately 70 percent of all air toxics in 2000 and the average potential cancer risk associated with diesel PM is over 500 excess cases per million people;

Diesel emission control systems have been proven successful in a variety of applications and field demonstration programs;

It is appropriate for California to establish and maintain its own diesel emission control system verification program;

The proposed regulations are authorized by California law, and the cost of the regulations is justified by the benefit to human health, public safety, or the environment;

The economic and fiscal impacts of the proposed amendments to the verification procedure have been analyzed as required by California law, and the conclusions and supporting documentation for this analysis are set forth in the ISOR;

The function of the proposed amendments is to improve the ability of the verification procedure to support the Diesel Risk Reduction Plan and related programs such as the Public Transit Bus Fleet Rule, the Solid Waste Collection Vehicle Rule, the Carl Moyer Memorial Air Quality Standards Attainment Program, and the Lower-Emissions School Bus Program;

Because no direct emissions benefits are associated with the staff's proposal, a traditional cost effectiveness calculation cannot be made;

WHEREAS, the Board further finds that the proposed amendments would:

Encourage manufacturers to offer diesel emission control systems for sale in California;

Provide an opportunity for applicants with verified technologies to sell their products to new on-road applications more quickly;

Establish new classifications for oxides of nitrogen (NOx) emissions reductions that are more appropriate for the actual performance of NOx reducing technologies;

Allow control systems that only reduce NOx to be verified for certain diesel engines;

Require NOx emissions to be measured and recorded both upstream and downstream of the aftertreatment system during the durability and field demonstrations;

Eliminate the requirement to test an on-road NOx emissions control system under conditions that generate off-cycle emissions;

Require the Non-Road Transient Cycle for the testing of diesel emission control systems for transient off-road applications;

Require all fuel additive-based control systems to follow similar testing that is required for alternative fuel-based control systems;

Require alternative fuel-based control strategies for off-road and stationary applications to be tested under the appropriate off-road and stationary cycles specified in section 2703 of the verification procedure;

Allow fuels that do not comply with the ARB Reformulated Diesel Fuel specifications of title 13, CCR, sections 2280 through 2283 to be used as test fuels for both emissions and durability tests in select applications;

Add options for determining if pre-conditioning is necessary for control systems that could potentially increase NO_2 emissions;

Clarify that applicants must demonstrate the durability of the monitoring and notification systems of their control strategies;

Require that selective catalytic reduction control strategies have systems that monitor the amount of reductant available and notify the operator when the level is low;

Require that control strategies that use a reductant to reduce NOx emissions from on-road and off-road applications measure and record the amount of reductant consumed during each test run;

Require that selective catalytic reduction control strategies include effective means of inducing the operator to maintain a constant supply of reductant;

Establish deadlines for submitting in-use compliance information;

Require applicants to keep information regarding where their product was sold, including valid end user contact information, and a description of the engine and vehicle on which the product is installed until the in-use compliance requirements are satisfied;

Require applicants to sell their verified control systems in California or make them available to be sold in California;

Require applicants to provide the installation manuals and parts lists for their control strategies; and

Clarify some existing requirements to aid applicants in the verification process;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby adopt the amendments to sections 2700, 2701, 2702, 2703, 2704, 2705, 2706, 2708, 2709, 2710, title 13, California Code of Regulations, as set forth in Attachment A, with the modifications set forth in Attachment B hereto.

BE IT FURTHER RESOLVED, that the Board directs the Executive Officer to adopt the regulation set forth in Attachment A, as modified by Attachment B, in accordance with the Board's direction, and to make such other conforming modifications as may be appropriate, after making the modified regulatory language and any additional supporting documents and information available to the public for a period of 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 regulation to the Board for further consideration if he determines that this is warranted.

BE IT FURTHER RESOLVED that the Board hereby determines that the regulations approved herein will not cause 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 emission standards and test procedures are necessary to meet compelling and extraordinary conditions.

BE IT FURTHER RESOLVED that the Board finds that the regulations approved herein will not cause the California emission standards and test procedures for new motor vehicles to be inconsistent with section 202(a) of the Clean Air Act and raise no new issues affecting previous waiver determinations of the Administrator of the Environmental Protection Agency pursuant to section 209(b) of the Clean Air Act.

BE IT FURTHER RESOLVED that the Executive Officer shall, upon adoption, forward the amended regulations to the U.S. EPA with a request for a waiver of federal preemption pursuant to section 209(b) of the Clean Air Act, or confirmation that the amendments are within the scope of previous waivers, as appropriate.

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DEC - 4 2008
Resources Agency of California

I hereby certify that the above is a true and correct copy of Resolution 08-13, as adopted by the Air Resources Board.

Lori Andreoni

Lori Andreoni, Clerk of the Board

Resolution 08-13

January 24, 2008

Identification of Attachments to the Resolution

Attachment A: Proposed Regulation Order, as set forth in Appendix A of the Staff Report: Initial Statement of Reasons

Attachment B: Staff's Suggested Modifications to the Original Proposal (distributed at the Board hearing on January 24, 2008)

State of California
Environmental Protection Agency
AIR RESOURCES BOARD

Notice of Decision and
Response to Significant Environmental Issues

Item:	AMENDMENTS TO THE VERIFICATION PROCEDURE, WARRANTY AND IN-USE COMPLIANCE REQUIREMENTS FOR IN-USE STRATEGIES TO CONTROL EMISSIONS FROM DIESEL ENGINES
Approved By:	Resolution 08-13
Adopted by:	Executive Order R-08-014
Agenda Item:	08-1-8
Public Hearing Date:	January 24, 2008
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:	Trini Balcazar, Regulations Coordinator
Date:	October 5, 2008

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