

# TITLE 13. CALIFORNIA AIR RESOURCES BOARD

## RESCHEDULING NOTICE

### NOTICE OF RESCHEDULED PUBLIC HEARING TO CONSIDER ADOPTION OF THE HEAVY-DUTY DIESEL ENGINE SOFTWARE UPGRADE REGULATION (CHIP REFLASH)

You are invited, but not required, to attend a public hearing conducted by the Air Resources Board (ARB or Board) at the time and place noted below to consider adopting the proposed heavy-duty diesel engine software upgrade regulation. If adopted, this regulation would require reprogramming the engine computer in order to reduce exhaust emissions from 1993-1999 model year heavy-duty vehicles. This hearing was first scheduled for October 23, 2003, in a Notice dated August 26, 2003 and published September 5, 2003. (California Regulatory Notice Register 2003, No. 36-Z.) This hearing has been rescheduled to the following date, time, and location:

DATE: December 11, 2003

TIME: 8:00 a.m.

PLACE: California Environmental Protection Agency  
Air Resources Board  
1001 I Street,  
Auditorium, Second Floor  
Sacramento, California 95814

To promote public participation, the remainder of this rescheduling notice simply reproduces, with non-substantive clarifications, portions of the earlier August 26, 2003 notice. This notice also sets new comment period deadlines.

This item will be considered at a two-day meeting of the Board, which will commence at 8:00 a.m., December 11, 2003, and may continue at 8:30 a.m., December 12, 2003. This item may not be considered until December 12, 2003. Please consult the agenda for the meeting, which will be available at least ten days before December 11, 2003, to determine the day on which this item will be considered. At 8:00 a.m. on the day that this item will be considered, a demonstration of heavy-duty diesel engine reprogramming will be conducted on the east side of the 1001 I Street building.

If you have questions about the proposed regulation, please call Ms. Lisa Jennings, Air Pollution Specialist, at (916) 322-6913, or Mr. Earl Landberg, Air Pollution Specialist, at (916) 323-1384.

If you plan to attend the board hearing and have special accommodation or language needs, please contact, Ms. Stacey Dorais, ARB's Clerk of the Board, at (916) 322-5594, or send an email to [sdorais@arb.ca.gov](mailto:sdorais@arb.ca.gov) as soon as possible. Teletypewriter (TTY)/Telecommunications Device for the Deaf (TDD)/Speech-to-Speech users may dial 7-1-1 for the California Relay Service.

## **INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW**

**Sections Affected:** Proposed adoption of Section 2011 in new Article 3.5 within Chapter 1, Division 3, Title 13, California Code of Regulations (CCR). Proposed amendments to sections 2180.1, 2181, 2184, 2185, 2186, 2192, and 2194 of Article 1, Chapter 3.5, Division 3, Title 13, CCR.

### **What is ARB proposing?**

ARB staff is proposing to reduce air pollution by requiring owners and operators of trucks, school buses, and motor homes with 1993-1998 model year heavy-duty diesel engines to upgrade the software in the electronic control module (ECM) of these engines. Software upgrades were developed by the engine manufacturers and are available now for most 1993-1998 model year engines. Since many 1999 model year vehicles have engines produced in 1998, owners and operators of 1999 model year vehicles need to check if they are affected using the ARB list referenced below. Engine manufacturers, distributors, and dealers have to provide the appropriate low NOx software to the vehicle owner or operator if this proposal is adopted.

### **What is a heavy-duty diesel engine software upgrade?**

A heavy-duty diesel software upgrade (also referred to as "low NOx software upgrade" or "chip reflash") is software installed in the engine that reprograms the vehicle's computer and reduces off-cycle NOx emissions. The installation process takes between one-half to one hour depending on the engine type. ARB staff has prepared a list that can be checked to determine if low NOx software is available for the engine. This list is available from our web site at <http://www.arb.ca.gov/msprog/hdsoftware/hdsoftware.htm>

### **Are out-of-state vehicles subject to the proposed requirements?**

Yes. If adopted, owners and operators of 1993-1999 model year heavy-duty diesel vehicles (trucks, school buses, and motor homes) registered out-of-state, but that travel within California, would also be required to ensure that the engines in their vehicles have the appropriate low NOx software installed.

### **How much would the low NOx software installation cost?**

Engine manufacturers have a responsibility to mitigate the excess NOx emissions caused by the "computer-based strategies" they programmed into their engines. In addition, the applicable Consent Decrees and Settlement Agreements require manufacturers to supply the low NOx software at no added cost whenever it is requested. For these reasons, ARB expects the low NOx software to be provided and installed at the expense of the engine manufacturers.

### **When would low NOx software have to be installed?**

If this regulation is adopted as proposed, the low NOx software would have to be installed by the following dates:

1993-1994 model years	By April 30, 2004
1995-1996 model years	By August 31, 2004
1997-1998 model years	By December 31, 2004

If this regulation is adopted, we will provide a supplemental notice to inform affected vehicle owners that they must have the software installed.

### **How would the low NOx software installations be enforced?**

Staff is proposing to amend the Heavy-Duty Vehicle Inspection Program (HDVIP) to include the verification of the low NOx software installations. ARB staff already inspects heavy-duty vehicles at California Highway Patrol weigh stations, randomly selected roadside locations, and fleet facilities for excessive smoke and tampering. With the proposed amendments, HDVIP Inspectors would be able to verify that the correct low NOx software has been installed. Failure to have the low NOx software installed by the compliance dates would result in a citation accompanied by monetary penalties.

### **What are the proposed penalties for not installing the low NOx software?**

The proposed penalty would be \$300 if the low NOx software were installed within 45 days of issuance of a citation. If the software were not installed until after 45 days of issuance of a citation, we are proposing an additional \$500 penalty. The penalties for the failure to install the low NOx software would apply to both California-registered vehicles and out-of-state registered vehicles, and would be in addition to any penalties incurred for excessive smoke and tampering.

### **How much would the proposed requirements reduce emissions?**

NOx reductions are needed to protect public health by meeting National Ambient Air Quality Standards and to preserve the state's federal highway funding. This regulation, once implemented, will reduce NOx emissions 30–40 tons per day statewide from California-registered vehicles by the year 2005. We estimate that NOx emissions will be reduced by an additional six to nine tons per day by 2005 from out-of-state registered vehicles traveling in California. The NOx benefits from this regulation are equivalent to taking more than 600,000 passenger vehicles off the road in 2005.

### **AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS**

The Board staff has prepared a staff report, which also includes a summary of the environmental and economic impacts of the proposal and supporting documentation. The staff report is entitled "Initial Statement of Reasons, Public Hearing to Consider Adoption Of The Heavy-Duty Diesel Engine Software Upgrade Regulation (Chip Reflash)."

Copies of the staff report and the full text of the proposed regulatory language, in underline and strikethrough format to allow for comparison with the existing regulations, may be accessed on ARB's web site listed below or obtained from ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1<sup>st</sup> Floor, Sacramento, California 95814, (916) 322-2990. at least 45 days prior to the scheduled hearing on December 11, 2003.

Upon its completion, the Final Statement of Reasons will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on ARB's web site listed below.

Inquiries concerning the substance of the proposed regulation may be directed to the designated agency contact Ms. Lisa Jennings, Air Pollution Specialist, at (916) 322-6913, or Mr. Earl Landberg, Air Pollution Specialist, at (916) 323-1384. Procedural inquiries concerning the proposed administrative action may be directed to Ms. Artavia Edwards, Manager, Board Administration & Regulatory Coordination Unit, at (916) 322-6070, or Ms. Amy Whiting, Regulations Coordinator, at (916) 322-6533. The Board has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

If you are a person with a disability and desire to obtain this document in an alternative format, please contact ARB's American with Disabilities Act Coordinator at (916) 323-4916, or call TDD at (916) 324-9531 or (800) 700-8326 for TDD calls outside the Sacramento area.

This notice, the staff report and all subsequent regulatory documents, including the Final Statement of Reasons, when completed, are available on the ARB Internet site for this rulemaking at [www.arb.ca.gov/regact/chip03/chip03.htm](http://www.arb.ca.gov/regact/chip03/chip03.htm)

### **COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED**

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulations are presented below.

Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action will not create costs or savings to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to Part 7 (commencing with Section 17500), Division 4, Title 2 of the Government Code, or other nondiscretionary savings to state or local agencies.

In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on representative private persons or businesses. There may be as many as 40,000 businesses, up to 3,000 school districts, and over 5,000 individuals who own 1993-1999 model year heavy-duty diesel vehicles affected by this proposal. Also affected are approximately 100 dealers/distributors for Caterpillar, Cummins, Detroit Diesel, Mack/Renault, International (Navistar), and Volvo that have the capability to install low NOx software into the affected engine's ECM. Finally, this proposal will also affect the seven engine manufacturers mentioned above—each of which is located outside of California. The total statewide costs that businesses and individuals may incur to comply with this regulation over its lifetime are up to eight million dollars.

The applicable consent decrees and settlement agreements require low NOx software to be provided and installed free of charge to vehicle owners and operators upon their request. Assuming engine manufacturers reimburse the dealers and distributors for labor charges, the only cost to the vehicle owner would be the time that the vehicle is out-of-service. This "time cost" can be reduced to next to nothing if the low NOx software is installed at the same time that another service or repair is performed on the vehicle.

The Executive Officer has made an initial determination that the proposed regulatory action will not have a significant statewide adverse economic impact directly affecting businesses,

including the ability of California businesses to compete with businesses in other states, or on representative private persons.

In accordance with Government Code Section 11346.3, the Executive Officer has determined that the proposed regulatory action will not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the staff report.

The Executive Officer has also determined, pursuant to Title 1, CCR, Section 4, that the proposed regulatory action will affect small businesses. Staff was unable to determine the number or percentage of total businesses impacted that are small businesses. Staff believes that some of the 40,000 companies that own 1993-1999 model year heavy-duty diesel vehicles affected by this proposal are small businesses based on income, profit, number of employees, or number of vehicles owned. Some of the dealers/distributors affected may also be small businesses. Staff has estimated the initial cost for a small business at \$0-200 dollars with the typical businesses spending \$0-1,500 dollars to comply with this regulatory proposal. In accordance with Government Code sections 11346.3(c) and 11346.5(a)(11), ARB's Executive Officer has found that the reporting requirements of the regulation which apply to businesses are necessary for the health, safety, and welfare of the people of the State of California.

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the agency or that has otherwise been identified and brought to the attention of the agency would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.

### **SUBMITTAL OF COMMENTS**

The public may present comments relating to this matter orally or in writing at the hearing, and in writing or by e-mail before the hearing. To be considered by the Board, written submissions not physically submitted at the hearing must be received **no later than 12:00 noon, December 10, 2003**, and addressed to the following:

Postal mail is to be sent to:

Clerk of the Board  
Air Resources Board  
1001 I Street, 23<sup>rd</sup> Floor  
Sacramento, California 95814

Electronic mail is to be sent to [chip03@listserv.arb.ca.gov](mailto:chip03@listserv.arb.ca.gov) and received at ARB **no later than 12:00 noon, December 10, 2003**.

Facsimile transmissions are to be transmitted to the Clerk of the Board at (916) 322-3928 and received at ARB **no later than 12:00 noon, December 10, 2003**.

The Board will consider comments already received in response to the Notice published and posted September 5, 2003, so you do not need to resubmit those comments. You may but are not required to provide additional comments in response to this notice.

The Board requests but does not require that 30 copies of any written statement be submitted and that all written statements be filed at least 10 days prior to the hearing so that ARB staff and Board Members have time to fully consider each comment. ARB encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

### **STATUTORY AUTHORITY AND REFERENCES**

This regulatory action is proposed under that authority granted in Health and Safety Code, sections 39600, 39601, 43013, 43018, 43701, and 44011.6 Health and Safety Code.

This action is proposed to implement, interpret and make specific sections 39001, 39002, 39003, 39010, 39033, 43000, 43013, 43018, 43701, and 44011.6 Health and Safety Code, and sections 305, 505, 545, and 2813 Vehicle Code.

### **HEARING PROCEDURES**

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Title 2, Division 3, Part 1, Chapter 3.5 (commencing with Section 11340) of the Government Code.

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with non-substantial or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice that the regulatory language as modified could result from the proposed regulatory action; in such event the full regulatory text, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15 days before it is adopted.

The public may request a copy of the modified regulatory text from ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1<sup>st</sup> Floor, Public Information Office, Sacramento, California 95814, (916) 322-2990.

CALIFORNIA AIR RESOURCES BOARD

Catherine Witherspoon  
Executive Officer

Date: November 12, 2003

*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 Web –site at [www.arb.ca.gov](http://www.arb.ca.gov).*