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Agency Secretary

# Air Resources Board

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El Monte, California 91731 [www.arb.ca.gov](http://www.arb.ca.gov)



Arnold Schwarzenegger  
Governor

DATE: March 3, 2005

TO: ALL INTERESTED PARTIES

SUBJECT: ON-ROAD HEAVY-DUTY DIESEL VEHICLE IDLING EMISSION  
REDUCTION WORKSHOP

The Air Resources Board (ARB) will be conducting a public workshop on March 23, 2005, to discuss a regulatory proposal to reduce emissions from idling on-road heavy-duty diesel vehicles. The proposal requires 2008 and subsequent model year on-road heavy-duty diesel engines (with a gross vehicle weight rating > 14,000 lbs.) to be equipped with a non-adjustable and tamper resistant electronic idle controls that will shut down the engine if it is left to idle for more than 5 minutes.

Staff's proposal will also include an optional requirement that allows engine manufacturers to certify the vehicle's engine to a new oxides of nitrogen (NOx) idling emission standard. An engine certified to this optional NOx idling emission standard would be able to run at idle continuously for more than the specified 5-minute idle time limit.

The proposal allows the use of alternative technologies/strategies in order to provide heating and cooling for cab comfort, engine heating for easy engine start-up, and electric power to charge batteries and operate on-board ancillaries. These include, but are not limited to, on-board auxiliary devices such as fuel-fired heaters and auxiliary power units, and power inverters/chargers for use with battery packs and grid supplied electricity.

At the workshop, the ARB staff will discuss the proposal, respond to questions, and receive written and/or verbal comments. An agenda of the workshop and an outline of the proposed regulatory concept are attached for your information.

The workshop details are as follows:

Date: March 23, 2005  
Time: 9:00 a.m. – 12:00 p.m.  
Location: Annex 4 Conference Room  
9528 Telstar Avenue  
El Monte, California 91731

*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

On-Road Heavy-Duty Diesel Vehicle  
Idling Emissions Reduction  
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The workshop facility is accessible to persons with disabilities. If special accommodations are needed, please contact Ms. Margaret Dawson at (626) 575-6632 by May 16, 2005. Persons with hearing or speech impairments can contact us by using our Telephone Device for the Deaf (TDD) at (916) 324-9531, or (800) 700-8326 for TDD calls from outside of Sacramento. For technical questions, please contact Mr. Daniel Hawelti at (626) 450-6149 or e-mail at [dhawelti@arb.ca.gov](mailto:dhawelti@arb.ca.gov) or Mr. Stephan Lemieux at (626) 450-6162 or e-mail at [slemieux@arb.ca.gov](mailto:slemieux@arb.ca.gov). To subscribe to our mailing list, please enroll at <http://www.arb.ca.gov/listserv/truckidling/truckidling.htm>.

Sincerely,

/s/

Robert H. Cross, Chief  
Mobile Source Control Division

Attachments (2)

Attachment 1

**California Environmental Protection Agency  
Air Resources Board**

**Public Workshop to Discuss Proposed Requirements  
to Reduce On-Road Heavy-Duty Diesel Vehicle Idling**

**Workshop Agenda**

- I. Introduction
- II. Staff Presentation
- III. Discussion of Staff's Proposal
- IV. Public Comments
- V. Item Schedule

# DRAFT

## **HEAVY-DUTY DIESEL ENGINE/VEHICLE IDLING EMISSION REDUCTION PROGRAM**

### **Proposed Requirements**

The proposed requirements are divided into the two following applications: (1) new engine/vehicle requirements, and (2) in-use vehicle requirements

#### **1. New Engine/Vehicle Requirements – Model Years 2008+**

- Require engine manufacturers to install non-programmable, tamper-resistant idle shutdown devices on all heavy-duty diesel engines with gross vehicle weight rating greater than 14,000 lbs. (except those engines that meet an optional low engine idling standard described below) that will shut down the main engine after 5 minutes of idling.

#### *Optional Requirements*

- Engine manufacturers would have the option to certify their engines to meet a new low NOx engine idling emission standard. The NOx standard would be based on diesel APU certification data. Engines certified to this new requirement would not have to be equipped with an idle shutdown device.
- Engine manufacturers may choose to produce an integrated APU/main engine system. With such a system, manufacturers would be required to control PM emissions from the APU by either running the exhaust through the main engine PM filter or have a PM filter on the APU itself (filter efficiency would be designated at 85%, a "Level 3" device).
- Manufacturers choosing to meet the optional NOx engine idling standard or have an integrated APU system would be required to produce a label indicating whether the engine meets the idling standard or is equipped with an integrated APU system. The label would be affixed by the truck manufacturer to the outside of the truck's cab. These labels would be used for enforcement purposes to allow extended main engine idling or the use of an APU. We would like to encourage the use of APUs that have inherently low emissions (such as those powered by fuel cells or batteries) or that surpass the emission performance of filter equipped diesel APUs. Thus, we are open to suggestions on how we could incentivise such options.

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- Truck OEMs may choose to purchase and install an engine with none of the optional requirements listed above. Instead, they may choose to install, themselves, nonintegrated APUs for their customers. It would be the responsibility of these customers (owners) to order/choose whether they want a compliant system or non-compliant system.
- Third party (or aftermarket) APU manufacturers producing California compliant systems for 2007 and subsequent model year trucks would need to comply with a verification procedure (to be developed) that would require the use of California certified APUs that meet stringent PM requirements. A label would be needed for these engines as well.

## **2. In-Use Vehicle Requirements**

### *Modification of the Idling Rule Adopted in July of 2004*

- Apply the no idling requirements to all trucks statewide, including those with sleeper berths and out-of-state registered trucks, and all model years beginning in calendar year 2008. Only trucks that have an idling label showing compliance with California requirements would be allowed to idle more than 5 minutes.
- No in-use retrofit requirements are being proposed since the in-use idling rule adopted in July of 2004 will be modified to include all model years and all trucks (GVWR > 10,000 lbs.).
- Owners of 2007 and subsequent model year vehicles, not equipped with engines meeting the optional low NOx engine idling emission standard, would need to have a California compliant APU system installed on their vehicle to operate those systems in California.
- Owners of 2006 and older model year vehicles can purchase any California certified APU and operate them in California. There will be no requirement to have aftertreatment control of NOx and PM emissions since engine out NOx and PM emissions from these APUs are less than and comparable, respectively, to engine out idling NOx and PM emissions from the truck's engine.