Terry Tamminen
*Agency Secretary*

# Air Resources Board

**Alan C. Lloyd, Ph.D.**
**Chairman**
9480 Telstar Avenue, Suite 4
El Monte, California 91731 www.arb.ca.gov

**Arnold Schwarzenegger**
*Governor*

October 18, 2004

Mail-Out #MSC 04-16

TO: All Interested Parties

SUBJECT: PUBLIC WORKSHOP TO DISCUSS DEVELOPING A DIESEL PARTICULATE MATTER CONTROL MEASURE FOR IN-USE OFF-ROAD DIESEL-FUELED NON-AGRICULTURAL ENGINES GREATER THAN 25 HORSEPOWER

The California Air Resources Board (ARB or the Board) invites you to participate in a public workshop to discuss developing a diesel particulate matter (PM) control measure for in-use off-road diesel-fueled engines greater than 25 horsepower (off-road equipment rule). The off-road equipment rule would be designed to reduce diesel PM emissions from diesel-powered in-use off-road equipment in California. This equipment includes, but is not limited to, construction equipment, mining equipment, airport ground support equipment, logging equipment and industrial equipment such as forklifts. The rule would not cover equipment used in agricultural operations, cargo handling equipment used at ports and intermodal rail facilities, or equipment already covered by an in-use rule or agreement.

At the workshop, we will discuss the reason for this rulemaking, the expected timeline and process for rule development, options that are available to reduce diesel PM emissions from off-road equipment, successful efforts underway to reduce off-road equipment PM emissions, and how best to improve our understanding of the inventory of diesel-powered off-road equipment in California. We are seeking input to help ensure that we identify all interested stakeholders and potentially impacted parties.

The workshop meetings will be held at the two locations below, and staff will present the same materials at both workshops. The Sacramento workshop will also be webcast (broadcast live over the Internet). You may access the webcast through the ARB website at www.arb.ca.gov, clicking on the "Webcasts" link on the left side of the Home page, and then following the prompts. Participants may submit written comments or questions on the day of the workshop by sending an email to: onair@arb.ca.gov. In the "subject area"" please write "off-road equipment rule comment."

**Sacramento**

Date: Tuesday, November 16
Time: 10 a.m. – 12 noon
Location: Air Resources Board
1927 13th Street
(13th and "T" Streets)
Sacramento, California 95814

http://www.arb.ca.gov/maps/sactomap.htm

**El Monte**

Date: Wednesday, November 17
Time: 1 p.m. – 3 p.m.
Location: Air Resources Board
Auditorium, Annex 4
9530 Telstar Avenue
El Monte, California 91731

http://www.arb.ca.gov/maps/elmomaps.htm

For Sacramento, public parking is available on R Street between 15th and 16th Streets in Sacramento. The daily rate is $8.00. For El Monte, public parking is available along Telstar Avenue and in designated parking spaces.

Background:

In August 1998, the ARB identified PM exhaust from diesel-fueled engines as a toxic air contaminant. Diesel PM is of concern because it poses a lung cancer hazard for humans as well as a hazard from noncancer respiratory effects such as pulmonary inflammation. Using data from several epidemiological studies, ARB has estimated that 2,900 premature deaths resulted from exposure to diesel PM in the year 2000 in California.

Following the identification of diesel PM as a toxic air contaminant, the ARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (the Plan). The Plan, approved by the Board in September 2000, set goals to reduce diesel PM emissions and the resultant health risk by 75 percent by 2010 and 85 percent by 2020. The Plan identified various methods for reducing diesel PM emissions from virtually all diesel-fueled engines and vehicles in the state including more stringent standards for new diesel-fueled engines and vehicles, the replacement of older in-use engines with new cleaner engines, the use of diesel emission control strategies on in-use engines, and the use of low sulfur diesel fuel.

ARB has already adopted a number of diesel PM control measures, including rules limiting PM emissions from transit agency fleets, solid waste collection vehicles, stationary diesel engines, portable diesel engines, and transport refrigeration units in response to the health hazard posed by diesel PM. ARB also negotiated an agreement with airlines operating in Southern California to reduce diesel PM emissions from airport ground support equipment. Additionally, ARB has adopted rules limiting idling of diesel school buses and commercial vehicles.

ARB staff is working on additional measures that will be adopted in the 2005-2007 timeframe to further reduce the risk from diesel particulate matter. In addition to the off-road equipment rule to be discussed at this workshop, ARB staff is at work on measures for on-road heavy-duty diesel-fueled public fleets, transit agency vehicles other than urban buses, in-use stationary agricultural engines, marine auxiliary engines, harbor craft, in-state locomotives, and cargo handling equipment. The cargo handling equipment rule is expected to address diesel mobile cargo handling equipment at major ports and intermodal rail facilities in California. The ARB staff also expects to develop one or more measures to limit diesel PM from privately owned on-road heavy-duty trucks.

Possible Scope and Structure of Off-road Equipment Rule:

The goal of the off-road equipment rule will be to reduce diesel PM from off-road equipment used in construction, mining, logging, industrial applications, and airport ground support equipment. We expect to include equipment with engines over 25 horsepower.

This rule will not address equipment used in agricultural operations. We also expect that airport ground support equipment covered by a memorandum of understanding between ARB and the airlines operating in the South Coast would be exempt from the requirements of this rule for the duration of that agreement. Finally, so as to minimize duplication, we also expect that cargo handling equipment at intermodal facilities that will be covered by ARB's new cargo handling rule would be exempt from this off-road equipment rule.

There are a number of approaches that have been used in the design of measures to reduce diesel PM and that could be used to structure the off-road equipment rule. These include the following:

- Accelerated fleet turnover – The rule could contain a declining fleet average emission rate and/or requirements to use engines meeting the U.S. Environmental Protection Agency Tier 3 or 4 off-road engine standards by certain dates;

  Idling limitations -- The rule could contain limits on the allowed time equipment may unnecessarily idle; and/or

  Use of best available control technology – The rule could require use of the best available diesel PM control technology by a certain date. Deadlines for use of control technology could vary based on fleet size, equipment type, engine age, and/or other factors. Potential control technologies could include alternative diesel

fuels, or retrofit technologies such as diesel oxidation catalysts or diesel particulate filters.

Staff would like to solicit feedback from all interested parties on which approaches seem most effective, feasible, and enforceable.

Workshop Details:

The meeting agenda will be available on our web site for your review at http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm prior to the workshop. If you did not receive this notice directly, but would like to be on the mailing list for future notification, please sign up via our web site at http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm.

If you have a disability-related accommodation need, please go to http://www.arb.ca.gov/html/ada/ada.htm for assistance or contact the ADA Coordinator at (916) 323-4916. If you are a person who needs assistance in a language other than English, please contact the Bilingual Coordinator at (916) 324-5049. For public transit information, please view the transportation information on the California Environmental Protection Agency's web site at http://www.calepa.ca.gov/epabldg/location.htm.

We welcome your participation in this effort. If you have questions regarding either the workshop or the off-road equipment rulemaking, please contact Ms. Kim Heroy-Rogalski, P.E., Staff Air Pollution Specialist, at (916) 327-2200 or kheroyro@arb.ca.gov, or Ms. Kitty Martin, Manager, In-Use Control Measures Section, at (916) 324-1362 or kmartin@arb.ca.gov.

Sincerely,

Robert H. Cross, Chief
Mobile Source Control Division