



# Regulatory Advisory

August 2005



## AMENDMENTS TO THE AIRBORNE TOXIC CONTROL MEASURE FOR STATIONARY COMPRESSION IGNITION ENGINES (ATCM)

### What is the purpose of these amendments?

On May 26, 2005, the Air Resources Board (ARB or Board) approved amendments to the Stationary Diesel Engine Airborne Toxic Control Measure (ATCM). These amendments make permanent the changes approved under emergency regulatory action in March 2005. The temporary emergency revisions and the permanent amendments are summarized below.

### What were the emergency regulation revisions?

On March 17, 2005, the Board approved emergency regulatory changes replacing the ATCM's 0.15 grams per brake horsepower-hour (g/bhp-hr) particulate matter (PM) emission limits for greater than 50 to less than 175 hp new stationary diesel agricultural pump engines with ARB and federal new off-road/nonroad engine PM certification standards. ARB and federal PM certification standards during the 120-day period when the emergency regulation is in effect are 0.30 g/bhp-hr PM for engines greater than 50 to 99 hp and 0.22 g/bhp-hr PM for engines 100 to less than 175 hp. The emergency regulation expires on August 3, 2005.

### Why was this emergency regulatory action taken?

During an extensive investigation, the ARB staff found very limited availability of 0.15 g/bhp-hr PM-compliant new stationary diesel agricultural pump engines in the greater than 50 to 99 hp size range and limited availability in the 100 to less than 175 hp size range. The limited availability of compliant engines posed technical and cost issues, particularly regarding engine replacement. The emergency action averted these issues and allowed older, dirtier, uncontrolled diesel engines to continue to be replaced with new, cleaner engines certified to ARB and federal standards. This emergency action was taken to protect public health and to prevent disruption and economic hardship for farmers and agricultural equipment distributors and dealers.

### When do the permanent amendments go into effect?

The permanent amendments discussed below have been forwarded to the Office of Administrative Law (OAL) for review (up to 30 days). The emergency regulation mentioned above remains in effect throughout OAL review. The ARB anticipates that OAL will approve the amendments and has requested the earliest possible effective date. Should the emergency regulation not be in effect at any time before the amendments become official, the ARB expects the local air districts to use enforcement discretion.

### Who is affected by the amendments?

Those affected by the amendments include local air districts; stationary diesel engine manufacturers, distributors, and dealers; and the following stationary diesel engine owners/operators: the agricultural industry, the fire protection industry, the U.S. Department of Defense, healthcare facilities, and boarding schools.

### What are the permanent amendments?

In addition to the revised PM emission limits for new stationary diesel agricultural pump engines, further amendments were made to clarify the ATCM and to provide flexibility for certain operations. The following is a summary of the amendments (please see "For more information" below to obtain a copy of the actual regulatory language):

PM Emission Limit Revisions The 0.15 g/bhp-hr PM emission limits for greater than 50 to less than 175 hp new stationary diesel agricultural engines (except generator sets) and direct-drive emergency standby fire pump engines have been replaced with ARB and federal new off-road/nonroad engine certification standards for engines of the same brake horsepower rating and model year. Through 2011, ARB and federal certification standards are 0.30 g/bhp-hr PM for engines greater than 50 to 99 hp and 0.22 g/bhp-hr PM for engines 100 to less than 175 hp. In 2012, the ARB and federal PM certification standards are scheduled to become more stringent, i.e., 0.02 g/bhp-hr PM for engines greater than 50 to 99 hp and 0.01 g/bhp-hr PM for engines 100 to less than 175 hp.

This amendment should ensure the continued availability of cleaner new stationary diesel agricultural and direct-drive emergency standby engines in a variety of makes, models, and sizes.

Direct-drive Emergency Standby Fire Pump Engine Compliance Extension The dates for new stationary diesel direct-drive emergency standby fire pump engines to comply with ARB and federal new off-road/nonroad engine Tier 3 and Tier 4 certification standards have been extended an additional three years beyond the effective dates of those standards. This amendment provides fire pump manufacturers with the additional time they need to design, produce, test, and certify fire pump engines to meet both Tier 3-Tier 4 and National Fire Protection Association emission and performance requirements. In addition, ARB staff is committed to work with fire pump manufacturers and the U.S. Environmental Protection Agency (U.S. EPA) to evaluate if Tier 4 engine control technology is feasible for this application.

Emergency Standby Engine Operation During Missile Launching The definition of "Emergency Use" has been modified to allow U.S. Department of Defense emergency standby engines to operate in parallel with electric grid power during missile launch tracking. This amendment protects people and property by ensuring that power is immediately available to destroy a missile if it deviates from an expected path.

Emergency Standby Engine Maintenance and Testing at Healthcare Facilities The local air districts are allowed to approve up to 40 total hours per year of stationary diesel emergency standby engine maintenance and testing operation at hospitals and other healthcare facilities. This amendment will enable healthcare facilities to comply with January 1, 2005 Joint Commission on Accreditation Manual for Healthcare Organizations requirements for more frequent and extensive testing of emergency standby engines.

Emergency Standby Engine Maintenance and Testing at Schools Schools where students live on-site, e.g., boarding schools, have been exempted from the provisions prohibiting stationary diesel emergency standby engine maintenance and testing at or near schools in the presence of students. This amendment will allow a limited number of hours per year of emergency standby engine maintenance and testing at or near the exempt schools and will ensure that these engines will work during power failures and other emergencies.

New Stationary Diesel Engines Acquired or Submitted for Approval, But Not Installed, Prior to the January 1, 2005 Effective Date for New Emission Limits Local air districts are allowed to determine the time at which emission limit compliance requirements are triggered based on the date of new stationary diesel engine acquisition or the date an application was submitted for a district permit or registration program for stationary sources. This amendment addresses, at least partially, the potential disruption and severe economic hardships in consequence of new emission limits becoming effective during the long lead time from new engine purchase commitment to installation.

The concerns and issues associated with the date of new stationary diesel engine acquisition or approval and the phase in of more stringent emission limits are complex and require information gathering and extensive discussions with the districts and engine manufacturers, distributors, dealers, and end-users. It is not possible to conduct extensive discussions within the timeframe for finalizing the proposed amendments. Therefore, ARB staff plans to return to the Board with possible amendments to address these timing and compliance requirement issues in early 2006.

Non-substantive Amendments Several non-substantive amendments were made to correct referencing errors or otherwise clarify the intent of the original ATCM.

#### **For more information**

To obtain a copy of the amendments, ARB staff report, and other related documents, visit our web site at <http://www.arb.ca.gov/regact/stade05/stade05.htm>. A fact sheet and other information are also available at <http://www.arb.ca.gov/diesel/ag/ag.htm>.

If you are a person who needs assistance in a language other than English, please contact the Bilingual Coordinator at (916) 324-5049.

Additional questions may be addressed to Mr. Tony Andreoni, Manager, Process Evaluation Section, Stationary Source Division, at (916) 324-6021 or [tandreon@arb.ca.gov](mailto:tandreon@arb.ca.gov), or Barbara Cook, Process Evaluation Section, Stationary Source Division, at (916) 327-1507 or [bcook@arb.ca.gov](mailto:bcook@arb.ca.gov).