



# Program Announcement

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## **Notice of a Settlement Agreement with the Engine Manufacturers Association to Propose a Manufacturer-Run, In-Use Emissions Testing Program for Heavy-Duty Diesel Trucks and to Provide Engine Certification Guidance**

*The U.S. Environmental Protection Agency (EPA) and the Engine Manufacturers Association (EMA) have reached a settlement agreement that will result in a manufacturer-run, in-use emissions testing program for heavy-duty diesel trucks. The in-use testing program will measure exhaust emissions from diesel engines using portable onboard emission measurement systems. The detailed regulatory provisions for this program will be proposed by EPA in approximately one year. As part of the agreement EPA will issue guidance documents that will provide engine manufacturers additional certainties and details of the requirements they must meet in testing and certifying their engines. This cooperative effort represents a significant advance in helping to ensure that the benefits of more stringent emission standards are realized under real-world driving conditions.*

## **Background**

EPA has issued four rules regarding diesel engines since 1999. These include the 2004 and 2007 Heavy-Duty Diesel Motor Vehicle Engines Rules, Recreational Marine Diesel Engines Rule and the Commercial Marine Diesel Engines Rule. EMA and some manufacturers challenged parts of the rules regarding legal authority and technical feasibility of certain emission standards called the Not-To-Exceed Standards (NTE). EPA, the California Air Resources Board (ARB), and EMA, along with its member companies, have worked cooperatively to reach an agreement. The resulting settlement includes provisions for proposing a manufacturer run, in-use emissions testing program in the *Federal Register* in approximately one year. As part of the agreement, EPA will issue guidance documents that will provide engine manufacturers additional certainties and details of the requirements they must meet in testing and certifying their engines.

The new testing program will assess in-use exhaust emissions from heavy-duty diesel trucks using portable emission measurement systems for the first time. Previously, engine emissions testing involved removing the engine from the truck and testing the engine in a laboratory on an engine dynamometer. Starting in the mid-1990s EPA facilitated research into portable systems by developing and using prototype systems in its compliance programs. Portable systems were placed inside vehicles to measure emissions performance during real-world operating conditions. It became clear that these systems offered advantages over conventional approaches to assess in-use exhaust emissions from engines for design improvement, research, modeling, and compliance purposes.

In a largely unprecedented example of proactive government and industry cooperation, prior to any formal rulemaking initiative, manufacturers have agreed to implement this new type of in-use emission testing program. The resulting collaborative program is a significant step forward for both parties in helping ensure that heavy-duty diesel engines comply with applicable emission standards throughout their useful lives while reducing overall compliance burdens.

## **Key Elements of the Manufacturer-Run, In-Use Emissions Testing Program**

- Applicable to 2007 and later model-year engines
- Proposed rulemaking in approximately one year
- Monitors in-use emissions of diesel vehicles with portable emission measurement systems
- Testing will be conducted on in-use vehicles, under real-world driving conditions, within the engine's useful life to monitor for NTE compliance and to help ensure overall compliance with the emission standards.
- Emissions to be measured: Hydrocarbons (HC), Carbon Monoxide (CO), Nitrogen Oxides (NO<sub>x</sub>) and Particulate Matter (PM)
- Testing conducted and paid for by manufacturers with EPA and ARB oversight
- Addresses a serious, long-standing need for "real-world" in-use testing data
- Pilot program for 2005 and 2006 model years will allow EPA, ARB and the manufacturers to gain the necessary experience with in-use testing protocols and generation of in-use test data using portable emission measurement systems.
- Fully enforceable program beginning in the 2007 model year
- A nonroad diesel engine in-use testing program is expected to be patterned after the heavy-duty truck program
- ARB will adopt a parallel in-use testing program for California.

Under the program, manufacturers will test fleet or customer-owned, in-use trucks. Manufacturers will tap into existing customer relationships and create new lines of communication with customers, all of which is expected to fortify the engine development process. This will enhance the manufacturer's ability to catch any problem engines early on, and encourage future engine designs that are cleaner and more durable.

Manufacturers will monitor compliance by testing in-use diesel engines during normal vehicle operation. If noncomplying engines are identified, the manufacturer will test more engines for the purpose of determining if any further action is necessary. EPA will likewise use the in-use data to make independent evaluations about the possible need to pursue further actions. The in-use test data, which have never been collected on this large of a scale, will be used by EPA and ARB to assure that emission standards are being met, and by manufacturers to improve their engine designs. The data will also be available to the public.

## **Other Important Aspects of the Agreement**

Representatives of EPA, ARB, and EMA have also agreed to begin a collaborative effort aimed at developing an outline for a manufacturer-run, in-use emission testing program applicable for diesel nonroad engines. The program will have features similar to the heavy-duty diesel truck testing program. The implementation date for the nonroad equipment testing program may be as early as 2011.

Finally, EPA will provide a set of guidance documents to engine manufacturers with important details for certifying their diesel engines to the NTE emission standards. These documents will clarify a number of issues relating to how manufacturers certify heavy-duty diesel truck engines and diesel marine engines, and will address manufacturers' concerns regarding technical issues of complying with the NTE requirements.

## **Health and Environmental Impacts**

This announcement seeks to propose an in-use emissions testing program and is expected to help ensure that the intended health and environmental benefits from recently-adopted emission regulations are realized throughout the entire useful lives of heavy-duty and marine engines.

## **For More Information**

For more details on the terms of the settlement, please see the *Federal Register* notice, which will be available on the Office of Transportation and Air Quality Web Site at: [www.epa.gov/otaq/hd-hwy.htm](http://www.epa.gov/otaq/hd-hwy.htm).

For inquiries about heavy-duty truck engines please call Rick Gezelle at (202) 564-9267.

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