

Lisa Stegink

STATE OF CALIFORNIA  
AIR RESOURCES BOARD

Public Hearing To Adopt California's )  
Heavy-Duty Diesel In-Use )  
Compliance Regulation )

Agenda Item: 06-8-5

Hearing Date: September 28, 2006

ORAL STATEMENT OF THE  
THE ENGINE MANUFACTURERS ASSOCIATION

Date: September 28, 2006

Jed R. Mandel  
Timothy A. French  
Engine Manufacturers Association  
Two North LaSalle Street  
Suite 2200  
Chicago, IL 60602

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Introduction

The Engine Manufacturers Association ("EMA") appreciates the opportunity to present this oral statement regarding the California Air Resources Board's ("ARB") proposed adoption of a California heavy-duty diesel in-use compliance testing regulation (the "Proposed HDIUT Rule"). EMA is the trade association that represents the world's leading manufacturers of internal combustion engines used in a wide variety of applications, including the diesel-fueled engines utilized in the heavy-duty on-highway ("HDOH") trucks that are slated for in-use testing under the Proposed HDIUT Rule.

The Negotiated HDIUT Outline

As with any ARB rulemaking impacting HDOH engines, EMA and its members have a direct and significant interest in the Proposed HDIUT Rule and the manner in which it will be finalized and implemented. EMA's interest is perhaps even more heightened in this case, since the Proposed HDIUT Rule stems from many months of detailed negotiations between EMA, EPA and ARB aimed at settling a number of significant legal challenges that EMA initiated in 2000 and 2001 relating to the group of emission control requirements referred to as "not-to-exceed" or "NTE" standards.

One specific result from the parties' lengthy and complex NTE settlement negotiations was a 10-page outline for the establishment of a detailed regulatory program implementing a manufacturer-run in-use testing program to assess the real-world compliance of HDOH vehicles with the applicable NTE emission standards (the "HDIUT Outline"). Under that HDIUT Outline, EPA and ARB expressly agreed to implement the type of specified and uniform test procedures that manufacturers had sought to enable them to demonstrate compliance with the NTE standards in a clear and definitive manner. Following the completion of the HDIUT Outline, EPA published a final rule establishing a manufacturer-run in-use NTE testing program based upon and consistent with the HDIUT Outline (the "EPA HDIUT Rule"). (See 70 Fed.Reg. 34594, June 14, 2005).

ARB was an active participant in the negotiations that led to the development of the HDIUT Outline. As a result of that participation, and pursuant to a Statement of Agreement and Accord ("SAA"), entered into by and among ARB, EMA, and certain of EMA's members in 2003, ARB agreed to propose a California HDIUT regulation in substantial conformance with the HDIUT Outline. The Proposed HDIUT Rule at issue in this rulemaking fulfills ARB's commitments under the SAA, and, if adopted as

recommended by ARB Staff, will ensure a viable, nationwide program for the in-use NTE compliance testing of HDOH engines and vehicles, as envisioned and agreed to by the parties under the HDIUT Outline.

### **In-Use Testing Represents A Paradigm Shift**

The critical importance of ARB implementing an in-use testing rule that is fully consistent with the letter and spirit of the HDIUT Outline cannot be overstated. The type of manufacturer-run in-use NTE testing program that is at issue in this rulemaking represents a true paradigm shift from the regulatory scheme that heretofore has been applied to control emissions from HDOH vehicles and engines. Previously, HDOH engine standards have been established with reference to highly specified engine development and testing processes that are carried out using engine dynamometers in carefully controlled and monitored engine laboratories. In addition, the technical feasibility of the underlying engine emission standards, as well as an engine's compliance with those standards, traditionally have been assessed through the use of specific engine duty cycles (designating specified engine speed and torque test points) that can be programmed into and run on engine dynamometers, again in a controlled and monitored laboratory environment (e.g. the federal test procedure or "FTP").

An in-use NTE testing program, by contrast, represents a fundamental break - - a paradigm shift - - from the traditional HDOH engine development and testing processes that have been in place for the past several decades. The NTE requirements are not the type of standards that can be assessed against a specifically prescribed dynamometer-based engine test cycle. Instead, the NTE standards apply to any 30-second increment of engine operating conditions under a very broad range of engine speed, load and ambient conditions that reasonably could be encountered in real-world operation. As a result, how a manufacturer conclusively "tests" for compliance with such loosely-defined NTE standards amounts to a fundamental break with the past and a very significant challenge in and of itself. Indeed, it was that very problem that prompted manufacturers' legal challenges to the NTE standards back in 2000 and 2001.

On top of the fundamental change (and challenge) posed by the very nature of the NTE standards, the proposed in-use compliance program also moves the testing of engines away from the dynamometer and out of the laboratory. Instead of controlled, monitored and repeatable engine laboratory conditions, HDOH engine emissions will now be assessed with the engine installed in a heavy-duty truck as it is operated under completely uncontrolled and changing real-world driving conditions, and utilizing still-developing portable emissions measurement systems ("PEMS"). Manufacturers have never before faced this level of challenge in performing emission tests in uncontrolled real-world environments utilizing largely unproven PEMS. It is, in sum, a true paradigm shift that manufacturers are facing.

## **The In-Use Testing Program Must Be Implemented And Administered On A Uniform Nationwide Basis**

Due to the significant (in fact, unprecedented) challenges that engine manufacturers will face in implementing the Proposed HDIUT Program, it is vital that the in-use program be administered on a uniform and nationwide basis, without any unique or special provisions for particular jurisdictions, including California. To that end, the HDIUT Outline specifically includes a commitment by the parties to a single coordinated program. ARB has honored the letter and spirit of the HDIUT Outline and the SAA (and the related negotiations among the parties) in submitting the Proposed HDIUT Rule for Board approval. Specifically, ARB has made it clear that its Proposed HDIUT Rule is intended to be -- and is -- essentially identical to the EPA HDIUT Rule.

Because the ARB's Proposed HDIUT Rule is essentially identical to the EPA HDIUT Rule, EMA and its members support the adoption of the Proposed HDIUT Rule. Adopting the Rule, as recommended by ARB staff, will complete the implementation of the SAA, and will establish a viable, ground-breaking manufacturer-run in-use NTE testing program that will ensure the real-world emissions benefits of advanced diesel engines and exhaust after-treatment systems. All of this, in turn, will continue to facilitate the deployment, validation and expansion of clean diesel technologies.

### **Conclusion**

EMA appreciates the opportunity to submit this oral statement relating to the Proposed HDIUT Rule. As noted above, the proposed in-use NTE testing program represents a fundamental and ground-breaking paradigm shift in the regulation and control of emissions from HDOH vehicles and engines. Accordingly, continuing cooperation among ARB, EPA and engine manufacturers will be necessary to accomplish that change in paradigm. For its part, and recognizing that many significant challenges still lie ahead, EMA looks forward to an ongoing collaborative effort with ARB and EPA to ensure that the negotiated in-use NTE testing program is implemented in a feasible, cost-effective and highly successful manner.

Respectfully submitted

ENGINE MANUFACTURERS ASSOCIATION