

**STATE OF CALIFORNIA  
AIR RESOURCES BOARD**

<b>Notice of Public Hearing to Consider</b>	<b>)</b>	
<b>Technical Status and Proposed Revisions</b>	<b>)</b>	
<b>to Malfunction and Diagnostic System</b>	<b>)</b>	
<b>Requirements and Associated</b>	<b>)</b>	<b>Hearing Date: September 28, 2006</b>
<b>Enforcement Provisions for Passenger</b>	<b>)</b>	<b>Agenda Item 06-8-4</b>
<b>Cars, Light-Duty Trucks, and</b>	<b>)</b>	<b>Notice of Public Availability of</b>
<b>Medium-Duty Vehicles and Engines</b>	<b>)</b>	<b>Modified Text</b>
<b>On-Board Diagnostic (OBD II) and</b>	<b>)</b>	
<b>Emission Warranty Regulations</b>	<b>)</b>	

**COMMENTS OF THE  
ENGINE MANUFACTURERS ASSOCIATION**

**Jed R. Mandel  
Lisa A. Stegink  
Engine Manufacturers Association  
Two North LaSalle Street, Suite 2200  
Chicago, Illinois 60602  
(312) 269-8000**

**June 19, 2007**

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**COMMENTS OF THE  
ENGINE MANUFACTURERS ASSOCIATION**

On May 22, 2007, the California Air Resources Board ("ARB" of the "Board") published a Notice of Public Availability of Modified Text ("15-Day Notice") regarding amendments to the light- and medium-duty OBDII requirements approved by the Board at the September 28, 2006, public hearing. The Engine Manufacturers Association ("EMA") presented written comments in advance of the hearing and testimony at the hearing, after having worked extensively with Staff on the proposed amendments to the OBDII rule for medium-duty vehicles.

EMA's comments on the 15-Day Notice are limited to three areas: the malfunction thresholds for EGR and VVT systems, in-use compliance flexibility, and SAE publication dates.

**EGR and VVT System Engine-Based Malfunction Thresholds**

ARB has proposed to modify the emissions-related malfunction thresholds for EGR system low flow, high flow, and cooler performance and VVT system target error and slow response monitoring requirements. EMA understands that these changes are being proposed in an effort to address concerns with the originally-proposed threshold for NOx (additive threshold of 0.3g), which did not take into account phase-in allowances and the high probability that engine manufacturers would certify to higher NOx FELs for 2007 through 2009 model year engines. As EMA commented during the September Board hearing, the originally-proposed thresholds would have resulted in a requirement to illuminate the MIL for these monitors at a level well below 1.5 times the FEL for NOx.

EMA appreciates ARB's effort to correct the NOx threshold. However, it appears that ARB has inappropriately modified the NMHC and CO malfunction thresholds in the process. The NMHC and CO standards do not change for phase-in engines between the 2007 through 2009 model years, and for all engines 2010 and beyond. Diesel MDV phase-in engines and engine families meeting "split engine family" FEL provisions must meet the 0.14 g/bhp-hr NMHC and 15.5 g/bhp-hr CO standards *regardless* of the NOx FEL to which the engines are certified. In fact, most 2007 through 2009 model year engines will be certified in this manner.

These engines also will be certified to NO<sub>x</sub> FELs above 0.5 g/bhp-hr in most, if not all, cases. As a result, ARB's 15-Day Notice proposal to implement dual-threshold multipliers for NMHC and CO based on the NO<sub>x</sub> FEL being above or below 0.5g would result in more stringent malfunction NMHC and CO thresholds for most 2007 through 2009 model year engines (1.5 times the standard), and then revert back to the correct, less stringent threshold (2.5 times the standard) that was approved by the Board at the September hearing. Such a result does not make sense and is not appropriate.

EMA believes that the proposed dual-threshold approach for the NO<sub>x</sub> constituent based on the NO<sub>x</sub> FEL is appropriate. However, ARB must modify the EGR and VVT system threshold proposal for NMHC and CO and retain the single threshold multiplier of 2.5 times the standard for those constituents, regardless of the NO<sub>x</sub> FEL to which the engine is certified, and as originally approved by the Board.

#### In-Use Compliance Flexibility

In written comments and in hearing testimony, EMA requested in-use compliance flexibility for meeting the minimum monitoring ratio requirements. ARB Staff proposed that engine manufacturers could meet “interim” monitoring ratios of 0.100 (rather than 0.33) until 2012 (1968.2(d)(3.2.1)(D)(iii)). Prior to the hearing, EMA proposed revised language that would allow manufacturers in-use compliance flexibility in meeting monitoring ratio requirements during the first three years after the introduction of new monitors. Staff suggested that a simple approach would be to extend in-use flexibility through 2015. EMA requested at the hearing, and Staff agreed to, an additional two years (2013 and 2014) of in-use compliance flexibility for medium-duty diesel engines to meet the monitoring ratio requirements (Hearing Transcript, p. 224). However, the 15-Day Notice does not include any such change.

EMA seeks this change in order to provide manufacturers time after introduction of a new monitor in which the manufacturer would have to design to the higher final ratio but would be held responsible to the lower 0.100 ratio in use. NO<sub>x</sub> aftertreatment will not be implemented until 2010, so the interim in-use 0.100 ratio will be available for only 3 years total before final ratios are required to be met in 2013. EMA is requesting additional in-use compliance flexibility only for the first two years – 2013 and 2014 – that the more stringent, final monitoring ratios are effective for medium-duty diesel. ARB Staff agreed to the change at the hearing, the Board approved the change, and the final rule must be revised to include the 0.100 ratio in 2013 and 2014 for medium-duty diesel vehicles in use.

#### SAE Publication Dates

ARB has included language in section 1968.2(g)(1) that would allow the Executive Officer to approve a manufacturer's use of subsequently-revised final versions of SAE and ISO documents included within the regulation. EMA supports that provision. However, ARB should make appropriate corrections to the OBDII rule now, while the rulemaking is still open, to update a number of SAE publications that have new 2006 and 2007 publication dates. The full list of published J1939 standards is available from the SAE Web site and shows all updated publications to date. ARB should include the updated references within these amendments.

EMA would be happy to provide any additional information or discuss these issues further with ARB.

Respectfully submitted,

Engine Manufacturers Association

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