

Heavy Duty OBD Issues

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Presented By:

John Trajnowski
*Vehicle Environmental Engineering
Ford Motor Company*

HDOBD Regulatory Development Update

- ARB recently proposed new OBD requirements for all trucks over 14,000 lb. GVWR.
- EPA is expected to initiate a rulemaking for federal heavy duty trucks in the near future.

ARB HDOBD - Rulemaking Timetable

- ARB Workshop to discuss their proposed heavy duty OBD II requirements will probably be held in September.
- The regulation is scheduled to be considered for adoption at the November, 2003 ARB Board Hearing.

ARB HDOBD – Proposed Requirements

- ARB's proposal very similar to the LD/MDV OBD II requirements.
 - Monitoring required for all emissions-related systems and components *on the vehicle*.
 - Rate-based monitoring will be required to ensure monitors execute on a regular basis.
 - Regulation will require a standardized communication protocol for the OBD II system.

ARB HDOBD - Implementation

- ARB proposed to require HDOBD on heavy duty trucks beginning with the 2007 model year.
 - Phase-in of 30/60/100% in 2007/08/09.

ARB HDOBD – Major Issues

- *Vehicle-based* monitoring requirements.
 - Not limited to engine. Includes transmission.
 - Non-engine driveline malfunctions have negligible emissions impact.
 - OBD II requirements apply to “vehicle” model year rather than “engine” model year.

ARB HDOBD – Major Issues

- 2007 MY implementation date is problematic.
 - Major workload already facing HD truck engine manufacturers in 2007 to comply with new emissions requirements.
- Purpose unclear for potential new AECD/NTE zone tracking requirements.
 - Requirement unrelated to detecting malfunctions.
 - How would ARB plan to use this information?
 - Would this requirement be cost effective from an air quality perspective?

ARB HDOBD – Other Potential Concerns

- There will be significant cost implications if ARB requires a communication protocol other than what is currently in use.
 - SAE J1939 for diesel engines in large trucks.
 - ISO 15765-4 (LD protocol) for engines used in lighter trucks derived from LD/MDVs.
- Aftertreatment monitoring requirements are technology-forcing and create a compliance risk.

ARB HDOBD – Enforcement Concerns

- ARB plans to propose HDOBD enforcement provisions in a separate rulemaking.
 - Light Duty OBD II enforcements regulations contain “mandatory recall” provisions.

ARB HDOBD – Other Potential Concerns

- ARB's Policy "You cannot use certain emissions control technology if you can't monitor it."
 - Policy could impact engine manufacturers' ability to meet emissions requirements.