With the Advent of 2010 Compliant HDDEs and In-Use PEMS Testing – Where does ARB go from Here?

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Disclaimer

The materials in this presentation are a combination of adopted ARB programs and other staff concepts on how PEMS could improve ARB’s overall heavy duty diesel vehicle (HDDV) Programs.
With PEMS Testing Capabilities, What Improvements to the HDDV Programs can be Made?

- HDDV In-use compliance
- HDDV Certification
- HDDV Inventory
- HDDV Verification/Retrofit
PEMS used for HDDV Compliance

The Heavy Duty In-Use Testing Program
- Up to 25% of a manufacturer’s engine families are tested annually
- Based on the not-to-exceed test limits
- Testing conducted by the manufacturers using PEMS on revenue service vehicles
- Reporting by the manufacturers
- ARB can audit manufacturer testing
- ARB can complement by conducting additional PEMS testing
PEMS Testing to Support the HDDV Certification Program

- Assessment of engine AECD/ deficiency
- Investigate warranty claim reporting
- Evaluate engine power de-rate or other inducement strategies
- Evaluate on-board diagnostic systems
PEMS Testing to Support ARB’s HDDV Inventory Development

- Assessment of Inventory modeling (real-world reality check)
- Assessment of mal-performance and tampering effects
- Effectiveness of HDDV emission technologies in vehicle second-life applications
PEMS Testing to Support ARB’s HDDV Verification/Retrofit Programs

- Assess the performance of retrofit emission devices in the field
- Effects of poor maintenance
- Evaluate engine-out emissions of retrofitted in-use vehicles
Thank you