



Proposal for Updated Test Procedures and Technical Amendments

Briefing for Margo Oge
June 2004

Test procedures

- Part 1065 has test procedures for multiple engine categories
 - Originally adopted for nonroad spark-ignition engines
 - Nonroad diesel Tier 4
- Part 1065 is adequate for these final rules
- Proposal includes three types of change
 - Improved precision and new measurement techniques, consistent with HD2007 final rule
 - Updated measurement procedures for in-use testing
 - Updated language to make testing general and understandable for all engine categories; Part 1065 will be become the global technical standard
- Proposed language has been closely coordinated with industry

Rulemaking Background



- Most of the changes to the test procedures in part 1065 were drafted for the Tier 4 final rule
- The final draft included many changes from the proposal
 - OGC recommended adopting only those changes needed for the Tier 4 final rule
- The heavy-duty in-use testing rule depends on updating the test procedures in part 1065
 - Need signature by early July to support in-use testing rule
- Initiating a separate rule for changing test procedures gave us the opportunity to add technical amendments

Technical Amendments

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- OTAQ has had no technical amendments for 3+ years
 - Industry and EPA review of regs has produced several amendments, which can be grouped into three types:
 - Correct errors (equations, cross-references, typos, etc.)
 - Clarify various provisions, none of which are expected to raise big issues (see Appendix)
 - » many of these align other programs with the nonroad diesel Tier 4 final rule
 - Make minor program adjustments
 - No changes related to fuels program

HD2007 Amendments

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- Migrate test procedures from Part 86, subpart N to Part 1065
 - Test requirements are consistent, but clarify several provisions and incorporate recent testing upgrades
 - Adjust the testing method for the Supplemental Emission Test
 - Conventional approach requires 13 separate measurements, which can reduce repeatability, especially with infrequent regeneration events
 - New “ramped-modal” approach covers the same engine-operating modes, but connects them with gradual transition “ramps” that allow for a single measurement
 - Accuracy and repeatability are substantially improved
 - We and manufacturers strongly support this change

Aftertreatment Shipment

- We are considering a provision to allow manufacturers to ship aftertreatment separately to truck builders
- We adopted this for nonroad diesel engines for Tier 4
- Manufacturers are eager do this also for highway engines, but are concerned with a restriction we adopted for nonroad engines
 - Engine manufacturer must include the cost of aftertreatment in the price of the engine
 - This removes the incentive for equipment manufacturers to ignore aftertreatment or skimp on quality
- We recommend taking comment on the concept of separate shipment for highway engines to give ourselves flexibility to address it in the final rule if appropriate

Recreational Vehicles

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- To resolve a pending lawsuit from the Motorcycle Industry Council, we agreed to make several changes to the regulations:
 - Clarify approach to defining exhaust and evaporative engine families
 - Clarify gas-cap specifications for permeation testing
 - Clarify the sequence of permeation testing
 - Define “fuel line” to clear up ambiguous testing specification
 - Correct the equations defining advertised emission levels for consumer labels
 - Allow exhaust testing using raw-gas sampling methods
 - Allow manufacturers to select a different maximum engine speed for testing

Other Program Adjustments

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- Independent Commercial Importers
 - Allow limited import of products subject to year-of-production standards
 - HD2007: allow flexible phase-in for HD2007 rule
 - Manufacturers may base compliance on model year or calendar year
 - This addresses Cummins' concerns
 - Nonroad Diesel Tier 3: allow the same technical hardship provisions we adopted in Tier 4 final rule
 - This addresses Ingersoll Rand concerns
 - Nonroad Diesel Tier 4 and Recreational vehicles: require separate ABT accounting if states adopt separate standards
 - Consistent with previous programs
 - This will have no effect until California adopts standards
 - Adjusting maximum penalties to \$32,500
 - Consistent with February 2004 OECA final rule