

On-Road Heavy-Duty

Q/A and Update

2007 EMA Certification Workshop

April 24, 2007

California Environmental Protection Agency

 **Air Resources Board**

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Hybrid Overview

Two Certification Options

1. Using Certified Engines
2. Chassis Certification
(engine + hybrid system + vehicle)

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Hybrid Overview

Option 1: Using Certified Engines

Can be used in HEVs of the same service class

- no need for recertification,
- no emission credit from hybrid use.

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Hybrid Overview

Option 2: Chassis Certification

Interim HEV Test Procedure Applies

- One party certification.
- For hybrids using an engine not previously certified or seeking emission credits beyond the emission levels of the certified engine.
- Emission factors for determining certification compliance.

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Hybrid Overview

Contact ARB for hybrid certification plans

- Durability and DF plans
- Warranty and Maintenance
- Other related discussions:
 - Special test conditions/procedures.
 - Test vehicle configuration.
 - Emission Factor determination.

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Idling Emission Reduction

MY2008+ HDDEs

1. Requirements:
 - Five-minute engine shutdown, or
 - 30 g/hr NO_x, or
 - Approved alternatives (APS or Heaters).
2. Part of AECD review process
3. <http://www.arb.ca.gov/regact/idling/idling.htm>

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Suggestions for Speedy Review

- Annual certification preview meeting with ARB staff (~6 months before first certification).
- Seek approval for certain major requirements before submitting engine family applications.

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Certification Preview Meeting

Discussion of the followings will help expedite the certification process:

- Durability testing and DF determination method
- Emissions averaging plan
- New technology
- Alternative idling emission reduction compliance
- Test waivers and special test procedures

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- Engine family certification timing indicating completion of each major requirement (e.g., Gantt chart of engine families)
 - Identify exact carry-over EFs for fast track review
 - Identify non-carryover EFs

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Pre-certification Approvals

Approval of the following before submitting the application will expedite the review process

- Durability test plan and DF determination
- Request for carryover or carry-across
- EMD/OBD
- AECD, NTE deficiencies
- Regeneration emissions
- Warranty, engine label and maintenance schedule

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Speedy Review

Missing items that delay issuance of E O:

- Durability and DF data and summary information
- NTE deficiencies declaration and justifications
- Facsimile of engine label
- Warranty statement
- Maintenance schedule
- EPA Certificate of Conformity

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Submittal Requirements

- DMS = Filemaker application + Documents
- DMS submittal – follow HD users guide @ <http://www.arb.ca.gov/msprog/dms/mfrug032007.pdf>
- AB&T reporting same as EPA = submit same reports into ARB DMS

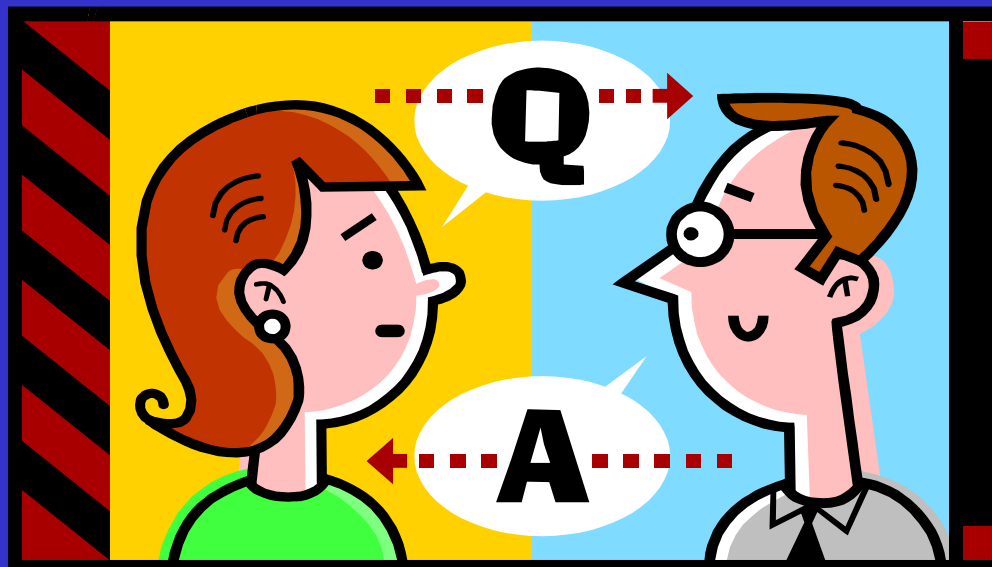
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