

Amendments to Verification Procedure Public Workshop

December 19, 2006



California Environmental Protection Agency

Air Resources Board

Verification Procedure Background

- **Approved May 2002**
- **Ensures that technology achieves emissions reductions of diesel PM and NO_x that are real and durable**
- **Requires warranty coverage and in-use compliance testing**
- **Amendments adopted February 2004 and March 2006**
 - **Most recent change includes the requirement that verified systems must not increase NO₂ emissions by more than 30% beginning January 1, 2007 and 20% in 2009**

Outline of Proposed Amendments

- **Conditional Extension**
- **Fuel based strategies**
- **Other Proposed Modifications:**
 - **In-Use Compliance**
 - **Verification Transfers**
 - **Acceptance of existing data**
 - **Record keeping**
- **Consideration of non-CCR Title 13 compliant test fuels**
- **Sales and installations requirement**
- **Additional In-Use Compliance and Record Keeping Requirements**

Conditional Extension

- **Conditional extensions would allow applicants to apply for conditional extensions for their verified systems for on-road applications**
- **Expedites the verification process for reliable systems that can be applied to a broader range of applications**
- **Provides the opportunity to sell systems while obtaining data and information required for a full verification**
- **Will satisfy fleet rules**

Fuel Based Strategies

- Definition of alternative diesel fuels remains the same
- Testing requirements for fuel additive based systems would change

Fuel Based Strategies Testing Modifications

- All fuel based strategies must comply with testing per Section 2710
- FTP cycle for on-road applications
- Off-road and stationary applications must adhere to the appropriate test cycles per Section 2703(e)(2) and 2703(e)(3)

In-Use Compliance Modifications

Testing Proposal Deadlines

- Testing proposals for phase 1 and phase 2
 - Must be submitted no later than 90 days after 50th unit sold (phase 1)
 - Must be submitted no later than 3 years after 50th unit sold (phase 2)
- Both proposals must include applicable information required in the in-use test report, a test plan, a test engine/vehicle description, and a list of candidate test systems

In-Use Compliance Modifications

Phase 1 and Phase 2 Reports

- Phase 1 Report
 - Must be submitted no later than 18 months after the 50th unit is sold
- Phase 2 Report
 - Must be submitted no later than 4 years after the 50th unit is sold

In-Use Compliance Modifications

Test System Failure

- For each test unit that fails, a test proposal for 2 additional units must be submitted within 30 days after failure
- After receiving approval from the Executive Officer, the applicant must resume testing

Verification Transfers

- Applies to applicants who wish to market another manufacturer's previously verified system
 - Applicants must submit an application per Section 2702(b) of the regulation
 - Applicants must get written permission from the verified manufacturer allowing them to market the product

Verification Transfers

- Applicants must get written permission from the verified device manufacturer to use data/information submitted for the original verification
- Applicants must demonstrate a thorough understanding of how the product relies on sound principles of science and engineering to achieve emissions reductions

Verification Transfers

- Applicants who wish to expand the scope of the verification or extend the conditions of a verification must provide any and all additional information and/or data requested by ARB

Pre-existing Data

- Pre-existing data and/or verifications from other programs (e.g. EPA, VERT, etc.) can be submitted for review
- Pre-existing data may support conditional or full verifications
- Applicants with pre-existing data are encouraged to apply

Record Keeping

- Applicants would be required to keep updated end user contact information and vehicle/engine information for each installed system
- Records must be kept until the in-use compliance requirements are completed
- Applicants receiving conditional extensions and conditional verifications must submit records one year after receiving their conditional status
- Other applicants would submit records upon request by the Executive Officer

Additional Amendments

- Consideration of non-CCR Title 13 compliant test fuels
- Sales and Installations requirement
- More in-use compliance language

Test Fuels

- Test fuels for emissions and durability tests must meet California Code of Regulations, Title 13, Sections 2280 – 2283
- Some applications (e.g. marine vessels, locomotives, etc.) use fuels that do not necessarily meet these specifications
- Staff proposes the addition of language allowing for test fuels that are representative of in-use fuels for the above mentioned applications

Sales and Installation

- Staff proposes to add language specifying that applicants, distributors, and installers must sell and install verified systems for and on appropriate applications
- Violation will result in remedial action

Additional In-Use Compliance Amendments

- Applicants that have less than 50 units installed can request for extensions of in-use compliance deadlines
- Within 45 days of receiving the testing proposal for additional test units needed after a test failure, the Executive Officer will determine if the new test plan is appropriate

Additional In-Use Compliance Amendments

- **Clarifying Language**

- **Revise language in 2709(d) to clarify how the Executive Officer will approve test units**
- **Add subsection 2709(e) to clarify how the Executive Officer selects test engines/vehicles**
- **Add subsection 2709(h) allowing the Executive Officer to approve alternative in-use compliance test plans on a case by case basis**

Additional Record Keeping Requirements

- Description of vehicles or equipment on which diesel emission control strategy is installed
 - make, model, model year, vehicle identification number
- Description of engine on which the diesel emission control strategy is installed
 - make, model, model year, engine family name, engine serial number

Future Amendments

- Plan to propose additional language that addresses marine applications
- May change NO_x testing requirements and NO_x emission reduction designations
- May change NO₂ testing requirements
- Staff considering current schedule

Next Steps

- Provide comments on proposed amendments by January 10, 2007
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Questions/Comments

