# State of California California Environmental Protection Agency AIR RESOURCES BOARD

PUBLIC HEARING TO CONSIDER TECHNICAL AMENDMENTS TO THE MOTOR VEHICLE EVAPORATIVE AND EXHAUST EMISSIONS TEST PROCEDURES

FINAL STATEMENT OF REASONS

November 2006

# State of California AIR RESOURCES BOARD

# Final Statement of Reasons for Rulemaking, Including Summary of Comments and Agency Response

PUBLIC HEARING TO CONSIDER TECHNICAL AMENDMENTS TO THE MOTOR VEHICLE EVAPORATIVE AND EXHAUST EMISSIONS TEST PROCEDURES

Public Hearing Date: June 22, 2006

Agenda Item No.: 06-6-4

### I. General

The Staff Report: Initial Statement of Reasons for Rulemaking ("Staff Report"), entitled "Initial Statement of Reasons for Proposed Technical Amendments to the Motor Vehicle Evaporative and Exhaust Emissions Test Procedures," released April 7, 2006, is incorporated by reference herein.

In this rulemaking, the Air Resources Board (ARB or Board) adopted amendments to the California Motor Vehicle Evaporative, Refueling, and Exhaust Emissions Test Procedures. These amendments will reduce the testing burden on manufacturers associated with evaporative emission-related certification and in-use compliance requirements. This reduction is achieved by clarifying and modifying the current procedures so that they are better harmonized with similar procedures of the United States Environmental Protection Agency (U.S. EPA) without changing the stringency of either the emission standards or test procedures. Other minor amendments provide four-wheel drive (4WD) dynamometer provisions, and update vehicle labeling requirements. The amendments consist of the following primary elements:

## **Evaporative Emission Testing Related Amendments**

Providing manufacturers the option of certifying new vehicles to the Supplemental Two-Day Diurnal plus Hot Soak (2D+HS) standard on the basis of an engineering evaluation, instead of requiring that manufacturers demonstrate compliance with this standard on the basis of performing a test. A manufacturer electing to utilize this option must submit a compliance statement at the time of certification, based on good engineering judgment, that the vehicle's canister purges adequately and complies with the 2D+HS emission standard. Demonstrating compliance with the 2D+HS emission standard by performing the 2D+HS test remains a requirement under the In-Use Verification Program (IUVP), and if requested by ARB under certification confirmatory testing.

Revising the running loss emission test procedure to clarify that if ARB approves a manufacturer's alternative running loss test procedure, ARB may conduct

certification confirmatory tests and any in-use compliance tests using either the existing procedures or the manufacturer's alternative procedure.

Providing manufacturers the option of using an alternative canister preconditioning method subject to the ARB's advance approval. The alternative preconditioning method must be as, or more, stringent than the currently specified preconditioning method. The ARB may use either a manufacturer's alternative preconditioning method or the methods specified in the current evaporative test procedures for both certification confirmatory testing and in-use compliance testing.

Modifying the California IUVP evaporative emissions test requirements by aligning them with the current federal IUVP regulations. Specifically, for gasoline- and ethanol-fueled IUVP vehicles, the 2D+HS test would be used for demonstrating compliance. For liquefied petroleum gas and non-dedicated compressed natural gas-fueled (i.e., gaseous-fueled) IUVP vehicles, the 3D+HS test would be used.

Revising the "California Refueling Emission Standards and Test Procedures For 2001 and Subsequent Model Motor Vehicles," (ORVR procedures) to provide manufacturers the option of not disconnecting the fuel tank-vent hose from the carbon canister while performing the drain-and-10 percent-fill step of the test sequence. A manufacturer must indicate in its certification application which type of canister and vent hose assembly configuration will be used for testing purposes. The ARB will utilize the same configuration for certification confirmatory testing purposes.

Adding minor non-substantive amendments (test waiver provisions for certification vehicles relating to ORVR and refueling spitback tests) to maintain harmonization with federal evaporative requirements.

## **Four-Wheel Drive Dynamometer Amendments**

Allowing manufacturers to perform certification emission testing of 4WD vehicles on 4WD dynamometers. Manufacturers retain the option of certifying 4WD vehicles in a 2WD mode of dynamometer operation.

## **Vehicle Labeling Amendments**

Amending California's emission control label requirements to not require information relating to outdated information; specifically, the engine tune-up specifications and adjustments, diagrams of vacuum hose routing, and the Vehicle Emission Configuration bar codes.

On April 7, 2006, ARB published a notice for a May 25, 2006 public hearing to consider the proposed amendments. The Staff Report was also made available for public review and a 45-day comment period starting April 7, 2006. The Staff Report provides the

rationale for the proposed amendments. The text of the proposed amendments to title 13, California Code of Regulations (CCR) sections 1961, 1976 and 1978 and the three test procedures incorporated by reference therein, "California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles"; "California Refueling Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles"; and the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," were included as Appendices to the Staff Report. Additional appendices provided detailed explanations of the proposed amendments to the CCR sections and corresponding test procedures. These documents were also posted on ARB's Internet site for the rulemaking at: http://www.arb.ca.gov/regact/evap2006/evap2006.htm.

On April 13, 2006, a Notice of Postponement was issued delaying consideration of the proposed amendments until a hearing on June 22, 2006. All of the applicable rulemaking documents were posted at the ARB Internet site address in the immediately preceding paragraph.

On June 22, 2006, the Board conducted the public hearing and received written comments. At the conclusion of the hearing, the Board adopted Resolution 06-20, in which it approved the proposed amendments without modification.

This Final Statement of Reasons contains a summary of the comments received by the Board on the proposed regulatory amendments and ARB's responses to those comments, and clarifies issues regarding amendments to the four-wheel drive dynamometer and the vehicle labeling requirements (see "Clarifications and Modifications to the Original Proposal" section).

**Incorporation of Test Procedures and Federal Regulations.** The three amended test procedures are incorporated by reference in title 13, CCR, sections 1961, 1976, and 1978. Each of these test procedures in turn incorporate, with revisions, certification and in-use vehicle program test procedures adopted by the U.S. EPA, and contained in title 40, Code of Federal Regulations (CFR), Part 86.

Title 13, CCR sections 1961, 1976 and 1978 identify the incorporated ARB documents by title and date. The ARB documents are readily available from ARB upon request and were made available in the context of this rulemaking in the manner specified in Government Code section 11346.5(b). The CFR is published by the Office of the Federal Registrar, National Archives and Records Administration, and is therefore reasonably available to the affected public from a commonly known source.

The test procedures are incorporated by reference because it would be cumbersome, unduly expensive, and otherwise impractical to print them in the CCR. Existing ARB administrative practice has been to have the test procedures incorporated by reference rather than printed in the CCR because these procedures are highly technical and complex. They include the "nuts and bolts" engineering protocols, computer modeling, and laboratory practices required for certification of regulated engines and equipment,

and have a very limited audience. Because ARB has never printed complete test procedures in the CCR, the directly affected public is accustomed to the incorporation by reference format used therein. The ARB's test procedures as a whole are extensive, and it would be both cumbersome and expensive to print these lengthy, technically complex procedures for a limited audience in the CCR. Printing portions of ARB's test procedures that are incorporated by reference would be unnecessarily confusing to the affected public.

The test procedures incorporate portions of the CFR because ARB's requirements are substantially based on the federal emission regulations. Manufacturers typically certify engines to a version of the federal emission standards and test procedures, which has been modified by state requirements. Incorporation of the federal regulations by reference makes it easier for manufacturers to know when the two sets of regulations are identical and when they differ. Each of the incorporated CFR provisions is identified by date in ARB's test procedure documents.

**Fiscal Impacts.** The Board has determined that this regulatory action will not create create costs or savings, as defined in Government Code section 11346.5(a)(6), to any state agency or in federal funding to the state, costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to part 7 (commencing with section 17500), Division 4, title 2 of the Government Code, or other nondiscretionary costs or savings to state or local agencies.

The Executive Officer has determined that this regulatory action will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

In accordance with Government Code section 11346.3, the Executive Officer has determined that this amendment will not affect the creation or elimination of jobs within the State of California, the creation of new businesses and the elimination of existing businesses within the State of California, and the expansion of businesses currently doing business within the State of California.

The Executive Officer has determined, pursuant to title 1, CCR, section 4, that the proposed regulatory action will not affect small businesses because the proposed amendments allow for reducing the number of emission tests required for vehicle certification and the IUVP, and these tests are conducted by vehicle manufacturers, none of which are small businesses.

The Board has further determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed or would be as effective and less burdensome to affected private persons or businesses than the action taken by the Board.

**Consideration of Alternatives.** The amendments and new regulatory language proposed in this rulemaking were the result of extensive discussions and meetings involving ARB, U.S. EPA, and automobile manufacturers. As discussed in the Staff

Report, the only other possible regulatory alternative considered was not making any changes to the current test procedures. However, as stated in both the Staff Report and at the hearing, the objective of this rulemaking is to reduce the certification and IUVP-related testing burden on manufacturers. The "no action" alternative would actually increase the inconsistency between the current California test procedures and the recently amended federal test procedures which would increase manufacturers' testing burdens. The Board has determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed or would be as effective and less burdensome to affected private persons than the action taken by the Board.

### II. CLARIFICATIONS AND MODIFICATIONS TO THE ORIGINAL PROPOSAL

Subsequent to the June 22, 2006 public hearing, staff has identified three issues requiring additional clarification and has therefore made minor, nonsubstantive modifications to the original proposal as more fully described below.

# A. CLARIFYING WHEN ADVANCE EXECUTIVE OFFICER APPROVAL IS REQUIRED FOR CERTIFYING A FOUR-WHEEL DRIVE VEHICLE ON A TWO-WHEEL DRIVE DYNAMOMETER

Section III.B of the Staff Report describes the proposed amendments as providing manufacturers the option of certifying 4WD vehicles in a two-wheel drive (2WD) mode of dynamometer operation only if they obtain advance Executive Officer approval. This was not an accurate characterization of the U.S. EPA regulations being incorporated in the ARB regulations in this rulemaking. The Preamble to U.S. EPA's direct final rule, 70 Federal Register 72917 (December 8, 2005), describes the federal 4WD dynamometer provisions on pages 72923-4. The only time a manufacturer is required to obtain advance approval for testing 4WD vehicles in 2WD mode is when the manufacturer is conducting IUVP testing and wishes to use a 2WD dynamometer to test a 4WD vehicle that had been certified on a 4WD test mode. Staff is therefore using this opportunity to make clear that manufacturers will not need advance Executive Officer approval to *certify* a 4WD vehicle in a 2WD mode of dynamometer operation.

# B. CLARIFICATION THAT AMENDMENTS TO VEHICLE LABELING PROVISIONS ARE NOT APPLICABLE TO HEAVY-DUTY VEHICLES OR ENGINES

Section IV of the Staff Report (Proposed Vehicle Labeling Amendments) explains that the intent of the proposal is to align California's label requirements with the recently enacted amendments to the corresponding federal label regulations. While the federal revisions apply to light-duty vehicles, light-duty trucks, medium-duty passenger vehicles, and heavy-duty engines and vehicles, the proposed California label amendments apply only to passenger cars, light-duty trucks, and medium-duty vehicles, and not to heavy-duty engines and vehicles (i.e., gross vehicle weight rating over 14,000 lbs.). The Staff Report did not make clear why the proposed label amendments were limited to only light-duty vehicles. Heavy-duty vehicles were not affected by the proposed label amendments because the scope of this rulemaking pertains mostly to light-duty

vehicles, and any heavy-duty-related label amendments would be more appropriately proposed under the heavy-duty engine, in-use compliance rulemaking already scheduled for July 2006 (and subsequently rescheduled for September 2006).

### C. OTHER MINOR, NON-SUBSTANTIVE CHANGES

Page numbers will be added to the "California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles." Although a "Table of Contents" was included when these test procedures were initially adopted, individual page numbers were inadvertently omitted. Adding page numbering will make these test procedures consistent with other ARB test procedure documents, and will also make the document easier to use.

#### III. SUMMARY OF COMMENTS AND AGENCY RESPONSE

Two written comments on the proposed regulatory amendments were received during the 45-day public comment period. Ferrari S.p.A. expressed support for the proposal. The other comment was from an individual that was not specifically directed at the proposed amendments or to the procedures used by ARB in proposing or adopting the proposed amendments. Specifically, that commenter inquired why California has allowed the use of ethanol as a substitute for methyl tertiary butyl ether (MTBE) in gasoline, but does not allow ethanol to be made available as an alternative to gasoline. Because this rulemaking does not include any amendments to fuel specifications, the comment is beyond the scope of the rulemaking.