State of California Air Resources Board

UPDATED INFORMATIVE DIGEST

TECHNICAL AMENDMENTS TO THE MOTOR VEHICLE EVAPORATIVE AND EXHAUST EMISSION TEST PROCEDURES

Sections Affected: Amendments to title 13, California Code of Regulations (CCR), section 1961, Exhaust Emission Standards and Test Procedures – 2004 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles; section 1976, Standards and Test Procedures for Motor Vehicle Fuel Evaporative Emissions; section 1978, Standards and Test Procedures for Vehicle Refueling Emissions.

Background

The Air Resources Board (ARB or the Board) required compliance with motor vehicle evaporative emissions standards and test procedures beginning in 1970. Since then ARB has established more stringent evaporative emission standards and more realistic test requirements for reducing evaporative emissions. In 1996, automobile manufacturers, the United States Environmental Protection Agency (U.S. EPA), and ARB staff began jointly exploring reductions in the testing burden on manufacturers for new vehicle certification and in-use vehicle compliance testing without changing the stringency of the emission standards or test procedures.

U.S. EPA issued a guidance letter on December 31, 2002, providing manufacturers with key "streamlining" modifications to the evaporative and refueling test procedures along with implementing recommendations. On December 8, 2005, U.S. EPA issued a direct final rule for these modifications, including additional minor amendments to the dynamometer provisions and vehicle labeling requirements. Those federal amendments became effective on February 6, 2006.

In accordance with Government Code section 11346.4, the Initial Statement of Reasons for the proposed rulemaking, including the proposed regulatory text, were made available for a 45-day public comment period beginning on April 7, 2006. The public hearing was scheduled for May 25, 2006. On April 13, 2006, a Notice of Postponement was issued delaying consideration of the proposed amendments until a hearing on June 22, 2006. At that hearing, staff presented, and the Board approved, the regulatory amendments as proposed.

Description of the Regulatory Action

The amendments to ARB's motor vehicle evaporative, refueling, and exhaust emissions regulations eliminate redundancies and complexities, and result in better harmonization with federal test procedures. In particular, the amendments provide manufacturers with an option to waive compliance demonstration with the supplemental two-day diurnal plus hot soak emission test for certification in order to eliminate compliance redundancy; clarify the current provision for alternative running loss test procedures so that technical complexities are resolved; provide an allowance for alternative evaporative canister preconditioning methods with the intent to eliminate inaccessibility difficulties; clarify the applicability of the In-Use Verification Program evaporative testing requirements with respect to fuel types; and provide an optional configuration of the canister and vent hoses for refueling emission tests. Additional minor amendments addressed four-wheel drive dynamometer provisions and clarified the vehicle label specifications.

The adopted amendments were not considered to be controversial since they were developed in cooperation with manufacturers. Furthermore, the amendments will not cause any change to the air quality and environmental impacts of the current programs because the amendments would not change the stringency of the existing emissions standards or test procedures.

Comparable Federal Regulations

U.S. EPA regulations for controlling motor vehicle evaporative emissions were first applicable for the 1970 model year. Subsequent adoption of increasingly more stringent emission standards and test procedure requirements has resulted in significant reductions in evaporative emissions. Currently, federal test procedures reflect the evaporative streamlining amendments which became effective in February 2006. Included in those amendments were revisions for updating the vehicle labeling regulations for all motor vehicle categories. In contrast, ARB's evaporative streamlining measure excluded labeling amendments for heavy-duty engines/vehicles because the scope was limited to mostly light-duty vehicles. Aligning the California heavy-duty engine/vehicle labeling requirements with the federal requirements will likely be completed in conjunction with the heavy-duty engine in-use compliance rulemaking already scheduled for September 2006. In addition to other amendments that are common in both the U.S. EPA and ARB evaporative streamlining measures. U.S. EPA's version included amendments for harmonizing certain federal requirements with the California procedures. Specifically, U.S. EPA aligned the federal quality-audit procedures used for calibrating the evaporative testing chamber (i.e., Sealed Housing for Evaporative Determination, or SHED) with the California procedures, and allowed federal acceptance of California evaporative/refueling test data for both 50-state-certified heavy-duty vehicles and non-Tier 2 vehicles. Accordingly, both the U.S. EPA and ARB evaporative streamlining measures resulted in better harmonization between the respective test procedures.