South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 · www.aqmd.gov

*Office of the Executive Officer*
*Barry R. Wallerstein, D.Env.*
*909.396.2100, fax 909.396.3340*

September 20, 2006

Robert Sawyer, Ph.D., Chair
California Air Resources Board
1001 "I" Street
Sacramento, California 95814

Dear Dr. Sawyer:

Comments of South Coast Air Quality Management District regarding
Proposed Adoption of California's Heavy-Duty Diesel In-Use Compliance Regulation

The South Coast Air Quality Management District (AQMD) staff appreciates the opportunity to submit comments regarding California Air Resources Board's (CARB) proposed adoption of California's Heavy-Duty Diesel In-Use Compliance Regulation. The proposed regulation is in response to Health and Safety Code section 43104 directing CARB to adopt test procedures to ensure compliance with emission standards for new heavy-duty motor vehicles.

The AQMD's comments are as follows. First, the proposed regulation indicates that CARB and U.S. EPA will jointly designate up to 25 percent of a manufacturer's total number of heavy-duty diesel engine families for testing and that manufacturers would screen, procure and test vehicles that use the designated engines. Because manufacturers would be solely implementing the selection, screening, and emission testing portion of this in-use compliance program, CARB and U.S. EPA run the risk of engine manufacturers pre-selecting unrepresentative vehicles that have the highest potential for passing in-use emission testing. We suggest that this portion of the heavy-duty diesel engine compliance regulation be modified to allow CARB oversight and approval authority for vehicle selection and emission testing. This proposed additional provision would supplement CARB's independent confirmatory testing on selected engine families.

Second, we believe the remote sensing technology has been sufficiently developed and demonstrated to be capable of measuring in-use emissions from heavy-duty diesel trucks. In a recent U.S. EPA study evaluating emissions from heavy-duty diesel trucks crossing the U.S.-Mexico border, the contractor for the U.S. EPA, Environmental Systems Products (ESP), was able to show good correlation between remote sensing emission measurements and portable emission monitors (PEMS). We recommend that CARB evaluate and implement remote sensing

technology as a supplement to PEMS-based emission testing. Remote sensing technology has the potential to accurately measure heavy-duty truck emissions in a cost-effective manner, and could eventually replace PEMS-based emission testing.

Finally, we recommend that as part of the emission test protocol development, CARB emission test heavy-duty vehicles with engines that incorporate deliberate emission control malfunctions/failures as well as hardware- and software-based defeat devices. Affirmation that the proposed emission test protocol has the capability to generate emissions data that could be used to identify engines with defective emission control systems would help ensure that the final emission test procedure results in a sufficiently robust in-use emissions control program.

The AQMD appreciates the opportunity to provide these comments. If you have any questions regarding this matter, please call me at (909) 396-2100 or Mr. Dean Saito, Manager Mobile Source Strategies Section, at (909) 396-2647.

Sincerely,

Barry R. Wallerstein

Barry R. Wallerstein, D.Env.
Executive Officer

CSL:HH:DKS:DRC