



# pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

SECRETARY

October 14, 2014

Clerk of the Board  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

Re: California Air Resources Board's Proposed Amendments to the Low Emission Vehicle Program Criteria Pollutant Requirements for Light- and Medium-Duty Vehicles, the Hybrid Electric Vehicle Test Procedures, and the Heavy-Duty Otto-Cycle and Heavy-Duty Diesel Test Procedures

Dear Sir or Madam:

The Pennsylvania Department of Environmental Protection (DEP) is submitting comments on the proposed amendments to California's Low Emission Vehicle program (LEV III) for light- and medium-duty vehicles and test procedure documents for hybrid electric and heavy-duty vehicles that are scheduled for public hearing before the California Air Resources Board (CARB) on October 23, 2014. Under the authority of Section 177 of the federal Clean Air Act, Pennsylvania adopted and incorporated by reference California's Low Emission Vehicle (CA LEV) regulations in 1998, found in Title 13 California Code of Regulations (CCR) Chapters 1 and 2, excluding the zero emissions vehicle percentage requirement in 13 CCR § 1962 and the emissions control system warranty statement in 13 CCR § 2039.

Beginning in May 2009, the U.S. Environmental Protection Agency (EPA), the National Highway Transportation Safety Administration (NHTSA), major automakers, the State of California, and other state governments worked cooperatively to develop criteria pollutant standards, greenhouse gas standards, and corporate average fuel economy standards for different vehicle classifications. The first of these standards took effect in model year 2012 for light-duty vehicles and in later years for heavier vehicles. The purpose of the collaboration was to harmonize federal and California standards as much as possible, without requiring the standards to be identical. DEP has long supported efforts to harmonize federal and California requirements, provided that the harmonization efforts do not result in CARB adopting less stringent requirements than those in existing CARB regulations. Adoption of less stringent requirements by CARB may result in a reduction of air quality benefits for Pennsylvania and other states that have adopted CA LEV programs.

Numerous rulemakings have been completed by the EPA, NHTSA and California in the intervening years. On August 7, 2012, California finalized a package of regulations referred to as the Advanced Clean Car (ACC) program. The ACC program encompassed changes to the CA LEV program for model years 2015-2025 vehicles, referred to as the LEV III amendments, which affect provisions adopted by Pennsylvania. At the same time that CARB was developing the ACC program, the EPA was developing new federal regulations for vehicle criteria pollutant emissions and greenhouse gas emissions for model years 2017-2025 vehicles. The EPA recently finalized a rulemaking titled "Control of Air Pollution from Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards; Final Rule" (Tier 3 regulations), which addresses criteria

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pollutants. See 79 FR 23414, April 28, 2014, and 79 FR 36657, June 30, 2014. The amendments currently proposed by CARB are intended to continue the efforts to harmonize regulations by revising the LEV III regulations to address differences that remain between the final Tier 3 regulations and the LEV III regulations.

Overall, DEP strongly supports the proposed revisions because the revisions continue the effort to harmonize the LEV III regulations with the Tier 3 regulations to the extent that harmonization supports the most stringent emission standards and testing requirements. Most of the revisions are corrections to references to the Code of Federal Regulations, formatting and structural revisions, and clarification of the applicability of various sections and test procedures. Additionally, there are several revisions incorporating standards from Tier 3 that were more stringent than LEV III, and adding some new compliance options for manufacturers to increase compliance flexibility. CARB also kept provisions from LEV III that are more stringent than Tier 3 requirements. DEP is providing specific comments on some of these changes below.

1. DEP supports the establishment of more stringent fleet average Non-Methane Organic Gas and Oxides of Nitrogen (NMOG+NO<sub>x</sub>) requirements for small-volume manufacturers. CARB is proposing this revision to more closely align with the Tier 3 fleet average NMOG+NO<sub>x</sub> requirements for small-volume manufacturers. DEP agrees that CARB should not be less stringent than the EPA for this requirement. The proposed amendments also result in additional compliance flexibility for small-volume manufacturers because the manufacturers are testing to the same standards under LEV III and Tier 3 for model years 2017-2015. DEP also agrees with CARB's decision to plateau the fleet-average requirements in model year 2025 and to reevaluate the requirements for years beyond 2025 at a later date.
2. DEP supports the proposed requirement for fuel-flexible vehicles to certify to their applicable emission standards, including Supplemental Federal Test Procedures standards, on all fuels the vehicles are designed to use. DEP agrees that this provision ensures that emission controls remain effective regardless of fuel type. This added testing requirement may result in new insights into alternative fuel vehicle emissions, which may be useful to DEP as the number of alternative fuel vehicles in Pennsylvania continues to increase.
3. DEP supports CARB's proposed changes to certification and testing fuel, including allowing federal test fuel to be used for fuel-flexible vehicles. Allowing federal test fuel to be used for fuel-flexible vehicles for refueling tests will provide flexibility to manufacturers to test with a single fuel and will not result in reduced stringency because the federal test fuel is representative of the worst case fuel blend (in terms of vapor generation), which would be the highest potential emission output for fuels outside of California. If a vehicle can pass the emissions tests with the worst case fuel blend federal test fuel, it would also pass using California's LEV III E10 certification gasoline.
4. DEP supports CARB's proposed change to California certification fuel, including ethanol content and reciprocity with federal test fuels. Current specifications for California E10 certification gasoline include a range for the allowable total oxygen content and the ethanol content. Manufacturers have expressed concern that their ability to meet the specifications for both the ten percent ethanol content requirement and the allowable total oxygen content requirement is highly dependent on the base gasoline used in the blending, and that the range where both requirements are met is very small. The proposed changes to the ethanol limit for LEV III certification gasoline to expand the overlap between the allowable ethanol range and the allowable total oxygen content

range will provide manufacturers with enough flexibility to meet both requirements. Additionally, CARB's proposed amendments to allow reciprocity of LEV III certification gasoline with federal Tier 3 certification gasoline and California E85 certification fuel with federal E85 certification fuel will provide additional compliance flexibility to manufacturers and should reduce their testing burden.

5. DEP supports CARB retaining its more stringent 150,000-mile full useful life standards. Modern vehicles are designed to last longer than their predecessors. By retaining the 150,000-mile full useful life standard, CARB is ensuring that the emission controls on these vehicles will continue to operate longer and are less likely to fail before the end of the vehicle's useful life.
6. DEP supports CARB retaining a five-year credit life for LEV III fleet average NMOG+NO<sub>x</sub> credits and debits. DEP agrees that the changes CARB has already made to the credit system, including transitioning from a three-year credit life to a five-year credit life, and eliminating the credit discount over time, adequately address manufacturers' concerns about the build-up of credits in the earlier years and concerns about whether existing technologies are adequate to meet greenhouse gas emission requirements, or if new technologies will need to be developed. DEP agrees that it is appropriate to review the credit system, and any proposed modifications, during the mid-term review of the program (in conjunction with EPA and NHTSA) in the 2017 timeframe. Additionally, changing to a five-year credit life with no depreciation decreases the staff time needed to review and calculate manufacturer credits and debits in states that have adopted CA LEV programs.
7. DEP supports CARB rejecting requests to allow compliance with CARB regulations based on vehicle sales in all 50 states. DEP agrees with CARB that allowing a 50-state fleet average compliance option would create difficulties in implementing and enforcing the LEV III program. Implementation of, and compliance with, the LEV III program should be kept separate from implementation of, and compliance with, the federal Tier 3 program. While many of the standards and testing provisions have been harmonized between the two programs, separation is still necessary for compliance to ensure that California and other states that have adopted a CA LEV program are provided with the state-specific information needed to determine compliance with the LEV III program requirements in their state. Manufacturers are already provided with several pooling options under LEV III for combining sales in California and other states that have adopted a CA LEV program, which decrease the reporting burden but ensure that all vehicles included in the pooling are compliant with LEV III requirements.

Thank you for your consideration of our comments on California's proposed amendments to the LEV III program and test procedures. Should you have questions or need additional information, please contact Vincent J. Brisini, Deputy Secretary for Waste, Air, Radiation and Remediation, by e-mail at [vbrisini@pa.gov](mailto:vbrisini@pa.gov) or by telephone at 717.772.2724, or Joyce E. Epps, Director of the Bureau of Air Quality, by e-mail at [jeepps@pa.gov](mailto:jeepps@pa.gov) or by telephone at 717.787.9702.

Sincerely,



Dana K. Aunkst  
Acting Secretary