

September 21, 2018

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

Re: California Air Resources Board Proposed Amendments to the Low Emission Vehicle III
Greenhouse Gas Emission Regulation

Dear Ms. McReynolds:

The Pennsylvania Department of Environmental Protection (PA DEP) submits the following comments on the proposed amendments to California's low emission vehicle program (LEV III) greenhouse gas (GHG) emission standards for new passenger cars and light-duty trucks (light-duty vehicles) and test procedures for light-duty vehicles. The proposed amendments, designed to prevent weakening of the GHG standards that could result from federal action, are scheduled for a public hearing before the California Air Resources Board (CARB) September 27-28, 2018. PA DEP submits these comments under 25 Pa. Code § 126.451(2)(iii), which requires PA DEP to submit comments on behalf of the residents of the Commonwealth of Pennsylvania on proposed or final-form rulemakings amending the California Code of Regulations (CCR) requirements that are incorporated by reference into the Pennsylvania Clean Vehicle (PCV) Program regulations. 25 Pa. Code Chapter 126, Subchapter D.

Introduction and Background

Legal Authority

States have the authority under Section 177 of the Clean Air Act to adopt California emission control standards for motor vehicles. 42 U.S.C. § 7507. Pennsylvania adopted and incorporated by reference California's LEV regulations in 1998, except for the California Zero Emission Vehicle and emissions control warranty systems statement provisions. 28 Pa.B. 5873 (Dec. 5, 1998). Pennsylvania updated its regulations in 2006. 36 Pa.B. 7424 (Dec. 9, 2006). The California proposal would amend Title 13 CCR, Division 3, Chapters 1 and 2, §§ 1961.2 and 1961.3, as well as the "California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," as last amended September 2, 2015 and incorporated by reference in 13 CCR § 1961.2. The above referenced sections and documents concerning the CARB LEV III regulations are incorporated in Pennsylvania's regulations by reference in 25 Pa. Code § 126.411(b).

Air Pollution

Motor vehicles remain a significant source of pollution in Pennsylvania. According to the U.S. Environmental Protection Agency's (EPA) 2014 National Emissions Inventory¹, gasoline-powered and diesel-powered light-duty onroad vehicle emissions account for 63.2% of carbon dioxide (CO₂) emissions. These vehicles also account for 16.3% of oxides of nitrogen (NO_x), 2.2% of fine particulate matter (PM_{2.5}), and 7.3% of volatile organic compounds (VOC) emissions in Pennsylvania. Additionally, Pennsylvania continues to face challenges in meeting and maintaining federal clean air standards for ozone and PM, and reducing emissions from motor vehicles are an important aspect of Pennsylvania's clean air strategy. Since the California emission control standards for motor vehicles have historically been more stringent than the federal standards, Pennsylvania adopted the standards to maximize potential emission reductions.

Pennsylvania has a history of having areas that face challenges meeting national ambient air quality standards (NAAQS) for ozone and PM air pollution. Although overall air quality has improved over the years, ozone concentrations remain high in the Philadelphia area. This five-county area is designated as a nonattainment area for the 2015 ozone NAAQS. Additionally, the heavily trafficked I-95 Corridor runs through Pennsylvania and correlates with several ozone nonattainment areas throughout the Northeast United States. Increased ozone formation is particularly problematic, because it is directly related to the higher ambient air temperatures occurring from the effects of GHG emissions on the climate. Pennsylvania has also included GHG reductions from the vehicle program in its Climate Change Action Plan required under the Pennsylvania Climate Change Act, 71 P.S. §§ 1361.1 – 1361.8.

CARB's current GHG regulations reduce GHG emissions not only from motor vehicles in California, but also the Section 177 states and any other states in which automakers sell CARB-compliant vehicles. This reduction in GHG emissions in turn diminishes the potential for ozone formation by limiting the increase in atmospheric temperature. In addition, reduced fuel consumption resulting from CARB's GHG standards decreases activity of, and emissions from, refineries, pipelines, and other fuel distribution networks operating in Pennsylvania, which also contribute to ozone formation.

Pennsylvania's History of Support for the "National Program"

Regarding the federal standards, California has worked with both EPA and the National Highway Traffic Safety Administration (NHTSA) for nearly a decade to harmonize the federal standards and the LEV III program standards for both criteria pollutants and GHGs under what is known as the National Program. As part of that effort, California adopted a provision that allows manufacturers of passenger cars, light-duty trucks, and medium-duty vehicles the option of certifying to EPA GHG emission standards as a means of complying with the California GHG emission standards through MY 2025. 13 CCR § 1961.3(c). CARB adopted this "deemed to comply" provision on the condition that the federal standards would deliver GHG emission reductions equivalent to the emission reductions delivered by California's standards.

¹ <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data>

Pennsylvania has long supported the harmonization efforts between the federal and California requirements, as long as it did not result in reduced emissions benefits for Pennsylvania. PA DEP has submitted comments expressing support for CARB's proposed amendments to its light-duty vehicle GHG regulations and harmonization efforts several times in recent years including: September 2009 (proposed amendments to the GHG regulations for model years 2009 through 2016); February 2010 (harmonization with the National Program for model years 2012 through 2016); January 2012 (transition to the LEV III program, including revised and new GHG standards for model years 2015 through 2025 and harmonization with the National Program for model years 2017 through 2025); and October 2014 (additional measures to harmonize standards with the National Program for GHG emission requirements). Pennsylvania still strongly supports these GHG standards and will urge EPA to retain the nationally harmonized standards in comments on its proposal.

EPA's Proposal

On August 24, 2018, EPA published a notice of proposed rulemaking that indicates EPA is considering decreasing the stringency of its GHG standards for model year 2021 through 2025 light-duty passenger vehicles to the model year 2020 standard. Under EPA's proposal, the fleet average CO₂ target value for model year 2025 passenger cars will be 166.0 or 226.0 grams per mile (dependent on vehicle footprint) (83 Fed. Reg. 43494-43495, August 24, 2018) while CARB's CO₂ standards for model year 2025 passenger cars will be 131.0 or 179.0 grams per mile (13 CCR § 1961.3(a)(1)(A)). CARB's standards are 21.1 percent and 20.8 percent, respectively, lower than the standards in the federal proposal for passenger cars. For light-duty trucks and medium-duty passenger cars, EPA's proposal sets the fleet average CO₂ target value for model year 2025 at 212.0 or 337.0 grams per mile (dependent on vehicle footprint) (83 Fed. Reg. 43497, 43499, August 24, 2018) while CARB's CO₂ standards for model year 2025 will be 159.0 and 277.0 grams per mile (13 CCR § 1961.3(a)(1)(B)). CARB's standards are 25.0 percent and 17.8 percent, respectively, lower than the standards in the federal proposal for light-duty trucks and medium-duty passenger cars. EPA's proposed action would result in federal GHG emission standards no longer delivering GHG emission reductions equivalent to the GHG emission reductions achieved by California's standards, one of the primary conditions for CARB's "deemed to comply" provision. EPA's proposal also deviates from prior EPA determinations that were, contrary to the current proposal, based on a robust technical record.

As required under the final rule published by EPA and NHTSA on October 15, 2012, (77 Fed. Reg. 62623) establishing GHG standards and continuing the National Program for model years 2017 through 2025, EPA conducted a Midterm Evaluation of the longer-term standards for model years 2022 through 2025, in coordination with NHTSA and CARB, to ensure that the approved standards were still technically and economically feasible. In its January 2017 Final Determination under the Midterm Evaluation², EPA found that the standards for model years 2022 through 2025 were still feasible and likely to be achieved at lower cost and sooner than

² EPA, *Final Determination on the Appropriateness of the Model Year 2022-2025 Light-Duty Vehicle Greenhouse Gas Emission Standards Under the Midterm Evaluation*, Document Number EPA-420-R-17-001, Jan. 2017, available at <https://www.epa.gov/regulations-emissions-vehicles-and-engines/midterm-evaluation-light-duty-vehicle-greenhouse-gas#previoussteps>.

originally anticipated due to rapid advances in vehicle technologies.³ Similarly, CARB determined during its California-specific Midterm Review⁴ that the standards were feasible and would likely cost less than anticipated based on the same technical information. In EPA's current proposal, however, EPA contradicts CARB's and its own prior conclusions based on what appears to be a significantly less robust technical record.

To ensure that California and Section 177 states, including Pennsylvania, continue to receive the benefits of California's GHG standards for model years 2021 through 2025 if EPA standards become less stringent, CARB is proposing to amend the "deemed to comply" provision only to apply to the currently adopted federal GHG regulations (incorporated in the Code of Federal Regulations and last amended on October 25, 2016). In other words, if EPA repeals or weakens the GHG standards for model years 2021 through 2025, manufacturers will not have the option to comply with EPA's standards for those model years as a means of complying with CARB's standards.

CARB's Proposed LEV III Greenhouse Gas Regulation Amendments

PA DEP strongly supports CARB's proposal to amend the "deemed to comply" provision only to apply to the currently adopted federal GHG regulations (incorporated in the Code of Federal Regulations and last amended on October 25, 2016).

- PA DEP supports CARB's goal of ensuring that GHG emission reduction benefits from California's current GHG regulations for light-duty vehicles are realized in California and the Section 177 states, including Pennsylvania, in the event that EPA weakens GHG emission standards for model years 2021 through 2025.
- PA DEP supports CARB's proposal because it ensures maintenance of current benefits with no additional costs to consumers or manufacturers, as shown in Table 3 of Appendix D of CARB's proposal, entitled "Standardized Regulatory Impact Assessment (SRIA) Equivalent Document⁵."
- PA DEP supports CARB's proposal because it provides certainty for the regulated community (light-duty vehicle manufacturers) through model year 2025.

PA DEP supports the review by CARB in this proposed rulemaking of the technology analysis conducted for its 2012 rulemaking establishing GHG emission standards for light-duty vehicles for model years 2017 through 2025.

- For this proposed rulemaking, CARB reviewed its analysis for the technical feasibility of the technology expected to be used to meet the GHG emission standards. Much of the information for the original analysis was provided by the joint work of EPA, NHTSA and

³ EPA, under prior Administrator E. Scott Pruitt, withdrew the 2017 Final Determination of the Midterm Evaluation. 83 Fed. Reg. 16,077 (April 13, 2018).

⁴ CARB, *California's Advanced Clean Cars Midterm Review and Appendices*, Jan. 18, 2017, available at https://www.arb.ca.gov/msprog/acc/mtr/acc_mtr_finalreport_full.pdf.

⁵ <https://www.arb.ca.gov/regact/2018/leviii2018/appd.pdf>

CARB that resulted in the *Interim Technical Assessment Report* (TAR).⁶ CARB also based its review on its California-specific Midterm Review, referenced above. CARB's updated analysis anticipates that manufacturers will use a variety of combinations of vehicle technologies rather than relying primarily on any one technology. PA DEP agrees that CARB's emission standard regulations are based on the most up-to-date technical information for existing technologies and solid projections regarding emerging technologies.

- Additionally, for this proposed rulemaking CARB analyzed the status of several elements of the LEV III program and determined that the technologies used to meet GHG emission standards have developed and penetrated the markets more quickly, and experienced lower costs, than anticipated in CARB's 2012 rulemaking. PA DEP agrees with CARB's conclusion that technologies are advancing faster and costs are falling faster than initially anticipated.
- One element of concern is vehicle weight reduction and safety, because EPA appears to be basing its weakening of the GHG standards on it. PA DEP believes that EPA has erred significantly in its analysis and reasoning in its proposal relating to this topic. PA DEP will address those errors in its comment letter to EPA. In relation to CARB's proposed rulemaking, PA DEP supports CARB's position that the weight reduction that may occur to comply with the GHG standards does not approach the weight reduction level that would impact vehicle safety. PA DEP believes that concern about weight reduction impacting safety is additionally offset by the introduction of modern safety features and materials that are lighter but stronger.

PA DEP supports CARB's rejection of Alternative 1, as presented in CARB's "Staff Report: Initial Statement of Reasons" for the proposed rulemaking.

- As required by California law, CARB considered alternatives to its regulatory proposal and provided reasons for rejecting them. Alternative 1 included eliminating, rather than amending, the "deemed to comply" provision and strengthening the GHG standards for model years 2024 and 2025.
- PA DEP supports CARB's rejection of this alternative because it would create regulatory uncertainty for auto manufacturers and require additional investment in advanced technology packages. Alternative 1 would also eliminate an element of the National Program/LEV III harmonization efforts in the event the federal GHG standards are maintained in their current form.
- PA DEP agrees that CARB should focus on development of GHG standards for model year 2026 and beyond.

PA DEP supports CARB's rejection of Alternative 2, as presented in the "Staff Report: Initial Statement of Reasons" for the rulemaking.

- The second alternative to its regulatory proposal that CARB considered and rejected, Alternative 2, would have eliminated, rather than amended, the "deemed to comply"

⁶ <https://www.epa.gov/regulations-emissions-vehicles-and-engines/interim-joint-technical-assessment-report-light-duty>

provision and would have flat-lined the stringency of the GHG standards at model year 2021 levels for model years 2022 through 2025, to reduce compliance costs.

- PA DEP supports CARB's rejection of this alternative because there would be a significant loss of environmental benefit if CARB were to decrease the stringency of the LEV III GHG regulation.

Conclusion

As a Section 177 state, Pennsylvania has consistently supported California's efforts to regulate emissions from motor vehicles. Efforts to combat motor vehicle pollution must come from across the spectrum of local, state, and federal governments. Pennsylvania appreciates California's proactive efforts to regulate and raise awareness of the impact of GHGs and climate change, which will have the co-benefit of helping Pennsylvania reduce other criteria pollution and meet its clean air goals.

Thank you for your consideration of PA DEP's comments on California's proposed amendments to the GHG emissions standards for new light-duty vehicles. Should you have questions or need additional information, please contact George Hartenstein, Deputy Secretary for Waste, Air, Radiation and Remediation, by e-mail at ghartenste@pa.gov or by telephone at 717.772.2725, or Krishnan Ramamurthy, Director of the Bureau of Air Quality, by e-mail at kramamurth@pa.gov or by telephone at 717.787.9702.

Sincerely,



Patrick McDonnell
Secretary