



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

One Winter Street Boston, MA 02108 • 617-292-5500

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

Bureau of Air and Waste Division of Air and Climate Programs

310 CMR 7.40:

LOW EMISSION VEHICLE PROGRAM

Background Technical Support Document for Public Hearing on the Proposed Amendments to the Low Emission Vehicle III Greenhouse Gas Emission Standards

Regulatory Authority:

**Massachusetts General Law, Chapter 111, Sections 142A through 142E, 142K & 142M,
Massachusetts General Law Chapter 21A, Sections 2 and 8, and
Massachusetts General Law Chapter 21N**

December 2018

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

TABLE OF CONTENTS

I.	SUMMARY.....	3
II.	BACKGROUND.....	4
III.	NEED FOR AND SUMMARY OF PROPOSED AMENDMENTS.....	6
IV.	IMPACTS OF PROPOSED AMENDMENTS.....	7
V.	PUBLIC HEARING AND COMMENT.....	10

Background Technical Support Document for Public Hearing to Consider
Amendments to the Low Emission Vehicle III Greenhouse Gas Emission Standards
310 CMR 7.40: Low Emission Vehicle Program

On December 13, 2018 the Massachusetts Department of Environmental Protection (MassDEP) filed amendments as an emergency regulation to 310 CMR 7.40, the Low Emission Vehicle (LEV) Program regulation, with the Massachusetts Secretary of the Commonwealth. These amendments were effective upon filing and were published in the Massachusetts Register on December 28, 2018. In order to make the regulations permanent, MassDEP is now soliciting public comment on the regulation in order to comply with the public review process requirements under Massachusetts General Laws (M.G.L.) Chapter 30A. MassDEP will hold a public hearing on the amendments on January 28, 2019, and the deadline to submit public comments is February 8, 2019.

I. SUMMARY

In compliance with the Massachusetts Clean Air Act,¹ MassDEP is proposing to permanently adopt California's Low Emission Vehicle (LEV) III Greenhouse Gas (GHG) Emission Regulation under the Massachusetts LEV Program regulation, 310 CMR 7.40. The proposed amendments accomplish the following: (1) incorporate modifications made by California to its LEV program to clarify the "deemed to comply" option,² and (2) assure continued emission benefits from automobile manufacturer compliance with GHG regulations pertaining to model years (MYs) 2021 through 2025. The proposed revisions apply to passenger cars (PCs), light-duty trucks (LDTs), and medium-duty passenger vehicles (MDPVs).

Massachusetts is committed to protecting public health and the environment through programs and policies that address air pollution and climate change. While Massachusetts has made significant progress in addressing criteria air pollutants and climate change, continued reductions in motor vehicle emissions are needed to address the growing threat of climate change in the Commonwealth, to remain compliant with National Ambient Air Quality Standards (NAAQS), and to achieve emission-reduction requirements for 2020 and beyond. Massachusetts' LEV program is a fundamental component of the Commonwealth's plan to

¹ The Massachusetts Clean Air Act, M.G.L. c. 111, §142K:

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXVI/Chapter111/Section142K>

² State of California, Air Resources Board, *Public Hearing to Consider Proposed Amendments to the Low-Emission Vehicle III Greenhouse Gas Emission Regulation*, Staff Report: Initial Statement of Reasons, August 7, 2018

<https://www.arb.ca.gov/regact/2018/leviii2018/leviiiisor.pdf> and State of California, Air Resources Board, *Final Statement of Reasons, Amendments to the Low-Emission Vehicle III Greenhouse Gas Emission Regulation*, November 2018 <https://www.arb.ca.gov/regact/2018/leviii2018/fsorleviii18.pdf>

achieve and maintain NAAQS compliance, and of the Commonwealth's climate strategy. The LEV program has beneficial impacts to air quality through reductions in emissions, including GHGs, criteria air pollutants, and toxic air contaminants.

Pursuant to M.G.L. c. 111, §142K, MassDEP is required to adopt California's LEV standards if such standards are at least as protective, in the aggregate, as the federal standards. In 2012, MassDEP adopted and incorporated by reference California's LEV III GHG regulations for MYs 2017-2025 that included the "deemed to comply" option in 310 CMR 7.40. This option allows compliance with the U.S. Environmental Protection Agency's (EPA) regulations as an alternative to complying with California's regulations for these model years because EPA standards, at the time, delivered GHG emission reductions equivalent to California's program. On August 24, 2018, the federal government proposed to weaken the federal motor vehicle emissions standards, and this has resulted in the need for California and Massachusetts to amend their regulations to maintain the current emissions standards.

II. BACKGROUND

In 1967, the federal Clean Air Act (CAA) established the framework for controlling mobile source emissions in the United States. Although States were preempted by Section 209 of the CAA from adopting their own state emissions standards, California was granted a special exemption to the federal preemption because of the State's unique air quality problems. This exemption authorized California to set its own vehicle emissions standards so long as such standards are at least as protective as the federal standards.³ A subsequent amendment to the CAA added Section 177,⁴ whereby Congress allowed other states to adopt the California new motor vehicle standards to address air contamination from the transportation sector.

As a matter of federal law, Section 177 of the CAA requires that if a state adopts the California motor vehicle emission standards, the standards must be "identical to the California standards" for which California received a waiver of preemption from implementing the federal motor vehicle emission standards from EPA. *American Auto. Mfrs Assoc., et al. v. Commissioner, Massachusetts Dep't of Env'tl Protection*, 31 F.3d 18, 21 (1st. Cir. 1994) (emphasis added).

As a matter of state law, MassDEP has broad authority to enact regulations to establish a comprehensive air quality program to regulate air contaminants from all sources to protect public health and the environment. See, M.G.L. c. 21A, §§ 2 and 8; M.G.L. c. 111, §§ 142A – 142E, 142K and 142M. This mission was expanded through passage of the Global Warming

³ U.S.EPA, Title II – Emission Standards for Moving Sources, Part A – Motor Vehicle Emission and Fuel Standards, Section 209, 42 U.S.C. 85 §7543

⁴ U.S.EPA, Title I – Programs and Activities, Part D – Plan Requirements for Nonattainment Areas, Section 177, 42 U.S.C. 85 §7507

Solutions Act in 2008 to include significant regulatory authority for MassDEP to reduce GHG emissions under c. 21N.⁵

With regard to the regulation of motor vehicle emissions, the Legislature required MassDEP to adopt California's LEV standards so long as such standards are at least as protective, in the aggregate, as the federal standards. Massachusetts law provides that:

...the department, shall adopt motor vehicle emissions standards based on the... duly promulgated motor vehicle emissions standards of the state of California unless, after a public hearing, the Department establishes, based on substantial evidence, that said emissions standards and a compliance program similar to the state of California's will not achieve, in the aggregate, greater motor vehicle pollution reductions than the federal standards and compliance program for any such model year.

In 1991, MassDEP adopted the California LEV standards by promulgating 310 CMR 7.40, the Massachusetts LEV Program. MassDEP submitted the Massachusetts LEV Program to EPA as part of the Massachusetts State Implementation Plan (SIP) as one of a number of air pollution strategies and programs designed to meet the CAA Amendments of 1990 and to attain and maintain the NAAQS for ozone. In 1999, MassDEP adopted California Air Resource Board's (ARB) comprehensive package of stringent motor vehicle emission standards that apply to all light- and medium-duty vehicles beginning in MY 2004. These standards are collectively known as "LEV II." The LEV II standards were submitted and approved by EPA as part of the Massachusetts SIP.

In 2002, California Assembly Bill 1493 (known as the "Pavley" bill) was signed into law and required ARB to adopt regulations requiring significant reductions in GHG emissions from new PCs, LDTs, and MDPVs for MYs 2009 through 2016 vehicles. ARB approved the "Pavley" regulations in 2004. These regulations formed the foundation for the first national GHG emissions reduction program for light-duty vehicles for the 2012 through 2016 MYs that was developed by EPA, in coordination with the National Highway Traffic Safety Administration (NHTSA), and with agreement from the automobile manufacturers. Because this first national program was expected to achieve GHG emissions reductions that were equivalent to California's program, California's rule included a "deemed to comply" option which accepted an automobile manufacturer's compliance with the national program as an alternative to compliance with the California program.

This "deemed to comply" option was based on the understanding that the national program would provide equivalent or better overall GHG reductions compared to California's program. Pursuant to the broad legal authorities cited above, MassDEP adopted California's Pavley

⁵ <https://malegislature.gov/Laws/SessionLaws/Acts/2008/Chapter298>

regulations in 2005, and California's GHG regulations that included the "deemed to comply" provision in 2012.

In 2012, California promulgated the next generation of motor vehicle emissions regulations for MYs 2017-2025. These regulations, collectively called the Advanced Clean Car (ACC) Program, included standards for criteria pollutants under the "LEV III" program, as well as standards for GHGs and Zero Emission Vehicles. These ACC standards will reduce carbon dioxide (CO₂) emissions from approximately 251 grams (g) CO₂/mile in MY 2016 to approximately 166 g CO₂/mile by MY 2025, or by approximately 34%. MassDEP adopted these ACC amendments in December 2012 based on substantial technical analysis demonstrating the effectiveness of these regulations to reduce criteria pollutants and GHG emissions. Both the California and Massachusetts ACC regulations included the "deemed to comply" option for automobile manufacturers.

III. NEED FOR AND SUMMARY OF PROPOSED AMENDMENTS

Recognizing that EPA and NHTSA began planning in 2017 to propose weakening the federal GHG standards for PCs, LDTs, and MDPVs,⁶ on August 7, 2018, ARB proposed to amend the LEV III ACC regulations. ARB's proposed amendments were finalized on December 12, 2018 and clarify that the "deemed to comply" option, only applies to the EPA vehicle standards that were harmonized with California standards in 2012, as codified in 40 CFR Part 86. The "deemed to comply" provisions were included in the California regulation in 2012 to allow automakers to comply with one set of national harmonized GHG standards. On August 24, 2018, EPA and the National Transportation Safety Administration published in the Federal Register a Notice of Proposed Rulemaking, proposing to change and significantly weaken current EPA vehicle GHG emissions standards for model years (MYs) 2021-2025, and to adopt weak standards for MY 2026. The public comment period closed on October 26, 2018.

MassDEP is proposing to adopt as final regulations, the ARB amendments to the "deemed to comply" option. These proposed amendments to 310 CMR 7.40 ensure that the emissions benefits from compliance with the current GHG standards are maintained in MYs 2021 through 2025 and that the Massachusetts standards are identical to California Standards.⁷ MassDEP is required to adopt and implement these changes to comply with M.G.L. c. 142K, and to maintain identity with California regulations pursuant to Section 177 of the federal CAA.

⁶ EPA and NHTSA issued the pre-publication release of the notice of proposed rulemaking (NPRM) on August 2, 2018.

⁷ APPENDIX A - PROPOSED REGULATION ORDER, Amendments to Sections 1961.2 and 1961.3, Title 13, California Code of Regulations <https://www.arb.ca.gov/regact/2018/leviii2018/leviiiipro.pdf> and FINAL REGULATION ORDER, Amendments to Sections 1961.2 and 1961.3, Title 13, California Code of Regulations <https://www.arb.ca.gov/regact/2018/leviii2018/froleviii18.pdf>

The proposed Massachusetts regulations directly cite and incorporate by reference the revised applicable sections within Title 13 of the California Code of Regulations. The information below identifies the specific changes to the Massachusetts GHG requirements as included in the California GHG emission regulations:

310 CMR 7.40(1)(b) Definitions: This amendment adds a new definition of “2017 through 2025 MY National Greenhouse Gas Program” and adds “2012 through 2016 MY” to the existing “National Greenhouse Gas Program” definition, to match California’s definitions in Title 13, Code of California Regulations (CCR) 1961.3(f).

Title 13, CCR 1961.3(f) defines the “2017-2025 MY National Greenhouse Gas Program” to mean only the prior program (i.e., the program that was in effect prior to EPA’s August 24, 2018 NPRM) that is codified in 40 CFR Part 86, Subpart S, as last amended on October 25, 2016⁸ that incorporates CFR sections 86.1818-12 (October 25, 2016), 86.1865-12 (October 25, 2016), 86.1866-12 (October 25, 2016), 86.1867-12 (October 25, 2016), 86.1868-12 (October 25, 2016), 86.1869-12 (October 25, 2016), 86.1870-12 (October 25, 2016), and 86.1871-12 (October 25, 2016).

310 CMR 7.40(1)(c): TABLE 1: This amendment updates the dates when ARB makes final California’s GHG emission standards (Title 13, CCR 1961.2 and 1961.3). The date of reference clarifies that the updated version of California’s “deemed to comply” provision in Title 13, CCR 1961.3(c), summarized below, and its corresponding mandated emissions and testing standards in Title 13, CCR 1961.2, are being incorporated into Massachusetts’ LEV program regulation.

Title 13, CCR 1961.3(c) clarifies that if the 2017-2025 MY National Greenhouse Gas Program is altered via a final rule published in the *Federal Register* subsequent to October 25, 2016 (which includes finalization of EPA and NHTSA’s NPRM dated August 24, 2018), California’s optional compliance approach shall not be available for 2021 through 2025 model year passenger cars, light-duty trucks, and medium-duty passenger vehicles. Under California’s prior regulation, this section allowed an automobile manufacturer to elect to demonstrate compliance with California’s standards by demonstrating compliance with EPA’s National greenhouse gas program, known as the “deemed to comply” provision.

IV. IMPACTS OF PROPOSED AMENDMENTS

When Massachusetts GHG emission standards were proposed as part of the package of regulations referred to as the LEV III (also known as Advanced Clean Car (ACC) Program) in May

⁸ This is the date of the most recent version of EPA’s motor vehicle 40 CFR Part 86, Subpart S regulations in effect prior to the August 24, 2018 proposal to weaken the standards.

2012, the technical support document (TSD)⁹ prepared for those proposed regulations included an environmental analysis for the GHG standards. The LEV III ACC TSD concluded that compliance with the ACC standards would reduce emissions, including GHGs, criteria air pollutants, and toxic air contaminants. Maintaining these ACC standards would achieve the maximum feasible reduction of GHG emissions and criteria pollutants by requiring advanced technologies that significantly reduce emissions of such pollutants. By MY 2025, new vehicles will emit 75% less smog-forming pollution (mainly non-methane hydrocarbons and nitrogen oxides) than the average new car sold in 2012, and GHG emissions will be reduced by 34% or approximately 2.5 million metric tons annually for Massachusetts. The May 2012 TSD also demonstrated that significant reductions in GHG emissions were still needed to address the growing threat of climate change.

This is still true today. The transportation sector is a leading contributor to GHG emissions and is the single largest contributor of GHG emissions in Massachusetts, accounting for 38.9% in 2015,¹⁰ the latest year for which complete data are available. Even if emissions from all other sectors of the economy were eliminated, emissions from the transportation sector alone would exceed Massachusetts' economy-wide 2050 emissions limit if they did not decline after 2020.¹¹ Therefore, failure to maintain Massachusetts current motor vehicle criteria pollutant and GHG standards would result in substantial adverse environmental impacts to the Commonwealth.

Although Massachusetts was designated Attainment for the 2015 8-hour ozone NAAQS,¹² and significant progress has been made in addressing air pollution, the Commonwealth experienced 12 days with ozone exceedances in the summer of 2018. In addition, Massachusetts is required to maintain attainment with the NAAQS for ozone.

The proposed amendments are needed to guarantee that transportation emissions of both criteria pollutants and of GHGs will continue to decrease, not stall or climb, so that Massachusetts can continue to meet the federal ambient air quality standards and its statutory mandates for GHG emissions reductions.

Because the proposed amendments require no changes to the motor vehicle standards, there will be no substantial changes experienced, compared to that analyzed in the ACC TSD in May 2012. The amendments do not modify the in-place fleet average emission standards, do not alter the compliance plans of the regulated entities, and do not result in any changes that

⁹ Massachusetts Background Document and Technical Support for Public Hearing on the Proposed Amendments to the LEV III, Greenhouse Gas, and Zero Emission Vehicle Standards, May 2012

¹⁰ <https://www.mass.gov/doc/appendix-c-massachusetts-annual-greenhouse-gas-emissions-inventory-1990-2015-with-partial-2016/>

¹¹ <https://www.mass.gov/files/documents/2017/01/uo/cecp-for-2020.pdf>

¹² 82 FR 54253-54254 <https://www.gpo.gov/fdsys/pkg/FR-2017-11-16/pdf/2017-24640.pdf> and 83 FR 25812-25813 <https://www.gpo.gov/fdsys/pkg/FR-2018-06-04/pdf/2018-11838.pdf>

significantly affect the physical environment. Therefore, as described above, the proposed changes will not result in any new environmental impacts.

Economic Impacts

The LEV III ACC TSD included an economic impact analysis for the GHG standards and concluded that consumers would experience a significant reduction in their fuel costs as a result of the regulations. Consumers and businesses will benefit from this additional disposable income to spend on goods and services at local businesses, which could boost the Massachusetts' economy slightly, potentially resulting in the creation of some additional employment.

Since the proposed amendments require no changes to the motor vehicle standards, and the stringency of the requirements remain unchanged, there should be no significant adverse potential impacts to business creation, elimination, or expansion expected from this regulatory action. Failure to maintain Massachusetts current standards would have major long-term climate change-induced environmental and economic impacts to the Commonwealth. Air quality degradation would also result in significant impacts to agricultural and forest resources, land use, population and housing, and recreation.

Since the proposed amendments require no changes to the motor vehicle standards and the stringency of the requirements remain unchanged, the proposed regulatory amendments should not have any negative impact on dealerships, vehicle operators, businesses, and agencies at the local, state, or federal levels.

Impacts on Massachusetts Municipalities

Pursuant to Executive Order 145, state agencies must assess the fiscal impact of new regulations on the Commonwealth's municipalities. The proposed amendments to the regulation will not require cities and towns to significantly expand services or expend local resources.

MassDEP notes that the regulation's required standards, directed at automobile manufacturers, are not relevant to mandated municipal services. Moreover, any compliance costs if a municipality chose to manufacture automobiles would not be for mandated municipal services subject to the restrictions of Proposition 2½, M.G.L. c. 29, § 27 C(a) (which requires the state to reimburse municipalities for costs incurred as a consequence of new state laws and regulations if associated with mandated municipal services).

Massachusetts Environmental Policy Act

Pursuant to 301 CMR 11.03(12) (Massachusetts Environmental Policy Act Regulations), MassDEP is not required to file an Environmental Notification Form (ENF) regarding the

proposed amendments. The proposed regulations do not reduce standards for environmental protection, nor do they reduce opportunities for public participation in review processes or public access to information generated or provided in accordance with the regulations.

V. PUBLIC HEARING AND COMMENT

After an emergency regulation is filed with the Massachusetts Secretary of State, M.G.L. c. 30A requires that the public process (i.e., the opportunity to review background and technical information for at least 21 days prior to a public hearing) be completed within three months, including filing the permanent regulation if the public comment and hearing process result in changes to the emergency regulation.

MassDEP gave formal notice to comply with M.G.L. c. 111, Section 142K and M.G.L. c. 30A. This notice was issued at least 30 days before the public hearing. The public hearing will be held in Boston on January 28, 2019.