

## **Appendix B-6**

### **Proposed Amendments to the Light- and Medium-Duty Test Procedures**

#### **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**

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California Environmental Protection Agency  
AIR RESOURCES BOARD

**PROPOSED**

**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**

Adopted: March 22, 2012  
Amended: December 6, 2012  
Amended: September 2, 2015  
Amended: September 28, 2018  
Amended: December 19, 2018  
Amended: [Insert Date of Amendment]

Note: The proposed amendments to this document are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions compared to the test procedures as amended December 19, 2018. Existing intervening text that is not amended in this rulemaking is indicated by “\* \* \* \*”.

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**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**

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**PART I: GENERAL PROVISIONS FOR CERTIFICATION AND IN-USE  
VERIFICATION OF EMISSIONS**

\* \* \* \*

**A. General Applicability**

**1. §86.1801 Applicability.**

1.1 §86.1801-12. October 25, 2016. Amend as follows:

\* \* \* \*

1.1.7 Amend subparagraph (g) *Complete and incomplete vehicles* as follows:

A manufacturer must certify any heavy-duty complete Otto-cycle vehicle or complete diesel vehicle of 14,000 pounds Gross Vehicle Weight Rating (GVWR) or less and any medium-duty passenger vehicle in accordance with the medium-duty chassis-standards of section E.1 of these test procedures. For the 2015 through 2021 model years, a manufacturer must certify all LEV II heavy-duty engines or vehicles of 14,000 pounds GVWR or less, excluding medium-duty passenger vehicles, to the medium-duty engine standards in title 13, CCR, section 1956.8 (c) or (h), as applicable. For the 2020 and subsequent model years, a manufacturer must certify any heavy-duty vehicle of 10,000 pounds GVWR or less, including incomplete Otto-cycle vehicles and incomplete heavy-duty diesel vehicles, in accordance with the LEV III medium-duty chassis-standards of section E.1 of these test procedures. A manufacturer must certify any heavy-duty engine and vehicle of 10,001-14,000 pounds GVWR to the medium-duty engine standards in title 13, CCR, section 1956.8 (c) or (h), as applicable. A manufacturer may request to certify LEV II heavy-duty complete diesel vehicles of 14,000 pounds GVWR or less and LEV III heavy-duty complete diesel vehicles of 10,001 - 14,000 pounds GVWR to the chassis-standards in section E.1 of these test procedures; heavy-duty engine or heavy-duty vehicle provisions of 40 CFR Part 86 subpart A do not apply to such a vehicle or engine.

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**E. California Exhaust Emission Standards.**

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**2. Emission Standards Phase-In Requirements for Manufacturers.**

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**2.3 LEV III Phase-In Requirements for Medium-Duty Vehicles Other than Medium-Duty Passenger Vehicles.**

**2.3.1 Requirements for Manufacturers Other Than Small Volume Manufacturers.** A manufacturer of MDVs, other than a small volume manufacturer, shall certify its MDV fleet according to the following phase-in schedule:

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### 2.3.1.1 LEV III Phase-in Requirements for Medium-Duty Vehicles Certified to Section E.1.1.

Model Year	Vehicles Certified to Section E.1.1 <sup>1</sup> (%)				Vehicles Certified to title 13 CCR Section 1956.8(c) or (h) (%)
	LEV II LEV; LEV III LEV395 or LEV630	LEV II ULEV; LEV III ULEV340 or ULEV570	LEV III ULEV250 or ULEV400	LEV III SULEV170 or SULEV230	ULEV
2015	40	60	0	0	100
2016	20	60	20	0	100
2017	10	50	40	0	100
2018	0	40	50	10	100
2019	0	30	40	30	100
2020	0	20	30	50	100
2021	0	10	20	70	100
2022 +	0	0	10	90	100

<sup>1</sup> The LEV II LEV and LEV II ULEV, emission categories are only applicable for the 2015 through 2019 model years. The LEV III LEV395, LEV630, ULEV340, and ULEV570 emission categories are only applicable for the 2015 through 2021 model years.

### 2.3.1.2 LEV III Phase-in Requirements for Incomplete and Diesel Medium-Duty Vehicles Using Engines Certified to Title 13 CCR, Section 1956.8.

Model Year	Vehicles Certified to title 13 CCR Subsection 1956.8(c)(1)(B) or (h)(2) (%)	Vehicles Certified to title 13 CCR Subsection 1956.8(c)(1)(C) or (h)(7) (%)
2015- <u>2022+2023</u>	100% ULEV	0
<u>2024+</u>	0	100%

<sup>1</sup> If a manufacturer elects to certify to the "Optional 50-State-Directed Engine Emission Standards for New 2024 through 2026 Model Heavy-Duty Diesel and Otto-Cycle Engines," in Title 13 CCR, section 1956.8, the Optional 50-State-Direct Exhaust Emission standards for Otto-cycle engines used in incomplete medium-duty vehicles from 10,001 – 14,000

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pounds GVWR and diesel engines used in medium-duty vehicles from 10,001 – 14,000 pounds GVWR shall apply in lieu of the standards in this table.

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### 2.3.3 Alternate Phase-In Schedules for LEV III MDVs.

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**2.3.3.2 Alternate Phase-In Schedules for LEV III MDVs Certified to Section E.1.1 for Manufacturers with a Limited Number of Test Groups.** For the 2016 and subsequent model years, a manufacturer, that produces and delivers for sale in California four or fewer medium-duty test groups may comply with the following alternate phase-in schedule for LEV III medium-duty vehicles.

2.3.3.2.1 A manufacturer that produces and delivers for sale in California four medium-duty test groups certified to section E.1.1 may comply with the following alternate phase-in schedule for LEV III medium-duty vehicles instead of section E.2.3.1.1.

Model Year	Number of Test Groups Certified to Section E.1.1				Vehicles Certified to <del>§1956.8(c)</del> or (h) (%)
	LEV II LEV; LEV III LEV395 or LEV630	LEV II ULEV; LEV III ULEV340 or ULEV570	LEV III ULEV250 or ULEV400	LEV III SULEV170 or SULEV230	ULEV
2016-2017	1	2	1	0	100
2018	0	2	2	0	100
2019	0	1	2	1	100
2020	0	1	1	2	100
2021	0	0	1	3	100
2022 +	0	0	0	4	100

2.3.3.2.2 A manufacturer that produces and delivers for sale in California three medium-duty test groups certified to section E.1.1 may comply with the following alternate phase-in schedule for LEV III medium-duty vehicles instead of section E.2.3.1.1.

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Model Year	Number of Test Groups Certified to Section E.1.1				Vehicles Certified to §1956.8(c) or (h) (%)
	LEV II LEV; LEV III LEV395 or LEV630	LEV II ULEV; LEV III ULEV340 or ULEV570	LEV III ULEV250 or ULEV400	LEV III SULEV170 or SULEV230	ULEV
2016	1	2	0	0	400
2017	0	2	1	0	400
2018	0	1	2	0	400
2019- 2020	0	1	1	1	400
2021	0	0	1	2	400
2022 +	0	0	0	3	400

2.3.3.2.3 A manufacturer that produces and delivers for sale in California two medium-duty test groups certified to section E.1.1 may comply with the following alternate phase-in schedule for LEV III medium-duty vehicles instead of section E.2.3.1.1.

Model Year	Number of Test Groups Certified to Section E.1.1				Vehicles Certified to §1956.8(c) or (h) (%)
	LEV II LEV; LEV III LEV395 or LEV630	LEV II ULEV; LEV III ULEV340 or ULEV570	LEV III ULEV250 or ULEV400	LEV III SULEV170 or SULEV230	ULEV
2016	1	1	0	0	400
2017- 2019	0	1	1	0	400
2020- 2021	0	0	1	1	400
2022 +	0	0	0	2	400

2.3.3.2.4 A manufacturer that produces and delivers for sale in California one medium-duty test groups certified to section E.1.1 may comply

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with the following alternate phase-in schedule for LEV III medium-duty vehicles instead of section E.2.3.1.1.

Model Year	Number of Test Groups Certified to Section E.1.1				Vehicles Certified to <del>§1956.8(c)</del> or (h) (%)
	LEV II LEV; LEV III LEV395 or LEV630	LEV II ULEV; LEV III ULEV340 or ULEV570	LEV III ULEV250 or ULEV400	LEV III SULEV170 or SULEV230	ULEV
2016-2018	0	1	0	0	100
2019-2021	0	0	1	0	100
2022 +	0	0	0	1	100

**2.3.4 Identifying a Manufacturer's MDV Fleet.** Each manufacturer's MDV fleet shall be defined as the total number of California-certified MDVs produced and delivered for sale in California. For the purpose of demonstrating compliance with the LEV III phase-in requirements in section E.2.3, each manufacturer's MDV fleet must be divided into two separate groups of vehicles – “chassis-certified MDVs” that certify to section E.1.1 and “engine-certified MDVs” that use engines certified to the standards in §1956.8, title 13 CCR. The phase-in percentages in section E.2.3 for vehicles certified to section E.1.1 shall be applied to the manufacturer's total production of California chassis-certified medium-duty vehicles delivered for sale in California. The phase-in percentages in section E.2.3 for vehicles certified to title 13 CCR section 1956.8 shall be applied to the manufacturer's total production of California engine-certified medium-duty vehicles delivered for sale in California. A manufacturer that elects to certify engines to the optional medium-duty engine standards in title 13, CCR, ~~§1956.8(c), or (h)~~ shall not count those engines in the manufacturer's total production of California-certified medium-duty vehicles for purposes of this subparagraph.

## **2.4 Implementation Schedules for SFTP Emission Standards.**

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**2.4.3 Identifying a Manufacturer's MDV Fleet.** For the 2016 and subsequent model years, each manufacturer's MDV fleet shall be defined as the total number of California-certified MDVs, other than MDPVs, produced and delivered for sale in California. For 2016 and subsequent model years, a manufacturer that elects to certify engines to the optional medium-duty engine emission standards in title 13, CCR, ~~§1956.8(c) or (h)~~ shall not count those engines

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in the manufacturer's total production of California-certified medium-duty vehicles for purposes of this subparagraph.

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### **PART II: CALIFORNIA EXHAUST AND PARTICULATE EMISSION TEST PROCEDURES FOR PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES**

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#### **C. 40 CFR Part 1066 – Vehicle-Testing Procedures. ---**

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#### **2. Subpart B – Equipment, Measurement Instruments, Fuel, and Analytical Gas Specifications.**

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1066.125 Data updating, recording, and control. ~~April 28, 2014~~ February 19, 2015.

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