

## FINAL REGULATION ORDER FOR PHASE 1 GREENHOUSE GAS REGULATIONS

Note: Set forth below are the proposed amendments to title 13, California Code of Regulations (CCR), sections 1900, 1956.8, 2036, 2037, 2112, 2139, 2140, and 2147. Proposed amendments to existing sections are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions. Subsections for which no changes are proposed in this rulemaking are indicated with [No change] or “\* \* \*”.

Amend section 1900, 1956.8, 2036, 2037, 2112, 2139, 2140, and 2147, title 13, CCR, to read as follows:

### § 1900. Definitions.

(a) The definitions of this section supplement and are governed by the definitions set forth in chapter 2 (commencing with section 39010), part 1, division 26 of the Health and Safety Code. unless a specific definition set forth therein has been revised in section (b) below to conform to federal law pursuant to Health and Safety Code section 39601. The definitions set forth in the applicable model-year new vehicle certification and assembly-line test procedures adopted in this chapter are hereby incorporated by reference.

(b) In addition to the definitions incorporated under subdivision (a), the following definitions shall govern the provisions of this chapter;

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(3) “Emission standard” as it applies to compliance with the requirements applicable to motor vehicles and motor vehicle engines set forth in Article 2, Chapter 1, Division 3 of Title 13, California Code of Regulations, and the associated remedies provided in the Health and Safety Code for noncompliance, means:

(a) a numerical limit on the amount of a given pollutant that a motor vehicle or motor vehicle engine may emit into the atmosphere; or

(b) a requirement that a motor vehicle or motor vehicle engine be equipped with a certain type of pollution-control device or some other design feature related to the control of emissions.

(4) “Evaporative emission standards” are a subset of emission standards that refer to the specific motor vehicle fuel evaporative emission standards and test procedures incorporated by reference in title 13, CCR section 1976 to which a vehicle is certified.

(5) “Exhaust emission standards” or “tailpipe emission standards” are a subset of emission standards that collectively refer to the specific standards to which a motor vehicle or motor vehicle engine is certified.

(~~36~~) “Emissions-related part” \*\*\*\*\* [No change]

(~~47~~) “Gaseous fuels” \*\*\*\*\* [No change]

(~~58~~) “Heavy-duty engine” \*\*\*\*\* [No change]

(~~69~~) “Heavy-duty vehicle” \*\*\*\*\* [No change]

(~~710~~) “Identical device” \*\*\*\*\* [No change]

(~~811~~) “Independent low volume manufacturer”\*\*\*\*\* [No change]

(~~912~~) “Intermediate volume manufacturer” \*\*\*\*\* [No change]

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(~~1013~~) “Large volume manufacturer” \*\*\*\*\* [No change]

(~~1414~~) “Light-duty truck” \*\*\*\*\* [No change]

(~~1215~~) “Medium-duty passenger vehicle” \*\*\*\*\* [No change]

(~~1316~~) “Medium-duty vehicle” \*\*\*\*\* [No change]

(~~1417~~) “Modified part” \*\*\*\*\* [No change]

(~~1518~~) “Motorcycle Engine” \*\*\*\*\* [No change]

(~~1619~~) [Reserved] \*\*\*\*\* [No change]

(~~1720~~) “Passenger car” \*\*\*\*\* [No change]

(~~1821~~) “Reactivity adjustment factor” \*\*\*\*\* [No change]

(~~1922~~) “Recall” means: \*\*\*\*\* [No change]

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(~~2023~~) “Replacement part” \*\*\*\*\* [No change]

(~~2124~~) “Subgroup” \*\*\*\*\* [No change]

(~~2225~~) “Small volume manufacturer” \*\*\*\*\* [No change]

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NOTE: Authority cited: Sections 39010, 39600, 39601, 43013, 43018, 43101, and 43104, Health and Safety Code; Reference: Sections 39002, 39003, 39010, 39500, 40000, 43000, 43013, 43018.5, 43100, 43101, 43101.5, 43102, 43103, 43104, 43106, and 43204, Health and Safety Code; and Section 27156, Vehicle Code.

**§ 1956.8. Exhaust Emission Standards and Test Procedures - 1985 and Subsequent Model Heavy-Duty Engines and Vehicles.**

(a)(1) [No change]

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**Exhaust Emission Standards for 2004 and Subsequent Model Heavy-Duty Engines, and Optional, Reduced Emission Standards for 2002 and Subsequent Model Heavy-Duty Engines Produced Beginning October 1, 2002, Other than Urban Bus Model-Year Engines Produced From October 1, 2002 Through 2006<sup>L</sup>**  
(grams per brake horsepower-hour [g/bhp-hr])

Model Year	Oxides of Nitrogen Plus Non-methane Hydrocarbons	Optional Oxides of Nitrogen Plus Non-methane Hydrocarbons	Oxides of Nitrogen	Optional Oxides of Nitrogen	Non-methane Hydrocarbons	Carbon Monoxide	Particulates
2004-2006 <sup>H</sup>	2.4 <sup>A,C,E,J</sup>	2.5 <sup>B,C,E,J</sup>	n/a		n/a	15.5	0.10 <sup>C</sup>
October 1, 2002-2006	n/a	1.8 to 0.3 <sup>A,D,F</sup>	n/a		n/a	15.5	0.03 to 0.01 <sup>G</sup>
2007 and subsequent <sup>M</sup>	n/a	n/a	0.20 <sup>I</sup>		0.14	15.5	0.01 <sup>K</sup>
<u>2015 and Subsequent (Optional)<sup>N,O</sup></u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>	<u>0.10, 0.05, or 0.02</u>	<u>0.14</u>	<u>15.5</u>	<u>0.01</u>

[Footnotes A through M – No change]

<sup>N</sup> Optional Low NOx emission standards. A manufacturer may choose to offer an engine that is 50%, 75%, or 90% below the current 0.20 g/bhp-hr NOx emission standards for heavy duty engines. A manufacturer may not include an engine family certified to the optional NOx emission standards in the ABT programs for NOx but may include it for particulates.

<sup>O</sup> On-Board Diagnostic (OBD) requirements are to be followed per Title 13, CCR, section 1971.1 with the exception of the NOx emission threshold malfunction criteria for all applicable monitors, in which case a malfunction criterion of 0.4 g/bhp-hr NOx shall be used (i.e., the OBD system is required to detect a malfunction before NOx emissions exceed 0.4 g/bhp-hr).

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(a)(7) Greenhouse Gas Emission Standards for new 2014 and Subsequent Model Heavy-Duty Diesel Engines, Heavy-Duty Natural Gas-Fueled and Liquefied-Petroleum-Gas-Fueled Engines Derived from Diesel-Cycle Engines, and Heavy-Duty Methanol-Fueled Diesel Engines.

(A) The CO<sub>2</sub> emissions from new 2014 and subsequent model heavy-duty diesel engines, heavy-duty natural gas-fueled and liquefied-petroleum-gas-fueled engines derived from diesel-cycle engines, and heavy-duty methanol-fueled diesel engines, except in all cases engines used in medium-duty vehicles, shall not exceed:

**CO<sub>2</sub> Emission Standards for 2014 and Subsequent Model Heavy-Duty Diesel Engines<sup>A, B, C</sup>**  
(in g/hp-hr)

<u>Model Years</u>	<u>Light heavy-duty – vocational</u>	<u>Medium heavy-duty – vocational</u>	<u>Heavy heavy-duty – vocational</u>	<u>Medium heavy-duty – tractor</u>	<u>Heavy heavy-duty – tractor</u>
<u>2014-2016</u>	<u>600</u>	<u>600</u>	<u>567</u>	<u>502</u>	<u>475</u>
<u>2017 and later</u>	<u>576</u>	<u>576</u>	<u>555</u>	<u>487</u>	<u>460</u>

<sup>A</sup> Family Certification Levels. A Family Certification Level (FCL) must be specified for each engine family, which may not be less than the certified emission level for the engine family. The Family Emission Limit (FEL) for the engine family is equal to the FCL multiplied by 1.03. The FCL serves as the CO<sub>2</sub> emission standard for the engine family with respect to certification and confirmatory testing instead of the standards specified in this subsection (a)(7)(A). The FEL serves as the emission standard for the engine family with respect to all other testing.

<sup>B</sup> Averaging, Banking, and Trading Program and Credits. The requirements for the optional averaging, banking, and trading program and for generating credits are described in the applicable test procedures incorporated by reference in subsection (b).

<sup>C</sup> Alternate Phase-in Emission Standards. Alternate phase-in emission standards may be used in lieu of the required CO<sub>2</sub> emission standards in the table above. To qualify for these alternate phase-in emission standards, the manufacturer must begin certifying all of its model year 2013 diesel engines within a given primary intended service class to the applicable alternate emission standards of this footnote (c) and continue through model year 2016. This means that once a manufacturer chooses to certify a primary intended service class to the alternate emission standards of this footnote (c), it is not allowed to opt out of these standards. Engines certified to these alternate emission standards are not eligible for early credits. Note that these alternate emission standards for 2016 and later are the same as the otherwise applicable required emission standards for model year 2017 and later.

<b><u>Alternate Phase-in CO<sub>2</sub> Emission Standards (in g/hp-hr)</u></b>					
<u>Model Years</u>	<u>Light heavy-duty – vocational</u>	<u>Medium heavy-duty – vocational</u>	<u>Heavy heavy-duty – vocational</u>	<u>Medium heavy-duty – tractor</u>	<u>Heavy heavy-duty – tractor</u>
<u>2013-2015</u>	<u>618</u>	<u>618</u>	<u>577</u>	<u>512</u>	<u>485</u>
<u>2016</u>	<u>576</u>	<u>576</u>	<u>555</u>	<u>487</u>	<u>460</u>

<sup>D</sup> Alternate Emission Standards Based on 2011 Model Year Engines. For model years 2014 through 2016, heavy-duty diesel engines may be certified to these alternate emission standards based on 2011 model year engines, if they are not part of an averaging set in which a balance of banked credits remain. These alternate standards are determined from the measured emission rate of the test engine of the applicable baseline 2011 engine family(ies) as described in the “California Exhaust Emission Standards and Test Procedures for 2004 and

Subsequent Model Heavy-Duty Diesel-Engines and Vehicles,” as incorporated by reference in section (b). The alternate CO<sub>2</sub> standard for light and medium heavy-duty vocational-certified engines is equal to the baseline 2011 emission rate multiplied by 0.975. The alternative CO<sub>2</sub> standard for tractor-certified engines and all other heavy heavy-duty engines is equal to the baseline 2011 emission rate multiplied by 0.970.

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(B) The methane (CH<sub>4</sub>) emissions from new 2014 and subsequent model heavy-duty diesel engines, heavy-duty natural gas-fueled and liquefied-petroleum-gas-fueled engines derived from diesel-cycle engines, and heavy-duty methanol-fueled diesel engines, except in all cases engines used in medium-duty vehicles, shall not exceed 0.10 g/hp-hr.

(C) The nitrous oxide (N<sub>2</sub>O) emissions from new 2014 and subsequent model heavy-duty diesel engines, heavy-duty natural gas-fueled and liquefied-petroleum-gas-fueled engines derived from diesel-cycle engines, and heavy-duty methanol-fueled diesel engines, except in all cases engines used in medium-duty vehicles, shall not exceed 0.10 g/hp-hr.

(b) *Test Procedures.* The test procedures for determining compliance with standards applicable to 1985 and subsequent model heavy-duty diesel engines and vehicles and the requirements for participating in the averaging, banking and trading programs, are set forth in the “California Exhaust Emission Standards and Test Procedures for 1985 through 2003 Model Heavy-Duty Diesel-Engines and Vehicles,” adopted April 8, 1985, as last amended December 12, 2002, the “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel-Engines and Vehicles,” adopted December 12, 2002, as last amended ~~April 18, 2013~~ October 21, 2014, and the “California Interim Certification Procedures for 2004 and Subsequent Model Hybrid-Electric and Other Hybrid Vehicles, in the Urban Bus and Heavy-Duty Vehicle Classes,” adopted October 24, 2002, as last amended October 21, 2014, which are incorporated by reference herein.

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(c)(1)(B) The exhaust emissions from new 2005 and subsequent model heavy-duty Otto-cycle engines, except for Otto-cycle medium- and heavy-duty engines subject to the alternative standards in 40 CFR §86.005-10(f), shall not exceed:

**California Emission Standards for 2005 and Subsequent Model Heavy-Duty Otto-Cycle Engines<sup>A</sup>**  
(in g/bhp-hr)

<i>Model Year</i>	<i>Emission Category</i>	<i>NMHC + NOx</i>	<i>NMHC</i>	<i>NOx</i>	<i>CO<sup>FG</sup></i>	<i>HCHO</i>	<i>PM</i>
<b>Standards for Heavy-Duty Otto-Cycle Engines Used in 2005 through 2019 Model Incomplete Medium-Duty Vehicles 8,501 to 10,000 pounds GVW<sup>B</sup> and 2005 and Subsequent Model Incomplete Medium-Duty Vehicles 10,001 to 14,000 pounds GVW<sup>C</sup></b>							
2005 through 2007	ULEV	1.0 <sup>C,E,D,F</sup>	n/a	n/a	14.4	0.05	n/a
	SULEV	0.5	n/a	n/a	7.2	0.025	n/a
2008 and subsequent	ULEV	n/a	0.14 <sup>EE</sup>	0.20 <sup>EE</sup>	14.4	0.01	0.01
	SULEV	n/a	0.07 <sup>EE</sup>	0.10 <sup>EE</sup>	7.2	0.005	0.005
<b>Standards for Heavy-Duty Otto-Cycle Engines Used In Heavy-Duty Vehicles Over 14,000 pounds GVW</b>							
2005 through 2007	n/a	1.0 <sup>D,F</sup>	n/a	n/a	37.1	0.05 <sup>E</sup>	n/a
2008 and subsequent	n/a	n/a	0.14 <sup>EE</sup>	0.20 <sup>EE</sup>	14.4	0.01	0.01
<u>2015 and subsequent</u> <sup>H,I</sup>	<u>Optional</u>	<u>n/a</u>	<u>0.14</u>	<u>0.10, 0.05, or 0.02</u>	<u>14.4</u>	<u>0.01</u>	<u>0.01</u>

<sup>A</sup> These standards apply to petroleum-fueled, alcohol-fueled, liquefied petroleum gas-fueled and natural gas-fueled Otto-cycle engines.

<sup>B</sup> For the 2020 and subsequent model years, medium-duty vehicles 8,501 to 10,000 pounds GVW must certify to the primary emission standards and test procedures for complete vehicles specified in section 1961.2, title 13, CCR.

<sup>C</sup> A manufacturer of engines used in incomplete medium-duty vehicles may choose to comply with these standards as an alternative to the primary emission standards and test procedures for complete vehicles specified in section 1961 or 1961.2, title 13, CCR. A manufacturer that chooses to comply with these optional heavy-duty engine standards and test procedures shall specify, in the Part I application for certification, an in-use compliance test procedure, as provided in section 2139(c), title 13 CCR.

<sup>D</sup> A manufacturer may request to certify to the Option 1 or Option 2 federal NMHC + NOx standards as set forth in 40 CFR § 86.005-10(f). However, for engines used in medium-duty vehicles, the formaldehyde level must meet the standard specified above.

<sup>E</sup> This standard only applies to methanol-fueled Otto-cycle engines.

<sup>F</sup> A manufacturer may elect to include any or all of its medium- and heavy-duty Otto-cycle engine families in any or all of the emissions ABT programs for HDEs, within the restrictions described in section I.15 of the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines," incorporated by reference in section 1956.8(d). For engine families certified to the Option 1 or 2 federal standards, the FEL must not exceed 1.5 g/bhp-hr. If a manufacturer elects to include engine families certified to the 2005 and subsequent model year standards, the NOx plus NMHC FEL must not exceed 1.0 g/bhp-hr. For engine families certified to the 2008 and subsequent model year standards, the FEL is the same as set forth in 40 CFR 86.008-10(a)(1).

<sup>G</sup> Idle carbon monoxide: For all Otto-cycle heavy-duty engines utilizing aftertreatment technology, and not certified to the on-board diagnostics requirements of section 1968, et seq, as applicable, the CO emissions shall not exceed 0.50 percent of exhaust gas flow at curb idle.

<sup>H</sup> Optional Low NOx emission standards. A manufacturer may choose to offer an engine that is 50%, 75%, or 90% below the current 0.20 g/bhp-hr NOx emission standards for heavy duty engines. A manufacturer may not

include an engine family certified to the optional NOx emission standards in the ABT programs for NOx but may include it for NMHC.

On Board Diagnostic (OBD) requirements are to be followed using Title 13, CCR, section 1971.1 with the exception of the NOx emission threshold malfunction criteria for all applicable monitors, in which case the malfunction criteria shall be as follows:

(A) for monitors that require detection of a malfunction before emissions exceed 1.5 times the applicable NOx standard, a malfunction criterion of 0.3 g/bhp-hr NOx shall be used (i.e., the OBD system is required to detect a malfunction before NOx emissions exceed 0.3 g/bhp-hr).

(B) for monitors that require detection of a malfunction before emissions exceed 1.75 times the applicable NOx standard, a malfunction criterion of 0.35 g/bhp-hr NOx shall be used (i.e., the OBD system is required to detect a malfunction before NOx emissions exceed 0.35 g/bhp-hr).

(C) for monitors that require detection of a malfunction before emissions exceed 3.0 times the applicable NOx standard, a malfunction criterion of 0.6 g/bhp-hr NOx shall be used (i.e., the OBD system is required to detect a malfunction before NOx emissions exceed 0.6 g/bhp-hr).

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#### (c)(4) Greenhouse Gas Emission Standards for New 2016 and Subsequent Model Heavy-Duty Otto-Cycle Engines.

(A) The CO<sub>2</sub> emissions from new 2016 and subsequent model heavy-duty Otto-cycle engines, except in all cases engines used in medium-duty vehicles, shall not exceed 627 g/hp-hr. An FCL must be specified for each engine family, which may not be less than the certified emission level for the engine family. The FEL for the engine family is equal to the FCL multiplied by 1.03. The FCL serves as the CO<sub>2</sub> emission standard for the engine family with respect to certification and confirmatory testing instead of the standard specified in this subsection (c)(4)(A). The FEL serves as the emission standard for the engine family with respect to all other testing. The requirements for the optional averaging, banking, and trading program and for generating credits are described in the applicable test procedures incorporated by reference in subsection (d).

(B) The CH<sub>4</sub> emissions from new 2016 and subsequent model heavy-duty Otto-cycle engines, except in all cases engines used in medium-duty vehicles, shall not exceed 0.10 g/hp-hr.

(C) The N<sub>2</sub>O emissions from new 2016 and subsequent model heavy-duty Otto-cycle engines, except in all cases engines used in medium-duty vehicles, shall not exceed 0.10 g/hp-hr.

(d) The test procedures for determining compliance with standards applicable to 1987 and subsequent model heavy-duty Otto-cycle engines and vehicles are set forth in the "California Exhaust Emission Standards and Test Procedures for 1987 through 2003 Model Heavy-Duty Otto-Cycle Engines and Vehicles," adopted April 25, 1986, as last amended December 27, 2000, the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles," adopted December 27, 2000, as last amended ~~April 18, 2013~~ October 21, 2014, the "California Non-Methane Organic Gas Test Procedures," adopted July 12, 1991, as last amended December 6, 2012, and the "California Interim Certification Procedures for 2004 and Subsequent Model Hybrid-Electric and Other Hybrid Vehicles,

in the Urban Bus and Heavy-Duty Vehicle Classes,” adopted October 24, 2002, as last amended October 21, 2014, which are incorporated by reference herein.

(e) A manufacturer may elect to certify complete heavy-duty vehicles of 14,000 pounds or less maximum gross vehicle weight rating as medium-duty vehicles under section 1960.1 or section 1961 of this chapter, in which event the heavy-duty emission standards and test procedures in this section shall not apply.

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(h)(6) Greenhouse Gas Emission Standards for New 2014 and Subsequent Model Heavy-Duty Diesel Engines and 2016 and Subsequent Heavy-Duty Otto-Cycle Engines Used in Medium-Duty Low-Emission Vehicles, Ultra-Low-Emission Vehicles, and Super-Ultra-Low-Emission Vehicles.

(A) The CO<sub>2</sub> emissions from new 2014 and subsequent model heavy-duty diesel engines and new 2016 and subsequent heavy-duty Otto-cycle engines used in medium-duty low-emission vehicles, ultra-low-emission vehicles, and super-ultra-low-emission vehicles shall not exceed:

**CO<sub>2</sub> Emission Standards for 2014 and Subsequent Model Heavy-Duty Diesel Engines and 2016 and Subsequent Model Heavy-Duty Otto-Cycle Engines Used in Medium-Duty Low-Emission Vehicles, Ultra-Low-Emission Vehicles, and Super-Ultra-Low Emission Vehicles<sup>A, B</sup>**  
(in g/hp-hr)

<u>Model Years</u>	<u>Diesel Engines<sup>C</sup></u>	<u>Otto-Cycle Engines</u>
<u>2014</u>	<u>600</u>	<u>-</u>
<u>2015</u>	<u>600</u>	<u>-</u>
<u>2016</u>	<u>600</u>	<u>627</u>
<u>2017 and later</u>	<u>576</u>	<u>627</u>

<sup>A</sup> Family Certification Levels. An FCL must be specified for each engine family, which may not be less than the certified emission level for the engine family. The FEL for the engine family is equal to the FCL multiplied by 1.03. The FCL serves as the CO<sub>2</sub> emission standard for the engine family with respect to certification and confirmatory testing instead of the standards specified in this subsection (h)(6)(A). The FEL serves as the emission standard for the engine family with respect to all other testing.

<sup>B</sup> Averaging, Banking, and Trading Program and Credits. The requirements for the optional averaging, banking, and trading program and for generating credits are described in the applicable test procedures incorporated by reference in subsection (b).

<sup>C</sup> Alternate Emission Standards Based on 2011 Model Year Engines. For model years 2014 through 2016, heavy-duty diesel engines may be certified to these alternate emission standards if they are not part of an averaging set in which a balance of banked credits remain. These alternate standards are determined from the measured emission rate of the test engine of the applicable baseline 2011 engine family(ies) as described in the California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel-Engines and Vehicles, as incorporated by reference in section (b). The alternate CO<sub>2</sub> standard for light heavy-duty vocational-certified engines is equal to the baseline 2011 emission rate multiplied by 0.975.



(B) The CH<sub>4</sub> emissions from new 2014 and subsequent model heavy-duty diesel engines and new 2016 and subsequent heavy-duty Otto-cycle engines used in medium-duty low-emission vehicles, ultra-low-emission vehicles, and super-ultra-low-emission vehicles shall not exceed 0.10 g/hp-hr.

(C) The N<sub>2</sub>O emissions from new 2014 and subsequent model heavy-duty diesel engines and new 2016 and subsequent heavy-duty Otto-cycle engines used in medium-duty low-emission vehicles, ultra-low-emission vehicles, and super-ultra-low-emission vehicles shall not exceed 0.10 g/hp-hr.

(i) Definitions Specific to this Section. The following definitions apply to this section 1956.8.

(1) "Certified emission level" means the highest deteriorated emission level in an engine family for a given pollutant from the applicable transient and/or steady-state testing, rounded to the same number of decimal places as the applicable standard. Note that there may be two certified emission levels for CO<sub>2</sub> if a family is certified for both vocational and tractor use.

(2) "Emission standard," as it applies to the compliance with the standards set forth in this section, and the remedies provided for in the Health and Safety Code for noncompliance, relates to the emission characteristics of a motor vehicle or motor vehicle engine and means:

(a) a numerical limit on the amount of a given pollutant that a motor vehicle or motor vehicle engine may emit into the atmosphere; or

(b) a requirement that a motor vehicle or motor vehicle engine be equipped with a certain type of pollution-control device or some other design feature related to the control of emissions.

(3) "Evaporative emission standards" are a subset of emission standards that collectively refer to the specific motor vehicle fuel evaporative emission standards and test procedures incorporated by reference in title 13, CCR section 1976 to which a vehicle is certified.

(4) "Exhaust emission standards" or "tailpipe emission standards" are a subset of emission standards that collectively refer to the specific standards or family certification Level (FCL) and family emission limit (FEL) emission levels to which an engine is certified.

(5) "Family certification level" (FCL) means a CO<sub>2</sub> emission level declared by the manufacturer that is at or above emission test results for all emission-data engines. The FCL serves as the emission standard for the engine family with respect to certification testing if it is different than the otherwise applicable standard. The FCL must be expressed to the same number of decimal places as the emission standard it replaces.

(6) "Family emission limit" (FEL) means an emission level declared by the manufacturer to serve in place of an otherwise applicable emission standard (other than CO<sub>2</sub> standards) under the Average, Banking, and Trading Program. The FEL must be expressed to the same number of decimal places as the emission standard it replaces. The FEL serves as the emission standard for the

engine family with respect to all required testing except certification testing for CO<sub>2</sub>. The CO<sub>2</sub> FEL is equal to the CO<sub>2</sub> FCL multiplied by 1.03 and rounded to the same number of decimal places as the standard (e.g., the nearest whole g/hp-hr for the 2016 CO<sub>2</sub> standards).

(7) "Heavy heavy-duty engine" means an engine used in a vehicle that normally exceeds 33,000 pounds GVWR. Heavy heavy-duty engines are designed for multiple rebuilds and have cylinder liners. Vehicles in this group are normally tractors, trucks, and buses used in inter-city, long-haul applications.

(8) "Light heavy-duty engine" means an engine used in a vehicle that is normally below 19,500 pounds GVWR. Light heavy-duty engines usually are not designed for rebuild and do not have cylinder liners. Vehicle body types in this group might include any heavy-duty vehicle built for a light-duty truck chassis, van trucks, multi-stop vans, motor homes and other recreational vehicles, and some straight trucks with a single rear axle. Typical applications would include personal transportation, light-load commercial delivery, passenger service, agriculture, and construction.

(9) "Medium heavy-duty engine" mean an engine used in a vehicle that is normally between 19,500 to 33,000 pounds GVWR. Medium heavy-duty engines may be designed for rebuild and may have cylinder liners. Vehicle body types in this group would typically include school buses, straight trucks with dual rear axles, city tractors, and a variety of special purpose vehicles such as small dump trucks, and refuse trucks. Typical applications would include commercial short haul and intra-city delivery and pickup.

(10) "Primary intended service class" means the class that best describes the vehicle for which the manufacturer designs and markets the engine. The three primary intended service classes are light heavy-duty, medium heavy-duty, and heavy heavy-duty.

(11) "Tractor" means a vehicle meeting the definition of "tractor" in 40 CFR §1037.801, but not classified as a "vocational tractor" under 40 CFR §1037.630, or relating to such a vehicle.

(12) "Tractor engine" means an engine certified for use in tractors. Where an engine family is certified for use in both tractors and vocational vehicles, "tractor engine" means an engine that the engine manufacturer reasonably believes will be (or has been) installed in a tractor. Note that the Executive Officer may require a manufacturer to document how it determines that an engine is a tractor engine.

(13) "Vocational engine" means an engine certified for use in vocational vehicles. Where an engine family is certified for use in both tractors and vocational vehicles, "vocational engine" means an engine that the engine manufacturer reasonably believes will be (or has been) installed in a vocational vehicle. Note that the provisions of this part may require a manufacturer to document how it determines that an engine is a vocational engine.

(14) "Vocational vehicle" means a vehicle meeting the definition of "vocational" vehicle in 40 CFR §1037.801.

NOTE: Authority cited: Sections 38501, 38505, 38510, 38560, 39500, 39600, 39601, 43013, 43018, 43100, 43101, 43102, 43104, 43105, 43106, 43107 and 43806, Health and Safety Code; and Section 28114, Vehicle Code. Reference: Sections 38501, 38505, 38510, 38560, 38580, 39002, 39003, 39017, 39033, 39500, 39600, 39601, 39610, 39650, 39657, 39667, 39701, 40000, 43000, 43000.5, 43009, 43009.5, 43013, 43017, 43018, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43107, 43202, 43204, 43205, 43205.5, 43206, 43210, 43211, 43212, 43213 and 43806, Health and Safety Code; and Section 28114, Vehicle Code.

**§ 2036. Defects Warranty Requirements for 1979 Through 1989 Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles; 1979 and Subsequent Model Motorcycles and Heavy-Duty Vehicles; and Motor Vehicle Engines Used in Such Vehicles.**

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(c) Warranty Period.

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(4) In the case of diesel-powered heavy-duty vehicles (except medium-duty vehicles), and motor vehicle engines used in such vehicles, a period of use of five years, 100,000 miles, or 3000 hours of operations, whichever first occurs. However, in no case may this period be less than the basic mechanical warranty that the manufacturer provides (with or without additional charge) to the purchaser of the engine. Extended warranties on select parts do not extend the emissions warranty requirements for the entire engine but only for those parts. In cases where responsibility for an extended warranty is shared between the owner and the manufacturer, the emissions warranty shall also be shared in the same manner as specified in the warranty agreement.

(4.1) In the case of diesel-powered heavy-duty vehicles below 19,500 pound GVWR (except medium-duty vehicles) certified to the GHG emission standards of section 95663, title 17, and motor vehicle engines used in such vehicles, a period of use of five years or 50,000 miles, whichever first occurs, for GHG emission control components, as set forth in 40 CFR 1037.120, as adopted November 14, 2011.

(4.2) In the case of diesel-powered heavy-duty vehicles at or above 19,500 pound GVWR certified to the GHG emission standards of section 95663, title 17, and motor vehicle engines used in such vehicles, a period of use of five years or 100,000 miles, whichever first occurs, for GHG emission control components, as set forth in 40 CFR 1037.120, as adopted November 14, 2011.

\* \* \* \*

(8) In the case of heavy-duty vehicles and motor vehicle engines used in such vehicles, (except for diesel-powered heavy-duty vehicles or all medium-duty vehicles, and motor vehicle engines used in such vehicles,) a period of use of five years or

50,000 miles, whichever first occurs. However, in no case may this period be less than the basic mechanical warranty period that the manufacturer provides (with or without additional charge) to the purchaser of the engine. Extended warranties on select parts do not extend the emissions warranty requirements for the entire engine but only for those parts. In cases where responsibility for an extended warranty is shared between the owner and the manufacturer, the emissions warranty shall also be shared in the same manner as specified in the warranty agreement.

(8.1) In the case of heavy-duty vehicles certified to the GHG emission standards of section 95663, title 17, and motor vehicle engines used in such vehicles, (except for diesel-powered heavy-duty vehicles or all medium-duty vehicles, and motor vehicle engines used in such vehicles), a period of use of five years or 50,000 miles, whichever first occurs, for GHG emission control components, as set forth in 40 CFR 1037.120, as adopted November 14, 2011.

\* \* \* \*

Note: Authority cited: Sections 38501, 38505, 38510, 38560, 39600 and 39601, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 43106, 43204, 43205.5, 44004, 44010, 44011, 44012, 44015, and 44017, Health and Safety Code.

**§ 2037. Defects Warranty Requirements for 1990 and Subsequent Model Passenger Cars, Light-Duty Trucks, Medium-Duty Vehicles, and Motor Vehicle Engines Used in Such Vehicles.**

(a) Applicability.

This section shall apply to 1990 and subsequent model passenger cars, light-duty trucks, medium-duty vehicles, and motor vehicle engines used in such vehicles. This section shall apply to medium-duty vehicles certified to the GHG emission standards of section 95663, title 17, for GHG emission control components, as set forth in 40 CFR 1037.120, as adopted November 14, 2011. The warranty period shall begin on the date the vehicle is delivered to an ultimate purchaser, or if the vehicle is first placed in service as a “demonstrator” or “company” car prior to delivery, on the date it is first placed in service.

(b) General Emissions Warranty Coverage.

The manufacturer of each motor vehicle or motor vehicle engine shall warrant to the ultimate purchaser and each subsequent purchaser that the vehicle or engine is:

(1) Designed, built, and equipped so as to conform with all applicable regulations adopted by the Air Resources Board pursuant to its authority in chapters 1 and 2, part 5, division 26 of the Health and Safety Code; and

(2) Free from defects in materials and workmanship which cause the failure of a warranted part to be identical in all material respects to the part as described in the vehicle or engine manufacturer's application for certification, including any defect in materials or workmanship which would cause the vehicle's on-board diagnostic malfunction indicator light to illuminate, for a period of three years or 50,000 miles, whichever first occurs; and

(3) Free from defects in materials and workmanship which cause the failure of a warranted part described in section (c) below for seven years or 70,000 miles, whichever first occurs.

\* \* \* \*

Note: Authority cited: Sections 38501, 38505, 38510, 38560, 39600 and 39601, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 43106, 43204, 43205, 44004, 44010, 44011, 44012, 44015, and 44017, Health and Safety Code.

**§ 2112. Definitions.**

\* \* \* \*

(l) "Useful life" means, for the purposes of this article:

\* \* \* \*

(19) For 2004 and subsequent model-year light heavy-duty diesel engines, for carbon monoxide, particulate, and oxides of nitrogen plus non-methane hydrocarbons emissions standards, a period of use of 10 years or 110,000 miles, whichever first occurs, or any alternative useful life period approved by the Executive Officer.

(19.1) For 2004 and subsequent model-year light heavy-duty diesel engines certified to the Greenhouse Gas emission standards in section 1956.8(a)(7), title 13, CCR, for carbon dioxide, nitrous oxide, and methane emission standards, a period of use of ten years or 110,000 miles, whichever first occurs, or any alternative useful life period approved by the Executive Officer.

(20) For 2004 and subsequent model-year medium heavy-duty diesel engines, for carbon monoxide, particulate, and oxides of nitrogen plus non-methane hydrocarbons emissions standards, a period of use of ten years or 185,000 miles, whichever first occurs; or any alternative useful life period approved by the Executive Officer.

(20.1) For 2004 and subsequent model-year medium heavy-duty diesel engines certified to the Greenhouse Gas emission standards in section 1956.8(a)(7), title 13, CCR, for carbon dioxide, nitrous oxide, and methane emission standards, a period of

use of ten years or 185,000 miles, whichever first occurs, or any alternative useful life period approved by the Executive Officer.

(21) For 2004 and subsequent model-year heavy heavy-duty diesel engines, 2004 and subsequent model-year heavy-duty diesel urban buses, 2004 and subsequent model-year heavy-duty diesel engines to be used in urban buses, and 2004 and subsequent model year hybrid-electric urban buses for carbon monoxide, particulate, and oxides of nitrogen plus non-methane hydrocarbon emissions standards, a period of use of 10 years or 435,000 miles, or 22,000 hours, whichever first occurs, or any alternative useful life period approved by the Executive Officer, except as provided in paragraphs (2021)(A) and (2021)(B).

(A) The useful life limit of 22,000 hours in paragraph (19) of this definition is effective as a limit to the useful life only when an accurate hours meter is provided by the manufacturer with the engine and only when such hours meter can reasonably be expected to operate properly over the useful life of the engine.

(B) For an individual engine, if the useful life hours limit of 22,000 hours is reached before the engine reaches 10 years or 100,000 miles, the useful life shall become 10 years or 100,000 miles, whichever occurs first, as required under Clean Air Act section 202(d) (42 U.S.C. 7521(d)).

(21.1) For 2004 and subsequent model-year heavy heavy-duty diesel engines certified to the Greenhouse Gas emission standards in section 1956.8(a)(7), title 13, CCR, for carbon dioxide, nitrous oxide, and methane emission standards, a period of use of ten years or 435,000 miles, or 22,000 hours, whichever first occurs, or any alternative useful life period approved by the Executive Officer, except as provided in paragraphs (21)(A) and (21)(B).

(22) For 2004 and subsequent model-year heavy-duty Otto-cycle engines, for carbon monoxide, particulate, and oxides of nitrogen plus non-methane hydrocarbon emissions standards, a period of use of 10 years or 110,000 miles, whichever first occurs.

(22.1) For 2004 and subsequent model-year heavy-duty Otto-cycle engines certified to the Greenhouse Gas emission standards in section 1956.8(h)(6), title 13, CCR, for carbon dioxide, nitrous oxide, and methane emissions standards, the useful life shall be a period of use of ten years or 110,000 miles, whichever first occurs.

\* \* \* \*

(25) For 2014 and subsequent model-year heavy-duty vehicles at or below 19,500 pounds GVWR, certified to the GHG emission standards of section 95663, title 17, CCR, the useful life shall be ten years or 110,000 miles, whichever first occurs.

(26) For 2014 and subsequent model-year heavy-duty vehicles above 19,500 pounds and at or below 33,000 pounds GVWR, certified to the GHG emission standards

of section 95663, title 17, CCR, the useful life shall be ten years or 185,000 miles, whichever first occurs.

(27) For 2014 and subsequent model-year heavy-duty vehicles above 33,000 pounds GVWR, certified to the GHG emission standards of section 95663, title 17, CCR, the useful life shall be ten years or 435,000 miles, whichever first occurs.

\* \* \* \*

Note: Authority cited: Sections 38501, 38505, 38510, 38560, 39010, 39600, 39601, 43013, 43018, 43101, 43104, 43105 and 43806, Health and Safety Code; and Section 28114, Vehicle Code. Reference: Sections 38501, 38505, 38510, 38560, 39002, 39003, 39010, 39500, 39601, 43000, 43009.5, 43013, 43018, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43107, 43202, 43204-43205.5, 43206, 43210, 43211, 43212, 43213 and 43806, Health and Safety Code; and Section 28114, Vehicle Code.

**§ 2139. Testing.**

\* \* \* \*

(b) For medium-duty vehicles certified according to the chassis standards and test procedures specified in section 1960.1, 1961, 1961.2, or 1961.3, Title 13, California Code of Regulations and the documents incorporated by reference therein, in-use compliance emission tests shall be performed pursuant to section 1960.1, 1961, 1961.2, or 1961.3, Title 13, California Code of Regulations, as applicable.

For medium-duty vehicles certified according to the GHG emission standards of section 95663, Title 17, California Code of Regulations, and the documents incorporated by reference therein, in-use compliance emission tests shall be performed pursuant to section 95663, Title 17, California Code of Regulations, as applicable.

(c) For medium-duty engines and vehicles certified according to the optional engine test procedures specified in section 1956.8, Title 13, California Code of Regulations and the documents incorporated by reference therein, in-use compliance emission tests shall be performed pursuant to one of the following procedures:

For medium-duty engines and vehicles certified to the Greenhouse Gas emission standards in sections 1956.8(a)(7) and 1956.8(h)(6), Title 13, California Code of Regulations, in-use compliance emission tests shall be performed pursuant to one of the following procedures:

\* \* \* \*

(2) Medium-duty vehicles may be tested according to the chassis test procedures specified in section 1960.1(k), 1961, ~~or 1961.2~~, Title 13, California Code of Regulations or section 95663, Title 17, California Code of Regulations, as applicable, if a manufacturer develops correlation factors which establish the relationship between engine and chassis testing for each engine family or test

group and submits these correlation factors within one year after the beginning of production.

\* \* \* \*

(d) For heavy-duty engines and vehicles, in-use compliance emission tests shall be performed pursuant to section 1956.8, Title 13, California Code of Regulations.

For heavy-duty vehicles certified to the GHG emission standards of section 95663, Title 17, California Code of Regulations, in-use compliance emission tests shall be performed pursuant to section 95663, Title 17, California Code of Regulations.

\* \* \* \*

Note: Authority cited: Sections 38501, 38505, 38510, 38560, 39600, 39601, 43013, 43018, 43101, 43104 and 43105, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 39002, 39003, 43000, 43009.5, 43013, 43018, 43100, 43101, 43101.5, 43102, 43103, 43104, 43105, 43106, 43107, 43204-43205.5 and 43211-43213, Health and Safety Code.

#### **§ 2140. Notification and Use of Test Results.**

\* \* \* \*

(b) If the results of the in-use vehicle emission tests conducted pursuant to Section 2139 indicate that the average emissions of the test vehicles for any pollutant exceed the applicable emission standards specified in Title 13, California Code of Regulations, Sections 1960.1, 1961, 1961.2, 1961.3, 1956.8, 1958, 2412, 2423 or 2442 or in Title 17, California Code of Regulations, Section 95663, the entire vehicle population so represented shall be deemed to exceed such standards. The Executive Officer shall notify the manufacturer of the test results and upon receipt of the notification, the manufacturer shall have 45 days to submit an influenced recall plan in accordance with Sections 2113 through 2121, Title 13, California Code of Regulations. If no such recall plan is submitted, the Executive Officer may order corrective action including recall of the affected vehicles in accordance with Sections 2122 through 2135, Title 13, California Code of Regulations.

Note: Authority cited: Sections 38501, 38505, 38510, 38560, 39600, 39601, 43013, 43018 and 43105, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107, 43204-43205.5 and 43211-43213, Health and Safety Code.



**§ 2147. Demonstration of Compliance with Emission Standards.**

\* \* \* \*

(b) A manufacturer may test properly maintained in-use vehicles with the failed emission-related component pursuant to the applicable certification emission tests specified in Title 13, California Code of Regulations, Section 1960.1, 1961, 1961.2, or 1961.3, as applicable, for passenger cars, light-duty trucks, and medium-duty vehicles, Section 1956.8 for heavy-duty engines and vehicles, Section 1958 for motorcycles, and Section 2442 for sterndrive/inboard marine engines, and in Title 17, California Code of Regulations, Section 95663, for heavy-duty vehicles. The emissions shall be projected to the end of the vehicle's or engine's useful life using in-use deterioration factors. The in-use deterioration factors shall be chosen by the manufacturer from among the following:

\* \* \* \*

(3) subject to approval by the Executive Officer, a manufacturer-generated deterioration factor. The Executive Officer shall approve such deterioration factor if it is based on in-use data generated from certification emission tests performed on properly maintained and used vehicles in accordance with the procedures set forth in Section 1960.1, 1961, or 1961.2 of Title 13 of the California Code of Regulations, as applicable, for passenger cars, light-duty trucks, and medium-duty vehicles; Section 1956.8 of Title 13 of the California Code of Regulations heavy duty vehicles and engines; ~~and~~ Section 1958 of Title 13 of the California Code of Regulations for motorcycles; and Section 95663 of Title 17 of the California Code of Regulations, for heavy-duty vehicles, and if the vehicles from which it was derived are representative of the in-use fleet with regard to emissions performance and are equipped with similar emission control technology as vehicles with the failed component.

\* \* \* \*

NOTE: Authority cited: Sections 38501, 38505, 38510, 38560, 39600, 39601 and 43105, Health and Safety Code. Reference: Sections 38501, 38505, 38510, 38560, 43000, 43009.5, 43018, 43101, 43104, 43105, 43106, 43107 and 43204-43205.5, Health and Safety Code.

**FINAL REGULATION ORDER FOR AMENDMENTS TO  
THE AIRBORNE TOXIC CONTROL MEASURE TO LIMIT DIESEL-FUELED  
COMMERCIAL MOTOR VEHICLE IDLING**

Note: Set forth below are the proposed amendments to title 13, California Code of Regulations, section 2485. Proposed amendments to existing sections are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions. Subsections for which no changes are proposed in this rulemaking are indicated with [No change] or “\* \* \*”.

Amend section 2485, title 13, California Code of Regulations, to read as follows:

**§ 2485. Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.**

- (a) *Purpose.* The purpose of this airborne toxic control measure is to reduce public exposure to diesel particulate matter and other air contaminants by establishing idling restrictions, emission standards, and other requirements for heavy-duty diesel engines and alternative idle reduction technologies to limiting the idling of diesel-fueled commercial motor vehicles.
- (b) *Applicability.* This section applies to any person, business, or government agency that owns, operates, or causes to operate the equipment listed below, at any location in California:
- (1) diesel-fueled commercial motor vehicles that operate in the State of California with gross ~~vehicular~~-vehicle weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. This specifically includes:
- ~~(1)~~(A) California-based vehicles; and
- ~~(2)~~(B) Non-California-based vehicles; and
- (2) alternative idle reduction technologies including but not limited to internal combustion engine auxiliary power systems (APS), fuel-fired heaters, battery-electric APSs, and other technologies installed on diesel-fueled commercial motor vehicles.
- (c) *Requirements.*
- (1) *Idling Restriction:*
- (A) Between February 1, 2005 through December 31, 2014, On or after February 1, 2005, the driver of any vehicle subject to this section shall comply with the following requirements, except as noted in subsection (d) below:
- ~~(A)~~1. ~~¶~~The driver shall not idle the vehicle’s primary diesel engine for greater than 5.0 minutes at any location.

~~(B)2.~~ †The driver shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 100 feet of a restricted area.

(B) Except as provided in subsection (d) below, on or after January 1, 2015, any person that owns, operates, or causes to operate any diesel-fueled commercial motor vehicle subject to the requirements of this section shall comply with the following requirements:

1. No vehicle subject to this section shall idle for more than 5 consecutive minutes at any location.
2. No diesel-fueled APS subject to this section shall be operated for greater than 5 minutes at any location when within 100 feet of a restricted area.

(C) On or after January 1, 2015, the driver of a vehicle subject to the requirements of this section must, upon request, provide the following information to authorized enforcement personnel:

1. driver's license;
2. vehicle registration; and
3. motor carrier's information set forth in subsection(c)(1)(D), below.

(D) On or after January 1, 2015, a motor carrier that dispatches a vehicle subject to the requirements of this section must provide the following information to a dispatched driver:

1. motor carrier's business name
2. motor carrier's street address, state, zip code;
3. motor carrier contact person's name; and
4. motor carrier contact person's business phone number.

(2) *Use of Alternative Technologies.*

(A) Between January 1, 2008 through December 31, 2014, On or after January 1, 2008, the driver shall not operate an internal combustion APS on any vehicle equipped with a 2007 and subsequent model year primary diesel engine unless the vehicle is:

1. equipped with an APS meeting the emissions performance requirements found in subsection (c)(3)(A), below; and

2. the vehicle is equipped with a label meeting the requirements pursuant to section 35.B.4 of the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles," as incorporated by reference in title 13, CCR, section 1956.8(b).
- (B) Between January 1, 2008 through December 31, 2014, On or after January 1, 2008, the driver shall not operate a fuel-fired heater on any vehicle equipped with a 2007 and subsequent model year primary diesel engine unless the fuel-fired heater meets the emissions performance requirements found in subsection (c)(3)(B), below;
- (C) Between January 1, 2008 through December 31, 2014, On or after January 1, 2008, the driver of a vehicle equipped with a 2006 or older model year primary diesel engine may use and operate in California any certified internal combustion APS with or without the additional PM control specified in subsection (c)(3)(A)1. or any other certified alternative idling reduction technology. In addition, the APS or idle reduction technology used or operated on such a vehicle is exempt from the requirements specified in subsection (c)(3), below.
- (D) Except as provided in subsection (d) below, on or after January 1, 2015, any person who owns or operates any vehicle equipped with an alternative technology subject to the requirements of this section shall comply with the following requirements:
1. No internal combustion APS installed on any vehicle equipped with a primary diesel engine certified to the 2007 and subsequent model year engine standards set forth in title 13, CCR, section 1956.8, shall be operated at any location in California unless:
    - a. the APS is verified to comply with the emission performance requirements found in subsection (c)(3)(A), below; and
    - b. the vehicle is equipped with a label for a verified APS meeting the requirements set forth in section 35.B.4 of the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles," as last amended on October 21, 2014, which is incorporated by reference herein.
  2. No fuel-fired heater installed on any vehicle equipped with a primary diesel engine certified to the 2007 and subsequent model year engine standards set forth in title 13, CCR, section 1956.8, shall be operated at any location in California unless the fuel-fired heater meets the emission performance requirements found in subsection (c)(3)(B), below;

3. Any internal combustion APS equipped with a California or federally certified off-road engine or any other certified alternative idle reduction technology may be installed and operated on a vehicle equipped with a primary diesel engine certified to the 2006 or older model year engine standards set forth in title 13, CCR, section 1956.8. In addition, the APS or idle reduction technology used or operated on such a vehicle is exempt from the requirements specified in subsection (c)(3), below

(3) Idle Reduction Technology Compliance Requirements. As an alternative to idling the primary engine, diesel-fueled engines/vehicles may, as an option, be equipped with alternative technologies, as listed and defined below in subsections (c)(3)(A), (c)(3)(B), and (c)(3)(C) of this subsection. If so equipped, these technologies are subject to the following requirements:

(A) *Internal Combustion APS.*

1. In order to operate in California, an APS utilizing an internal combustion engine must comply with applicable California off-road and/or federal non-road emission standards and test procedures for its fuel type and power category. In addition, diesel-fueled APSs installed on vehicles equipped with primary engines certified to the 2007 and subsequent model year heavy-duty diesel-engine standards, pursuant to section 1956.8(a)(2)(A) of title 13, CCR, shall either,
  - a. be equipped with a verified Level 3 in-use strategy for particulate matter control (see title 13, CCR, sections 2700 to 2710), or
  - b. have its exhaust routed directly into the vehicle's exhaust pipe, upstream of the diesel particulate matter aftertreatment device.
2. With advance Executive Officer approval, a certifying/verifying APS manufacturer may petition for an alternate compliance strategy other than described in (A)1.a. or b. in this subsection above. However, this provision is limited to manufacturers that can demonstrate, to the satisfaction of the Executive Officer, that their alternative strategy is equivalent (or "cleaner"), from an emissions standpoint, compared to the requirement described in (A)1.a. or b. in this subsection above. As an example, strategies that can use the available electric power infrastructure, instead of solely operating a diesel-fueled APS for engine and/or cab heating and cooling, may be able to use such a strategy to demonstrate compliance with these requirements.

(B) *Fuel-Fired Heaters.* Fuel-fired heaters must comply with the applicable California emission standards and test procedures as specified in the Low Emission Vehicle program requirements found in title 13, CCR, subsections 1961(a)(15) and (d), or in Part I.E.1.13 of the "California

2001 through 2014 Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2009 through 2016 Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles,” as incorporated by reference in title 13, CCR, section 1961(d). However, the specified requirement that limits fuel-fired heaters from being operated above 40°F does not apply.

- (C) *Other Idle Reduction Technologies.* Other technologies that will reduce idling emissions may also be used, including the use of batteries, fuel cells, power inverter/chargers for on-shore electrical power, on-shore electric power infrastructure also known as truck stop electrification, and other technologies that produce minimal or no emissions. With the exception of battery and fuel cell powered APSs, power inverter/chargers, and electric power infrastructure, the use of other technologies ~~are~~ is subject to advance Executive Officer approval and must be at least as effective in reducing idling emissions as the technologies described in subsections (c)(3)(A), above, or the NOx idling emission standard specified in title 13, CCR, section 1956.8(a)(6)(C). The Executive Officer shall use good engineering judgment and test data to determine if an idle reduction technology provides idling emission controls equivalent to the standards specified in subsection (c)(3)(A) above, or in title 13, CCR, section 1956.8(a)(6)(C).
- (D) *Labeling Requirements.* 2007 and subsequent model year commercial diesel vehicles equipped with an internal combustion APS meeting the requirements specified in subsection (c)(3)(A) shall have a label affixed to the hood of the vehicle to allow operation of the APS in California. The labels shall meet the requirements specified in section 35.B.4 of the “California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles,” as incorporated by reference in title 13, CCR, section 1956.8(b).

(d) *Exceptions.*

- (1) Except when a vehicle is located within 100 feet of a restricted area, subsections (c)(1)(A)1 and (c)(1)(B)1 does not apply, if the vehicle is equipped with
- (A) a primary diesel engine meeting the optional NOx idling emission standard pursuant to title 13, CCR, section 1956.8(a)(6)(C); and
- (B) a label meeting the requirements pursuant to section 35.B.4 of the “California Exhaust Emission Standards and Test Procedures for 2004

and Subsequent Model Heavy-Duty Diesel Engines and Vehicles,” as incorporated by reference in title 13, CCR, section 1956.8(b).

- (2) Subsection (c)(1) does not apply for the period or periods during which
- (A) a bus is idling for
    - 1. up to 10.0 minutes prior to passenger boarding, or
    - 2. when passengers are onboard;
  - (B) prior to January 1, 2008, idling of the primary diesel-engine is necessary to power a heater, air conditioner, or any ancillary equipment during sleeping or resting in a sleeper berth. This provision does not apply when operating within 100 feet of a restricted area;
  - (C) idling when the vehicle must remain motionless due to traffic conditions, an official traffic control device, or an official traffic control signal over which the driver has no control, or at the direction of a peace officer, or operating a diesel-fueled APS or other device at the direction of a peace officer;
  - (D) idling when the vehicle is queuing that at all times is beyond 100 feet from any restricted area;
  - (E) idling of the primary diesel engine, operating a diesel-fueled APS, or operating other devices when forced to remain motionless due to immediate adverse weather conditions affecting the safe operation of the vehicle or due to mechanical difficulties over which the driver has no control;
  - (F) idling to verify that the vehicle is in safe operating condition as required by law and that all equipment is in good working order, either as part of a daily vehicle inspection or as otherwise needed, provided that such engine idling is mandatory for such verification;
  - (G) idling of the primary diesel engine, operating a diesel-fueled APS, or operating other devices is mandatory for testing, servicing, repairing, or diagnostic purposes, including regeneration or maintenance of the exhaust emission control device during engine idling when the dashboard indicator light, if so equipped, is illuminated indicating that regeneration or maintenance is in progress;
  - (H) idling when positioning or providing a power source for equipment or operations, other than transporting passengers or propulsion, which involve a power take off or equivalent mechanism and is powered by the primary diesel engine for:

1. controlling cargo temperature, operating a lift, crane, pump, drill, hoist, mixer (such as a ready mix concrete truck), or other auxiliary equipment;
  2. providing mechanical extension to perform work functions for which the vehicle was designed and where substitute alternate means to idling are not reasonably available; or
  3. collection of solid waste or recyclable material by an entity authorized by contract, license, or permit by a school or local government;
- (I) idling of the primary diesel engine, operating a diesel-fueled APS, or operating other devices when operating defrosters, heaters, air conditioners, or other equipment solely to prevent a safety or health emergency;
- (J) idling of the primary diesel engine, operating a diesel-fueled APS, or operating other devices by authorized emergency vehicles while in the course of providing services for which the vehicle is designed;
- (K) idling of military tactical vehicles during periods of training, testing, and deployment;
- (L) idling when operating equipment such as a wheelchair or people assist lift as prescribed by the Americans with Disabilities Act;
- (M) idling of armored cars in the course of providing services for which the vehicle is designed; and
- (N) idling of workover rigs while performing work for which the vehicle is designed.

(e) *Relationship to Other Law.*

Nothing in this section allows idling in violation of other applicable law, including, but not limited to:

- (1) California Vehicle Code ~~S~~section 22515;
- (2) ~~T~~title 13, CCR, Ssection 2480, ~~California Code of Regulations~~;
- (3) title 13, CCR, section 1956.8
- (~~34~~) California Health and Safety Code ~~S~~section 40720; or
- (~~45~~) any applicable ordinance, rule, or requirement as stringent as, or more stringent than, this section.

(f) *Enforcement.* This section may be enforced by the Air Resources Board; peace officers as defined in California Penal Code, title 3, chapter 4.5, Sections 830 et



seq. and their respective law enforcement agencies' authorized representatives; and air pollution control or air quality management districts.

- (g) *Penalties.* For violations of subsection (c)(1), (c)(2) or (c)(3), that occur prior to January 1, 2015, the driver of a subject vehicle is subject to a minimum civil penalty of 300 dollars and to criminal penalties as specified in the Health and Safety Code and the Vehicle Code.

On or after January 1, 2015, any person who violates any requirement of this section is subject to the penalties set forth in California Health and Safety Code sections 39674, 39675, 42400, 42400.1, 42400.2, 42400.3, 42402, 42402.1, 42402.2, 42402.3, 42402.4, 42403.5, and 42410 and 43704.

- (h) *Definitions.* The following definitions apply to this section:

- (1) "Armored car" is as defined in California Vehicle Code §section 115
- (2) "Authorized emergency vehicle" is as defined in California Vehicle Code §section 165.
- (3) "Auxiliary power system" or "APS" means any device that is permanently dedicated to the vehicle on which it is installed and provides electrical, mechanical, or thermal energy to the primary diesel engine, truck cab and/or sleeper berth, bus's passenger compartment or any other commercial vehicle's cab, as an alternative to idling the primary diesel engine.
- (4) "Bus" means any vehicle defined in ~~Title 13, CCR California Code of Regulations~~, §section 2480, subsections (h) (13)-(16), inclusive or as defined in the California Vehicle Code §section 233.
- (5) "Child care facility" is a facility that meets the definition of a "child day care facility" in Health and Safety Code section 1596.750 and that is subject to the requirements of Health and Safety Code sections 1596.7 to 1597.71.
- (56) "Commercial Motor Vehicle" means any vehicle or combination of vehicles defined in California Vehicle Code §section 15210(b) and any other motor truck or bus with a gross vehicle weight rating of 10,001 pounds or more, except the following:
  - (A) a zero emission vehicle; or
  - (B) a pickup truck as defined in California Vehicle Code §section 471.
- (67) "Driver" is as defined in California Vehicle Code §section 305.
- (8) "Emission standard" as it applies to compliance with the requirements and standards set forth in this section, and the remedies provided for in the Health and Safety Code for noncompliance, relates to the emission characteristics of a motor vehicle or off-road engine and means:

- (A) a numerical limit on the amount of a given pollutant that a motor vehicle engine or off-road engine may emit into the atmosphere; or
- (B) a requirement that a motor vehicle , motor vehicle engine, or off-road engine be equipped with a certain type of pollution-control device or some other design feature related to the control of emissions.
- (9) “Evaporative emission standards” are a subset of emission standards that refer to the specific motor vehicle fuel evaporative emission standards and test procedures incorporated by reference in title 13, CCR section 1976 to which a vehicle is certified.
- (10) “Exhaust emission standards” or “tailpipe emission standards” are a subset of emission standards that collectively refer to the specific standards to which a motor vehicle, motor vehicle engine, or off-road engine is certified.
- (11) “Executive Officer” means the Executive Officer of the California Air Resources Board or his or her delegate.
- ~~(7)~~(12) “Fuel-fired heater” means a fuel burning device that creates heat for the purpose of (1) warming the cab or sleeper berth compartment of a vehicle or (2) warming the engine oil and/or coolant for easy start-up of the vehicle’s engine but does not contribute to the propulsion of the vehicle.
- ~~(8)~~(13) “Gross vehicle weight rating” is as defined in California Vehicle Code §section 350.
- ~~(9)~~(14) “Highway” is as defined in California Vehicle Code §section 360.
- ~~(10)~~(15) “Idling” means the vehicle engine is running at any location while the vehicle is stationary.
- (16) “Motor Carrier” means a person providing transportation of goods or passengers for compensation.
- ~~(11)~~(17) “Motor truck” or “motortruck” means a motor vehicle designed, used, or maintained primarily for the transportation of property.
- ~~(12)~~(18) “Official traffic control device” is as defined in California Vehicle Code §section 440.
- ~~(13)~~(19) “Official traffic control signal” is as defined in California Vehicle Code §section 445.
- ~~(14)~~(20) “Owner” is as defined in Vehicle Code Section 460 means the person or persons registered as the owner of the vehicle by the California Department of Motor Vehicles or its equivalent in another state, province, or country (presumed at the time of violation to be the person or persons identified as the owner on the registration document or title carried on the vehicle). For the purposes of this section, the definition of an owner excludes a lessor or a

renter who leases or rents vehicles without a driver for a fixed rate or price, and does not operate or permit to operate the vehicle at the time of violation.

(21) “Person” means an individual, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, government, governmental subdivision, agency, instrumentality, public corporation, or any other legal or commercial entity.

(15)(22) “Primary diesel engine” means the diesel-fueled engine used for vehicle propulsion.

(16)(23) “Queuing” means (A) through (C)

- (A) the intermittent starting and stopping of a vehicle;
- (B) while the driver, in the normal course of doing business, is waiting to perform work or a service; and
- (C) when shutting the vehicle engine off would impede the progress of the queue and is not practicable.
- (D) Queuing does not include the time a driver may wait motionless in line in anticipation of the start of a workday or opening of a location where work or a service will be performed.

(17)(24) “Restricted area” means any real property zoned for individual or multifamily housing units, schools, hotels, motels, hospitals, senior care facilities or child care facilities, that has one or more of such units on it.

(18)(25) “Safety or health emergency” means:

- (A) a sudden, urgent, or usually unforeseen, occurrence; or
- (B) a foreseeable occurrence relative to a medical or physiological condition.

(26) “Senior care facility” is a facility that meets the definition of “residential care facility for the elderly” in Health and Safety Code section 1569.2(k) and that is subject to the requirements of the California Residential Care Facilities for the Elderly Act (Health and Safety Code sections 1569 to 1569.889).

(19)(27) “Sleeper berth” is as defined in Title 13, CCR California Code of Regulations, Section 1265.

(20)(28) “Vehicle” is as defined in the California Vehicle Code Section 670.

(21)(29) “Workover rig” is as defined in Section 2449 of Title 13, CCR California Code of Regulations.

(i) Severability.

If any section, paragraph, subparagraph, sentence, clause, phrase, or portion of the section is, for any reason, held invalid, unconstitutional, or unenforceable by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of this section.

NOTE: Authority cited: Sections 39600, 39601, 39614(b)(6)(A), 39658, 39667, 43000.5(d), 43013(b), 43013(h), 43018(b) and 43018(c), Health and Safety Code; and *Western Oil & Gas Assn. v. Orange County Air Pollution Control Dist.* (1975), 14 Cal.3d.411. Reference: Sections 39002, 39003, 39027, 39500, 39600, 39650, 39655, 39656, 39657, 39658, 39659, 39662, 39665, 39674, 39675, 42400, 42400.1, 42400.2, 42400.3, 42402, 42402.1, 42402.2, 42402.3, 42402.4, 42403.5, 42410, 43013, 43018 and 43704, Health and Safety Code; Sections 305, 336, 350, 440, 445, 545, 546, 642, 680, 21400, 22452, 22515, 27153, 40001 and 40001(b)(5), California Vehicle Code; and Sections 1201, 1900, 1962 and 2480, Title 13, California Code of Regulations.