State of California AIR RESOURCES BOARD

FINAL Phase 1 Greenhouse Gas Regulation Amendments to

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR 2004 AND SUBSEQUENT MODEL HEAVY-DUTY DIESEL-ENGINES AND VEHICLES

Adopted: December 12, 2002

Amended: July 24, 2003

Amended: September 1, 2006

Amended: July 26, 2007 Amended: October 17, 2007

Amended: October 14, 2008 Amended: September 27, 2010

Amended: October 12, 2011 Amended: March 22, 2012

Amended: December 6, 2012

Amended: April 18, 2013 (Corrected by Section 100)

Amended: October 21, 2014

Note: The proposed amendments to this document are shown in <u>underline</u> to indicate additions and <u>strikeout</u> to indicate deletions compared to the test procedures as last amended, April 18, 2013. Existing intervening text that is not amended in this rulemaking is indicated by "* * * *". [No change] indicates proposed federal provisions that are also proposed for incorporation herein without change.

NOTE: This document is incorporated by reference in section 1956.8(d), title 13, California Code of Regulations ("CCR") and also incorporates by reference various sections of Title 40, Part 86 of the Code of Federal Regulations, with some modifications. It contains the majority of the requirements necessary for certification of heavy-duty diesel engines for sale in California, in addition to containing the exhaust emissions standards and test procedures for these diesel engines. The section numbering conventions for this document are set forth in subparagraph 4 on page 6. Reference is also made in this document to other California-specific requirements that are necessary to complete an application for certification. These other documents are designed to be used in conjunction with this document. They include:

- 1. "California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles," as last amended December 6, 2012 (incorporated by reference in section 1976, title 13, CCR);
- 2. Warranty requirements (sections 2035, et seq., title 13, CCR);
- 3. OBD II (section 1968, et seq., title 13, CCR, as applicable);
- 4. "California Test Procedures for Evaluating Substitute Fuels and New Clean Fuels through 2014," as last amended March 22, 2012 (incorporated by reference in section 2317, title 13, CCR); and
- 5. "California Test Procedures for Evaluating Substitute Fuels and New Clean Fuels in 2015 and Subsequent Years," as adopted March 22, 2012 (incorporated by reference in (section 2317, title 13, CCR).

¹ The requirements for diesel engines used in complete vehicles up to 14,000 pounds GVW are contained in 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," as last amended December 6, 2012 (incorporated by reference in §1961(d), title 13, CCR) and the "California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles," as last amended April 18, 2013 (incorporated by reference in section 1961.2, title 13, CCR).

CALIFORNIA EXHAUST EMISSION STANDARDS AND TEST PROCEDURES FOR 2004 AND SUBSEQUENT MODEL HEAVY-DUTY DIESEL ENGINES AND VEHICLES

The following provisions of Subparts A, I, N, S, and T, Part 86, of Subparts A through I, Part 1036, and of Subparts A through K, Part 1065, Title 40, Code of Federal Regulations, as adopted or amended by the U.S. Environmental Protection Agency on the date set forth next to the applicable section listed below, and only to the extent they pertain to the testing and compliance of exhaust emissions from heavy-duty diesel engines and vehicles, are adopted and incorporated herein by this reference as the "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles," except as altered or replaced by the provisions set forth below.

PART 86 – CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES

I. GENERAL PROVISIONS FOR CERTIFICATION AND IN-USE VERIFICATION OF EMISSIONS.

§86.1 Reference materials. June 14, 2005 September 15, 2011.

- 1 Delete subparagraph (a).
- 2 Amend subparagraph (b) as follows:
 - 2.1 Delete subparagraphs (b)(1) through (b)(5).
 - 2.2 Subparagraph (b)(6) [No change.]

Subpart A - General Provisions for Emission Regulations for 1977 and Later Model Year New Light-Duty Vehicles, Light-Duty Trucks, and Heavy-Duty Engines, and for 1985 and Later Model Year New Gasoline-Fueled, Natural Gas-Fueled, Liquefied Petroleum Gas-Fueled and Methanol-Fueled Heavy-Duty Vehicles.

- 1. General Applicability. [§86.xxx-1]
 - A. Federal Provisions.
 - 1. §86.001-1 October 6, 2000.
 - 1.1 Subparagraph (a) [No change.]
 - 1.2 Subparagraph (b) Optional Applicability. [No change.]
 - 1.3 Subparagraphs (c) and (d) Reserved
 - 1.4 Amend subparagraph (e) as follows: *Small volume manufacturers*. Special certification procedures are available for any manufacturer whose projected or actual combined California sales of passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles and heavy-duty engines in its product line (including all vehicles and engines imported under the

provisions of 40 CFR §§85.1505 and 85.1509 of this chapter) are fewer than 4,500 units based on the average number of vehicles sold for the three previous consecutive model years for which a manufacturer seeks certification. For a manufacturer certifying for the first time in California, model year production shall be based on projected California sales. To certify its product line under these optional procedures, the small-volume manufacturer must first obtain the Executive Officer's approval. The manufacturer must meet the eligibility criteria specified in 40 CFR §86.092-14(b) before the Executive Officer's approval will be granted. The small volume manufacturer's heavy-duty engine certification procedures are described in 40 CFR §86.092-14.

1.5 Subparagraph (f) Optional procedures for determining exhaust opacity. [No change.]

2. §86.005-1 October 6, 2000

- 2.1 Subparagraph (a) [No change.]
- 2.2 Subparagraph (b) Optional Applicability. [No change.]
- 2.3 Subparagraph (c) [n/a; Otto-cycle]
- 2.4 Subparagraph (d) Reserved
- Amend subparagraph (e) as follows: Small volume manufacturers. 2.5 Special certification procedures are available for any manufacturer whose projected or actual combined California sales of passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles and heavy-duty engines in its product line (including all vehicles and engines imported under the provisions of 40 CFR §§85.1505 and 85.1509 of this chapter) are fewer than 4,500 units based on the average number of vehicles sold for the three previous consecutive model years for which a manufacturer seeks certification. For a manufacturer certifying for the first time in California, model year production shall be based on projected California sales. To certify its product line under these optional procedures, the small-volume manufacturer must first obtain the Executive Officer's approval. The manufacturer must meet the eligibility criteria specified in 40 CFR §86.092-14(b) before the Executive Officer's approval will be granted. The small volume manufacturer's heavy-duty engine certification procedures are described in 40 CFR §86.092-14.
- 2.6 Subparagraph (f) Optional procedures for determining exhaust opacity. [No change.]

3. §86.016-1 September 15, 2011.

- 3.1 Subparagraph (a) Applicability. [No change.]
- 3.2 Subparagraph (b) Optional Applicability. [n/a; Otto-cycle]
- 3.3 Subparagraph (c) through (c)(1). [No change.]
- 3.4 Delete subparagraph (c)(2) and replace with the following: On-

board diagnostic requirements according to the provisions of title 13, CCR, sections 1968.2 and 1968.5 or title 13, CCR, sections 1971.1 and 1971.5, as applicable.

- 3.5 Delete subparagraph (c)(3) and replace with the following: Evaporative emission standards according to the provisions of title 13, CCR, section 1976.
- 3.6 Delete subparagraph (c)(4) and replace with the following: Refueling emission standards according to the provisions of title 13, CCR, section 1978.
 - 3.7 Subparagraph (d) *Non-petroleum fueled vehicles*. [No change.]
- 3.8 Amend subparagraph (e) as follows: Small volume manufacturers. Special certification procedures are available for any manufacturer whose projected or actual combined California sales of passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and heavy-duty engines in its product line (including all vehicles and engines imported under the provisions of 40 CFR §\$85.1505 and 85.1509) are fewer than 4,500 units based on the average number of vehicles sold for the three previous consecutive model years for which a manufacturer seeks certification. For a manufacturer certifying for the first time in California, model year production shall be based on projected California sales. To certify its product line under these optional procedures, the small volume manufacturer must first obtain the Executive Officer's approval. The manufacturer must meet the eligibility criteria specified in 40 CFR §86.094-14(b) before the Executive Officer's approval will be granted. The small volume manufacturer's heavy-duty engine certification procedures are described in 40 CFR §86.098-14.
- 3.9 Subparagraph (f) Optional procedures for determining exhaust opacity. [No change.]

B. California provisions.

1. These regulations shall be applicable to all heavy-duty diesel methanol-fueled, ethanol-fueled, natural-gas-fueled and liquefied-petroleum gas-fueled dedicated, dual-fuel and multi-fuel engines (and vehicles) including those engines derived from existing diesel engines. For any engine that is not a distinctly diesel engine nor derived from such, the Executive Officer shall determine whether the engine shall be subject to these regulations or alternatively to the heavy-duty Otto-cycle engine regulations, in consideration of the relative similarity of the engine's torque-speed characteristics and vehicle applications with those of diesel and Otto-cycle engines. Reference to dual fuel vehicles or engines shall also mean bi-fuel vehicles or engines. References to methanol shall also mean ethanol.

- 2. References in the federal regulations to light-duty vehicles and light-duty trucks do not apply. References to heavy-duty Otto-cycle engines or vehicles do not apply.
- 3. Any reference to vehicle or engine sales or vehicle or engine production volume throughout the United States shall mean vehicle or engine sales or vehicle or engine volume in California. References to small volume manufacturers shall mean California small volume manufacturer as defined in section I.1.A., above.
- 4. Regulations concerning U.S. EPA hearings, U.S. EPA inspections, specific language on the Certificate of Conformity, non-conformance penalties, selective enforcement audit, evaporative emission, high-altitude vehicles and testing, alternative useful life, and Certification Short Test shall not be applicable to these procedures, except where specifically noted. The regulations pertaining to evaporative emissions are contained in "California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles," adopted August 5, 1999, as last amended March 22, 2012, as incorporated in title 13, CCR §1976. All heavy-duty methanol- and gaseousfueled vehicles shall comply with the evaporative requirements in title 13, CCR, §1976.

2. Definitions. [§86.xxx-2]

A. Federal Provisions.

- 1. **§86.004-2** January 18, 2001. [All federal definitions apply, except as otherwise noted below. Definitions specific to other requirements are contained in separate documents.]
- 2. **§86.010-2** April 30, 2010. [All federal definitions apply, except as otherwise noted below. Definitions specific to other requirements are contained in separate documents.]
- 3. §86.012-2 September 15, 2011. [All federal definitions apply, except as otherwise noted below. Definitions specific to other requirements are contained in separate documents.]
- 3.1 Amend paragraph as follows: The definitions of §86.010-2 continue to apply to model year 2010 and later model year engines and vehicles. The definitions listed in this section apply beginning with model year 2012. "GHG Urban Bus" means a passenger-carrying vehicle with a load capacity of fifteen or more passengers and intended primarily for intracity operation, i.e., within the confines of a city or greater metropolitan area. GHG urban bus operation is characterized by short rides and frequent stops. To facilitate this type of operation, more than one set of quick-operating entrance and exit doors would normally be installed. Since fares are usually paid in cash or tokens, rather than purchased in advance in the form of tickets, GHG urban buses would normally

have equipment installed for collection of fares. GHG urban buses are also typically characterized by the absence of equipment and facilities for long distance travel, e.g., rest rooms, large luggage compartments, and facilities for stowing carry-on luggage.

B. California Provisions.

- "Administrator" means the Executive Officer of the Air Resources Board.
- "Certificate of Conformity" means "Executive Order" certifying vehicles for sale in California.
- "Certification" means certification as defined in Section 39018 of the Health and Safety Code.
- "Designated Compliance Officer" means the Executive Officer of the Air Resources Board or his or her delegate.
- **"EPA"** shall also mean Air Resources Board or Executive Officer of the Air Resources Board
- "EPA Enforcement Officer" means the Executive Officer or his or her delegate.
- "Measurement allowance" means accuracy margin.
- "Medium-duty engine" means a heavy-duty engine that is used to propel a medium-duty vehicle.
- "Medium-duty vehicle" means 2004 through 2006 model year heavy-duty low-emission vehicle, ultra-low-emission vehicle, super-ultra-low-emission vehicle or zero-emission vehicle certified to the standards in title 13, CCR, section 1960.1(h)(2) having a manufacturer's gross vehicle weight rating of 14,000 pounds or less; and any 2004 and subsequent model heavy-duty low-emission, ultra-low-emission, super-ultra-low-emission or zero-emission vehicle certified to the standards in title 13, CCR section 1956.8(h), having a manufacturer's gross vehicle weight rating between 8,501 and 14,000 pounds.
- "NTE standard" means NTE emission limit.
- "Warranty period" [For guidance see title 13, CCR, §2036].

- 16. Prohibition of defeat devices. [§86.004-16] [July 13, 2005]. [No change.]
- 17. On-board diagnostics for engines used in applications less than or equal to 14,000 pounds GVWR. [§86.099-17; §86.005-17; §86.007-17]; [Delete replace with: All heavy-duty diesel cycle engines used in vehicles up to 14,000 pounds GVW must have an on-board diagnostic system as required in title 13, CCR §1968 et seq, as applicable.]
- 18. §86.xxx-18. [Reserved.] On-board diagnostics for engines used in applications greater than 14,000 pounds GVWR. §86.010-18 [Delete replace with: All heavy-

duty diesel cycle engines used in vehicles greater than 14,000 pounds GVWR must have an on-board diagnostic system as required in title 13, CCR §1971.1 et seq, as applicable.]

* * * *

- 23. Required data. [§86.xxx-23]
 - A. Federal provisions.
 - 1. §86.098-23. April 30, 2010.
 - 1.1 Subparagraphs (a) through (b)(1)(i) [No change.]
 - 1.2 Add the following sentence to subparagraph (b)(1)(ii): The data derived from testing to determine the exhaust emission deterioration factors shall be submitted to the Executive Officer for review. If the durability test method is accepted by EPA, it shall also be accepted by ARB, subject to the following condition. If, after certification for the first model year in which the method is used, the Executive Officer determines that a manufacturer's durability test procedures do not conform with good engineering practices, the Executive Officer may require changes to that manufacturer's durability test procedures for subsequent model years. The manufacturer's revised durability test procedures shall be submitted to the Executive Officer for review and approval.
 - 1.3 Subparagraphs (b)(2) through (h)(2) [No change.]
 - 1.4 Amend subparagraph (h)(3) as follows:
 - (h)(3)(i) These reports shall be submitted within 90 days of the end of the model year to: Chief, Mobile Source Operations Division Emissions Compliance, Automotive Regulations and Science Division, California Air Resources Board, 9528 Telstar Avenue 9480 Telstar Avenue, Ste. #4, El Monte. California 91731.
 - 1.5 Subparagraphs (h)(3)(ii) through (m) [No change.]
 - 2. **§86.001-23.** October 21, 1997. [No change, except that the amendments indicated for §86.098-23 above still apply.]
 - 3. **§86.007-23.** October 30, 2009 June 17, 2013. [No change, except that the amendments indicated for §86.098-23 above still apply.]

Subpart S – General Compliance Provisions for Control of Air Pollution From New and In-Use Light-Duty Vehicles, Light-Duty Trucks, and Complete Otto-Cycle Heavy-Duty Vehicles.

86.1863-07 Optional chassis certification for diesel vehicles. September 15, 2011.

- 1. Amend subparagraph (a) as follows: For the 2004 through 2014 model years, a manufacturer may optionally certify heavy-duty diesel vehicles weighing 14,000 pounds GVWR or less to the emission standards specified in title 13, CCR, §1961. Such vehicles must meet all applicable requirements 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," as amended December 6, 2012, as incorporated by reference in title 13, CCR, §1961(d). For the 2015 through 2019 model years, a manufacturer may optionally certify heavyduty diesel vehicles weighing 8,500 to 10,000 pounds GVWR or less to the emission standards specified in title 13, CCR, §1961 or §1961.2, as applicable. Such vehicles must meet all applicable requirements of the "California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles," as amended December 6, 2012, incorporated by reference in section 1961.2, title 13, CCR. For the 2015 and subsequent model years, a manufacturer may optionally certify heavy-duty diesel vehicles weighing 10,001 to 14,000 pounds GVWR or less to the emission standards specified in title 13, CCR, §1961.2. Such vehicles must meet all applicable requirements of the "California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles," as amended December 6, 2012, incorporated by reference in section 1961.2, title 13, CCR. For the 2020 and subsequent model years, heavy-duty diesel vehicles 8,501 to 10,000 pounds GVWR must certify to the primary emission standards and test procedures for complete vehicles specified in section 1961.2, title 13, CCR.
- 2. Amend subparagraph (b) as follows: Diesel vehicles optionally certified under this section are subject to the OBD requirements of title 13, CCR, §1968.2.
 - 3. Subparagraphs (c) to (g). [No change.]
 - 4. Subparagraphs (h) and (i). [n/a] [No change.]

<u>PART 1036 – CONTROL OF EMISSIONS FROM NEW AND IN-USE HEAVY-DUTY</u> <u>HIGHWAY ENGINES</u>

<u>Subpart A – Overview and Applicability</u>

1036.1	Does this part apply for my engines? September 15, 2011.
1036.2	Who is responsible for compliance? September 15, 2011.
1036.5	Which engines are excluded from this part's requirements?
	June 17, 2013.
1036.10	How is this part organized? September 15, 2011.
1036.15	Do any other regulation parts apply to me? September 15, 2011.
1036.30	Submission of information. September 15, 2011.
<u>1. Ar</u>	mend subparagraph as follows: Send all reports and requests for approva
ADD	

1. Amend subparagraph as follows: Send all reports and requests for approval to the ARB Designated Compliance Officer, as follows: Chief, Emissions Compliance, Automotive Regulations and Science Division, California Air Resources Board, 9480 Telstar Avenue, Ste. #4, El Monte, CA 91731.

<u>Subpart B – Emission Standards and Related Requirements</u>

- 1036.100 Overview of exhaust emission standards. September 15, 2011.
 1036.108 Greenhouse gas emission standards. September 15, 2011.
- 1. Add the following section to the introductory paragraph: Optional Compliance Via the 2014 MY National Heavy-Duty Engine and Vehicle Greenhouse Gas Program. For the 2014 through 2022 model years, a manufacturer may elect to demonstrate compliance with this section, §1036.108, for all of its applicable heavy-duty engines by demonstrating compliance with the 2014 MY National Heavy-Duty Engine and Vehicle Greenhouse Gas Program, if it meets the criteria identified below.
- (1) A manufacturer that selects compliance with this option must notify the Executive Officer of that selection, in writing, prior to the start of the applicable model year or December 1, 2014, whichever is later;
- (2) The manufacturer must submit to ARB all data that it submitted to U.S. Environmental Protection Agency in accordance with the reporting requirements as required under 40 CFR §1036.205, §1036.250, and §1036.730, for demonstrating compliance with the 2014 MY National Heavy-Duty Engine and Vehicle Greenhouse Gas Program and the U.S. Environmental Protection Agency determination of compliance. With the exception of the 2014 model year, all such data must be submitted within 30 days of receipt of the U.S. Environmental Protection Agency Certificate of Conformity or of the date of submission to the U.S. Environmental Protection Agency, whichever is later, for each model year that a manufacturer selects compliance with this option;
- (3) The manufacturer must provide to the Executive Officer separate numbers for each engine family of heavy-duty engines produced and delivered for sale in California each model year and all values used in calculating positive or negative

emission credits in §1036.730.

- 2. Subparagraphs (a) through (f). [No change.]
- 1036.115 Other requirements. September 15, 2011.
- 1036.130 Installation instructions for vehicle manufacturers. September 15, 2011.
 - 1. Subparagraphs (a) through (b)(1). [No change.]
- 2. Delete and replace subparagraph (b)(2), as follows: State "Failing to follow these instructions when installing a certified engine in a heavy-duty motor vehicle violates federal and state law, subject to fines or other penalties as described in the Clean Air Act and California Health and Safety Code."
 - 3. Subparagraphs (b)(3) through (d). [No change.]
- 1036.135 Labeling. September 15, 2011.
- 1. Amend the introductory paragraph as follows: Beginning January 1, 2015, label your engines as described in 40 CFR §86.007-35(a)(3), as modified by these test procedures, with the following additional information:
 - 2. Subparagraph (b) through (d). [No change.]
- 1036.140 Primary intended service class. September 15, 2011.
- 1036.150 Interim provisions. June 17, 2013.
- 1. Amend subparagraph (a) as follows: Credit provisions for 2013 model year compliance. The provisions of this paragraph (a) apply to 2013 model year heavy-duty diesel engines that have generated early credits with U.S. Environmental Protection Agency. For each 2013 model year heavy-duty diesel engine that is certified to the greenhouse gas standards of 40 CFR Part 1036, an equal amount of credit as given by the U.S. Environmental Protection Agency will be granted in the California ABT Program. The manufacturer must notify ARB of its intent to use this provision before submitting its application and must submit to ARB all data that the manufacturer submitted to U.S. Environmental Protection Agency in accordance with the reporting requirements as required under 40 CFR §§1036.205, 1036.250, and 1036.730.
 - 2. Subparagraphs (a)(1) through (i). [No change.]

Subpart C – Certifying Engine Families

1036.205	What must I include in my application? June 17, 2013.
1036.210	Preliminary approval before certification. September 15, 2011.
1036.225	Amending my application for certification. June 17, 2013.
1036.230	Selecting engine families. September 15, 2011.
1036.235	Testing requirements for certification. September 15, 2011.
1036.241	Demonstrating compliance with greenhouse gas pollutant standards.
	<u>September 15, 2011.</u>
1036.250	Reporting and recordkeeping for certification. September 15, 2011.
1036.255	What decisions may EPA make regarding my certificate of conformity?

<u>September 15, 2011.</u>

Subpart D – [Reserved]

Subpart E – In-use Testing

<u>1036.401</u> In-use testing. September 15, 2011.

Subpart F – Test Procedures

1036.501	How do I run a valid emission test? September 15, 2011.
1036.525	Hybrid engines. June 17, 2013.
1036.530	Calculating greenhouse gas emission rates. September 15, 2011.

Subpart G – Special Compliance Provisions

1036.601	What compliance provisions apply to these engines?
	September 15, 2011.
1036.610	Innovative technology credits and adjustments for reducing greenhouse
	gas emissions. September 15, 2011

- 1. Subparagraphs (a) through (c). [No change.]
- 2. Amend subparagraph (d) as follows: We may seek public comment on your request. However, we will generally not seek public comment on credits/adjustments based on A to B engine dynamometer testing, chassis testing, or in-use testing.

1036.615	Engines with Rankine cycle waste heat recovery and hybrid
	powertrains. June 17, 2013.
1036.620	Alternate CO ₂ standards based on model year 2011 compression-ignition
	engines. September 15, 2011.
1036.625	In-use compliance with family emission limits (FELs). September 15,
•	2011.

<u>Subpart H – Averaging, Banking, and Trading for Certification</u>

<u>1036.701</u>	General provisions. September 15, 2011.
1036.705	Generating and calculating emission credits. September 15, 2011.
1036.710	Averaging. September 15, 2011.
1036.715	Banking. September 15, 2011.
1036.720	Trading. September 15, 2011.
1036.725	What must I include in my application for certification? September 15,
	<u>2011.</u>
1036.730	ABT reports. September 15, 2011.
1036.735	Recordkeeping. September 15, 2011.

1036.740	Restrictions for using emission credits. September 15, 2011.
1036.745	End-of-year CO ₂ credit deficits. September 15, 2011.
1036.750	What can happen if I do not comply with the provisions of this
	subpart? September 15, 2011.

<u>Subpart I – Definitions and Other Reference Information</u>

1036.801 Definitions. June 17, 2013.

A. Federal Provisions. [All federal definitions apply, except as otherwise noted below.]

B. California Provisions.

"2014 MY National Heavy-Duty Engine and Vehicle Greenhouse Gas Program"
means the national program that applies to new 2014 and subsequent model
medium- and heavy-duty engines and vehicles to control greenhouse gas emissions,
as adopted by the U.S. Environmental Protection Agency (76 Fed. Reg. 57106
(September 15, 2011)), and as subsequently amended on June 17, 2013, as
incorporated in and amended by these test procedures.

"Certificate of Conformity" means an Executive Order certifying vehicles for sale in California.

"Certification" means relating to the process of obtaining an Executive Order for an engine family that complies with the emission standards and requirements in this part.

"Designated Compliance Officer" means the Executive Officer of the Air Resources Board or a designee of the Executive Officer.

"Designated Enforcement Officer" means the Executive Officer of the Air Resources Board or a designee of the Executive Officer.

<u>"EPA" shall also mean Air Resources Board or Executive Officer of the Air</u> Resources Board.

"Manufacturer" means any person who manufactures an engine, vehicle, or piece of equipment for sale in California or otherwise introduces a new engine into commerce in California. This includes importers who import engines or vehicles for resale.

"U.S. Environmental Protection Agency" means the United States Environmental Protection Agency.

"We (us, our)" means the Executive Officer and any authorized representatives.

1036.805	Symbols, acronyms, and abbreviations. September 15, 2011.
1036.810	Incorporation by reference. September 15, 2011.
1036.815	Confidential information, September 15, 2011.

A. Federal Provisions. [No change.]

- <u>B. California Provisions.</u> The provisions of title 17, CCR section 91000 through 91022 apply for information you consider confidential. Note that according to section 91011, emissions data shall not be identified as confidential.
- 1036.820 Requesting a hearing. September 15, 2011.
- 1. Delete subparagraph (a) and replace as follows: You may request a hearing under certain circumstances, as described elsewhere in this part.
 - 2. Subparagraph (b). [No change.]
- 3. Amend subparagraph (c) as follows: If we agree to hold a hearing, we will use the procedures specified in 17 CCR sections 60055.1 through 6055.43.
- 1036.825 Reporting and recordkeeping requirements. September 15, 2011.
 - 1. Subparagraphs (a) through (d). [No change.]
 - 2. Delete subparagraph (e).

PART 1065 - ENGINE-TESTING PROCEDURES.

Subpart A – Applicability and General Provisions

- 1065.1 Applicability. September 15, 2011.
 - 1. Amend subparagraph (a) as follows:
 - 1.1. Introductory paragraph. [No change.]
 - 1.2. Subparagraphs (a)(1). [n/a]
 - 1.3. Amend subparagraph (a)(2) as follows: Model year 2010 and later heavy-duty highway engines we regulate under title 13, CCR, §1956.8. For earlier model years, manufacturers may use the test procedures in this part or those specified in 40 CFR part 86, subpart N, according to §1065.10, as modified by these test procedures.
 - 1.4. Subparagraphs (a)(3) through (a)(8). [n/a]
 - 2. Subparagraph (b). [n/a]
 - 3. Subparagraph (c) through (g h). [No change.]
- Submitting information to EPA under this part. April 30, 2010.
 - 1. Subparagraphs (a) through (d). [No change.]
 - 2. Amend subparagraph (e) as follows: See title 137, CCR, section 91011 for provisions related to confidential information. Note that according to this section, emission data shall not be identified as confidential.
 - 3. Subparagraph (f). [No change.]

1065.5	Overview of this part 1065 and its relationship to the standard-setting
	part. October 30, 2009.
1065.10	Other procedures. April 30, 2010.
1065.12	Approval of alternate procedures. June 30, 2008.
1065.15	Overview of procedures for laboratory and field testing. September 15,
	2011.

- 1065.20 Units of measure and overview of calculations. September 15, 2011.
- 1065.25 Recordkeeping. July 13, 2005.

Subpart B - Equipment Specifications.

1065.101	Overview. June 30, 2008.
1065.110	Work inputs and outputs, accessory work, and operator demand. June
	30, 2008.
1065.120	Fuel properties and fuel temperature and pressure. June 30, 2008.
1065.122	Engine cooling and lubrication. June 30, 2008.
1065.125	Engine intake air. September 15, 2011.
1065.127	Exhaust gas recirculation. July 13, 2005.
1065.130	Engine exhaust. June 30, 2008.

1065.140	Dilution for gaseous and PM constituents. September 15, 2011.
1065.145	Gaseous and PM probes, transfer lines, and sampling system
	components. April 30, 2010.
1065.150	Continuous sampling. July 13, 2005.
1065.170	Batch sampling for gaseous and PM constituents. September 15, 2011.
1065.190	PM-stabilization and weighing environments for gravimetric analysis.
	September 15, 2011.
1065.195	PM-stabilization environment for in-situ analyzers. June 30, 2008.

Subpart C – Measurement Instruments

1065.201	Overview and general provisions. April 30, 2010.
1065.202	Data updating, recording, and control. July 13, 2005.
1065.205	Performance specifications for measurement instruments. September
	15, 2011.

Measurement of Engine Parameters and Ambient Conditions

1065.210	Work input and output sensors. June 30, 2008.
1065.215	Pressure transducers, temperature sensors, and dewpoint sensors.
	June 30, 2008.

Flow-Related Measurements

1065.220	Fuel flow meter. June 30, 2008 September 15, 2011.
1065.225	Intake-air flow meter. September 15, 2011.
1065.230	Raw exhaust flow meter. July 13, 2005.
1065.240	Dilution air and diluted exhaust flow meters. April 30, 2010.
1065.245	Sample flow meter for batch sampling. July 13, 2005.
1065.248	Gas divider. July 13, 2005.

CO and CO₂ Measurements

1065.250 Nondispersive infra-red analyzer. September 15, 2011.

Hydrocarbon Measurements

1065.260	Flame ionization detector. September 15, 2011.
1065.265	Nonmethane cutter. September 15, 2011.
1065.267	Gas chromatograph. September 15, 2011.

NOx Measurements

1065.270	Chemiluminescent detector. September 15, 2011.
1065.272	Nondispersive ultraviolet analyzer. September 15, 2011.
1065.275	N ₂ O measurement devices. September 15, 2011 June 17, 2013.

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Subpart G – Calculations and Data Requirements.

1065.601	Overview. April 30, 2010.
1065.602	Statistics. September 15, 2011.
1065.610	Duty cycle generation. September 15, 2011. June 17, 2013.