## **ATTACHMENT 1**

## PROPOSED MODIFIED TEXT OF THE REGULATIONS TO AMEND THE NEW PASSENGER MOTOR VEHICLE GREENHOUSE GAS EMISSION STANDARDS FOR MODEL YEARS 2012-2016 TO PERMIT COMPLIANCE BASED ON FEDERAL GREENHOUSE GAS EMISSION STANDARDS

The following text shows the Board-approved modifications to the originally proposed regulatory text for section 1961.1, title 13 of the California Code of Regulations and to the "California Exhaust Emission Standards and Test Procedures for 2001 and subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles." Unless otherwise indicated below, the text of the originally proposed amendments is shown in underline to indicate additions and strikeout to indicate deletions. Amendments to these regulations that were adopted by the Board on September 24, 2009 as part of the "Rulemaking to Consider Proposed Amendments to New Passenger Motor Vehicle Greenhouse Gas Emission Standards," but which have not yet been approved by California's Office of Administrative Law (OAL) are indicated in dotted underline to indicate additions and italies double strikeout to indicate deletions. That rulemaking was sent to OAL for approval on February 22, 2010. OAL has until April 6, 2010 to make a determination. The dotted underline and italies double strikeout text is presented for context and completeness only and is not subject to comment in this proposal. The modified language now proposed by staff is shown in double underline to indicate additions and double strikeout to indicate deletions. Staff is proposing modifications to limited portions of the original proposal; for some portions for which no modifications are proposed, the text has been omitted and the omission indicated by [No change] or "\* \* \* \* "

There are no additional suggested modifications to the originally proposed amendments to section 1961, title 13, CCR.

1. Amend section 1961.1, title 13, CCR as follows:

§ 1961.1. Greenhouse Gas Exhaust Emission Standards and Test Procedures - 2009 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles.

(a) Greenhouse Gas Emission Requirements. The greenhouse gas emission levels from new 2009 and subsequent model year passenger cars, light-duty trucks, and medium-duty passenger vehicles shall not exceed the following requirements. Light-duty trucks from 3751 lbs. LVW – 8500 lbs. GVW that are certified to the Option 1 LEV II NOx Standard in section 1961(a)(1) are exempt from these greenhouse gas emission requirements, however, passenger cars, light-duty trucks 0-3750 lbs. LVW, and medium-duty passenger vehicles are not eligible for this exemption.

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- (1) Fleet Average Greenhouse Gas Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles.
- (A)(i) The fleet average greenhouse gas exhaust mass emission values from passenger cars, light-duty trucks, and medium-duty passenger vehicles that are produced and delivered for sale in California each model year by a large volume manufacturer shall not exceed:

FLEET AVERAGE GREENHOUSE GAS EXHAUST MASS EMISSION REQUIREMENTS FOR PASSENGER CAR, LIGHT-DUTY TRUCK, AND MEDIUM- DUTY PASSENGER VEHICLE WEIGHT CLASSES <sup>1</sup> (4,000 mile Durability Vehicle Basis)		
Model Year	Fleet Average Greenhouse Gas Emissions	
	(grams per mile CO <sub>2</sub> -equivalent)	
	All PCs;	LDTs
	LDTs 0-3750 lbs.	3751 lbs. LVW - 8500
	LVW	lbs. GVW; MDPVs
2009	323	439
2010	301	420
2011	267	390
2012	233	361
2013	227	355
2014	222	350
2015	213	341
2016+	205	332

<sup>&</sup>lt;sup>1</sup> Each manufacturer shall demonstrate compliance with these values in accordance with section 1961.1(a)(1)(B).

1. For each model year, a manufacturer must demonstrate compliance with the fleet average requirements in this section 1961.1(a)(1)(A) based on one of two options applicable throughout the model year, either:

Option 1: the total number of passenger cars, light-duty trucks, and medium-duty passenger vehicles that are certified to the California exhaust emission standards in this section 1961.1, and are produced and delivered for sale in California; or

Option 2: the total number of passenger cars, light-duty trucks, and medium-duty passenger vehicles that are certified to the California exhaust emission standards in this section 1961.1, and are produced and delivered for sale in California.

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the District of Columbia, and all states that have adopted California's greenhouse gas emission standards for that model year pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507).

- a. For the 2009 and 2010 model years, a manufacturer that selects compliance Option 2 must notify the Executive Officer of that selection, in writing, within 30 days of the effective date of the amendments to this section (a)(1)(A)1 or must comply with Option 1.
- b. For the 2011 and later model years, a manufacturer that selects compliance Option 2 must notify the Executive Officer of that selection, in writing, prior to the start of the applicable model year or must comply with Option 1.
- c. When a manufacturer is demonstrating compliance using Option 2 for a given model year, the term "in California" as used in subsections 1961.1(a)(1)(B)3. and 1961.1(b) means California, the District of Columbia, and all states that have adopted California's greenhouse gas emission standards for that model year pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507).
- d. A manufacturer that selects compliance Option 2 must provide to the Executive Officer separate values for the number of vehicles produced and delivered for sale in the District of Columbia and for each individual state within the average.
- (A)(ii) For the 2012 through 2016 model years, a manufacturer may elect to demonstrate compliance with this section 1961.1 by demonstrating compliance with the National greenhouse gas program as follows:
- a. A manufacturer that selects compliance with this option 1961.1(a)(1)(A)(ii) must notify the Executive Officer of that selection, in writing, prior to the start of the applicable model year or must comply with 1961.1(a)(1)(A)(i).
- b. The manufacturer must submit to ARB a copy of the official Model Year CAFE report that it submitted to EPA as required under 40 CFR §86-1865-12 (as proposed at 74 Fed.Reg. 49454, 49760 (September 28, 2009)), for demonstrating compliance with the National greenhouse gas program and the official EPA determination of compliance. These must be submitted no later than May 1 of the calendar year following the close of the model year within 30 days of receipt of the EPA determination of compliance, for each model year that a manufacturer selects compliance with this option 1961.1(a)(1)(A)(ii). and
- c. If a manufacturer has outstanding greenhouse gas debits at the end of the 2011 model year, as calculated in accordance with 1961.1(b), the manufacturer must submit to the Executive Officer a plan for offsetting all outstanding greenhouse gas debits by using greenhouse gas credits earned under the National greenhouse gas program before applying those credits to offset any National greenhouse gas program debits. Upon approval of the plan by the Executive Officer, the manufacturer may demonstrate compliance with this section 1961.1 by demonstrating compliance with the National greenhouse gas program. Any California

debits not offset by the end of the 2016 model year National greenhouse gas program reporting period are subject to penalties as provided in this Section 1961.1.

Sections (a)(1)(B) through (d). [No change.]

- (e) Definitions Specific to this Section. The following definitions apply to this section 1961.1:
- (1) "A/C Direct Emissions" means any refrigerant released from a motor vehicle's air conditioning system.
- (2) "A/C Indirect Emissions" means any increase in motor vehicle exhaust CO<sub>2</sub> emissions that can be attributed to the operation of the air conditioning system.
- (3) "GHG Vehicle Test Group" means vehicles that have an identical test group, vehicle make and model, transmission class and driveline, aspiration method (e.g., naturally aspirated, turbocharged), camshaft configuration, valvetrain configuration, and inertia weight class.
- (4) "Greenhouse Gas" means the following gases: carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons.
- (5) "Grid-Connected Hybrid Electric Vehicle" means a hybrid electric vehicle that has the capacity for the battery to be recharged from an off-board source of electricity and has some all-electric range.
- (6) "GWP" means the 100-year global warming potential specified in IPCC (Intergovernmental Panel on Climate Change) 2000: Emissions Scenarios. N. Nakicenovic et. al. editors, Special Report of Working Group III of the IPCC, Cambridge University Press, Cambridge UK, ISBN 0-521-80493-0.
- (7) "National greenhouse gas program" means the national program that applies to new 2012 through 2016 model year passenger cars, light-duty trucks, and medium-duty passenger vehicles as proposed promulgated by the U.S. Environmental Protection Agency at 74 Fed.Reg. 49454, (September 28, 2009) and promulgated on March XX, 2010 [Insert Reference in Federal Register for Final GHG Rule], as incorporated in and amended by the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."
- (87) "Normal Operation" of an air conditioning system means typical everyday use of the A/C system to cool a vehicle. "Normal Operation" does not include car accidents, dismantling of an air conditioning system, or any other non-typical events.
- (98) "Optional GHG Test Vehicle Configuration" means any GHG vehicle configuration that is selected for testing by the manufacturer as allowed by section G.2.3 of the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," other than the worst-case configuration.
- (109) "Renewable Energy Resource" means a facility that meets all of the criteria set forth in Public Resources Code section 25741(a), except that the facility is not required to be located in California or near the border of California.

- $(1\underline{1}\theta)$  "Variable Displacement Compressor" means a compressor in which the mass flow rate of refrigerant is adjusted independently of compressor speed by the control system in response to cooling load demand.
- (124) "Variable Speed Compressor" means a compressor in which the mass flow rate of refrigerant can be adjusted by control of the compressor input shaft speed, independent of vehicle engine speed. For example, a variable speed compressor can have electric drive, hydraulic drive, or mechanical drive through a variable speed transmission.
- (132) "Worst-Case" means the vehicle configuration within each test group that is expected to have the highest  $CO_2$ -equivalent value, as calculated in section 1961.1(a)(1)(B)1.

Sections (f) and (g). [No change.]

Note: Authority cited: Sections 39500, 39600, 39601, 43013, 43018, 43018.5, 43101, 43104 and 43105, Health and Safety Code. Reference: Sections 39002, 39003, 39667, 43000, 43009.5, 43013, 43018.5, 43100, 43101, 43101.5, 43102, 43104, 43105, 43106, 43204, 43205, and 43211, Health and Safety Code.