

## **APPENDIX O**

# **PROPOSED TEST PROCEDURES**

**Large Spark-Ignition Engines**

**(2010 and Later Model Years; Part 1048)**

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State of California  
AIR RESOURCES BOARD

CALIFORNIA EXHAUST AND EVAPORATIVE EMISSION STANDARDS  
AND TEST PROCEDURES FOR NEW 2010 AND LATER  
OFF-ROAD LARGE SPARK-IGNITION ENGINES  
(2010 and Later Test Procedure 1048)

Adopted: March 2, 2007

Amended: November 21, 2008

Amended: [insert applicable amendment date]

NOTE: This document incorporates by reference Title 40, Code of Federal Regulations (CFR), Part 1048 – **CONTROL OF EMISSIONS FROM NEW, LARGE NONROAD SPARK-IGNITION ENGINES**, Subparts A, B, C, F, G, H, and I, including Appendix I and II to Part 1048 as amended on July 13, 2005 (Federal Register, Volume 70, pages 40465 through 40486), and the internally referenced subparts of 40 CFR Part 86, 40 CFR Part 1065, and 40 CFR Part 1068. Sections that have been included in their entirety are set forth with the section number and title. California provisions that replace specific federal provisions are denoted by the words “DELETE” for the federal language and “REPLACE WITH” or “ADD” for the California regulations. The symbols “\* \* \* \* \*” and “...” mean that the remainder of the CFR text for a specific section, which is not shown in these regulations, has been included by reference, with only the printed text changed. Federal regulations that are not listed are not part of the California regulations. Text in *Italics* is provided as rationale for replacement language. This document is all newly adopted text. *[The italicized text in brackets describes the purpose of the California provisions.]*

NOTE: This document is printed in a style to indicate changes from the existing provisions. All existing language is indicated by plain type. All additions to language are indicated by underlined text. All deletions to language are indicated by ~~strikeout~~. Only those sections containing the suggested modifications from the existing language are included. All other portions remain unchanged and are indicated by the symbol “\* \* \* \* \*” for reference.

PART 1048 – CONTROL OF EMISSIONS FROM NEW, LARGE NONROAD SPARK-IGNITION ENGINES

\* \* \* \* \*

Subpart B—Emission Standards and Related Requirements

**§1048.101 What exhaust emission standards must my engines meet?**

\* \* \* \* \*

(e) Fuel ~~t~~Types and Test Fuel.

(1) Fuel ~~t~~Types

\* \* \* \* \*

(2) Test Fuel.

(A) Except as outlined in (B), if the engine is a gasoline-fueled large spark-ignition engine, then the test fuel used shall be consistent with the fuel specifications as outlined in the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," as of January 1, 2006 (last amended August 4, 2005) incorporated by reference in Section 1961(d), Title 13, CCR). The California fuel specifications are contained in the California Code of Regulations, Title 13, Chapter 5, Article 1, Sections 2260-2272. If the engine is tested using the U.S. EPA test fuel, consistent with the fuel specifications as outlined in Title 40 Code of Federal Register, Part 1065, subpart H, the manufacturer shall demonstrate that the emission test results complies with these Test Procedures.

(B) For 2013-2018 model-year gasoline-fueled, large spark-ignition engines, the manufacturer has the option to use the fuel specified in (e)(2)(C).

(C) For 2019 and later gasoline-fueled, large spark-ignition engines: The certification test fuel for exhaust emission testing must be consistent with the fuel specifications as outlined in title 13, section 1961.2 and the "California Exhaust Emission Standards and Test Procedures for 2015 and Subsequent Model Passenger Cars, Light Duty Trucks, and Medium Duty Vehicles," adopted <insert date of adoption>, and incorporated by reference herein. The test fuel specifications should remain consistent from batch to batch.

~~(B)~~(D) If the engine is not a gasoline-fueled large spark-ignition engine, then the test fuel used shall be consistent with the fuel specifications as outlined in the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," as of January 1, 2006 (last amended August 4, 2005) incorporated by reference in Section 1961(d), Title 13, CCR). The California fuel specifications are contained in the California Code of

Regulations, Title 13, Chapter 5, Article 3, Sections 2290- 2293.5. If the engine is tested using the U.S. EPA test fuel, consistent with the fuel specifications as outlined in Title 40 Code of Federal Register, Part 1065, subpart H, the manufacturer shall demonstrate that the emission test results complies with these Test Procedures.

~~(C)~~(E) During all engine tests, the engine shall employ a lubricating oil consistent with the engine manufacturer's specifications for that particular engine. These specifications shall be recorded and declared in the certification application.