Appendix C

Exhaust Emission Standards and Test Procedures for Off-Road Diesel Engines and Equipment (50 ≤ hp < 175)

NOTE: This document incorporates by reference various sections of the Code of Federal Regulations, some with modifications. California provisions which replace specific federal provisions are denoted by the words “DELETE” for the federal language and “REPLACE WITH” for the new California language. The symbols “*****” and “...” mean that the remainder of the federal text for a specific section, which is not shown in these procedures, has been included by reference, with only the printed text changed. Federal regulations which are not listed are not part of the procedures.

The following provisions of Subparts A to E, Part 89, Title 40, Code of Federal Regulations, as adopted or amended by the U.S. Environmental Protection Agency on the date listed, and only to the extent they pertain to the testing and compliance of exhaust emissions from nonroad diesel cycle vehicles/engines/equipment, are adopted and incorporated by reference as the Exhaust Emission Standards and Test Procedures for Exempting Add-on and Modified Parts for Off-Road Diesel Engines and Equipment rated from 50 to 175 hp and certified to meet federal emission standards and certification provisions, except as altered or replaced by the provisions set forth below.

Subpart A- General

89.1 Applicability. April 16, 1998.
   (a) ... greater than or equal to 50 horsepower (hp) and less than 175 hp ...

   * * * *

89.2 Definitions. April 16, 1998.

   * * * *
   “Administrator” DELETE
   REPLACE WITH: “Administrator” means the Executive Officer of the Air Resources Board.

   * * * *

   “EPA enforcement officer” DELETE
   REPLACE WITH: “EPA enforcement officer” means the Executive Officer or his or her delegate.

   * * * *

   “Off road aftermarket parts manufacturer” means any person engaged in the
manufacturing or assembling of add-on or modified parts, as defined in Section 1900(b), (1) and (10), Chapter 3, Title 13, California Code of Regulations, for off-road vehicles, engines, or equipment subject to California or federal emission standards.

* * * * *

“Presentation of Credentials” DELETE
REPLACE WITH: “Presentation of Credentials” means the display of the document designating a person as an EPA enforcement officer or ARB authorized representative.

* * * * *

89.4 Section numbering. June 17, 1994.
89.5 Table and figure numbering; position. June 17, 1994.
Appendix A to Subpart A -
State Regulation of Nonroad Internal Combustion Engines. December 30, 1997

Subpart B - Emission Standards and Certification Provisions

  (a)(3) - DELETE
  (a)(4) - DELETE

* * * * *

  (a)(2)-DELETE
  (a)(3)-DELETE
  (a)(4)-DELETE

* * * * *

89.113-96 Smoke emission standard. June 17, 1994.
89.308-96 Sampling system requirements for gaseous emissions. June 17, 1994.
89.317-96 NOx converter check. June 17, 1994.

Appendix A to Subpart D - Tables. June 17, 1994
   Table 1 - Abbreviations Used in Subpart D.
   Table 2 - Symbols Used in Subpart D.
   Table 3 - Measurement Accuracy Calibration Frequency (MY96 and Later)
   Table 4 - Test Fuel Specifications for MY96 and Later: Federal Specifications
   Table 5 - Test Fuel Specifications for MY96 and Later: California Specifications

   Figure 1 - Exhaust Gas Sampling and Analytical Train
   Figure 2 - NOx Converter Efficiency Detector

Subpart E- Exhaust Emission Test Procedures

89.401-96 Scope; applicability. June 17, 1994.
89.405-96 Recorded information. June 17, 1994.

* * * * *

(b) DELETE
   REPLACE WITH: Engine description and specification. A copy of the information specified in this paragraph must accompany each off-road aftermarket parts manufacturer’s emissions test data sent to the Administrator.

* * * * *

89.413-96 Raw sampling procedures. June 17, 1994.
89.419-96 Dilute gaseous exhaust sampling and analytical system description. June 17, 1994.
89.421-96 Exhaust gas analytical system; CVS bag sample. June 17, 1994.

Appendix A to Subpart E -Figures
   Figure 1 - Sample Probe and Typical Hole Spacing
   Figure 2 - Gaseous and Particulate Emissions Sampling System (PDP-CVS)
   Figure 3 - Gaseous and Particulate Emissions Sampling System (CVF-CVS)
   Figure 4 - Exhaust Gas Analytical System
   Figure 5 - PDP-CVS Calibration Configuration
   Figure 6 - CFV-CVS Calibration Configuration
   Figure 7 - Sonic Choking

Appendix B to Subpart E -Tables
   Table 1 - 8 Mode Test Cycle (MY96 and Later)