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detection requirement of paragraph (b)(4) of this section apply to manufacturers selecting this paragraph (j) for demonstrating compliance. In addition, demonstration of compliance with 13 CCR 1968.2(e)(15.2.1)(C), to the extent it applies to the verification of proper alignment between the camshaft and crankshaft, applies only to vehicles equipped with variable valve timing.

(k) Phase-in for heavy-duty engines. Manufacturers of heavy-duty engines intended for use in a heavy-duty vehicle weighing 14,000 pounds GVWR must comply with the OBD requirements in this section according to the following

phase-in schedule, based on the percentage of projected engine sales within each category. The 2007 requirements in the following phase-in schedule apply to all heavy-duty engines intended for use in a heavy-duty vehicle weighing 14,000 pounds GVWR or less. For the purposes of calculating compliance with the phase-in provisions of this paragraph (k), heavy-duty engines may be combined with heavy-duty vehicles subject to the phase-in requirements of paragraph §86.1806–05(1). The OBD Compliance phase-in table follows:

OBD COMPLIANCE PHASE-IN FOR HEAVY-DUTY ENGINES INTENDED FOR USE IN A HEAVY-DUTY VEHICLE WEIGHING 14,000 POUNDS GVWR OR LESS

Model year	Otto-cycle phase-in based on projected sales	Diesel phase-in based on pro- jected sales
2007 MY	80% compliance; alternative fuel waivers available.	100% compliance.
2008+ MY 100% compliance		100% compliance.

[74 FR 8356, Feb. 24, 2009]

§86.007-21 Application for certification.

Section 86.007–21 includes text that specifies requirements that differ from \$86.004–21, 86.094–21 or 86.096–21. Where a paragraph in \$86.004–21, 86.094–21 or 86.096–21 is identical and applicable to \$86.007–21, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see \$86.004–21.", "[Reserved]. For guidance see \$86.094–21.", or "[Reserved]. For guidance see \$86.096–21.".

- (a)-(b)(3) [Reserved]. For guidance see § 86.094-21.
- (b)(4)(i) [Reserved]. For guidance see §86.004–21.
- (b)(4)(ii)-(b)(5)(iv) [Reserved]. For guidance see §86.094–21.
- (b)(5)(v)-(b)(6) [Reserved]. For guidance see §86.004–21.
- (b)(7)-(b)(8) [Reserved]. For guidance see \$86.094-21.
- see §86.094-21. (b)(9)-(b)(10) [Reserved]. For guidance see §86.004-21.
- (c)-(j) [Reserved]. For guidance see \$86.094-21.
- (k)-(l) [Reserved]. For guidance see \$86.096-21.
- (m)-(n) [Reserved]. For guidance see 86.004-21.

- (o) For diesel heavy-duty engines, the manufacturer must provide the following additional information pertaining to the supplemental emission test conducted under §86.1360–2007:
- (1) Weighted brake-specific emissions data (i.e., in units of g/bhp-hr), calculated according to 40 CFR 1065.650 for all pollutants for which a brake-specific emission standard is established in this subpart;
- (2) For engines subject to the MAEL (see §86.007-11(a)(3)(ii)), brake specific gaseous emission data for each of the 12 non-idle test points (identified under §86.1360-2007(b)(1)) and the 3 EPA-selected test points (identified under §86.1360-2007(b)(2)):
- (3) For engines subject to the MAEL (see §86.007–11(a)(3)(ii)), concentrations and mass flow rates of all regulated gaseous emissions plus carbon dioxide;
- (4) Values of all emission-related engine control variables at each test point:
- (5) A statement that the test results correspond to the test engine selection criteria in 40 CFR 1065.401. The manufacturer also must maintain records at the manufacturer's facility which contain all test data, engineering analyses, and other information which provides the basis for this statement,

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where such information exists. The manufacturer must provide such information to the Administrator upon request:

(6) For engines subject to the MAEL (see $\S 86.007-11(a)(3)(ii)$), a statement that the engines will comply with the weighted average emissions standard and interpolated values comply with the Maximum Allowable Emission Limits specified in §86.007-11(a)(3) for the useful life of the engine where applicable. The manufacturer also must maintain records at the manufacturer's facility which contain a detailed description of all test data, engineering analyses, and other information which provides the basis for this statement, where such information exists. The manufacturer must provide such information to the Administrator upon request.

(7) [Reserved]

(p)(1) The manufacturer must provide a statement in the application for certification that the diesel heavy-duty engine for which certification is being requested will comply with the applicable Not-To-Exceed Limits specified in \$86.007-11(a)(4) when operated under all conditions which may reasonably be expected to be encountered in normal vehicle operation and use. The manufacturer also must maintain records at the manufacturers facility which contain all test data, engineering analyses, and other information which provides the basis for this statement, where such information exists. The manufacturer must provide such information to the Administrator upon request.

(2) For engines equipped with exhaust gas recirculation, the manufacturer must provide a detailed description of the control system the engine will use to comply with the requirements of §§ 86.007–11(a)(4)(iii) and 86.1370–2007(f) for NTE cold temperature operating exclusion, including but not limited to the method the manufacturer will use to access this exclusion during normal vehicle operation.

(3) For each engine model and/or horsepower rating within an engine family for which a manufacturer is applying for an NTE deficiency(ies) under the provisions of §86.007–11(a)(4)(iv), the manufacturer's application for an NTE

deficiency(ies) must include a complete description of the deficiency, including but not limited to: the specific description of the deficiency; what pollutant the deficiency is being applied for, all engineering efforts the manufacturer has made to overcome the deficiency, what specific operating conditions the deficiency is being requested for (i.e., temperature ranges, humidity ranges, altitude ranges, etc.), a full description of the auxiliary emission control device(s) which will be used to maintain emissions to the lowest practical level; and what the lowest practical emission level will be.

(q) The manufacturer must name an agent for service of process located in the United States. Service on this agent constitutes service on you or any of your officers or employees for any action by EPA or otherwise by the United States related to the requirements of this part.

[65 FR 59954, Oct. 6, 2000, as amended at 70 FR 40433, July 13, 2005; 71 FR 51487, Aug. 30, 2006]

§86.007-23 Required data.

Section 86.007–23 includes text that specifies requirements that differ from \$86.095–23, \$86.098–23, or \$86.001–23. Where a paragraph in \$86.095–23, \$86.098–23, or \$86.001–23 is identical and applicable to \$86.007–23, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see \$86.095–23.", "[Reserved]. For guidance see \$86.098–23.", or "[Reserved]. For guidance see \$86.098–23.", or "[Reserved].

(a)-(b)(1) [Reserved]. For guidance see \$86.098-23.

(b)(2) [Reserved]. For guidance see \$86.001-23.

(b)(3) and (b)(4) [Reserved]. For guidance see \$86.098-23.

(c) Emission data—(1) Certification vehicles. The manufacturer shall submit emission data (including, methane, methanol, formaldehyde, and hydrocarbon equivalent, as applicable) on such vehicles tested in accordance with applicable test procedures and in such numbers as specified. These data shall include zero-mile data, if generated, and emission data generated for certification as required under §86.000–26(a)(3). In lieu of providing emission