

advance by the Administrator, and the basis for equivalent results with the specified test procedures is fully described in the manufacturer's application.

(2) The Administrator may reject data generated under alternate test procedures which do not correlate with data generated under the specified procedures.

(3) A manufacturer may elect to use the test procedures in 40 CFR part 1065 as an alternate test procedure without advance approval by the Administrator. The manufacturer must identify in its application for certification that the engines were tested using the procedures in 40 CFR part 1065. For any EPA testing with Tier 2 or Tier 3 engines, EPA will use the manufacturer's selected procedures for mapping engines, generating duty cycles, and applying cycle-validation criteria. For any other parameters, EPA may conduct testing using either of the specified procedures.

(4) Where we specify mandatory compliance with the procedures of 40 CFR part 1065, such as in § 89.419, manufacturers may elect to use the procedures specified in 40 CFR part 86, subpart N, as an alternate test procedure without advance approval by the Administrator.

[59 FR 31335, June 17, 1994. Redesignated and amended at 63 FR 56995, 57003, Oct. 23, 1998; 69 FR 39212, June 29, 2004; 70 FR 40445, July 13, 2005]

§ 89.115 Application for certificate.

(a) For each engine family that complies with all applicable standards and requirements, the engine manufacturer must submit to the Administrator a completed application for a certificate of conformity.

(b) The application must be approved and signed by the authorized representative of the manufacturer.

(c) The application will be updated and corrected by amendment as provided for in § 89.123 to accurately reflect the manufacturer's production.

(d) *Required content.* Each application must include the following information:

(1) A description of the basic engine design including, but not limited to, the engine family specifications, the

provisions of which are contained in § 89.116;

(2) An explanation of how the emission control system operates, including a detailed description of all emission control system components, each auxiliary emission control device (AECD), and all fuel system components to be installed on any production or test engine(s);

(3) Proposed test fleet selection and the rationale for the test fleet selection;

(4) Special or alternate test procedures, if applicable;

(5) The period of operation necessary to accumulate service hours on test engines and stabilize emission levels;

(6) A description of all adjustable operating parameters (including, but not limited to, injection timing and fuel rate), including the following:

(i) The nominal or recommended setting and the associated production tolerances;

(ii) The intended physically adjustable range;

(iii) The limits or stops used to establish adjustable ranges;

(iv) Production tolerances of the limits or stops used to establish each physically adjustable range; and

(v) Information relating to why the physical limits or stops used to establish the physically adjustable range of each parameter, or any other means used to inhibit adjustment, are effective in preventing adjustment of parameters to settings outside the manufacturer's intended physically adjustable ranges on in-use engines;

(7) For families participating in the averaging, banking, and trading program, the information specified in subpart C of this part;

(8) A description of the test equipment and fuel proposed to be used;

(9) All test data obtained by the manufacturer on each test engine;

(10) An unconditional statement certifying that all engines in the engine family comply with all requirements of this part and the Clean Air Act.

(e) At the Administrator's request, the manufacturer must supply such additional information as may be required to evaluate the application including, but not limited to, projected nonroad engine production.

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(f)(1) The Administrator may modify the information submission requirements of paragraph (d) of this section, provided that all of the information specified therein is maintained by the engine manufacturer as required by § 89.124, and amended, updated, or corrected as necessary.

(2) For the purposes of this paragraph, § 89.124(a)(1) includes all information specified in paragraph (d) of this section whether or not such information is actually submitted to the Administrator for any particular model year.

(3) The Administrator may review an engine manufacturer's records at any time. At the Administrator's discretion, this review may take place either at the manufacturer's facility or at another facility designated by the Administrator.

[59 FR 31335, June 17, 1994, as amended at 61 FR 20741, May 8, 1996. Redesignated at 63 FR 56995, Oct. 23, 1998]

§ 89.116 Engine families.

(a) A manufacturer's product line is divided into engine families that are comprised of engines expected to have similar emission characteristics throughout their useful life periods.

(b) The following characteristics distinguish engine families:

- (1) Fuel;
- (2) Cooling medium;
- (3) Method of air aspiration;
- (4) Method of exhaust aftertreatment (for example, catalytic converter or particulate trap);
- (5) Combustion chamber design;
- (6) Bore;
- (7) Stroke;
- (8) Number of cylinders, (engines with aftertreatment devices only); and
- (9) Cylinder arrangement (engines with aftertreatment devices only).

(c) Upon a showing by the manufacturer that the useful life period emission characteristics are expected to be similar, engines differing in one or more of the characteristics in paragraph (b) of this section may be grouped in the same engine family.

(d) Upon a showing by the manufacturer that the expected useful life period emission characteristics will be different, engines identical in all the characteristics of paragraph (b) of this

section may be divided into separate engine families.

(e)(1) This paragraph (e) applies only to the placement of Tier 1 engines with power ratings under 37 kW into engine families. The provisions of paragraphs (a) through (d) of this section also apply to these engines. The power categories referred to in this paragraph (e) are those for which separate standards or implementation dates are described in § 89.112.

(2) A manufacturer may place engines with power ratings in one power category into an engine family comprised of engines with power ratings in another power category, and consider all engines in the engine family as being in the latter power category for the purpose of determining compliance with the standards and other requirements of this part, subject to approval in advance by the Administrator and the following restrictions:

(i) The engines that have power ratings outside the engine family's power category must constitute less than half of the engine family's sales in each model year for which the engine family grouping is made; and

(ii) The engines that have power ratings outside the engine family's power category must have power ratings that are within ten percent of either of the two power levels that define the engine family's power category.

(3) The restrictions described in paragraphs (e)(2)(i) and (e)(2)(ii) of this section do not apply if the emissions standards and other requirements of this part are at least as stringent for the engine family's power category as those of the other power categories containing engines in the engine family.

[59 FR 31335, June 17, 1994. Redesignated and amended at 63 FR 56995, 57003, Oct. 23, 1998]

§ 89.117 Test fleet selection.

(a) The manufacturer must select for testing, from each engine family, the engine with the most fuel injected per stroke of an injector, primarily at the speed of maximum torque and secondarily at rated speed.

(b) Each engine in the test fleet must be constructed to be representative of production engines.