

(f)(1) The Presiding Officer shall make an initial decision which shall include written findings and conclusions and the reasons or basis therefor on all the material issues of fact, law, or discretion presented on the record. The findings, conclusions, and written decision shall be provided to the parties and made a part of the record. The initial decision shall become the decision of the Administrator without further proceedings unless there is an appeal to the Administrator or motion for review by the Administrator within 30 days of the date the initial decision was filed.

(2) On appeal from or review of the initial decision, the Administrator shall have all the powers which he/she would have in making the initial decision including the discretion to require or allow briefs, oral argument, the taking of additional evidence or the remanding to the Presiding Officer for additional proceedings. The decision by the Administrator shall include written findings and conclusions and the reasons or basis therefor on all the material issues of fact, law, or discretion presented on the appeal or considered in the review.

§ 94.217 Emission data engine selection.

(a) The manufacturer must select for testing, from each engine family, the engine configuration which is expected to be worst-case for exhaust emission compliance on in-use engines, considering all exhaust emission constituents and the range of installation options available to vessel builders. The engines selected for testing are collectively described as the test fleet.

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

(c) After review of the manufacturer's test fleet, the Administrator may select from the available fleet one additional test engine from each engine family.

(d) Each engine selected shall be tested according to the provisions of Subpart B of this part.

(e) In lieu of testing an emission data engine selected under paragraph (a) of this section and submitting the resulting data, a manufacturer may, with

Administrator approval, use emission data on a similar engine for which certification has previously been obtained or for which all applicable data required under this subpart have previously been submitted. These data must be submitted in the application for certification.

(f) A single cylinder test engine may be used for certification of Tier 1 Category 3 engine families. If you use test data from a single cylinder test engine for certification, explain in your application how you have determined that such data show that the multiple cylinder production engines will comply with the applicable emission standards.

[64 FR 73331, Dec. 29, 1999, as amended at 68 FR 9786, Feb. 28, 2003]

§ 94.218 Deterioration factor determination.

Manufacturers shall determine exhaust emission deterioration factors using good engineering judgement according to the provisions of this section. Every deterioration factor must be, in the Administrator's judgment, consistent with emissions increases observed in-use based on emission testing of similar engines. Deterioration factors that predict emission increases over the useful life of an engine that are significantly less than the emission increases over the useful life observed from in-use testing of similar engines shall not be used.

(a) A separate exhaust emission deterioration factor shall be established for each engine family and for each emission constituent applicable to that family.

(b) *Calculation procedures*—(1) *For engines not utilizing aftertreatment technology (e.g., catalyst).* For each applicable emission constituent, an additive deterioration factor shall be used; that is, a deterioration factor that when added to the low mileage emission rate equals the emission rate at the end of useful life. However, if the deterioration factor supplied by the manufacturer is less than zero, it shall be zero for the purposes of this section.

(2) *For engines utilizing aftertreatment technology (e.g., catalyst).* For each applicable emission constituent, a multiplicative deterioration factor shall be used; that is deterioration factors that

§ 94.219

40 CFR Ch. I (7-1-10 Edition)

when multiplied by the low mileage emission rate equal the emission rate at the end of useful life. However, if the deterioration factor supplied by the manufacturer is less than one, it shall be one for the purposes of this section.

(c) *Rounding.* (1) In the case of a multiplicative exhaust emission deterioration factor, round the factor to three places to the right of the decimal point.

(2) In the case of an additive exhaust emission deterioration factor, round the factor shall to at least two places to the right of the decimal point.

(d)(1) Except as allowed by paragraph (d)(2) of this section, the manufacturer shall determine the deterioration factors for Category 1 and Category 2 engines based on service accumulation and related testing, according to the manufacturer's procedures, and the provisions of §§ 94.219 and 94.220. The manufacturer shall determine the form and extent of this service accumulation, consistent with good engineering practice, and shall describe this process in the application for certification.

(2) *Alternatives to service accumulation and testing for the determination of a deterioration factor.* A written explanation of the appropriateness of using an alternative must be included in the application for certification.

(i) *Carryover and carryacross of durability emission data.* In lieu of testing an emission data or durability data engine selected under § 94.217 or § 94.219, and submitting the resulting data, a manufacturer may, with Administrator approval, use exhaust emission deterioration data on a similar engine for which certification to the same standard has previously been obtained or for which all applicable data required under this subpart have previously been submitted. These data must be submitted in the application for certification.

(ii) *Use of non-marine deterioration data.* In the case where a manufacturer produces a certified motor vehicle engine, locomotive engine, or other nonroad engine that is similar to the marine engine to be certified, deterioration data from the non-marine engine may be applied to the marine engine. This application of deterioration data from such an engine to a marine engine is subject to Administrator ap-

proval, and the determination of whether the engines are similar shall be based on good engineering judgment.

(iii) *Engineering analysis for established technologies.* In the case where an engine family uses technology which is well established, an analysis based on good engineering practices may be used in lieu of testing to determine a deterioration factor for that engine family. Engines using exhaust gas recirculation or aftertreatment are excluded from this provision. The manufacturer shall provide a written statement to the Administrator that all data, analyses, test procedures, evaluations, and other documents, on which the deterioration factor is based, are available to the Administrator upon request.

(iv) *Assigned deterioration factors.* Small-volume manufacturers may use deterioration factors established by EPA.

[64 FR 73331, Dec. 29, 1999, as amended at 67 FR 68346, Nov. 8, 2002; 68 FR 9786, Feb. 28, 2003]

§ 94.219 Durability data engine selection.

(a) For Category 1 and Category 2 engines, the manufacturer shall select for durability testing, from each engine family, the engine configuration which is expected to generate the highest level of exhaust emission deterioration on engines in use, considering all exhaust emission constituents and the range of installation options available to vessel builders. The manufacturer shall use good engineering judgment in making this selection.

(b) Carryover data satisfying the provisions of § 94.220 may also be used in lieu of testing the configuration selected in paragraph (a) of this section.

(c) Durability data engines shall be built from subsystems and components that are representative of actual production engines.

[64 FR 73331, Dec. 29, 1999, as amended at 68 FR 9786, Feb. 28, 2003]

§ 94.220 Service accumulation.

(a) Each test emission data engine in the test fleet may be operated with all emission control systems operating properly for a period, up to 125 hours of