certificate of conformity shall include the following information:

- (1) A full description of the change to be made in production, or of the engines to be added;
- (2) Engineering evaluations or data showing that the engines as modified or added will comply with all applicable emission standards; and
- (3) A determination whether the manufacturer's original test fleet selection is still appropriate, and if the original test fleet selection is determined not to be appropriate, test fleet selection(s) representing the engines changed or added which would have been required if the engines had been included in the original application for certification.
- (c) The Administrator may require the manufacturer to perform tests on the engine representing the engine to be added or changed.
- (d)(1) Based on the description of the amendment and data derived from such testing as the Administrator may require or conduct, the Administrator will determine whether the change or addition would still be covered by the certificate of conformity then in effect.
- (2) If the Administrator determines that the change or new engine(s) meets the requirements of this part and the Act, the appropriate certificate of conformity shall be amended.
- (3) If the Administrator determines that the changed engine(s) does not meet the requirements of this part and the Act, the certificate of conformity will not be amended. The Administrator shall provide a written explanation to the manufacturer of the decision not to amend the certificate. The manufacturer may request a hearing on a denial
- (e) A manufacturer may make changes in or additions to production engines concurrently with the notification to the Administrator, as required by paragraph (a) of this section, if the manufacturer complies with the following requirements:
- (1) In addition to the information required in paragraph (b) of this section, the manufacturer shall supply supporting documentation, test data, and engineering evaluations as appropriate to demonstrate that all affected en-

gines will still meet applicable emission standards.

- (2) If, after a review, the Administrator determines additional testing is required, the manufacturer shall provide the required test data within 30 days or cease production of the affected engines.
- (3) If the Administrator determines that the affected engines do not meet applicable requirements, the Administrator will notify the manufacturer to cease production of the affected engines and to recall and correct at no expense to the owner all affected engines previously produced.
- (4) Election to produce engines under this paragraph (e) will be deemed to be a consent to recall all engines that the Administrator determines do not meet applicable standards and to cause such nonconformity to be remedied at no expense to the owner.

§ 94.211 Emission-related maintenance instructions for purchasers.

- (a) The manufacturer shall furnish or cause to be furnished to the ultimate purchaser of each new engine, subject to the standards prescribed in §94.8, written instructions for the proper maintenance and use of the engine as are reasonable and necessary to assure the proper functioning of the emissions control system, consistent with the applicable provisions of paragraph (b) of this section
- (1) The maintenance and use instructions required by this section shall be clear and easily understandable.
- (2) The maintenance instructions required by this section shall contain a general description of the documentation that would demonstrate for warranty purposes that the ultimate purchaser or any subsequent owner had complied with the instructions.
- (3) For Category 3 engines, the manufacturer must provide in boldface type on the first page of the written maintenance instructions notice that §94.1004 requires that the emissions-related maintenance be performed as specified in the instructions (or equivalent).
- (b)(1) The manufacturer must provide in boldface type on the first page of the written maintenance instructions notice that maintenance, replacement, or repair of the emission control devices

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and systems may be performed by any engine repair establishment or individual.

- (2) The instructions under paragraph (b)(1) of this section will not include any condition on the ultimate purchaser's or owner's using, in connection with such engine, any component or service (other than a component or service provided without charge under the terms of the purchase agreement) which is identified by brand, trade, or corporate name. Such instructions also will not directly or indirectly distinguish between service performed by any other service establishments with which such manufacturer has a commercial relationship and service performed by independent vessel or engine repair facilities with which such manufacturer has no commercial relationship.
- (3) The prohibition of paragraph (b)(2) of this section may be waived by the Administrator if:
- (i) The manufacturer demonstrates to the Administrator's satisfaction that the engine will function properly only if the component or service so identified is used in connection with such engine; and
- (ii) The Administrator finds that such a waiver is in the public interest.
- (c) The manufacturer shall provide to the Administrator, no later than the time of the submission required by §94.203, a copy of the emission-related maintenance instructions that the manufacturer proposes to supply to the ultimate purchaser or owner in accordance with this section. The Administrator will review such instructions to determine whether they are reasonable and necessary to ensure the proper functioning of the engine's emission control systems. If the Administrator determines that such instructions are not reasonable and necessary to ensure the proper functioning of the emission control systems, he/she may disapprove the application for certification or may require that the manufacturer modify the instructions.
- (d) Any revision to the maintenance instructions which will affect emissions shall be supplied to the Administrator at least 30 days before being supplied to the ultimate purchaser or owner unless the Administrator con-

sents to a lesser period of time, and is subject to the provisions of §94.210.

- (e) This paragraph (e) specifies emission-related scheduled maintenance for purposes of obtaining durability data for marine engines. The maintenance intervals specified in this paragraph are minimum intervals.
- (1) All emission-related scheduled maintenance for purposes of obtaining durability data must occur at the same or longer hours of use intervals as those specified in the manufacturer's maintenance instructions furnished to the ultimate purchaser of the engine under paragraph (a) of this section. This maintenance schedule may be updated as necessary throughout the testing of the engine, provided that no maintenance operation is deleted from the maintenance schedule after the operation has been performed on the test equipment or engine.
- (2) Any emission-related maintenance which is performed on equipment, engines, subsystems, or components must be technologically necessary to ensure in-use compliance with the emission standards. The manufacturer must submit data which demonstrate to the Administrator that all of the emission-related scheduled maintenance which is to be performed is technologically necessary. Scheduled maintenance must be approved by the Administrator prior to being performed or being included in the emission-related maintenance instructions provided to the purchasers under paragraph (a) of this section.
- (i) The Administrator may require longer maintenance intervals than those listed in paragraphs (e)(3) and (e)(4) of this section where the listed intervals are not technologically necessary.
- (ii) The Administrator may allow manufacturers to specify shorter maintenance intervals than those listed in paragraphs (e)(3) and (e)(4) of this section where technologically necessary for Category 2 engines.
- (iii) The maintenance intervals listed in paragraphs (e)(3) and (e)(4) of this section do not apply for Category 3.
- (3) The adjustment, cleaning, repair, or replacement of items listed in paragraphs (e)(3)(i) through (e)(3)(iii) of this

section shall occur at 1,500 hours of use and at 1,500-hour intervals thereafter.

- (i) Exhaust gas recirculation systemrelated filters and coolers.
- (ii) Positive crankcase ventilation valve.
- (iii) Fuel injector tips (cleaning only).
- (4) The adjustment, cleaning and repair of items in paragraphs (e)(4)(i) through (e)(4)(vii) of this section shall occur at 3,000 hours of use and at 3,000 hour intervals thereafter for engines with per-cylinder displacement less than 1.2 liters, or at 4,500-hour intervals thereafter for engines with per-cylinder displacement greater than or equal to 1.2 liters.
 - (i) Fuel injectors.
 - (ii) Turbocharger.
- (iii) Electronic engine control unit and its associated sensors and actuators
- (iv) Particulate trap or trap-oxidizer system (including related components).
- (v) Exhaust gas recirculation system (including all related control valves and tubing), except as otherwise provided in paragraph (e)(3)(i) of this section.
 - (vi) Catalytic convertor.
- (vii) Any other add-on emission-related component (*i.e.*, a component whose sole or primary purpose is to reduce emissions or whose failure will significantly degrade emission control and whose function is not integral to the design and performance of the engine).
- (f) Scheduled maintenance not related to emissions which is reasonable and technologically necessary (e.g., oil change, oil filter change, fuel filter change, air filter change, cooling system maintenance, adjustment of idle speed, governor, engine bolt torque, valve lash, injector lash, timing, lubrication of the exhaust manifold heat control valve, etc.) may be performed on durability engines at the least frequent intervals recommended by the manufacturer to the ultimate purchaser, (e.g., not the intervals recommended for severe service).
- (g) Adjustment of engine idle speed on emission data engines may be performed once before the low-hour emission test point. Any other engine, emission control system, or fuel sys-

- tem adjustment, repair, removal, disassembly, cleaning, or replacement on emission data vehicles shall be performed only with advance approval of the Administrator.
- (h) For Category 1 and Category 2 engines, equipment, instruments, or tools may not be used to identify malfunctioning, maladjusted, or defective engine components unless the same or equivalent equipment, instruments, or tools will be available to dealerships and other service outlets and are:
- (1) Used in conjunction with scheduled maintenance on such components; or
- (2) Used subsequent to the identification of an engine malfunction, as provided in paragraph (e) of this section for emission data engines; or
- (3) Specifically authorized by the Administrator.
- (i) All test data, maintenance reports, and required engineering reports shall be compiled and provided to the Administrator in accordance with \$94.215.
- (j)(1) The components listed in paragraphs (j)(1)(i) through (j)(1)(vi) of this section are defined as critical emission-related components.
 - (i) Catalytic convertor.
- (ii) Electronic engine control unit and its associated sensors and actuators.
- (iii) Exhaust gas recirculation system (including all related filters, coolers, control valves, and tubing).
- (iv) Positive crankcase ventilation valve.
- (v) Particulate trap or trap-oxidizer system.
- (vi) Any other add-on emission-related component (i.e., a component whose sole or primary purpose is to reduce emissions or whose failure will significantly degrade emission control and whose function is not integral to the design and performance of the engine).
- (2) All critical emission-related scheduled maintenance must have a reasonable likelihood of being performed in use. For Category 1 and Category 2 engines, the manufacturer must show the reasonable likelihood of such maintenance being performed inuse. Critical emission-related scheduled maintenance items which satisfy

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one of the conditions defined in paragraphs (j)(2)(i) through (j)(2)(vi) of this section will be accepted as having a reasonable likelihood of being performed in use.

- (i) Data are presented which establish for the Administrator a connection between emissions and engine performance such that as emissions increase due to lack of maintenance, vehicle performance will simultaneously deteriorate to a point unacceptable for typical operation.
- (ii) Survey data are submitted which adequately demonstrate to the Administrator with an 80 percent confidence level that 80 percent of such engines already have this critical maintenance item performed in-use at the recommended interval(s).
- (iii) A clearly displayed visible signal system approved by the Administrator is installed to alert the equipment operator that maintenance is due. A signal bearing the message "maintenance needed" or "check engine," or a similar message approved by the Administrator, shall be actuated at the appropriate usage point or by component failure. This signal must be continuous while the engine is in operation and not be easily eliminated without performance of the required maintenance. Resetting the signal shall be a required step in the maintenance operation. The method for resetting the signal system shall be approved by the Administrator. The system must not be designed to deactivate upon the end of the useful life of the engine or there-
- (iv) A manufacturer may desire to demonstrate through a survey that a critical maintenance item is likely to be performed without a visible signal on a maintenance item for which there is no prior in-use experience without the signal. To that end, the manufacturer may in a given model year market up to 200 randomly selected engines per critical emission-related maintenance item without such visible signals, and monitor the performance of the critical maintenance item by the owners to show compliance with paragraph (j)(2)(ii) of this section. This option is restricted to two consecutive model years and may not be repeated until any previous survey has been

completed. If the critical maintenance involves more than one engine family, the sample will be sales weighted to ensure that it is representative of all the families in question.

- (v) The manufacturer provides the maintenance free of charge, and clearly informs the customer that the maintenance is free in the instructions provided under paragraph (a) of this section.
- (vi) The manufacturer uses any other method which the Administrator approves as establishing a reasonable likelihood that the critical maintenance will be performed in-use.
- (3) Visible signal systems used under paragraph (j)(2)(iii) of this section are considered an element of design of the emission control system. Therefore, disabling, resetting, or otherwise rendering such signals inoperative without also performing the indicated maintenance procedure is a prohibited act.
- (k) For Category 3 engines, the manufacturer must provide the ultimate purchaser with a Technical File meeting the specifications of section 2.4 of the Annex VI Technical Code (incorporated by reference in §94.5). The maintenance instructions required by this part to be provided by manufacturer may be included in this Technical File. The manufacturer must provide a copy of this Technical File to EPA upon request.
- (1) Owners and operators of Category 3 engines shall transfer the maintenance instructions to subsequent owners and operators of the engine upon sale or transfer of the engine or vessel.

[64 FR 73331, Dec. 29, 1999, as amended at 68 FR 9786, Feb. 28, 2003; 70 FR 40458, July 13, 2005]

§94.212 Labeling.

- (a) General requirements. (1) Each new engine covered by a certificate of conformity under §94.208 shall be labeled by the manufacturer in the manner described in this paragraph (b) of this section at the time of manufacture.
- (2) Each new marine engine modified from a base engine by post-manufacture marinizers in accordance with the provisions of §94.209 (b) and covered by a certificate of conformity under §94.208 shall be labeled by the PMM in