## **Environmental Protection Agency**

$$Cap_f = Cap_i \left( \frac{T. Vol.}{Max. Vol.} \right)$$

Where:

 $\mathsf{Cap}_{\mathsf{f}} = \mathsf{final}$  amount of fuel tank vapor storage material, grams.

Cap<sub>i</sub> = initial amount of fuel tank vapor storage material, grams.

T. Vol. = total fuel tank volume of completed vehicle, gallons.

Max. Vol. = maximum fuel tank volume as specified on the label required in paragraph (g)(1) of this section, gallons.

- (ii) Use, if applicable, hosing for fuel vapor routing which is at least as impermeable to hydrocarbon vapors as that used by the primary manufacturer
- (iii) Use vapor storage material with the same adsorptive characteristics as that used by the primary manufacturer.
- (iv) Connect, if applicable, any new hydrocarbon storage device to the existing hydrocarbon storage device in series such that the original hydrocarbon storage device is situated between the fuel tank and the new hydrocarbon storage device. The original hydrocarbon storage device shall be sealed such that vapors cannot reach the atmosphere. The elevation of the original hydrocarbon storage device shall be equal to or lower than the new hydrocarbon storage device.
- (v) Submit a written statement to the Administrator that paragraphs (g)(2)(i) through (g)(2)(iv) of this section have been complied with.
- (3) If applicable, the Administrator will send a return letter verifying the receipt of the written statement required in paragraph (g)(2)(v) of this section.
- (h)(1) Light-duty trucks and heavy-duty engines for which nonconformance penalties are to be paid in accordance with §86.1113-87(b) shall have the following information printed on the label required in paragraph (a) of this section or on a separate permanent legible label in the English language and located in proximity to the label required in paragraph (a) of this section. The manufacturer shall begin labeling production engines or vehicles within 10 days after the completion of the PCA.

(i) The statement: "The manufacturer of this engine/vehicle will pay a penalty to be allowed to introduce it into commerce at an emission level higher than the applicable emission standard. The compliance level (or new emission standard) for this engine/vehicle is

\_\_\_\_." (The manufacturer shall insert the applicable pollutant and compliance level calculated in accordance with §86.1112–87(a).)

- (ii) [Reserved]
- (2) If a manufacturer introduces an engine or vehicle into commerce prior to the compliance level determination of §86.1112-87(a), it shall provide the engine or vehicle owner with a label as described above to be affixed in a location in proximity to the label required in paragraph (a) of this section within 30 days of the completion of the PCA.

(Secs. 202, 203, 206, 207, 208, 301a, Clean Air Act, as amended; 42 U.S.C. 7521, 7522, 7525, 7541, 7542, 7601a)

[50 FR 10690, Mar. 15, 1985, as amended at 54 FR 14498, Apr. 11, 1989; 55 FR 30626, July 26, 1990; 55 FR 46628, Nov. 5, 1990]

## §86.092-1 General applicability.

- (a) The provisions of this subpart apply to 1992 and later model year new Otto-cycle and diesel light-duty vehicles, 1992 and later model year new Otto-cycle and diesel light-duty trucks, and 1992 and later model year new Otto-cycle and diesel heavy-duty engines. The provisions of this subpart are optional for vehicles fueled with either natural gas or liquefied petroleum gas for the 1994 through 1996 model years. The provisions of this subpart also apply to aftermarket conversions of all model year Otto-cycle and diesel light-duty vehicles, Otto-cycle and diesel light-duty trucks, and Otto-cycle and diesel heavy-duty engines certified under the provisions of 40 CFR part 85, subpart F.
- (b) Optional applicability. A manufacturer may request to certify any heavy-duty vehicle of 10,000 pounds Gross Vehicle Weight Rating or less in accordance with the light-duty truck provisions. Heavy-duty engine or vehicle provisions do not apply to such a vehicle.
  - (c) [Reserved]

## §86.092-2

(d) Alternative Durability Program. For 1992 and later model year light-duty vehicles and light-duty trucks, a manufacturer may elect to participate in the Alternative Durability Program. This optional program provides an alternative method of determining exhaust emission control system durability.

The general procedures and a description of the programs are contained in §86.085-13 and specific provisions on test vehicles and compliance procedures are contained in §86.092-24 and §86.091-28 respectively.

- (e) Small volume manufacturers. Special certification procedures are available for any manufacturer whose projected combined U.S. sales of lightvehicles, light-duty trucks, dutv heavy-duty vehicles, and heavy-duty engines in its product line (including all vehicles and engines imported under the provisions of 40 CFR 85.1505 and 40 CFR 85.1509) are fewer than 10,000 units for the model year in which the manufacturer seeks certification. To certify its product line under these optional procedures, the small-volume manufacturer must first obtain the Administrator's approval. The manufacturer must meet the eligibility criteria specified in §86.092-14(b) before the Administrator's approval will be granted. The small-volume manufacturer's certification procedures are described in § 86.092-14.
- (f) Optional procedures for determining exhaust opacity. (1) The provisions of subpart I apply to tests which are performed by the Administrator, and optionally, by the manufacturer.
- (2) Measurement procedures, other than that described in subpart I, may be used by the manufacturer provided the manufacturer satisfies the requirements of §86.091–23(f).
- (3) When a manufacturer chooses to use an alternative measurement procedure it has the responsibility to determine whether the results obtained by the procedure will correlate with the results which would be obtained from the measurement procedure in subpart I. Consequently, the Administrator will not routinely approve or disapprove any alternative opacity measurement procedure or any associated correlation data which the manufacturer elects to

use to satisfy the data requirements for subpart I.

(4) If a confirmatory test(s) is performed and the results indicate there is a systematic problem suggesting that the data generated under an optional alternative measurement procedure do not adequately correlate with subpart I data, EPA may require that all certificates of conformity not already issued be based on data from subpart I procedures.

[55 FR 7187, Feb. 28, 1990, as amended at 59 FR 48494, Sept. 21, 1994]

## § 86.092-2 Definitions.

The definitions of \$86.091-2 remain effective. The definitions listed in this section apply beginning with the 1992 model year.

(a) Proven emission control systems are emission control components or systems (and fuel metering systems) that have completed full durability testing evaluation over a vehicle's useful life in some other certified engine family, or have completed bench or road testing demonstrated to be equal or more severe than certification mileage accumulation requirements. Alternatively, proven components or systems are those that are determined by EPA to be of comparable functional quality and manufactured using comparable materials and production techniques as components or systems which have been durability demonstrated in some other certified engine family. In addition, the components or systems must be employed in an operating environment (e.g., temperature, exhaust flow. etc.,) similar to that experienced by the original or comparable components or systems in the original certified engine family.

- (b) *Unproven emission control systems* are emission control components or systems (and fuel metering systems) that do not qualify as proven emission control systems.
- (c) Similar systems are engine, fuel metering and emission control system combinations which use the same fuel (e.g., gasoline, diesel, etc.), combustion cycle (i.e., two or four stroke), general type of fuel system (i.e., carburetor or fuel injection), catalyst system (e.g., none, oxidization, three-way plus oxidization, three-way only, etc.), fuel