

## Environmental Protection Agency

## § 86.884-14

starting and ending points specified in paragraph (a)(3) of this section.

(2) For the lugging mode specified in § 86.884-7(a)(3)(ii), note the maximum deflection of the rpm trace from a straight line drawn from the starting and ending points specified in paragraph (a)(7) of this section.

(3) The test results will be invalid if any deflection is greater than 100 rpm.

(4) This linearity check may be performed by direct analysis of the recorder traces, or by computer analysis of data collected by automatic data collection equipment.

(d) Analyze the smoke trace by means of the following procedure:

(1) Starting at the beginning of the first acceleration, as defined in paragraph (a)(2) of this section, and stopping at the end of the second acceleration, as defined in paragraph (a)(3) of this section, divide the smoke trace into half-second intervals. Similarly, subdivide into half-second intervals the third acceleration mode and the lugging mode as defined by paragraphs (a)(5) and (7) respectively, of this section.

(2) Determine the average smoke reading during each half-second interval.

(3) Locate and record the 15 highest half-second readings during the acceleration mode of each dynamometer cycle.

(4) Locate and record the five highest half-second readings during the lugging mode of each dynamometer cycle.

(5) Examine the average half-second values which were determined in paragraphs (d)(3) and (d)(4) of this section and record the three highest values for each dynamometer cycle.

(6) This smoke trace analysis may be performed by direct analysis of the recorder traces, or by computer analysis of data collected by automatic data collection equipment.

[48 FR 52203, Nov. 16, 1983, as amended at 49 FR 48141, Dec. 10, 1984; 62 FR 47123, Sept. 5, 1997]

### § 86.884-14 Calculations.

(a) If the measured half-second opacity values were obtained with a smokemeter with an optical path length different than shown in the table in § 86.884-8(c), then convert the measured half-second values or the

original instantaneous values to the appropriate equivalent optical path length values specified in the table. Convert the opacity values according to the following equations:

$$N_s = 100 \times (1 - (1 - N_m/100)^{L_s/LM})$$

$L_m$  and  $L_s$  must use consistent units in the above equation

Where:

$N_m$ =Measured half-second value for conversion, percent opacity

$L_m$ =Measuring smokemeter optical path length, meters

$L_s$ =Standard optical path length corresponding with engine power, n

$N_s$ =Standard half-second value, percent opacity

(b) Average the 45 readings in § 86.884-13(d)(3) or the equivalent converted values from paragraph (a) of this section if appropriate, and designate the value as "A". This is the value for the engine acceleration mode.

(c) Average the 15 readings in § 86.884-13(d)(4) or the equivalent converted values from paragraph (a) of this section if appropriate, and designate the value as "B". This is the value for the engine lugging mode.

(d) Average the 9 readings in § 86.884-13(d)(5) or the equivalent converted values from paragraph (a) of this section if appropriate, and designate the value as "C". This is the value for the peaks in either mode.

(e)(1) If multiple smokemeters were used, the half-second values for each mode from each smokemeter shall be combined and the calculated average based upon the total number of combined values.

(2) For example, if two smokemeters were used for acceleration mode data, 45 half-second values in each data set from both smokemeters would be combined to form a data set of 90 values, which would then be averaged.

[62 FR 47123, Sept. 5, 1997]

## Subpart J—Fees for the Motor Vehicle and Engine Compliance Program

SOURCE: 57 FR 30055, July 7, 1992, unless otherwise noted.

## § 86.901-93

## 40 CFR Ch. I (7-1-03 Edition)

### § 86.901-93 Abbreviations.

The abbreviations in this section apply to this subpart and have the following meanings:

CAFE—Corporate Average Fuel Economy,  
Cal—California,  
CPI—Consumer Price Index,  
ESI—Engine System Information,  
EPA—U.S. Environmental Protection Agency,  
Fed—Federal,  
HDE—Heavy-duty engine,  
HDV—Heavy-duty vehicle,  
ICI—Independent Commercial Importer,  
LDV—Light-duty vehicle,  
LDT—Light-duty truck,  
MC—Motorcycle,  
MVEPC—Motor Vehicle and Engine Compliance Program,  
MY—Model Year,  
OEM—Original equipment manufacturer,  
SEA—Selective Enforcement Auditing.

### § 86.902-01 Definitions.

(a) The definitions in § 86.902-93 continue to apply to this subpart.

(b) The definitions in subparts A and S of this part apply to this subpart.

[64 FR 23922, May 4, 1999]

### § 86.902-93 Definitions.

*California-only certificate* is a Certificate of Conformity issued by EPA which only signifies compliance with the emission standards established by California.

*Certification request* means a manufacturer's request for certification evidence by the submission of an application for certification, ESI data sheet, or ICI Carryover data sheet.

*Engine-system combination* as defined in 40 CFR 86.082-2, means an engine family-exhaust emission control system combination.

*Federal certificate* is a Certificate of Conformity issued by EPA which signifies compliance with emission standards in 40 CFR part 86, subpart A.

*Fuel economy basic engine* means a unique combination of manufacturer, engine displacement, number of cylinders, fuel system, catalyst usage, and other characteristics specified by the Administrator.

*Filing form* means the MVECP Fee Filing Form to be sent with payment of the MVECP fee.

*Signed* means a certification request which results in a signed Certificate of Conformity.

*Unsigned* means a certification request which does not result in a signed Certificate of Conformity because it is either voluntarily withdrawn by the manufacturer or does not receive approval from the EPA.

### § 86.903-93 Applicability.

This subpart prescribes fees to be charged for the MVECP for 1993 and later Mys. The fees charged will apply to all manufacturers' and ICIs' LDVs, LDTs, HDVs, HDEs, and MCs. Nothing in this subpart shall be construed to limit the Administrator's authority to require manufacturer or confirmatory testing as provided in the Clean Air Act, including authority to require manufacturer in-use testing as provided in section 208 of the Clean Air Act.

### § 86.904-93 Section numbering; construction.

(a)(1) The MY of initial applicability is indicated by the section number. The two digits following the hyphen designate the first MY for which a section is effective. A section remains effective until superseded.

(2) *Example.* Section 86.901-93 applies to the 1993 and subsequent MYs until superseded. If § 86.901-96 is promulgated, it will take effect beginning with the 1996 MY; § 86.901-93 will apply to MYs 1993 through 1995.

(b)(1) A section reference without a MY suffix refers to the section applicable for the appropriate MY.

(2) *Example.* For a reference to § 86.901, one would refer to § 86.901-xx where xx is the last two digits of the model year in question.

### § 86.905-93 Purpose.

The MVECP includes all compliance, enforcement, and related activities performed by EPA which are associated with certification, fuel economy, SEA, and in-use compliance programs. The fee will recover those compliance, investigation and review costs which the EPA incurs in providing vehicle and engine manufacturers or ICIs with Certificates of Conformity, fuel economy