0.30 ppm; CO_{dm} = 8.13 ppm; CO_{2d} = 0.037 pct; D_{ct} = 5.650 km.

Then:

(i) V_{mix} = [(0.0077934)(12,115)(99.05–9.851)(293.15)]/ [(101.325)(309.8)] = 78.651 m^3 per test phase.

(ii) H = [(6.211)(20.5)(3.382)]/[(99.05) − (3.382)(20.5/100)] = 4.378 grams H_2O per kg dry air.

(iii) K_h = 1/[1 − 0.0329(4.378 − 10.71)] = 0 8276

(iv) CO_e = [1 − 0.01925(0.415) − 0.000323 (20.5)](311.23) = 306.68 ppm.

(v) CO_d = [1 − 0.000323(20.5)](8.13) = 8.08 ppm.

(vi) DF = 13.4/[0.415 + (249.75 + 306.68)10^{-4}] = 28.472

(vii) HC_{conc} = 249.75 − 4.90(1 − 1/28.472) = 245.02 ppm.

(viii) HC_{mass} = (78.651) (576.8) (245.02) 10^{-6} = 11.114 grams per test phase.

(ix) NOx_{conc} = 38.30 − 0.30(1 − 1/28.472) = 38.01 ppm.

(x) NOx_{mass} = (78.651)(1913)(38.01)(0.8276) × 10^{-6} = 4.733 grams per test phase.

(xi) CO_{conc} = 306.68 − 8.08 (1 − 1/28.472) = 298.88 ppm.

(xii) CO_{mass} = (78.651) (1164) (298.88) (10^{-6}) = 27.362 grams per test phase.

(xiii) CO_{2conc} = 0.415 − 0.037 (1 − 1/28.472) = 0.3793 percent.

(xiv) CO_{2mass} = (78.651)(1843)(0.3793)/100 = 549.81 grams per test phase.

(2) For the ''stabilized'' portion of the cold-start test, assume that similar calculations resulted in HC_{mass} = 7.184 grams per test phase; NOx_{mass} = 2.154 grams per test phase; CO_{mass} = 64.541 grams per test phase; and CO_{2mass} = 529.52 grams per test phase. D_s = 6.070 km.

(3) For the ''transient'' portion of the hot-start test, assume that similar calculations resulted in HC_{mass} = 6.122 grams per test phase; NOx_{mass} = 7.056 grams per test phase; CO_{mass} = 34.964 grams per test phase; and CO_{2mass} = 480.93 grams per test phase. D_{ht} = 5.660 km.

(4) For a 1978 motorcycle with an engine displacement equal to or greater than 170 cc (10.4 cu. in):

(i) HC_{wm} = 0.43 [(11.114 + 7.184)/(5.650 + 6.070)] + 0.57 [(6.122 + 7.184)/(5.660 + 6.070)] = 1.318 grams per vehicle kilometer.

(ii) NOx_{wm} = 0.43 [(4.733 = 2.154)/(5.650 = 6.070)] = 0.57 [(7.056 = 2.154)/(5.660 = 6.070)] = 0.700 gram per vehicle kilometer.

(iii) CO_{wm} = 0.43 [(27.362 + 64.541)/(5.650 + 6.070)] + 0.57 [(34.964 + 64.541)/(5.660 + 6.070)] = 8.207 grams per vehicle kilometer.

(iv) CO_{2wm} = 0.43 [(549.81 + 529.52)/(5.650 + 6.070)] + 0.57 [(480.93 + 529.52)/(5.660 + 6.070)] = 88.701 grams per vehicle kilometer.

[54 FR 14553, Apr. 11, 1989, as amended at 59 FR 48515, Sept. 21, 1994; 60 FR 34358, June 30, 1995]

Subpart G—Selective Enforcement Auditing of New Light-Duty Vehicles

SOURCE: 41 FR 31483, July 28, 1976, unless otherwise noted.

§ 86.601–84 Applicability.

For 1984 and later model year light-duty vehicles, all provisions of this subpart are applicable. The provisions of this subpart are not applicable to 1984 and later model year light-duty trucks.

(a) *Section numbering; construction.* (1) The model year of initial applicability is indicated by the two digits following the hyphen of the section number. A section remains in effect for subsequent model years until it is superseded.

(2) A section reference without a model year suffix shall be interpreted to be a reference to the section applicable to the appropriate model year.

(b) References in this subpart to engine families and emission control systems shall be deemed to refer to durability groups and test groups as applicable for manufacturers certifying new light-duty vehicles and light-duty trucks under the provisions of subpart S of this part.

(Secs. 206, 208(a) and 301(a), Clean Air Act, as amended, 42 U.S.C. 7525, 7542(a) and 7601(a))

[49 FR 69, Jan. 3, 1984. Redesignated at 54 FR 2122, Jan. 19, 1989, as amended at 62 FR 31234, June 6, 1997; 64 FR 23922, May 4, 1999]

§ 86.602–84 Definitions.

(a) The definitions in this section apply to this subpart.

(b) As used in this subpart, all terms not defined herein have the meaning given them in the Act.

(1) *Acceptable Quality Level* (AQL) means the maximum percentage of failing vehicles that, for purposes of sampling inspection, can be considered satisfactory as a process average.

(2) *Axle Ratio* means all ratios within ±3% of the axle ratio specified in the configuration in the test order.

(3) *Configuration* means a subclassification of an engine-system combination on the basis of engine code, inertia weight class, transmission type and gear ratios, axle ratio, and other parameters which may be designated by the Administrator.

(4) *Test Sample* means the collection of vehicles of the same configuration which have been drawn from the population of vehicles of that configuration and which will receive exhaust emission testing.

(5) *Inspection Criteria* means the pass and fail numbers associated with a particular sampling plan.

(6) *Vehicle* means any new production light-duty vehicle as defined in subpart A of this part.

(7) *Test Vehicle* means a vehicle in a test sample.

(8) *In the Hands of the Manufacturer* means that vehicles are still in the possession of the manufacturer and have not had their bills of lading transferred to another person for the purpose of transporting.

[49 FR 48480, Dec. 12, 1984. Redesignated at 54 FR 2122, Jan. 19, 1989]

§ 86.602–97 Definitions.

Section 86.602–97 includes text that specifies requirements that differ from those specified in § 86.602-84. Where a paragraph in § 86.602–84 is identical and applicable to § 86.602–97, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.602–84.''

(a) through (b)(8) [Reserved]. For guidance see § 86.602–84.

(b)(9) *Executive Officer* means the Executive Officer of the California Air Resources Board or his or her authorized representative.

(10) *Executive Order* means the document the Executive Officer grants a manufacturer for an engine family that certifies the manufacturer has verified that the engine family complies with all applicable standards and requirements pursuant to Title 13 of the California Code of Regulations.

(11) *50-state engine family* means an engine family that meets both federal and California Air Resources Board motor vehicle emission control regulations and has received a federal certificate of conformity as well as an Executive Order.

[62 FR 31234, June 6, 1997]

§ 86.602–98 Definitions.

Section 86.602–98 includes text that specifies requirements that differ from § 86.602–84. Where a paragraph in § 86.602–84 is identical and applicable to § 86.602–98, this may be indicated by specifying the corresponding paragraph and the statement ''[Reserved]. For guidance see § 86.602–84.'' Where a corresponding paragraph of § 86.602–84 is not applicable, this is indicated by the statement ''[Reserved].''.

(a) through (b)(2) [Reserved]. For guidance see § 86.602–84.

(b)(3)(i) *Configuration*, when used for LDV exhaust emissions testing, means a subclassification of an engine-system combination on the basis of engine code, inertia weight class, transmission type and gear ratios, axle ratio, and other parameters which may be designated by the Administrator.

(ii) *Configuration*, when used for LDV refueling emissions testing, means a subclassification of an evaporative/refueling emission family on the basis of evaporative and refueling control system and other parameters which may be designated by the Administrator.

(4) *Test sample* means the collection of vehicles of the same configuration which have been drawn from the population of vehicles of that configuration and which will receive emission testing.

(b)(5) through (b)(8) [Reserved]. For guidance see § 86.602–84.

(9) *Executive Officer* means the Executive Officer of the California Air Resources Board or his or her authorized representative.

(10) *Executive Order* means the document the Executive Officer grants a manufacturer for an engine family that