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- (iv) In lieu of performing the test procedure of paragraphs (h)(1)(iii) (A) and (B) of this section, its acceleration time can be estimated based on the manufacturer's engineering evaluation, in accordance with good engineering practice, to meet the exemption criteria of paragraph (h)(1)(iii) of this section.
- (2) A vehicle shall only be considered eligible for exemption under this paragraph if at least one configuration of its model type (and transmission configuration in the case of vehicles equipped with manual transmissions, excluding differences due to the presence of overdrive) is certified to meet emission standards under high-altitude conditions as specified in paragraphs (a) through (c) and paragraph (g) of this section. The Certificate of Conformity (the Certificate) covering any exempted configuration(s) will also apply to the corresponding non-exempt configuration(s) required under this paragraph (h)(2). As a condition to the exemption, any suspension, revocation, voiding, or withdrawal of the Certificate as it applies to a non-exempt configuration for any reason will result in a suspension of the Certificate as it applies to the corresponding exempted configuration(s) of that model type, unless there is at least one other corresponding non-exempt configuration of the same model type still covered by the Certificate. The suspension of the Certificate as it applies to the exempted  $configuration(\hat{s})$  will be terminated when any one of the following occurs:
- (i) Another corresponding non-exempt configuration(s) receive(s) coverage under the Certificate; or
- (ii) Suspension of the Certificate as it applies to the corresponding non-exempt configuration(s) is terminated; or
- (iii) The Agency's action(s), with respect to suspension, revocation, voiding, or withdrawal of the Certificate as it applies to the corresponding non-exempt configuration(s), is reversed.
- (3) The sale of a vehicle for principal use at a designated high-altitude location that has been exempted as set forth in paragraph (h) of this section will be considered a violation of section 203(a)(1) of the Clean Air Act.
- (i)(1) The manufacturers may exempt 1996 and later model year vehicles from

- compliance at low altitude with the emission standards set forth in paragraph (a) of this section and §86.090-8(b) if the vehicles:
- (i) Are not intended for sale at low altitude; and
- (ii) Are equipped with a unique, highaltitude axle ratio (rear-wheel drive vehicles) or a unique, high-altitude drivetrain (front-wheel drive vehicles) with a higher N/V ratio than other configurations of that model type which are certified in compliance with the emission standards of paragraph (a) of this section and §86.090-8(b) under lowaltitude conditions.
- (2) The sale of a vehicle for principal use at low altitude that has been exempted as set forth in paragraph (i)(1) of this section will be considered a violation of section 203(a)(1) of the Clean Air Act.
- (j) Any exempted light-duty vehicle that a manufacturer wishes to certify for sale under the provisions of §86.090-8 (h) or paragraph (i) of this section is subject to the provisions of subpart Q of this part.
- (k) Cold Temperature Carbon Monoxide (CO) Standards—Light-Duty Vehicles. Exhaust emissions from 1996 and later model year gasoline-fueled light-duty vehicles shall not exceed the cold temperature CO standard of 10.0 grams per mile for an intermediate useful life of 50,000 miles, as measured and calculated under the provisions set forth in subpart C of this part. This standard applies under both low and high altitude conditions.

[56 FR 25756, June 5, 1991, as amended at 57 FR 31915, July 17, 1992; 58 FR 16021, Mar. 24, 1993; 58 FR 34536, June 28, 1993; 58 FR 58417, Nov. 1, 1993; 59 FR 48499, Sept. 21, 1994; 60 FR 43887, Aug. 23, 1995; 62 FR 47120, Sept. 5, 1997]

## § 86.096-9 Emission standards for 1996 and later model year light-duty trucks.

Section 86.096-9 includes text that specifies requirements that differ from §86.094-9. Where a paragraph in §86.094-9 is identical and applicable to §86.096-9, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see §86.094-9."

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- (a)(1) introductory text through (a)(1)(iv) [Reserved]. For guidance see § 86.094-9.
- (v) CST emissions from gasolinefueled Otto-cycle light-duty trucks measured and calculated in accordance with subpart O of this part may not exceed the standards listed in paragraphs (a)(1)(v) (A) and (B) of this section.
  - (A) Hydrocarbons: 100 ppm as hexane.
  - (B) Carbon monoxide: 0.5%.
  - (a)(2) [Reserved]
- (3) The standards set forth in paragraph (a)(1)(v) of this section refer to the exhaust emitted during the CST as set forth in subpart O of this part and measured and calculated in accordance with those provisions.
- (b) Evaporative emissions from lightduty trucks shall not exceed the following standards. The standards apply equally to certification and in-use vehicles. The spitback standard also applies to newly assembled vehicles. For certification vehicles only, manufacturers may conduct testing to quantify a level of nonfuel background emissions for an individual test vehicle. Such a demonstration must include a description of the source(s) of emissions and an estimated decay rate. The demonstrated level of nonfuel background emissions may be subtracted from emission test results from certification vehicles if approved in advance by the Administrator.
- (1) Hydrocarbons (for gasoline-fueled, natural gas-fueled and liquefied petro-leum gas-fueled vehicles). (i)(A) For gasoline-fueled heavy light-duty trucks with a nominal fuel tank capacity of at least 30 gallons:
- (1) For the full three-diurnal test sequence described in §86.130–96, diurnal plus hot soak measurements: 2.5 grams per test.
- (2) For the supplemental two-diurnal test sequence described in §86.130-96, diurnal plus hot soak measurements: 3.0 grams per test.
  - (B) For all other light-duty trucks:
- (1) For the full three-diurnal test sequence described in §86.130–96, diurnal plus hot soak measurements: 2.0 grams per test.
- (2) For the supplemental two-diurnal test sequence described in §86.130-96, diurnal plus hot soak measurements

(gasoline-fueled vehicles only): 2.5 grams per test.

- (ii) Running loss test (gasoline-fueled vehicles only): 0.05 grams per mile.
- (iii) Fuel dispensing spitback test (gasoline-fueled vehicles only): 1.0 grams per test.
- (2) Total Hydrocarbon Equivalent (for methanol-fueled vehicles). (i)(A) For heavy light-duty trucks with nominal fuel tank capacity of at least 30 gallons:
- (1) For the full three-diurnal test sequence described in §86.130-96, diurnal plus hot soak measurements: 2.5 grams carbon per test.
- (2) For the supplemental two-diurnal test sequence described in §86.130-96, diurnal plus hot soak measurements: 3.0 grams carbon per test.

(B) For all other light-duty trucks:

- (1) For the full three-diurnal test sequence described in §86.130-96, diurnal plus hot soak measurements: 2.0 grams carbon per test.
- (2) For the supplemental two-diurnal test sequence described in §86.130-96, diurnal plus hot soak measurements: 2.5 grams carbon per test.
- (ii) Running loss test: 0.05 grams carbon per mile.
- (iii) Fuel dispensing spitback test: 1.0 gram carbon per test.
- (3) The standards set forth in paragraphs (b) (1) and (2) of this section refer to a composite sample of evaporative emissions collected under the conditions and measured in accordance with the procedures set forth in subpart B of this part.
- (4) All fuel vapor generated in a gasoline- or methanol-fueled light-duty truck during in-use operations shall be routed exclusively to the evaporative control system (e.g., either canister or engine purge). The only exception to this requirement shall be for emergencies.
- (5)(i) A minimum of the percentage shown in table A96-16 of a manufacturer's sales of the applicable model year's gasoline- and methanol-fueled light-duty trucks shall be tested with the procedures in subpart B of this part indicated for the 1996 model year, and shall not exceed the standards described in paragraph (b) of this section. The remaining vehicles shall be tested with the procedures in subpart B of

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this part for 1995 model year light-duty trucks and be subject to the standards described in §86.090-9(b).

TABLE A96–16—IMPLEMENTATION SCHEDULE FOR LIGHT-DUTY TRUCKS FOR EVAPORATIVE EMISSION TESTING

Sales percent- age
20
40
90
100

- (ii) Optionally, a minimum of the percentage shown in table A96-16 of a manufacturer's combined sales of the applicable model year's gasoline- and methanol-fueled light-duty vehicles, light-duty trucks, and heavy-duty vehicles shall not exceed the applicable standards.
- (iii) Small volume manufacturers, as defined in §86.092-14(b)(1) and (2), are exempt from the implementation schedule of table A96-16 of this section for model years 1996, 1997, and 1998. For small volume manufacturers, the standards of §86.090-9(b), and the associated test procedures, continue to apply until model year 1999, when 100 percent compliance with the standards of this section is required. This exemption does not apply to small volume engine families as defined in §86.092-14(b)(5).
- (iv) For the 1996 model year, manufacturers may satisfy the testing requirements for federal certification to the evaporative standards of paragraph (b) of this section, except the fuel dispensing spitback test, by presenting test results from the certification procedures defined by the California Regulatory Requirements Applicable to the Evaporative Emissions Program (January 4, 1995). These requirements have been incorporated by reference (see §86.1).
- (c) [Reserved]. For guidance see §86.094-9.
  - (d)-(f) [Reserved]
- (g)-(k) [Reserved]. For guidance see \$86.094-9.

 $[58\ FR\ 16021,\ Mar.\ 24,\ 1993,\ as\ amended\ at\ 58\ FR\ 58417,\ Nov.\ 1,\ 1993;\ 59\ FR\ 48500,\ Sept.\ 21,\ 1994;\ 60\ FR\ 43887,\ Aug.\ 23,\ 1995]$ 

§ 86.096-10 Emission standards for 1996 and later model year Ottocycle heavy-duty engines and vehicles.

Section 86.096-10 includes text that specifies requirements that differ from §86.091-10. Where a paragraph in §86.091-10 is identical and applicable to §86.096-10, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see §86.091-10."

- (a) [Reserved]. For guidance see  $\S 86.091-10$ .
- (b) Evaporative emissions from heavy-duty vehicles shall not exceed the following standards. The standards apply equally to certification and inuse vehicles. The spitback standard also applies to newly assembled vehicles. For certification vehicles only, manufacturers may conduct testing to quantify a level of nonfuel background emissions for an individual test vehicle. Such a demonstration must include a description of the source(s) of emissions and an estimated decay rate. The demonstrated level of nonfuel background emissions may be subtracted from emission test results from certification vehicles if approved in advance by the Administrator.
- (1) Hydrocarbons (for vehicles equipped with gasoline-fueled, natural gas-fueled or liquefied petroleum gas-fueled engines).
  (i) For vehicles with a Gross Vehicle Weight Rating of up to 14,000 lbs:
- (A)(1) For the full three-diurnal test sequence described in §86.1230-96, diurnal plus hot soak measurements: 3.0 grams per test.
- (2) For the supplemental two-diurnal test sequence described in §86.1230-96, diurnal plus hot soak measurements (gasoline-fueled vehicles only): 3.5 grams per test.
- (B) Running loss test (gasoline-fueled vehicles only): 0.05 grams per mile.
- (C) Fuel dispensing spitback test (gasoline-fueled vehicles only): 1.0 gram per test.
- (ii) For vehicles with a Gross Vehicle Weight Rating of greater than 14,000 lbs:
- (A)(1) For the full three-diurnal test sequence described in §86.1230-96, diurnal plus hot soak measurements: 4.0 grams per test.