

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 (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 subparagraph. 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(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)(1) of this section will be considered a violation of section 203(a)(1) of the Clean Air Act.

(i)(1) The manufacturers may exempt 1997 and later model year light-duty trucks from compliance at low altitude with the emission standards set forth in paragraphs (a) and (b) of this section if the vehicles:

(i) Are not intended for sale at low altitude; and

(ii) Are equipped with a unique, high-altitude 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 paragraphs (a)

and (b) of this section under low-altitude 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 light-duty truck that a manufacturer wishes to certify for sale under the provisions of paragraphs (h) or (i) of this section is subject to the provisions of subpart Q of this part.

(k)(1) *Cold Temperature Carbon Monoxide (CO) Standards—Light light-duty trucks.* Exhaust emissions from 1997 and later model year light light-duty trucks with a loaded vehicle weight of 3,750 lbs or less shall not exceed the cold temperature CO standard of 10.0 grams per mile and light light-duty trucks with a loaded vehicle weight of greater than 3,750 lbs shall not exceed a cold temperature CO standard of 12.5 grams per mile, both for an intermediate useful life of 50,000 miles and 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.

(2) *Heavy light-duty trucks.* Exhaust emissions from 1997 and later model year heavy light-duty trucks shall not exceed the cold temperature CO standard of 12.5 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 25757, June 5, 1991, as amended at 57 FR 31916, July 17, 1992; 58 FR 16025, Mar. 24, 1993; 58 FR 58421, Nov. 1, 1993; 59 FR 48500, Sept. 21, 1994; 60 FR 34335, June 30, 1995]

#### § 86.098-2 Definitions.

The definitions of § 86.096-2 continue to apply to 1996 and later model year vehicles. The definitions listed in this section apply beginning with the 1998 model year.

*Dispensed fuel temperature* means the temperature (deg.F or deg.C may be used) of the fuel being dispensed into the tank of the test vehicle during a refueling test.

*Evaporative/refueling emission control system* means a unique combination within an evaporative/refueling family

of canister adsorptive material, purge system configuration, purge strategy, and other parameters determined by the Administrator to affect evaporative and refueling emission control system durability or deterioration factors.

*Evaporative/refueling emission family* means the basic classification unit of a manufacturers' product line used for the purpose of evaporative and refueling emissions test fleet selection and determined in accordance with § 86.098-24.

*Fixed liquid level gauge* means a type of liquid level gauge used on liquefied petroleum gas-fueled vehicles which uses a relatively small positive shutoff valve and is designed to indicate when the liquid level in the fuel tank being filled reaches the proper fill level. The venting of fuel vapor and/or liquid fuel to the atmosphere during the refueling event is generally associated with the use of the fixed liquid level gauge.

*Integrated refueling emission control system* means a system where vapors resulting from refueling are stored in a common vapor storage unit(s) with other evaporative emissions of the vehicle and are purged through a common purge system.

*Non-integrated refueling emission control system* means a system where fuel vapors from refueling are stored in a vapor storage unit assigned solely to the function of storing refueling vapors.

*Refueling emissions* means evaporative emissions that emanate from a motor vehicle fuel tank(s) during a refueling operation.

*Refueling emissions canister(s)* means any vapor storage unit(s) that is exposed to the vapors generated during refueling.

*Resting losses* means evaporative emissions that may occur continuously, that are not diurnal emissions, hot soak emissions, refueling emissions, running losses, or spitback emissions.

*Useful life* means:

(1) For light-duty vehicles, and for light light-duty trucks not subject to the Tier 0 standards of § 86.094-9(a), intermediate useful life and/or full useful life. Intermediate useful life is a period of use of 5 years or 50,000 miles, which-

ever occurs first. Full useful life is a period of use of 10 years or 100,000 miles, whichever occurs first, except as otherwise noted in § 86.094-9. The useful life of evaporative and/or refueling emission control systems on the portion of these vehicles subject to the evaporative emission test requirements of § 86.130-96, and/or the refueling emission test requirements of § 86.151-98, is defined as a period of use of 10 years or 100,000 miles, whichever occurs first.

(2) For light light-duty trucks subject to the Tier 0 standards of § 86.094-9(a), and for heavy light-duty truck engine families, intermediate and/or full useful life. Intermediate useful life is a period of use of 5 years or 50,000 miles, whichever occurs first. Full useful life is a period of use of 11 years or 120,000 miles, whichever occurs first. The useful life of evaporative emission control systems on the portion of these vehicles subject to the evaporative emission test requirements of § 86.130-96 is also defined as a period of 11 years or 120,000 miles, whichever occurs first.

(3) For an Otto-cycle heavy-duty engine family:

(i) For hydrocarbon and carbon monoxide standards, a period of use of 8 years or 110,000 miles, whichever first occurs.

(ii) For the oxides of nitrogen standard, a period of use of 10 years or 110,000 miles, whichever first occurs.

(iii) For the portion of evaporative emission control systems subject to the evaporative emission test requirements of § 86.1230-96, a period of use of 10 years or 110,000 miles, whichever occurs first.

(4) For a diesel heavy-duty engine family:

(i) For light heavy-duty diesel engines, for hydrocarbon, carbon monoxide, and particulate standards, a period of use of 8 years or 110,000 miles, whichever first occurs.

(ii) For light heavy-duty diesel engines, for the oxides of nitrogen standard, a period of use of 10 years or 110,000 miles, whichever first occurs.

(iii) For medium heavy-duty diesel engines, for hydrocarbon, carbon monoxide, and particulate standards, a period of use of 8 years or 185,000 miles, whichever first occurs.

## Environmental Protection Agency

## § 86.098-8

(iv) For medium heavy-duty diesel engines, for the oxides of nitrogen standard, a period of use of 10 years or 185,000 miles, whichever first occurs.

(v) For heavy heavy-duty diesel engines, for hydrocarbon, carbon monoxide, and particulate standards, a period of use of 8 years or 290,000 miles, whichever first occurs, except as provided in paragraph (3)(vii) of this definition.

(vi) For heavy heavy-duty diesel engines, for the oxides of nitrogen standard, a period of use of 10 years or 290,000 miles, whichever first occurs.

(vii) For heavy heavy-duty diesel engines used in urban buses, for the particulate standard, a period of use of 10 years or 290,000 miles, whichever first occurs.

[59 FR 16288, Apr. 6, 1994, as amended at 59 FR 48501, Sept. 21, 1994]

### § 86.098-3 Abbreviations.

(a) The abbreviations in § 86.096-3 continue to apply. The abbreviations in this section apply beginning with the 1998 model year.

(b) The abbreviations of this section apply to this subpart, and also to subparts B, E, F, G, K, M, N, and P of this part, and have the following meanings:

T<sub>D</sub>—Dispensed fuel temperature  
ABT—Averaging, banking, and trading  
HDE—Heavy-duty engine

[62 FR 54716, Oct. 21, 1997]

### § 86.098-7 Maintenance of records; submittal of information; right of entry.

Section 86.098-7 includes text that specifies requirements that differ from those specified in §§ 86.091-7, 86.094-7 and 86.096-7. Where a paragraph in § 86.091-7, § 86.094-7 or § 86.096-7 is identical and applicable to § 86.098-7, this may be indicated by specifying the corresponding paragraph and the statement “[Reserved]. For guidance see § 86.091-7.” or “[Reserved]. For guidance see § 86.094-7.” or “[Reserved]. For guidance see § 86.096-7.”.

(a) introductory text through (a)(2) [Reserved]. For guidance see § 86.091-7.

(a)(3) [Reserved]. For guidance see § 86.094-7.

(b)-(c)(2) [Reserved]. For guidance see § 86.091-7.

(c)(3) [Reserved]. For guidance see § 86.094-7.

(c)(4)-(d)(1)(v) [Reserved]. For guidance see § 86.091-7.

(d)(1)(vi)-(d)(2)(iv) [Reserved]. For guidance see § 86.094-7.

(d)(3)-(g) [Reserved]. For guidance see § 86.091-7.

(h)(1)-(h)(5) [Reserved]. For guidance see § 86.094-7.

(h)(6) *Voiding a certificate.* (i) EPA may void ab initio a certificate for a vehicle certified to Tier 0 certification standards or to the respective evaporative and/or refueling test procedure and accompanying evaporative and/or refueling standards as set forth or otherwise referenced in §§ 86.098-8, 86.098-9, or 86.098-10 for which the manufacturer fails to retain the records required in this section or to provide such information to the Administrator upon request.

(h)(6)(ii) to (h)(7)(vi) [Reserved]. For guidance see § 86.096-7.

(h)(6)(vii) EPA evaporative/refueling family.

[59 FR 16288, Apr. 6, 1994, as amended at 60 FR 43888, Aug. 23, 1995]

### § 86.098-8 Emission standards for 1998 and later model year light-duty vehicles.

Section 86.098-8 includes text that specifies requirements that differ from § 86.096-8. Where a paragraph in § 86.096-8 is identical and applicable to § 86.098-8, this may be indicated by specifying the corresponding paragraph and the statement “[Reserved]. For guidance see § 86.096-8.”

(a)-(b)(5) [Reserved]. For guidance see § 86.096-8.

(b)(6) Vehicles certified to the refueling standards set forth in paragraph (d) of this section are not required to demonstrate compliance with the fuel dispensing spitback standards contained in § 86.096-8 (b)(1)(iii) and (b)(2)(iii): *Provided*, that they meet the requirements of § 86.098-28(f).

(c) [Reserved]. For guidance see § 86.096-8.

(d) Refueling emissions from 1998 and later model year gasoline-fueled and methanol-fueled Otto-cycle and petroleum-fueled and methanol-fueled diesel-cycle light-duty vehicles shall not exceed the following standards. The