judgment, to meet the requirements of paragraphs (a)(2) (iii) and (iv) of this section, as applicable. These methods must be approved in advance by the Administrator and meet the objectives of paragraphs (a)(2) (iii) and (iv) of this section, as applicable: to provide assurance that the permeability of all nonmetallic fuel and evaporative system components will not lead to evaporative emission standard exceedance under sustained exposure to commercially available alcohol-containing fuels for the useful life of the vehicle.

(b) *Vehicle/component selection method.* The manufacturer shall determine a vehicle and component selection procedure which results in representative test vehicles and reflects good engineering judgment.

(c) The manufacturer shall calculate a deterioration factor which is applied to the evaporative emission results of the emission data vehicles. The deterioration factor shall be based on a linear regression, or an other regression technique approved in advance by the Administrator. The DF will be calculated to be the difference between the full life mileage evaporative level minus the stabilized mileage (e.g., 4000-mile) evaporative level from the regression analysis. The DF and the full and stabilized mileage emission levels shall be rounded to two decimal places of accuracy in accordance with the Rounding-Off Method specified in ASTM E29–93a, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications (incorporated by reference, see §86.1(b)(1). Calculated DF values of less than zero shall be changed to zero for the purposes of this paragraph.

(d) *Emission component durability.* The manufacturer shall use good engineering judgment to determine that all emission-related components are designed to operate properly for the full useful life of the vehicles in actual use.

(e) *In-use verification.* The durability program must meet the requirements of §86.1845–01.

(f) Information obtained under §§86.1845–01, 86.1846–01, 86.1847–01 or from other sources shall be used by the manufacturer in developing new durability processes and/or updating existing durability processes using good engineering judgment.

[64 FR 23925, May 4, 1999, as amended at 65 FR 6863, Feb. 10, 2000; 65 FR 59974, Oct. 6, 2000]

§ 86.1824–07 Durability demonstration procedures for evaporative emissions.

§86.1824–07 includes text that specifies requirements that differ from those specified in §86.1824–01. Where a paragraph in §86.1824–01 is identical and applicable to §86.1824–07, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see §86.1824–01.". This section applies to gasoline-, methanol-, natural gas- and liquefied petroleum gas-fueled LDV/Ts, MDPVs, and HDVs.

(a) through (f) [Reserved]. For guidance see §86.1824–01.

[66 FR 5192, Jan. 18, 2001]

§ 86.1825–01 Durability demonstration procedures for refueling emissions.

This section applies to light-duty vehicles, light-duty trucks, and complete heavy-duty vehicles, and heavy-duty vehicles which are certified under light-duty rules as allowed under the provisions of §86.1801–01(c) which are subject to refueling loss emission compliance. Refer to the provisions of §§86.1811–01, 86.1811–04, 86.1812–01, 86.1813–01, and 86.1816–04 to determine applicability of the refueling standards to different classes of vehicles for various model years. Diesel fuel vehicles may qualify for an exemption to the requirements of this section under the provisions of §86.1810. The manufacturer shall determine a durability process that will predict the expected refueling emission deterioration of candidate in-use vehicles over their full useful life. The manufacturer shall use good engineering judgment in determining this process.

(a) *Service accumulation method.* (1) The manufacturer shall develop a service accumulation method designed to effectively predict the deterioration of candidate in-use vehicles' refueling loss emissions in actual use over its full useful life. The manufacturer shall use good engineering judgement in developing this method.