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as “nonmanufacturer-owned credits” shall comply with the FEL and the requirements of the ABT program in all other respects.

(2) Only manufacturer-owned credits reported as “ABT-only credits” shall be used in the averaging, trading, and banking provisions described in this section.

(3) Credits shall not be double-counted. Credits used in the ABT program may not be provided to an engine purchaser for use in another program.

(4) Manufacturers shall determine and state the number of engines sold as “ABT-only credits” and “nonmanufacturer-owned credits” in the end-of-model year reports required under § 86.001-23.

(k) *Additional flexibility for diesel-cycle engines.* If a diesel-cycle engine family meets the conditions of either paragraph (k)(1) or (2) of this section, a Discount of 1.0 may be used in the trading and banking calculation, for both NO_x plus NMHC and for particulate, described in paragraph (c)(1) of this section.

(1) The engine family certifies with a certification level of 1.9 g/bhp-hr NO_x plus NMHC or lower for all diesel-cycle engine families.

(2) All of the following must apply to the engine family:

- (i) Diesel-cycle engines only;
- (ii) 2004, 2005, and 2006 model years only;
- (iii) Must be an engine family using carry-over certification data from prior to model year 2004 where the NO_x plus the HC certification level prior to model year 2004 is below the NO_x plus NMHC or NO_x plus NMHCE standard set forth in § 86.004-11. Under this option, the NO_x credits generated from this engine family prior to model year 2004 may be used as NO_x plus NMHC credits.

(1) *Additional flexibility for Otto-cycle engines.* If an Otto-cycle engine family meets the conditions of paragraph (1)(1) or (2) of this section, a discount of 1.0 may be used in the trading and banking credits calculation for NO_x plus NMHC described in paragraph (c)(1) of this section, as follows:

(1) The engine family has a FEL of 0.5 g/bhp-hr NO_x plus NMHC or lower;

(2) All of the following conditions are met:

(i) For first three consecutive model years that the engine family is certified to a NO_x plus NMHC standard contained in § 86.005-10;

(ii) The engine family is certified using carry-over data from an engine family which was used to generate early NO_x credits per § 86.000-15(k) where the sum of the NO_x FEL plus the HC (or hydrocarbon equivalent where applicable) certification level is below 1.0 g/bhp-hr.

[62 FR 54722, Oct. 21, 1997, as amended at 65 FR 59946, Oct. 6, 2000]

§ 86.004-16 Prohibition of defeat devices.

(a) No new heavy-duty vehicle or heavy-duty engine shall be equipped with a defeat device.

(b) The Administrator may test or require testing on any vehicle or engine at a designated location, using driving cycles and conditions which may reasonably be expected to be encountered in normal operation and use, for the purpose of investigating a potential defeat device.

(c) [Reserved]

(d) For vehicle and engine designs designated by the Administrator to be investigated for possible defeat devices:

(1) *General.* The manufacturer must show to the satisfaction of the Administrator that the vehicle or engine design does not incorporate strategies that reduce emission control effectiveness exhibited during the applicable Federal emissions test procedures when the vehicle or engine is operated under conditions which may reasonably be expected to be encountered in normal operation and use, unless one of the specific exceptions set forth in the definition of “defeat device” in § 86.004-2 has been met.

(2) *Information submissions required.* The manufacturer will provide an explanation containing detailed information (including information which the Administrator may request to be submitted) regarding test programs, engineering evaluations, design specifications, calibrations, on-board computer algorithms, and design strategies incorporated for operation both during

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and outside of the applicable Federal emission test procedure.

[65 FR 59947, Oct. 6, 2000, as amended at 70 FR 40432, July 13, 2005]

§ 86.004–21 Application for certification.

Section 86.004–21 includes text that specifies requirements that differ from § 86.094–21 or § 86.096–21. Where a paragraph in § 86.094–21 or § 86.096–21 is identical and applicable to § 86.004–21, this may be indicated by specifying the corresponding paragraph and the statement “[Reserved]. For guidance see § 86.094–21.” or “[Reserved]. For guidance see § 86.096–21.”.

(a)–(b)(3) [Reserved]. For guidance see § 86.094–21.

(b)(4)(i) For light-duty vehicles and light-duty trucks, a description of the test procedures to be used to establish the evaporative emission and/or refueling emission deterioration factors, as appropriate, required to be determined and supplied in § 86.001–23(b)(2).

(b)(4)(ii)–(b)(5)(iv) [Reserved]. For guidance see § 86.094–21.

(b)(5)(v) For light-duty vehicles and applicable light-duty trucks with non-integrated refueling emission control systems, the number of continuous UDDS cycles, determined from the fuel economy on the UDDS applicable to the test vehicle of that evaporative/refueling emission family-emission control system combination, required to use a volume of fuel equal to 85% of fuel tank volume.

(6) *Participation in averaging programs*—(i) *Particulate averaging*. (A) If the manufacturer elects to participate in the particulate averaging program for diesel light-duty vehicles and/or diesel light-duty trucks or the particulate averaging program for heavy-duty diesel engines, the application must list the family particulate emission limit and the projected U.S. production volume of the family for the model year.

(B) The manufacturer shall choose the level of the family particulate emission limits, accurate to hundredth of a gram per mile or hundredth of a gram per brake horsepower-hour for HDEs.

(C) The manufacturer may at any time during production elect to change

the level of any family particulate emission limit(s) by submitting the new limit(s) to the Administrator and by demonstrating compliance with the limit(s) as described in §§ 86.090–2 and 86.094–28(b)(5)(i).

(ii) *NO_x and NO_x plus NMHC averaging*. (A) If the manufacturer elects to participate in the NO_x averaging program for light-duty trucks or otto-cycle HDEs or the NO_x plus NMHC averaging program for diesel-cycle HDEs, the application must list the family emission limit and the projected U.S. production volume of the family for the model year.

(B) The manufacturer shall choose the level of the family emission limits, accurate to one-tenth of a gram per mile or to one-tenth of a gram per brake horsepower-hour for HDEs.

(C) The manufacturer may at any time during production elect to change the level of any family emission limit(s) by submitting the new limits to the Administrator and by demonstrating compliance with the limit(s) as described in §§ 86.088–2 and 86.094–28(b)(5)(ii).

(b)(7) and (b)(8) [Reserved]. For guidance see § 86.094–21.

(b)(9) For each light-duty vehicle, light-duty truck, evaporative/refueling emission family or heavy-duty vehicle evaporative emission family, a description of any unique procedures required to perform evaporative and/or refueling emission tests, as applicable, (including canister working capacity, canister bed volume, and fuel temperature profile for the running loss test) for all vehicles in that evaporative and/or evaporative/refueling emission family, and a description of the method used to develop those unique procedures.

(10) For each light-duty vehicle or applicable light-duty truck evaporative/refueling emission family, or each heavy-duty vehicle evaporative emission family:

(i) Canister working capacity, according to the procedures specified in § 86.132–96(h)(1)(iv);

(ii) Canister bed volume; and

(iii) Fuel temperature profile for the running loss test, according to the procedures specified in § 86.129–94(d).

(c)–(j) [Reserved]. For guidance see § 86.094–21.