

in paragraph (c) of this section. No averaging, banking, and trading program is available for meeting the CO standards of this part.

(c) Engines may not participate in the certification averaging, banking, and trading program if they are exported. Only engines certified under this part are eligible for generation or use of credits in this certification averaging, banking, and trading program. Engines certified to the Blue Sky provisions of § 94.8(f) are not eligible for inclusion in this certification averaging, banking, and trading program.

(d) Averaging involves the generation of credits by a manufacturer for use by that same manufacturer in the same calendar year. A manufacturer may use averaging during certification to offset an emission exceedance of an engine family caused by an FEL above the applicable emission standard, subject to the provisions of this subpart.

(e) Banking involves the generation of credits by a manufacturer in a given calendar year for use in a subsequent model year. A manufacturer may bank actual credits only after the end of the calendar year and after EPA has reviewed the manufacturer's end-of-year reports. During the calendar year and before submittal of the end-of-year report, credits originally designated in the certification process for banking will be considered reserved and may be redesignated for trading or averaging in the end-of-year report. Credits declared for banking from the previous calendar year that have not been reviewed by EPA may be used in averaging or trading transactions. However, such credits may be revoked at a later time following EPA review of the end-of-year report or any subsequent audit actions.

(f) Trading involves the sale of banked credits for use in certification of new engines under this part. Only banked credits may be traded; reserved credits may not be traded.

§ 94.304 Compliance requirements.

(a) Manufacturers wishing to participate in certification averaging, banking and trading programs shall select a FEL for each engine family they wish to include. The level of the FEL shall be selected by the manufacturer, sub-

ject to the upper limits described in paragraph (m) of this section. An engine family certified to an FEL is subject to all provisions specified in this part, except that the applicable FEL replaces the applicable THC+NO_x and PM emission standard for the family participating in the averaging, banking, and trading program.

(b) A manufacturer may certify one or more engine families at FELs above or below the applicable emission standard, provided the summation of the manufacturer's projected balance of all credit transactions in a given calendar year is greater than or equal to zero, as calculated for each family under § 94.305 and reported under § 94.309.

(c) Manufacturers certifying engine families with FELs exceeding the applicable emission standard shall obtain emission credits in amounts sufficient to address the shortfall. Credits may be obtained from averaging, banking, or trading, subject to the restrictions described in this subpart.

(d) Manufacturers certifying engine families with FELs below the applicable emission standard may generate emission credits to average, bank, or trade, or a combination thereof.

(e) An engine family may not generate credits for one pollutant while also using credits for another pollutant in the same model year.

(f) Credits may only be used for certification; they may not be used to remedy a violation of the FEL determined by production line or in-use testing. Credits may be used to allow subsequent production of engines for an engine family failing production line testing if the manufacturer elects to recertify to a higher FEL.

(g) [Reserved].

(h) If an FEL is changed after initial certification in any given model year, the manufacturer must conduct production line testing to verify that the emission levels are achieved, with one exception: when an FEL is changed immediately after (and because of) a production line testing failure, additional verification testing is not required.

(i) Manufacturers participating in the averaging, banking and trading program must demonstrate compliance with the applicable emission standards

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at the end of the model year. Manufacturers that have certified engine families to FELs above the applicable emission standards and do not have sufficient emission credits to offset the difference between the emission standard and the FEL for such engine families will be in violation of the conditions of the certificate of conformity for such engine families. The certificates of conformity may be voided *ab initio* for those engine families.

(j) In the event of a negative credit balance resulting from a credit trade, both the buyer(s) and the seller(s) are liable, except in cases involving fraud. Certificates of all engine families participating in a negative trade may be voided *ab initio*.

(1) Where a buyer of credits is not responsible for causing the negative credit balance, the buyer is only liable to supply additional credits equivalent to any amount of invalid credits that the buyer used for its engine family(ies).

(2) Credit holders responsible for the credit shortfall may be subject to the requirements of § 94.309(g)(3).

(k) The following provisions limit credit exchanges between different types of engines:

(1) Credits generated by Category 1 engine families may be used for compliance by Category 1 or Category 2 engine families. Credits generated from Category 1 engine families for use by Category 2 engine families must be discounted by 25 percent.

(2) Credits generated by Category 2 engine families may be used for compliance only by Category 2 engine families.

(3) Credits may not be exchanged between recreational and commercial engines.

(l) Credit life shall be unlimited.

(m) *Upper limits.* The FELs for THC+NO_x and PM for new engines certified for participation in this averaging, banking and trading program may not exceed the following values:

(1) For Category 1 engines, the FEL may not exceed the levels contained in Table D-1, which follows:

TABLE D-1—CATEGORY 1 UPPER LIMITS FOR TIER 2 FAMILY EMISSION LIMITS

Subcategory liters/cylinder	Model year ¹	THC+NO _x FEL g/kW-hr	PM FEL g/kW-hr
Power ≥ 37 kW disp. < 0.9	2005	11.5	1.2
0.9 ≤ disp. < 1.2	2004	11.5	1.2
1.2 ≤ disp. < 2.5	2004	10.5	0.54
2.5 ≤ disp. < 5.0	2007	10.5	0.54

¹The model years listed indicate the model years for which the specified standards start.

(2) For Category 2 engines, the FEL may not exceed the applicable standard by more than 25 percent.

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§ 94.305 Credit generation and use calculation.

(a) For each participating engine family, calculate THC+NO_x and PM emission credits (positive or negative) according to the equation in paragraph (b) of this section and round emissions to the nearest one-hundredth of a megagram (Mg). Use consistent units throughout the calculation.

(b) Credits (Mg) for each engine family are calculated as: Emission credits = (Std—

FEL)×(UL)×(Production)×(AvgPR)×(LF)×(10⁻⁶)

Where:

(i) Std = the applicable cycle-weighted marine engine THC+NO_x or PM emission standard in grams per kilowatt-hour.

(ii) FEL = the family emission limit for the engine family in grams per kilowatt-hour. (The FEL may not exceed the limit established in § 94.304(m) for each pollutant.)

(iii) UL = the useful life in hours of operation.

(iv) Production = the number of engines participating in the averaging, banking, and trading program within the given engine family during the calendar year (or the number of engines in the subset of the engine family for