### **Environmental Protection Agency**

### HYDROCARBON PLUS OXIDES OF NITROGEN EXHAUST EMISSION STANDARDS [Grams per kilowatt-hour]

Model year	P<4.3 kW HC+NO <sub>X</sub> emission standard by model year	P> 4.3 kW HC+NO <sub>x</sub> emission standard by model year
1998	276	(0.959 × (151 + 557/P <sup>0.9</sup> )) + 1.22)

(iii) For personal watercraft in model year 1997, a manufacturer may bank positive emission credits if the following conditions are met: the manufacturer certifies their entire marine personal watercraft engine product line for MY 1997 under the emission standards specified in the formula below for PWC. the manufacturer demonstrates compliance with the corporate average standard under §91.207(b), and the sum of positive and negative credits under §91.207 generates positive emission credits, when the following formula is used for purposes of the applicable standard in §91.207(a). The number of credits that may be banked under this paragraph is the number of positive emission credits generated under the provisions of the preceding sentence. Marine engines certified under the provisions of this paragraph are subject to all of the requirements of this part.

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(b) A manufacturer may bank actual credits only after the end of the model year and after EPA has reviewed the manufacturer's end-of-year reports. During the model 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 and final report.

(c) Credits declared for banking from the previous model 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.

#### §91.206 Trading.

- (a) A marine SI engine manufacturer may exchange emission credits with other marine SI engine manufacturers in trading. These credits must be used in the same averaging set as generated.
- (b) Credits for trading can be obtained from credits banked in the three previous model years or credits generated during the model year of the trading transaction. Traded credits expire if they are not used in averaging within three model years following the model year in which they were generated.
- (c) Traded credits can be used for averaging, banking, or further trading transactions.
- (d) In the event of a negative credit balance resulting from a transaction, both the buyer and the seller are liable, except in cases involving fraud. Certificates of all engine families participating in a negative trade may be voided *ab initio* pursuant to §91.123.

# §91.207 Credit calculation and manufacturer compliance with emission standards.

(a) For each engine family, certification emission credits (positive or negative) are to be calculated according to the following equation and rounded, in accordance with ASTM E29-93a, to the nearest gram. ASTM E29-93a has been incorporated by reference. See §91.6. Consistent units are to be used throughout the equation. The following equation is used to determine hydrocarbon plus oxides of nitrogen credit status for an engine family, whether generating positive credits or negative credits: