

well as all other alternative options discussed in Section VI of this preamble. We invite comments specifically on the costs of using advanced aftertreatment devices, particularly on engines below 75 hp.

ii. Nonroad Diesel Equipment

(a) Transition Flexibility Alternatives for Small Equipment Manufacturers

The Panel recommended that EPA propose to continue the transition flexibilities offered for the Tier 1 and Tier 2 nonroad diesel emission standards, as set out in 40 CFR 89.102, with some potential modifications. The recommended transition flexibilities are:

- **Percent-of-Production Allowance:** Over a seven model year period, equipment manufacturers may install engines not certified to the new emission standards in an amount of equipment equivalent to 80 percent of one year's production. This is to be implemented by power category with the average determined over the period in which the flexibility is used.

- **Small Volume Allowance:** A manufacturer may exceed the 80 percent allowance in seven years as described above, provided that the previous Tier engine use does not exceed 700 total over seven years, and 200 in any given year. This is limited to one family per power category. Alternatively, at the manufacturer's choice by hp category, a program that eliminates the "single family provision" restriction with revised total and annual sales limits as shown below:

- For categories ≤175 hp—525 previous Tier engines (over 7 years) with an annual cap of 150 units (these engine numbers are separate for each hp category defined in the regulations)
- For categories of >175hp—350 previous Tier engines (over 7 years) with an annual cap of 100 units (these engine numbers are separate for each hp category defined in the regulations).

The Panel recommended that EPA seek comment on the total number of engines and annual cap values listed above. Specifically, the SBA and OMB Panel members recommended that EPA seek comment on implementing the small volume allowance (700 engine provision) for small equipment manufacturers without a limit on the number of engine families which could be covered in any hp category.

- In addition, due to the changing nature of the technology as the manufacturers transition from Tier 2 to Tier 3 and Tier 4, the Panel recommended that the equipment manufacturers be permitted to borrow from the Tier 3/Tier 4 transition flexibilities for use in the Tier 2/Tier 3 time frame.

To maximize the likelihood that the application of these transition provisions will result in the availability of previous Tier engines for use by the small equipment manufacturers, the Panel recommended that these three provisions be provided to all equipment manufacturers. As explained earlier in the preamble, this is essentially the approach that EPA is proposing.

(b) Hardship Provisions for Small Equipment Manufacturers

The Panel also recommended that two types of hardship provisions be extended to small equipment manufacturers. These are generally the same as provided above for small engine manufacturers:

- For the case of a catastrophic event, or other extreme unforeseen circumstances, beyond the control of the manufacturer that could not have been avoided with reasonable discretion (*i.e.* fire, tornado, supplier not fulfilling contract, etc.); and
- For the case where a manufacturer has taken all reasonable business, technical, and economic steps to comply but cannot. In this case relief would have to be sought before there is

imminent jeopardy that a manufacturer's equipment could not be sold and a manufacturer would have to demonstrate to the Agency's satisfaction that failure to get permission to sell equipment with a previous Tier engine would create a serious economic hardship. Hardship relief of this nature cannot be sought by a manufacturer which also manufactures the engines for its equipment.

Hardship relief would not be available until other allowances have been exhausted. Either relief provision would provide additional lead time for up to 2 model years based on the circumstances, but EPA could require recovery of the lost environmental benefit. To be eligible for the hardship provisions listed above (as well as the flexibilities detailed above), the Panel recommended that equipment manufacturers and importers must have reported equipment sales using certified engines in model year 2002 or earlier. This requirement is to prohibit the misuse of these flexibilities as a loophole to enter the nonroad diesel equipment market or to gain unfair market position relative to other manufacturers.

iii. Nonroad Diesel Fuel Refiners

(a) Regulatory Flexibility Alternatives for Diesel Fuel Refiners

The Panel considered a range of options and regulatory alternatives for providing small refiners with flexibility in complying with new sulfur standards for nonroad diesel fuel. Taking into consideration the comments received on these ideas, as well as additional business and technical information gathered about potentially affected small entities, the Panel recommended that whether EPA proposes a one-step or a two-step approach, EPA should provide for delayed compliance for small refiners as shown below.

SMALL REFINER OPTIONS UNDER 2-STEP NONROAD DIESEL BASE PROGRAMS RECOMMENDED SULFUR STANDARDS

[in parts per million (ppm)]^a

Under 2-step program	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015+
Non-Small ^b	500	500	500	15	15	15	15	15	15
Small	500	500	500	500	15	15

Notes:

^a New standards are assumed to take effect June 1 of the applicable year.

^b Assumes 500 ppm standard for marine + locomotive fuel for non-small refiners for 2007 and later and for small refiners for 2010 and later.

(b) Small Refiner Incentives for Early Compliance

In addition to these standards, the Panel recommended that EPA propose

certain transition provisions to encourage early compliance with the diesel fuel sulfur standards. The Panel recommended that EPA propose that

small refiners be eligible to select one of the two following options:

- **Credits for Early Desulfurization:** The Panel recommended that the