

would be allowed. The restriction should be no burden to manufacturers, as it would apply only to those air-cooled, hand-startable, direct injection engines under 11 horsepower that are certified under the special standard, and the production of credit-generating engines would be contrary to the standard's purpose.

The current ABT program contains a restriction on trading credits generated from indirect injection engines greater than 25 horsepower. The restriction was originally adopted because of concerns over the ability of manufacturers to generate significant credits from existing technology engines. (See 63 FR 56977.) Under this proposal, we are not proposing the restriction which prohibits manufacturers from trading credits generated on Tier 4 indirect fuel injection engines greater than 25 horsepower. Based on the certification levels of indirect injection engines, we do not believe there is the potential for manufacturers to generate significant credits from their currently certified engines against the proposed Tier 4 standards. Therefore, we are not proposing to restrict the trading of credits generated on Tier 4 indirect injection engines to other manufacturers. The restriction placed on the trading of credits generated from Tier 2 and Tier 3 indirect injection engines would continue to apply in the Tier 4 timeframe.

We are not proposing to apply a specific discount to Tier 3 PM credits used to demonstrate compliance with the Tier 4 standards. PM credits generated under the Tier 3 standards are based on testing performed over a steady-state test cycle. Under the proposed Tier 4 standards, the test cycle is being supplemented with a transient test (see Section III.C above and VII.F below). Because in-use PM emissions from Tier 3 engines will vary depending on the type of application in which the engine is used (some having higher in-use PM emissions, some having lower in-use PM emissions), the relative "value" of the Tier 3 PM credits in the Tier 4 timeframe will differ. Instead of requiring manufacturers to gather information to estimate the level of in-use PM emissions compared to the PM level of the steady-state test, we believe allowing manufacturers to bring Tier 3 PM credits directly into the Tier 4 time frame without any adjustment is appropriate because it discounts their value for use in the Tier 4 timeframe (since the initial baseline being reduced is probably higher than measured in the Tier 2 test procedure).

### 3. Should We Expand the Nonroad ABT Program To Include Credits From Retrofit of Nonroad Engines?

We are considering expanding the scope of the standards by setting voluntary new engine standards applicable to the retrofit of nonroad diesel engines, and allowing these nonroad diesel engines to generate PM and NO<sub>x</sub> credits available for use by other nonroad diesel engines. This program could achieve greater emission reductions of these pollutants than could otherwise be achieved, in a cost-effective manner. Specifically, we would allow existing in-use nonroad diesel engines that are retrofitted to achieve more stringent levels of emissions than are otherwise required to generate credits available for use in the ABT program by new nonroad engines. Credit-generating engines electing to participate in the program would be considered new nonroad diesel engines, subject to the normal compliance mechanisms applicable to other new nonroad diesel engines. These new nonroad engines could generate credits that could be used in the ABT program for other new nonroad diesel engines. Any such program would also have to ensure that credits are surplus, verifiable, quantifiable, and enforceable. We request comment on whether such a program would be feasible and appropriate for the Tier 4 nonroad standards, and on how such a program might be structured.

We are considering an approach for credit generation based on the use of advanced exhaust emission control technology/engine system combinations that would provide significant emissions reductions. To accomplish this, simple changes that are easy to circumvent accidentally or to defeat intentionally would not be eligible to generate credits, and essentially, only changes involving introduction of post combustion emissions control technology would be eligible. Thus, we would structure the program such that engine recalibration as the sole mechanism to reduce emissions would not be eligible for retrofit credits. Also, as noted, for purposes of a nonroad retrofit ABT program, in order to generate credits, the manufacturer of the nonroad retrofit engine system choosing to participate in the program would accept that the retrofit engine would be considered a new nonroad engine, subject to enforceable standards and normal certification and compliance requirements. We have outlined in a memorandum to the docket our ideas for meeting these objectives, including possible ways to structure the

program.<sup>299</sup> This memorandum describes potential procedures for credit generation, credit use, and a number of compliance, implementation, and enforcement measures.

We recognize that expanding the ABT program in this way would introduce new issues and complexities to the nonroad Tier 4 program, and that there are several ways to structure the program. We are seeking comment on whether such an expansion of the ABT program is feasible and appropriate, as well as on the details of how a program could be structured. We have considered and described a possible framework for nonroad retrofit credits in an effort to help commenters provide input. The level of detail provided below and in the memorandum to the docket does not indicate that we have made any decisions on whether nonroad retrofit credits are appropriate for the ABT program or about how the program should function. We invite comment not only on the provisions described below and in the memorandum to the docket, but also on alternative approaches that commenters believe would lead to a better overall program.

We are also seeking comment on the timing of a retrofit credits approach. We believe that if such a program were adopted, credit generation could start in 2004 at the earliest, and request comment on ending the program in the 2015 time frame. We view this as primarily a transitional program which could be most useful in the early years of the nonroad program. Ending the program in 2015 may also ease concerns about long-term impact of such a program on the environment.

We encourage commenters to carefully address all aspects of a nonroad retrofit credits program including its usefulness, feasibility, compliance and enforcement measures, environmental benefits, and potential cost savings. We specifically request comment on the potential for such a program to provide additional emissions reductions than would otherwise be obtained and request comment on the potential impacts such provisions would have on emissions reductions associated with the proposed nonroad standards. We are also interested in comments on practical issues and details regarding how the program would operate and be enforced.

a. What would be the environmental impact of allowing ABT nonroad retrofit credits?

<sup>299</sup> Memorandum to the Docket, Chris Lieske and Joseph McDonald, EPA, Additional Information on Nonroad Retrofit Engine ABT Credit Concepts, Docket A-2001-28.