

will use over their lifetimes. For the standards we are adopting in this rule, we are allowing engine testing using distillate fuel, even though vessels with Category 3 marine engines primarily use the significantly less expensive residual fuel. This allowance is consistent with the specifications of the NTC. We proposed to base the standards on testing using residual fuel, but are not finalizing this requirement at this time due to concerns about the lead time needed by manufacturers to develop the necessary testing capabilities for residual fuels. Most manufacturers have test facilities designed to test engines using distillate fuel because it is easier to work with than residual fuel. Nevertheless, we believe that long-term standards should be based on actual in-use fuels. Thus, we will reconsider the issue of test fuel in a future rulemaking.

In our proposal, we also included a correction factor to account for the emission-related effects of fuel quality, specifically fuel-bound nitrogen. We are not finalizing the correction here. This correction would have been needed for residual fuel testing because of the high levels of nitrogen contained in those fuels. For all testing with Category 3 engines, we proposed to require measuring fuel-bound nitrogen and correcting measured values to what would occur with a nitrogen concentration of 0.4 weight percent. This corrected value would be used to

determine whether the engine meets emission standards or not. This correction methodology would have applied equally to testing with distillate or residual fuels. While we are not adopting any correction for fuel effects in this rule, we will reconsider the need for such corrections in a future rulemaking.

4. What Are EPA's Concerns About Production Variability?

To ensure compliance of production engines, we proposed a simple testing program that is modeled loosely on our production line testing (PLT) requirements for other marine engines. The general object of any PLT program is to enable manufacturers and EPA to determine, with reasonable certainty, whether certification designs have been translated into production engines that meet applicable standards. We proposed that each engine a manufacturer produces be tested. We are not including new production testing requirements in this final rule because of concerns about the amount of lead time needed to start such program. However, we will revisit the need to include this type of post-certification testing in our future rulemaking.

VI. Projected Impacts

Our analysis of the projected impacts of new emission standards typically consists of estimating the costs,

emission benefits, and cost per ton of pollutant reduced.

We expect the costs of compliance to be negligible. We do not anticipate any engineering or design costs associated with the near-term standards because manufacturers should already be certifying engines to the Annex VI standards to comply with the internationally negotiated program and new Category 3 marine diesel engines installed on ships since January 1, 2000 are widely understood to already comply with the standards set forth in both Annex VI and this rule. While there will be certification and compliance costs, these costs will be negligible, because manufacturers will be able to use the same test data for both programs. As detailed in the information collection request associated with this final rule (OMB #2060-0460), total annual reporting and recordkeeping costs for all affected entities is estimated to be \$144,000.³⁶ Consequently, this program does not impose significant additional costs.

The emission reductions will reflect only reductions from engines that are currently in noncompliance with the Annex VI NO_x limits. For these reasons, the projected impacts of this rule are expected to be negligible (see Table VI-1). Accordingly, we have not calculated values to quantify the cost-effectiveness of the final rule.

TABLE VI-1.—CATEGORY 3 MARINE VESSEL NO_x NATIONAL EMISSION INVENTORIES

	1996	2010	2020	2030
No control baseline (thousand short tons)	190	303	439	659
EPA/MARPOL Annex VI:				
(Thousand short tons)	190	274	367	531
Percent reduction (relative to no control)	9.6	16.2	19.5

VII. The Blue Cruise Program

As described in Section VIII of the proposal, we are interested in developing a voluntary program to encourage ship owners and operators to reduce their air and waste emissions to minimize adverse environmental impacts. Under the envisioned program, a participant ship owner would be awarded a certain designation based on the combination of air and waste emission-control programs adopted. These technologies and systems could be different for new or existing vessels, but would be in addition to any equipment or systems they are already required to have. Qualifying ship owners could use the EPA designation

on advertising materials (including the ship itself) to educate consumers and encourage them to choose their vessels.

We will continue the development of the Blue Cruise program separate from the emission-control programs for marine diesel engines. We intend to interact extensively with interested parties through public workshops and a proposal that we intend to publish in mid-2003. After consideration of the public comments we receive on that proposal, we will publish a final program.

VIII. Public Participation

A wide variety of interested parties participated in the rulemaking process

that culminates with this final rule. This process provided opportunity for public comment following the proposal that we published May 29, 2002 (67 FR 37548). We considered these comments in developing the final rule.

We have prepared a detailed Summary and Analysis of Comments document, which describes the comments we received on the proposal and our response to each of these comments. The Summary and Analysis of Comments is available in the docket for this rule and on the Office of Transportation and Air Quality Internet home page at <http://www.epa.gov/otaq/marine.htm>.

³⁶ Note that manufacturers have already incurred most of these estimated compliance costs for

meeting Annex VI standards. New costs related to the final rule will be much smaller.