

settings. For engine parameters such as aftercooler and backpressure simulation, these parameters may significantly affect emission levels. As with the test conditions for air and water temperatures, to avoid unrealistic parameter settings, we simply require good engineering judgment to select representative values for such engine parameters. Also, under NTC, manufacturers may specify a maximum test speed for engine testing that selectively includes lower-emission operation, even if those speeds do not represent an engine's actual operation when installed on a vessel. We instead define an objective way of identifying an engine's maximum test speed, based on the way the engine will operate in use.

- **Compliance date for standards**—As described in Section III, we apply the new emission standards based on the date the engine is fully assembled for the first time, while Annex VI applies the standards based on the date that the vessel is manufactured. Note that this difference would not matter for the near-term standards, since the effective date of the Annex VI limits has already passed (January 1, 2000).

- **Parameter adjustment**—We are allowing manufacturers to specify in their applications for certification the range of adjustment across which the engine is certified to comply with the applicable emission standards. This would allow a manufacturer to specify different fuel injection timing calibrations for different conditions. These different calibrations would be designed to account for differences in fuel quality. Operators would then be prohibited by the anti-tampering provisions from adjusting engines to a calibration different from the calibration specified by the manufacturer. The NTC would also prohibit operators from adjusting engines to a calibration different from the calibration specified by the manufacturer.

The durability requirements of the Clean Air Act represent the most fundamental differences between the NTC certification program and the program required by the Clean Air Act. The Act requires that a certificate of conformity be based on a demonstration of compliance with the engine standards, and the engine standards require that the engine manufacturer produces an engine that will comply with the emission standards for the specified useful life of the engine. The NTC certification provisions do not include this kind of requirement, instead making the ship operators solely responsible for ensuring in-use compliance through periodic survey

requirements. Nevertheless, since requiring compliance with both would be at least partially duplicative, this rule harmonizes the Act and NTC requirements as closely as possible.

The requirements related to representative engine testing are important to ensure that engines are not designed with emission-control systems that operate well in the laboratory, with less effective control during in-use operation. However, based on our expectation that manufacturers are designing their engines properly today, we will allow manufacturers to rely on test data generated under NTC on an interim basis, as described in Section V.A.2,

2. Can a Manufacturer Comply With EPA Requirements and Annex VI Requirements at the Same Time?

Manufacturers complying with EPA requirements will need to do very little additional work to meet the Annex VI requirements. Engine manufacturers must give the operator a Technical File that has more information than we require. The manufacturer may also need to ensure that the relevant emission testing is witnessed appropriately.

For manufacturers already complying with the NTC, the amount of additional work necessary to satisfy the new EPA requirements depends on how they conducted emission testing. The NTC allows more discretion in testing engines than we allow under our regulations, and does not necessarily require that the engine be tested fully consistent with in-use operation. Under the EPA regulations tests of engines that are not consistent with in-use operation would not be allowed, unless the manufacturer could demonstrate that the test results were equivalent to test results that would result from testing conducted in accordance with the proposed regulations. In these cases, manufacturers would need to repeat the tests according to the proposed test procedures. However, we recognize that some additional lead time is needed for manufacturers that will be repeating tests. Therefore, we have included in 40 CFR 94.12(f) of the final regulations an interim provision which will allow manufacturers to use their Annex VI test data to show compliance with Tier 1 standards. Manufacturers would not need prior approval to do this. We are limiting this allowance to the first three model years of the Tier 1 standards. Beginning with model year 2007, manufacturers would need to make a showing of equivalence before they could deviate from the EPA test procedures.

On the other hand, manufacturers that used good engineering judgment to test their engines consistent with their in-use operation may generally use the same test data for EPA certification. For future testing, manufacturers may test their engines in a way that allows them to simultaneously meet the NTC and EPA requirements.

With respect to other EPA compliance requirements not related to certification testing, manufacturers must do the following things in addition to the Annex VI requirements:

- Demonstrate prior to production that the engines will comply with the emission standards for the useful life of the engine.
- Warrant to the purchasers that the engines will comply with the EPA requirements for the useful life of the engine.
- Specify how the operator should adjust the engine in use and how proper adjustment should be verified through testing.

E. Technical Amendment to 40 CFR Part 94

The regulations in 40 CFR 94.7(d) require that a marine engine be equipped with a connection in the exhaust system for the temporary attachment of gaseous and/or particulate emission-sampling equipment. This provision is intended to facilitate in-use emission testing. Where the engine manufacturer does not add a sample port, for example when an inadequate amount of the exhaust system is supplied to make such an installation practical, the engine manufacturer would have to provide installation instructions for the sample port. If the engine manufacturer properly supplies such instructions, the engine would be covered by the applicable engine certificate when the engine manufacturer provides the engine to the vessel manufacturer for the purposes of installation. The vessel manufacturer would then have to follow these installation instructions or the vessel manufacturer's sale or placement of the vessel into service could be a violation of the prohibited acts. Manufacturers expressed concern that the wording of this requirement could be taken to mean that a failure to install the sample port by the vessel manufacturer could affect their engine certificate. This was clearly not the intent of this provision. To further clarify this issue, we are amending 40 CFR 94.7(d) by deleting the words "invalidate a certificate and" from the last sentence of that regulatory provision.