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The EPA Administrator signed the following final rule on June 3, 2005. It is being submitted for publication in the *Federal Register*. While EPA has taken steps to ensure the accuracy of this Internet version, it is not the official version of the rule. Please refer to the official version in a forthcoming *Federal Register* publication and on GPO's Web Site. The rule will likely be published in the *Federal Register* in August 2005. You can access the *Federal Register* at: [http://www.access.gpo.gov/su\\_docs/aces/aces140.html](http://www.access.gpo.gov/su_docs/aces/aces140.html). When using this site, note that "text" files may be incomplete because they don't include graphics. Instead, select "Adobe Portable Document File" (PDF) files.

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**ENVIRONMENTAL PROTECTION AGENCY**  
**40 CFR Parts 85, 86, 89, 90, 91, 92, 94, 1039, 1048, 1051, 1065, and 1068**  
**[AMS-FRL-7803-7]**

**RIN 2060-AM35**

**Test Procedures for Testing Highway and Nonroad Engines and Omnibus Technical Amendments**

**AGENCY: Environmental Protection Agency (EPA).**

**ACTION: Final Rulemaking.**

**SUMMARY:** This regulation revises and harmonizes test procedures from the various EPA programs for controlling engine emissions. It does not change emission standards, nor is it intended to change the emission reductions expected from these EPA programs. Rather, it amends the regulations that describe laboratory specifications for equipment and test fuels, instructions for preparing engines and running tests, calculations for determining final emission levels from measured values, and instructions for running emission tests using portable measurement devices outside the laboratory. These updated testing regulations currently apply to land-based nonroad diesel engines, land-based nonroad spark-ignition engines over 19 kilowatts, and recreational vehicles. The revisions in this final rule will update the regulations to deal more effectively with the more stringent standards recently promulgated by EPA and will also clarify and better define certain elements of the required test procedures. In particular, the amendments better specify the procedures applicable to field testing under the regulations.

This action also applies the updated testing regulations to highway heavy-duty diesel engine regulations. This action is appropriate because EPA has historically drafted a full set of testing specifications for each vehicle or engine category subject to emission standards as each program was developed over the past three decades. This patchwork approach has led to some variation in test parameters across programs, which we hope to address by adopting a common set of test requirements. The primary goal of this effort is to create unified testing requirements for all engines, which when implemented will streamline laboratory efforts for EPA and industry.

This action will also include other technical changes intended to clarify and better define requirements for several different EPA engine programs. These changes are relatively minor and are technical in scope.

**DATES:** This final rule is effective [insert date 60 days after publication in the Federal Register].

The incorporation by reference of certain publications listed in this regulation is approved by the Director of the Federal Register as of [insert date 60 days after publication in the Federal Register].

**ADDRESSES:** EPA has established a docket for this action under Docket ID No. OAR-2004-0017. All documents in the docket are listed in the EDOCKET index at <http://www.epa.gov/edocket>. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is

restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in EDOCKET or in hard copy at the Air Docket in the EPA Docket Center, EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

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**SUPPLEMENTARY INFORMATION:**

A. Regulated Entities

This action affects companies that manufacture or sell engines. Regulated categories and entities include:

Category	NAICS Codes <sup>a</sup>	Examples of Potentially Regulated Entities
Industry	333618	Manufacturers of new engines

<sup>a</sup>North American Industry Classification System (NAICS)

This list is not intended to be exhaustive, but rather provides a guide regarding entities likely to be regulated by this action. To determine whether particular activities may be regulated by this action, you should carefully examine the regulations. You may direct questions regarding the applicability of this action to the person listed in “FOR FURTHER INFORMATION CONTACT.”

**B. How Can I Get Copies Of This Document and Other Related Information ?**

1. *Docket.* EPA has established an official public docket for this action under Docket ID No. OAR-2004-0017. The official public docket consists of the documents specifically referenced in this action, any public comments received, and other information related to this action. Although a part of the official docket, the public docket does not include Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Documents in the official public docket are listed in the index list in EPA’s electronic public docket and comment system, EDOCKET. Documents may be available either electronically or in hard copy. Electronic documents may be viewed through EDOCKET. Hard copy documents may be viewed at the EPA Docket Center, (EPA/DC) EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC. Docket in The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744.

This rule relies in part on information related to our November 2002 final rule, which can be found in Public Docket A-2000-01. This docket is incorporated by reference into the docket for this action, OAR-2004-0017.

2. *Electronic Access.* You may access this Federal Register document electronically through the EPA Internet under the “Federal Register” listings at <http://www.epa.gov/fedrgstr/>. Or you can go to the federal-wide eRulemaking site at [www.regulations.gov](http://www.regulations.gov).

An electronic version of the public docket is available through EDOCKET. You may use EDOCKET at <http://www.epa.gov/edocket/> to view public comments, access the index listing of the contents of the official public docket, and to access those documents in the public docket that are available electronically. Once in the system, select “search,” then key in the appropriate docket identification number.

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### **I. Modified Test Procedures for Highway and Nonroad Engines**

#### **A. Incorporation of Nonroad Test Procedures for Heavy Duty Highway Engines**

As part of our initiative to update the content, organization and writing style of our regulations, we are revising our test procedures.<sup>1</sup> We have grouped all of our engine dynamometer and field testing test procedures into one part entitled, “Part 1065: Test Procedures.” For each engine or vehicle sector for which we have recently promulgated standards (such as land-based nonroad diesel engines or recreational vehicles), we identified an individual part as the standard-setting part for that sector. These standard-setting parts then refer to one common set of test procedures in part 1065. We intend in this rule to continue this process of having all our engine programs refer to a common set of procedures by applying part 1065 to all heavy-duty highway engines.

In the past, each engine or vehicle sector had its own set of testing procedures. There are many

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<sup>1</sup> For an overview of our new regulatory organization, refer to our fact sheet entitled, “Plain-Language Format of Emission Regulations for Nonroad Engines,” EPA420-F-02-046, September 2002, <http://www.epa.gov/otaq/largesi.htm>.

similarities in test procedures across the various sectors. However, as we introduced new regulations for individual sectors, the more recent regulations featured test procedure updates and improvements that the other sectors did not have. As this process continued, we recognized that a single set of test procedures would allow for improvements to occur simultaneously across engine and vehicle sectors. A single set of test procedures is easier to understand than trying to understand many different sets of procedures, and it is easier to move toward international test procedure harmonization if we only have one set of test procedures. We note that procedures that are particular for different types of engines or vehicles, for example, test schedules designed to reflect the conditions expected in use for particular types of vehicles or engines, will remain separate and will be reflected in the standard-setting parts of the regulations.

In addition to reorganizing and rewriting the test procedures for improved clarity, we are making a variety of changes to improve the content of the testing specifications, including the following:

- Writing specifications and calculations in international units
- Adding procedures by which manufacturers can demonstrate that alternate test procedures are equivalent to specified procedures.
- Including specifications for new measurement technology that has been shown to be equivalent or more accurate than existing technology; procedures that improve test repeatability, calculations that simplify emissions determination; new procedures for field testing engines, and a more comprehensive set of definitions, references, and symbols.
- Defining calibration and accuracy specifications that are scaled to the applicable standard, which allows us to adopt a single specification that applies to a wide range of engine sizes and applications.

Some emission-control programs already rely on the test procedures in part 1065. These programs regulate land-based nonroad diesel engines, recreational vehicles, and nonroad spark-ignition engines over 19 kW.

We are adopting the lab-testing and field-testing specifications in part 1065 for all heavy-duty highway engines, as described in Section II.J. These procedures replace those currently published in subpart N in 40 CFR part 86. We are making a gradual transition from the part 86 procedures. For several years, manufacturers will be able to optionally use the part 1065 procedures. By the 2010 model year, part 1065 procedures will be required for any new testing. For all testing completed for 2009 and earlier model years, manufacturers may continue to rely on carryover test data based on part 86 procedures to certify engine families in later years. In addition, other subparts in part 86, as well as regulations for many different nonroad engines refer to the test procedures in part 86. We are including updated references for all these other programs to refer instead to the appropriate cite in part 1065.

Part 1065 is also advantageous for in-use testing because it specifies the same procedures for all common parts of field testing and laboratory testing. It also contains new provisions that help ensure that engines are tested in a laboratory in a way that is consistent with how they operate in use. These new provisions will ensure that engine dynamometer lab testing and field testing are conducted in a consistent way.

In the future, we may apply the test procedures specified in part 1065 to other types of engines, so we encourage companies involved in producing or testing other engines to stay informed of developments related to these test procedures. For example, we expect to propose in the near future new regulations for locomotives, marine engines, and several types of nonroad SI engines. We are likely to consider some changes to part 1065 in each of these rulemakings.

## **B. Revisions to Part 1065**

Part 1065 was originally adopted on November 8, 2002 (67 FR 68242), and was initially applicable to standards regulating large nonroad spark-ignition engines and recreational vehicles under 40 CFR parts 1048 and 1051. The recent rulemaking adopting emission standards for nonroad diesel engines has also made part 1065 optional for Tier 2 and Tier 3 standards and required for Tier 4 standards. The test procedures initially adopted in part 1065 were sufficient to conduct testing, but in this final rule we have reorganized these procedures and added content to make various improvements. In particular, we have reorganized part 1065 by subparts as shown below:

Subpart A: general provisions; global information on applicability, alternate procedures, units of measure, etc.

Subpart B: equipment specifications; required hardware for testing

Subpart C: measurement instruments

Subpart D: calibration and verifications; for measurement systems

Subpart E: engine selection, preparation, and maintenance

Subpart F: test protocols; step-by-step sequences for laboratory testing and test validation.

Subpart G: calculations and required information

Subpart H: fuels, fluids, and analytical gases

Subpart I: oxygenated fuels; special test procedures

Subpart J: field testing and portable emissions measurement systems

Subpart K: definitions, references, and symbols

The regulations now prescribe scaled specifications for test equipment and measurement instruments by parameters such as engine power, engine speed and the emission standards to which an engine must comply. That way this single set of specifications will cover the full range of engine sizes and our full range of emission standards. Manufacturers will be able to use these specifications to determine what range of engines and emission standards may be tested using a given laboratory or field testing system.

The new content for part 1065 is mostly a combination of content from our most recent updates to other test procedures and from test procedures specified by the International Organization for Standardization (ISO). In some cases, however, there is new content that never existed in previous regulations. This new content addresses very recent issues such as measuring very low concentrations of emissions, using new measurement technology, using portable emissions measurement systems, and performing field testing. A full description of the changes is in the Technical Support Document that accompanies this final rule (this document is available in the docket for this rulemaking).

The new content also reflects a shift in our approach for specifying measurement performance. In the past we specified numerous calibration accuracies for individual measurement instruments, and we specified some verifications for individual components, such as NO<sub>2</sub> to NO converters. We have shifted our focus away from individual instruments and toward the overall performance of complete measurement systems. We did this for several reasons. First, some of what we specified in the past precluded the implementation of new measurement technologies. These new technologies, sometimes called “smart analyzers”, combine signals from multiple instruments to compensate for interferences that were previously tolerable at higher emissions levels. These analyzers are useful for detecting low concentrations of emissions. They are also useful for detecting emissions from raw exhaust, which can contain high concentrations of interferences, such as water vapor. This is particularly important for field testing, which will most likely rely upon raw exhaust measurements. Second, this new “systems approach” challenges complete measurement systems with a series of periodic verifications, which we feel will provide a more

robust assurance that a measurement system as a whole is operating properly. Third, the systems approach provides a direct pathway to demonstrate that a field test system performs similarly to a laboratory system. This is explained in more detail in item 10 below. Finally, we feel that our systems approach will lead to a more efficient way of assuring measurement performance in the laboratory and in the field. We believe that this efficiency will stem from less frequent individual instrument calibrations, and higher confidence that a complete measurement system is operating properly.

We have organized the new content relating to measurement systems performance into subparts C and D.. We specify measurement instruments in subpart C and calibrations and periodic system verifications in subpart D. These two subparts apply to both laboratory and field testing. We have organized content specific to running a laboratory emissions test in subpart F, and we separated content specific to field testing in subpart J.

In subpart C we specify the types of acceptable instruments, but we only recommend individual instrument performance. We provide these recommendations as guidance for procuring new instruments. We feel that the periodic verifications that we require in subpart D will sufficiently evaluate the individual instruments as part of their respective overall measurement systems. In subpart F we specify performance validations that must be conducted as part of every laboratory test. In subpart J we specify similar performance validations for field testing that must be conducted as part of every field test. We feel that the periodic verifications in subpart D and the validations for every test that we prescribed in subparts F and J ensure that complete measurement systems are operating properly.

In subpart J we also specify an additional overall verification of portable emissions measurement systems (PEMS). This verification is a comprehensive comparison of a PEMS versus a laboratory system, and it may take several days of laboratory time to set up, run, and evaluate. However, we only require that this particular verification must be performed at least once for a given make, model, and configuration of a field test system.

Below is a brief description of the content of each subpart, highlighting some of the new content. We also highlight the more significant changes from the regulatory language that was proposed in our responses to public comments. See the TSD for a more complete listing of the changes and comments to our proposed part 1065.

### **1. Subpart A General Provisions**

In Subpart A we identify the applicability of part 1065 and describe how procedures other than those in part 1065 may be used to comply with a standard-setting part. In §1065.10(c)(1), we specify that testing must be conducted in a way that represents in-use engine operation, such that in the rare case where provisions in part 1065 result in unrepresentative testing, other procedures would be used. We have revised the proposed regulatory language for this requirement to clarify the manufacturers' requirements and the process that we would use to make changes to the test procedures in these cases.

Other information in this subpart includes a description of the conventions we use regarding units and certain measurements and we discuss recordkeeping. We also provide an overview of how emissions and other information are used to determine final emission results. The regulations in §1065.15 include a figure illustrating the different ways we allow brake-specific emissions to be calculated.

In this same subpart, we describe how continuous and batch sampling may be used to determine total emissions. We also describe the two ways of determining total work that we approve. Note that the figure indicates our default procedures and those procedures that require additional approval before we will

allow them.

## **2. Subpart B Equipment Specifications**

Subpart B first describes engine and dynamometer related systems. Many of these specifications are scaled to an engine's size, speed, torque, exhaust flow rate, etc. We specify the use of in-use engine subsystems such as air intake systems wherever possible in order to best represent in-use operation when an engine is tested in a laboratory.

Subpart B also describes sampling dilution systems. These include specifications for the allowable components, materials, pressures, and temperatures. We describe how to sample crankcase emissions. We also now allow limited use of partial-flow dilution for PM sampling. Subpart B also specifies environmental conditions for PM filter stabilization and weighing. Although these provisions mostly come from our recent update to part 86, subpart N, we also describe some new aspects in detail.

The regulations in §1065.101 include a diagram illustrating all the available equipment for measuring emissions.

## **3. Subpart C Measurement Instruments**

Subpart C specifies the requirements for the measurement instruments used for testing. In subpart C we recommend accuracy, repeatability, noise, and response time specifications for individual measurement instruments, but note that we require that overall measurement systems meet the calibrations and verifications Subpart D.

In some cases we allow new instrument types to be used where we previously did not allow them. For example, we now allow the use of a nonmethane cutter for NMHC measurement, a nondispersive ultraviolet analyzers for NO<sub>x</sub> measurement, zirconia sensors for O<sub>2</sub> measurement, various raw-exhaust flow meters for laboratory and field testing measurement, and an ultrasonic flow meter for CVS systems. We had proposed to also allow zirconia sensors for NO<sub>x</sub> measurement, but we are not finalizing that option at this time because of manufacturer concerns about drift and sensor response to NO<sub>2</sub> and NH<sub>3</sub>.

## **4. Subpart D Calibrations and Verifications**

Subpart D describes what we mean when we specify accuracy, repeatability and other parameters in Subpart C. We are adopting calibrations and verifications that scale with engine size and with the emission standards to which an engine is certified. We are replacing some of what we have called "calibrations" in the past with a series of verifications, such as a linearity verification, which essentially verifies the calibration of an instrument without specifying how the instrument must be initially calibrated. Because new instruments have built-in routines that linearize signals and compensate for various interferences, our existing calibration specifications sometimes conflicted with an instrument manufacturer's instructions. In addition, there are new verifications in subpart D to ensure that the new instruments we specify in Subpart C are used correctly. The most significant changes in this subpart from the proposal are that we split the language for continuous gas analyzer verification into two sections (§§1065.308 and 1065.309), we provide more detailed descriptions for the FID O<sub>2</sub> interference verifications (§1065.362) and NMHC cutter setups (§1065.365), and we added §1065.395 for inertial PM balance verification.

## **5. Subpart E Engine Selection, Preparation, and Maintenance**

Subpart E describes how to select, prepare, and maintain a test engine. We updated these provisions to include both gasoline and diesel engines. This subpart is relatively short, and we did not make many changes to its proposed content.

## **6. Subpart F Test Protocols**

Subpart F describes the step-by-step protocols for engine mapping, test cycle generation, test cycle validation, pre-test preconditioning, engine starting, emission sampling, and post-test validations. We proposed an improved way to map and generate cycles for constant-speed engines that would better represent in-use engine operation. We have modified this language slightly to reflect the different ways in which constant-speed test cycles can be specified. We are adopting a more streamlined set of test cycle and validation criteria. We allow modest corrections for drift of emission analyzer signals within a certain range. We are also adopting a recommended procedure for weighing PM samples. We are not finalizing our proposed procedure to correct for instrument noise because after receiving many comments, we now acknowledge that the procedure is not robust and applicable to all emissions.

## **7. Subpart G Calculations and Required Information**

Subpart G includes all the calculations required in part 1065. We are adopting definitions of statistical quantities such as mean, standard deviation, slope, intercept, t-test, F-test, etc. By defining these quantities mathematically we intend to resolve any potential mis-communication when we discuss these quantities in other subparts. We have written all calculations for calibrations and emission calculations in international units to comply with 15 CFR 1170, which removes the voluntary aspect of the conversion to international units for federal agencies. Furthermore, Executive Order 12770 (56 FR 35801, July 29, 1991) reinforces this policy by providing Presidential authority and direction for the use of the metric system of measurement by Federal agencies and departments. For our standards that are not completely in international units (i.e., grams/horsepower-hour, grams/mile), we specify in part 1065 the correct use of internationally recognized conversion factors.

We also specify emission calculations based on molar quantities for flow rates, instead of volume or mass. This change eliminates the frequent confusion caused by using different reference points for standard pressure and standard temperature. Instead of declaring standard densities at standard pressure and standard temperature to convert volumetric concentration measurements to mass-based units, we declare molar masses for individual elements and compounds. Since these values are independent of all other parameters, they are known to be universally constant.

We have added some detail to the calculations relative to the proposed calculations to make them clearer. We also made changes in response to comments from manufacturers.

## **8. Subpart H Fuels, Fluids, and Analytical Gases**

Subpart H specifies test fuels, lubricating oils and coolants, and analytical gases for testing. We are eliminating the Cetane Index specification for all diesel fuels, because the existing specification for Cetane Number sufficiently determines the cetane levels of diesel test fuels. We are not identifying any detailed specification for service accumulation fuel. Instead, we specify that service accumulation fuel may be a test fuel or a commercially available in-use fuel. This helps ensure that testing is representative of in-use engine operation. We are adding a list of ASTM specifications for in-use fuels as examples of appropriate service accumulation fuels. Compared to the proposed regulatory language, we have clarified that §1065.10(c)(1) does not require test fuels to be more representative than the specified test fuels. We have added an allowance to use similar test fuels that do not meet all of the specifications, provided they do not compromise the manufacturer's ability to demonstrate compliance. We also now allow the use of ASTM test methods specified in 40 CFR Part 80 in lieu of those specified in part 1065. We did this because we more frequently review and update the ASTM methods in 40 CFR Part 80 versus those in part 1065.

We proposed purity specifications for analytical gases that scale with the standards that an engine must meet. In the final regulations, we have clarified the requirement to use good engineering judgment to



maintain the stability of these gases, and have tightened the purity specification for FID fuel in response to comment.

### **9. Subpart I Oxygenated Fuels**

Subpart I describes special procedures for measuring certain hydrocarbons whenever oxygenated fuels are used. We updated the calculations for these procedures in Subpart G. We have made some revisions to the proposed text to make it consistent the original content of the comparable provisions in 40 CFR part 86. We have also added an allowance to use the California NMOG test procedures to measure alcohols and carbonyls.

### **10. Subpart J Field Testing and Portable Emissions Measurement Systems**

We are adopting a wide range of changes to Subpart J Field Testing. Portable Emissions Measurement Systems (PEMS) must generally meet the same specifications and verifications that laboratory instruments must meet, according to subparts B, C, and D. However, allow some deviations from laboratory specifications. In addition to meeting many of the laboratory system requirements, a PEMS must meet an overall verification relative to a laboratory measurements. This verification involves repeating a duty cycle several times. The duty cycle itself must have several individual field-test intervals (e.g., NTE events) against which a PEMS is compared to the laboratory system. This is a comprehensive verification of a PEMS. We are also adopting a procedure for preparing and conducting a field test, and we are adopting drift corrections for emission analyzers. Given the evolving state of PEMS technology, the field-testing procedures provide for a number of known measurement techniques. We have added provisions and conditions for the use of PEMS in an engine dynamometer laboratory to conduct laboratory testing.

### **11. Subpart K Definitions, References, and Symbols**

In Subpart K we are adopting new and revised definitions of terms frequently used in part 1065. For example we have revised our definitions of “brake power”, “constant-speed engine”, and “aftertreatment” to provide more clarity, and we have added new definitions for things such as “300 series stainless steel”, “barometric pressure”, and “operator demand”. There are new definitions such as “duty cycle” and “test interval” to distinguish the difference between a single interval over which brake-specific emissions are calculated and the complete cycle over which emissions are evaluated in a laboratory. We also present a thorough and consistent set of symbols, abbreviations, and acronyms.

## **II. Technical Amendments**

### **A. Standard-Setting Changes that Apply to Multiple Categories**

#### **1. Definitions**

We are revising several definitions that apply over more than one part of our regulations. These changes are designed to harmonize our regulations.

We are changing the definition of Marine engine and Marine vessel to harmonize our approach to amphibious vehicles and clarify other issues. We have treated amphibious vehicles differently whether they had a diesel engine or a spark-ignition engine. We are harmonizing our treatment of amphibious vehicles by consistently treating these as land-based products. We are also adding a provision defining amphibious vehicles are those that are designed primarily for operation on land to clarify that we don’t consider hovercraft to be amphibious vehicles. This is consistent with our intent and our analyses in the rulemaking to initially set standards for these products. See the Technical Support Document for additional information related to these definitions. In particular, note that we describe our interpretation of what it means for an engine to be “installed in a marine vessel.” Manufacturers have raised several questions related to this issue, especially as it relates to portable engines installed on barges.

## 2. Penalties

The Clean Air Act specifies maximum penalty amounts corresponding to each prohibited Act. These maximum penalty amounts are periodically adjusted for inflation, based on the provisions of the Debt Collection Improvement Act. These maximum penalties have been updated under 40 CFR part 19. The new maximum penalties are \$32,500 for introducing noncompliant engines into commerce and for manufacturers guilty of tampering, and \$2,750 for non-manufacturers guilty of tampering. In addition, the maximum penalty we can recover using administrative procedures is \$270,000. We are extending these revised penalties into each of our emission-control programs.

## 3. Deterioration Factors for HC+NO<sub>x</sub> Standards

Manufacturers requested that we allow them to calculate a single deterioration factor for engines that are subject to combined HC+NO<sub>x</sub> emission standards, rather than calculating separate deterioration factors for each pollutant. We proposed for some engines to clarify that separate deterioration factors were appropriate. In the case of spark-ignition engines, it is especially true that changing carburetor calibrations and other things affecting air-fuel ratios have a direct inverse relationship on HC and NO<sub>x</sub> emissions. Where deterioration factors are based on service accumulation through the entire useful life, we believe it is therefore appropriate to base deterioration factors for spark-ignition engines subject to HC+NO<sub>x</sub> emission standards on a single deterioration factor for the combined pollutants. However, if deterioration factors are based on service accumulation over less than the full useful life, we want to avoid the situation where a manufacturer is extrapolating values that presume further improvement in the emission levels of any particular pollutant. For such testing, we therefore specify that separate deterioration factors for each pollutant are appropriate. We are making a related, additional change to clarify that manufacturers must include both low-hour and deteriorated emission measurements for each pollutant, even if the regulations allow for a single deterioration factor for HC+NO<sub>x</sub> emissions together. Compression-ignition engines have different wear mechanisms and generally have much longer useful-life values, so it is not clear that this approach to allowing combined deterioration factor is appropriate for these engines. We may further consider applying this change to compression-ignition engines in a future rulemaking.

## 4. Emission Warranty Related to Extended Service Contracts

Manufacturers objected to our proposal to apply emission-related warranty requirements to components for which a consumer pays for an extended performance warranty. We agree with the point raised by the manufacturers that these service contracts do not necessarily imply that the part should last longer, but rather that the manufacturer (or a third-party provider) has made a calculation regarding the financial and customer service benefits of offering contracts that provide free or reduced-cost coverage for certain components after collecting an up-front charge. We will remove this provision across all engine categories.

## 5. Exemption for Staged Assembly

Some manufacturers pointed out that they were facing difficulties with production processes that required them to ship a nearly completed engines to one or more different facilities for final assembly. Without an exemption, this would violate the applicable prohibited acts, since it involves the introduction into commerce an engine that is not in its certified configuration. To address this concern, we have adopted an exemption that allows manufacturers to assemble engines at multiple facilities, as long as they maintain control of the engines at all times before final assembly. Manufacturers would need to request approval for such an arrangement. EPA approval may be conditioned on the manufacturer taking reasonable additional

steps to ensure that engines end up in their certified configuration. This exemption applies to all the engine categories that are subject to 40 CFR part 1068 (as described in the next section), and to locomotives and marine diesel engines.

### **B. Nonroad general compliance provisions (40 CFR part 1068)**

In addition to the changing test procedures described above, we are making various changes to the general compliance provisions in 40 CFR part 1068, which currently applies to land-based nonroad diesel engines, recreational vehicles, and nonroad spark-ignition engines over 19 kW. We encourage manufacturers of other engines to take note of these changes, since we intend eventually to apply the provisions of part 1068 to all engines subject to EPA emission standards.

There was extensive comment related to the existing provisions in §1068.260 related to the exemption that allows engine manufacturers to arrange for shipment of aftertreatment devices separately from engines that are intended to rely on aftertreatment. Commenters suggested that we relax some of the provisions that were intended to prevent noncompliance. We continue to believe the provisions adopted in §1068.260 are appropriate for nonroad engines. The more extensive oversight and control mechanisms are important to ensuring that engines are assembled correctly, since there are so many possible equipment manufacturers and so many different business relationships among companies. Given that we are requiring engine manufacturers to include the cost of aftertreatment components in the price of the engine, we believe it is implicitly clear that the engine manufacturer is responsible for shipping costs, so we have removed the proposal to restate that in the regulations. We are making three other adjustments to the proposal. First, we are removing the requirement for engine manufacturers to arrange for direct shipment of aftertreatment components from the supplier to the equipment manufacturer, since a third party may appropriately be involved to produce system assemblies for integration into equipment. Second, we are adding a paragraph to clarify that integrated manufacturers can meet their auditing requirements by maintaining a database for matching up engines with the appropriate aftertreatment components. Third, we are adopting the staged-assembly exemption, as described above, which would streamline the production process for integrated engine and equipment manufacturers and address a wide range of production scenarios in addition to separate shipment of aftertreatment components.

The changes to part 1068 include several other minor adjustments and corrections. These changes are described in the Technical Support Document.

### **C. Land-based nonroad diesel engines (40 CFR parts 89 and 1039)**

We recently adopted a new tier of emission standards for nonroad diesel engines, codifying these standards in 40 CFR part 1039. This rulemaking led us to make several regulatory changes to the existing tiers of standards for these engines in 40 CFR part 89. In cases where we discovered the need for changes after publishing the proposed rule, but we did not make those changes to part 89 in the final rule out of concern that the public had not had an opportunity for comment. Similarly, we are adopting some adjustments to part 1039, based on information that surfaced late in that rulemaking. See the Technical Support Document for a complete discussion of the rulemaking changes for these engines.

We proposed to add a constraint for averaging, banking, and trading to prevent manufacturers from including credits earned in California or another state if there would ever be a situation in which manufacturers would be making engines with lower emissions to meet more stringent state standards or to earn emission credits under the state program. In the case of nonroad diesel engines, California has adopted our Tier 4 standards without an emission-credit program that does not involve California-specific

credit calculations. The proposed provision would therefore have no effect for the foreseeable future. We have decided not to adopt the proposed provision, but expect to pursue this if California adopts more stringent standards or creates a California-specific emission-credit program for these engines (see 40 CFR 1051.701(d)(4)).

#### **D. Marine diesel engines (40 CFR part 94)**

We are making several changes to our marine diesel engine program, in 40 CFR part 94. These changes are intended to clarify several aspects of the program. These changes are described in detail in the Technical Support Document. This discussion also elaborates on our interpretation of various provisions. For example, we describe how to determine which standards apply to amphibious vehicles and hovercraft. We also explain how we interpret the term “marine diesel engine” with respect to auxiliary applications in which it may not be clear whether the engine is “installed” on the vessel or not.

#### **E. Small nonroad spark-ignition engines (40 CFR part 90)**

We are adding a new §90.913 to better define the responsibilities for manufacturers choosing to certify their engines below 19 kW to the emission standards for Large SI engines in 40 CFR part 1048. We are also revising §90.1 to cross-reference provisions in parts 86, 1048, and 1051 that allow highway motorcycle engines and nonroad engines above 19 kW to meet the requirements in part 90 under certain conditions.

We are making several amendments to the test procedures, such as improving calculations for humidity corrections, adding clarifying language, and adjusting reporting provisions. We are also updating current references to test procedures in 40 CFR part 86 by pointing instead to 40 CFR part 1065. In addition, we are making a variety of minor corrections and clarifications. See the Technical Support Document for a discussion of all these changes.

#### **F. Marine spark-ignition engines (40 CFR part 91)**

We are adopting only minimal changes for Marine SI engines in 40 CFR part 91. These changes are primarily to update current references to test procedures in 40 CFR part 86 by pointing instead to 40 CFR part 1065. We are also updating various definitions, as described in Section II.A. Manufacturers raised some issues in the comment period that resulted in further minor corrections and adjustments for the final rule. We also corrected equations for typographical errors.

#### **G. Large nonroad spark-ignition engines (40 CFR part 1048)**

We adopted emission standards for nonroad spark-ignition engines over 19 kW in November 2002 (67 FR 68242). The regulations in 40 CFR part 1048 were our first attempt to draft emission-control regulations in plain-language format. In the recent final rule for nonroad diesel engines, we went through a similar process, including extensive interaction with a different set of manufacturers. This process led us adopt regulatory provisions in 40 CFR part 1039 that differ somewhat from those in part 1048. Since the process of meeting standards, applying for certificates, and complying with other emission-related requirements has a lot of commonality across programs, we have a strong interest in adopting consistent provisions and uniform terminology where possible. As a result, we are making extensive changes in part 1048 to align with the regulations in part 1039.

For discussion of these changes, see the Technical Support Document.

## **H. Recreational vehicles (40 CFR part 1051)**

We adopted emission standards for recreational vehicles in November 2002 (67 FR 68242). The regulations in 40 CFR part 1051 were our first attempt to draft emission-control regulations in plain-language format. In the recent final rule for nonroad diesel engines, we went through a similar process, including extensive interaction with a different set of manufacturers. This process led us to adopt regulatory provisions in 40 CFR part 1039 that differ from those in part 1051. Since the process of meeting standards, applying for certificates, and complying with other emission-related requirements has a lot of commonality across programs, we have a strong interest in adopting consistent provisions and uniform terminology as much as possible. As a result, we are making extensive changes in part 1051 to align with the regulations in part 1039. These provisions are all discussed in more detail in the Technical Support Document.

We proposed to add a constraint for averaging, banking, and trading to prevent manufacturers from including credits earned in California or another state if there would ever be a situation in which manufacturers would be making engines with lower emissions to meet more stringent state standards or to earn emission credits under the state program. We are adopting this provision in the final rule to require exclusion of California sales from federal ABT calculations if a company is subject to more stringent state standards, or if a company generates or uses emissions credits to show that it meets California standards. This provision is necessary to prevent double-counting of emission credits. In the case of recreational vehicles, California adopted emission standards that predate the EPA rulemaking. The California emission standards are based on a similar technology assessment, but are in a different form. For example, California specifies different numerical standards that apply to hydrocarbon emissions only, while EPA's standards apply to HC+NO<sub>x</sub> emissions. Given the difficulty in comparing these two sets of standards, we are making the judgment that, for the purposes of ABT calculations, California's current exhaust emission standards are equivalent to the EPA standards. Under the current requirements, companies would therefore exclude their California products from federal ABT calculations only if those products generate or use emission credits under the California program. If California adopts new standards for recreational vehicles, we will again make a judgment regarding the relative stringency of the two programs for ABT purposes.

## **I. Locomotives (40 CFR part 92)**

We proposed a variety of changes for our locomotive regulations in 40 CFR part 92 to correct various technical references and typographical errors. We are finalizing those changes. We are also finalizing other changes in response to comments. The large majority of the comments received regarding locomotives came from the Engine Manufacturers Association (EMA). See the Technical Support Document for additional information. In addition to the changes being finalized, we are also publishing the following clarifications in response to public comments.

EMA asked that remanufacturers be allowed to limit the practice of not replacing every power assembly with remanufactured power assemblies at the time of engine remanufacture. Remanufacturers already can limit this practice just as original manufacturers limit the parts that are used in their locomotives. In fact, remanufacturers would be expected to limit this practice to only those cases in which they can be certain that the previously used power assembly will not cause an engine to exceed an emission standard. By allowing an engine to be remanufactured under its certificate, the remanufacturer is assuming responsibility for the emission performance of that remanufactured engine. We define remanufactured locomotives to be "new", and the certificate holder has the same responsibilities as the manufacturer of a freshly manufactured locomotive. The remanufacturer is thus expected to maintain some degree of control

over the remanufacturing process to ensure that the remanufactured locomotive. For example, the remanufacturer might limit the certificate to only those engines remanufactured by installers that been properly trained. It must be noted, however, that while certificate holders have responsibility for the emission performance of locomotives remanufactured under their certificates, 40 CFR 92.209 also assigns responsibility to others involved in the remanufacturing process.

EMA asked that EPA not use the term "offer for sale" in the prohibited acts (40 CFR 92.1103). They are concerned that this would be problematic because locomotives are generally manufactured only after a sales agreement has been completed. The manufacturer offers to manufacture and sell a locomotive at least several months before it actually has obtained a certificate of conformity for the locomotive. Given this confusion, we are clarifying that EPA does not interpret the phrase "offer to sell" to apply to products that have not yet been manufactured (or remanufactured, as applicable).

EMA asked that EPA exempt replacement engines as we do in other nonroad engine programs. However, such exemption is not necessary with locomotives. Long after the manufacturer has stopped manufacturing brand new engines, that manufacturer (along with other remanufacturers) will be certifying remanufacturing systems. Thus, we believe that the cases in which a brand new engine will be needed will be rare. Nevertheless, we are finalizing a regulatory change in 40 CFR 92.204 to explicitly allow manufacturers to include freshly manufactured locomotive engines in the same engine family as remanufactured locomotives. We believe that this will resolve the issue, since manufacturers would merely need to certify a remanufacturing system for each engine it manufactures.

Finally, we are adopting a provision that will allow manufacturers to certify locomotives that have total power less than 750 kW. This provision will allow manufacturers of hybrid locomotives to certify under 40 CFR part 92. EMA commented that if we do this, we should specify test procedures and duty-cycle weightings for such hybrids. We agree that this would be appropriate in the long term, but do not believe that this rulemaking would be the proper place for such provisions. Instead, we expect to rely on the testing and calculation flexibility of 40 CFR 92.207 and 92.132(e) to certify hybrids on a case-by-case basis.

## **J. Highway engines and vehicles (40 CFR parts 85 and 86)**

Most of the changes we are adopting in parts 85 and 86 apply uniquely to different types of vehicles or engines. We are, however, adopting changes to the program for Independent Commercial Importers that affect all the different applications. The Technical Support Document describes how we are limiting the importation of products where the applicable standards are based on the year of original production. We continue to allow unlimited importation of products where the applicable standards are based on the year of modification.

The following paragraphs provide an overview of the changes for each type of engine or vehicle. See the Technical Support Document for a more detailed discussion of these changes.

### **1. Light-duty vehicles**

For light-duty vehicles, we are adopting a variety of clarifications and corrections, especially related to test procedures.

### **2. Highway motorcycles**

For highway motorcycles, we are correcting fuel specifications, clarifying the requirements related to engine labels, fixing the provisions related to using nonroad certificates for highway motorcycles below 50 cc (consistent with similar changes in other programs), and making a variety of other minor corrections.

### 3. Heavy-duty highway engines

As discussed above, we are adopting the lab-testing and field-testing specifications in part 1065 for heavy-duty highway engines, including both diesel and Otto-cycle engines. These procedures replace those currently published in 40 CFR part 86, subpart N.

We proposed to complete the migration of heavy-duty highway test procedures to part 1065 by the 2008 model year. Manufacturers pointed out that it would be most appropriate to move this date back to 2010 to correspond with the implementation of the new emission standards in that year. We agree that it would be appropriate to make this transition over several model years to fully migrate to part 1065, no later than model year 2010. Manufacturers do not need to conduct new testing if they are able to use carryover data, but any new testing for 2010 and later model years must be done using the part 1065 procedures. Migrating heavy-duty highway engines to the part 1065 procedures allows us to include all the testing-related improvements in the HD2007 rule, including those we have adopted through guidance.<sup>2</sup> In addition, part 1065 incorporates revisions based on updated procedures for sampling low concentrations of PM.

Another question was raised about how EPA should conduct testing during this transition stage. We intend to incorporate near-term upgrades that would make our testing facilities capable of meeting the requirements in part 1065. Most of the testing methods in part 1065 result in better measurements and should therefore not pose problems, even if manufacturers based their certification on the test procedures specified in part 86. Three exceptions to this include the steps for mapping an engine, denormalizing test cycles, and evaluating cycle-validation criteria. Changing the specified procedure for these three items would involve different engine operation that could cause an engine to have higher or lower emission levels. For all other parameters, the new procedures would be equivalent, or would give more accurate or more precise results. We are therefore specifying that we will follow the manufacturer's procedures for these three items related to engine operation, but will otherwise consider our tests valid if we use procedures from either part 86 or part 1065, regardless of the procedures used by the manufacturer.

EMA responded to our request for comment related to a provision that would allow engine manufacturers to ship certified engines without applicable aftertreatment components, while providing for separate shipment of those components to equipment manufacturers. EMA commented that such a provision would be appropriate, and that it should be set up to require either that the component cost be included in the price of the engine, or auditing requirements for engine manufacturers, but not both, since the equipment manufacturer has enough incentive to make the final installation without additional oversight. We agree with manufacturers that these more flexible arrangements are appropriate for the prevailing business relationships for heavy-duty highway engines. There are far fewer manufacturers producing heavy-duty trucks and buses than nonroad equipment. Engine manufacturers are therefore expected to be able to maintain control with an approach that requires them either to include the price of the aftertreatment in the engine price or to conduct periodic audits of vehicle manufacturers, but not both. In the periodic audit we require manufacturers to confirm the number of aftertreatment component shipped is sufficient for the applicable vehicle production. This confirmation is intended to show that the vehicle

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<sup>2</sup> "Guidance Regarding Test Procedures for Heavy-Duty On-Highway and Non-Road Engines," December 3, 2002.

manufacturers have purchasing and manufacturing processes in place to ensure that they are ordering and receiving enough aftertreatment components and that each vehicle is equipped with the correct components. To reduce the risk of noncompliance where the engine and aftertreatment components are not priced together, we require that engine manufacturers have a written confirmation that the vehicle manufacturer has ordered the appropriate aftertreatment before shipping engines without the otherwise required aftertreatment components.

We are adopting a test-related provision that was described in the proposal. We requested comment on approaches to address the concern that some engines experience significant overspeed excursions when following the proposed approach to defining maximum test speed and denormalizing duty cycles. As described in the Technical Support Document, we are finalizing a provision to define maximum test speed at the highest speed point at which engines are expected to operate in use.

### **III. Public Participation**

In the proposed rule, we invited public participation in a public hearing, a public workshop, and a comment period for written comments. No one responded to indicate interest in the public hearing, but we held the public workshop to talk through a wide range of issues. We also received written comments from about 20 organizations, mostly representing manufacturers. Several principle issues raised by commenters are described in the individual sections above. The Final Technical Support Document addresses the full range of comments.

### **IV. Statutory and Executive Order Reviews**

#### **A. Executive Order 12866: Regulatory Planning and Review**

Under Executive Order 12866 the Agency must determine whether the regulatory action is “significant” and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of this Executive Order. The Executive Order defines a “significant regulatory action” as any regulatory action that is likely to result in a rule that may:

- Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, Local, or Tribal governments or communities;
- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

The Office of Management and Budget reviewed this rule under the provisions of Executive Order 12866. Any new costs associated with this rule will be minimal. In addition, some of the changes will substantially reduce the burden associated with testing, as described in the Regulatory Support Document.

#### **B. Paperwork Reduction Act**

This rule does not include any new collection requirements, as it merely revises the measurement methods and makes a variety of technical amendments to existing programs.

#### **C. Regulatory Flexibility Act**

EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with this final rule.



For purposes of assessing the impacts of this final rule on small entities, a small entity is defined as: (1) A small business as defined in the underlying rulemakings for each individual category of engines; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this final rule on small entities, EPA has concluded that this action will not have a significant economic impact on a substantial number of small entities. The small entities directly regulated by this rule are small businesses that produce nonroad engines. We have determined that no small entities will be negatively affected as a result of this rule. This rule merely revises the measurement methods and makes a variety of technical amendments to existing programs. This rule, therefore, does not require a regulatory flexibility analysis.

Although this rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this rule on small entities. For example, most of the changes clarify existing requirements, which will reduce the time needed to comply, and added flexibility, which may allow for a simpler effort to comply.

#### **D. Unfunded Mandates Reform Act**

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law. 104-4, establishes requirements for federal agencies to assess the effects of their regulatory actions on state, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "federal mandates" that may result in expenditures to state, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation of why that alternative was not adopted.

Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

This rule contains no federal mandates for state, local, or tribal governments as defined by the provisions of Title II of the UMRA. The rule imposes no enforceable duties on any of these governmental entities. Nothing in the rule significantly or uniquely affects small governments. We have determined that this rule contains no federal mandates that may result in expenditures of more than \$100 million to the private sector in any single year. This rule merely revises the measurement methods and makes a variety of technical amendments to existing programs. The requirements of UMRA therefore do not apply to this action.

#### **E. Executive Order 13132: Federalism**

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to

develop an accountable process to ensure “meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications.” “Policies that have federalism implications” is defined in the Executive Order to include regulations that have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”

Under Section 6 of Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law, unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

Section 4 of the Executive Order contains additional requirements for rules that preempt State or local law, even if those rules do not have federalism implications (i.e., the rules will not have substantial direct effects on the States, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government). Those requirements include providing all affected State and local officials notice and an opportunity for appropriate participation in the development of the regulation. If the preemption is not based on express or implied statutory authority, EPA also must consult, to the extent practicable, with appropriate State and local officials regarding the conflict between State law and Federally protected interests within the agency’s area of regulatory responsibility.

This rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132.

#### **F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments**

Executive Order 13175, entitled “Consultation and Coordination with Indian Tribal Governments” (65 FR 67249, November 6, 2000), requires EPA to develop an accountable process to ensure “meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications.”

This rule does not have tribal implications as specified in Executive Order 13175. This rule will be implemented at the Federal level and impose compliance costs only on engine manufacturers and ship builders. Tribal governments will be affected only to the extent they purchase and use equipment with regulated engines. Thus, Executive Order 13175 does not apply to this rule.

#### **G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks**

Executive Order 13045, “Protection of Children from Environmental Health Risks and Safety Risks” (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be “economically significant” as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, Section 5-501 of the Order directs the Agency to evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This rule is not subject to the Executive Order because it does not involve decisions on environmental health or safety risks that may disproportionately affect children.

## **H. Executive Order 13211: Actions that Significantly Affect Energy Supply, Distribution, or Use**

This rule is not a “significant energy action” as defined in Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use” (66 FR 28355 (May 22, 2001)), because it is not likely to have a significant effect on the supply, distribution, or use of energy.

## **I. National Technology Transfer Advancement Act**

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (“NTTAA”), Public Law 104-113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless doing so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This rule involves technical standards. The International Organization for Standardization (ISO) has a voluntary consensus standard that can be used to test engines. However, the test procedures in this final rule reflect a level of development that goes substantially beyond the ISO or other published procedures. The procedures incorporate new specifications for transient emission measurements, measuring PM emissions at very low levels, measuring emissions using field-testing procedures. The procedures we adopt in this rule will form the working template for ISO and national and state governments to define test procedures for measuring engine emissions. As such, we have worked extensively with the representatives of other governments, testing organizations, and the affected industries.

## **J. Congressional Review Act**

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. This rule is not a “major rule” as defined by 5 U.S.C. 804(2).

## **V. Statutory Provisions and Legal Authority**

Statutory authority for the engine controls adopted in this rule is in 42 U.S.C. 7401 - 7671q.

### List of Subjects

#### 40 CFR Part 85

Confidential business information, Imports, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Research, Warranties.

#### 40 CFR Part 86

Administrative practice and procedure, Confidential business information, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements.

#### 40 CFR Part 89

Environmental protection, Administrative practice and procedure, Confidential business information, Imports, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Research, Vessels, Warranties.

40 CFR Part 90

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Reporting and recordkeeping requirements, Research, Warranties.

40 CFR Part 91

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Penalties, Reporting and recordkeeping Requirements, Warranties

40 CFR Part 92

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Railroads, Reporting and recordkeeping requirements, Warranties

40 CFR Part 94

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Penalties, Reporting and recordkeeping requirements, Vessels, Warranties.

40 CFR Part 1039, 1048, and 1051

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1065

Environmental protection, Administrative practice and procedure, Incorporation by reference, Reporting and recordkeeping requirements, Research.

40 CFR Part 1068

Environmental protection, Administrative practice and procedure, Confidential business information, Imports, Motor vehicle pollution, Penalties, Reporting and recordkeeping requirements, Warranties.

Dated:

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Steven Johnson,  
*Administrator.*