being satisfactorily tested under the established test procedures.

The Agency does not require engine manufacturers to maintain any certification test engine after a certificate has been granted; however, the manufacturer may find it useful to do so for future showings to EPA. For example, a manufacturer may use such engines for back-to-back testing when running changes occur and the manufacturer wishes to show that no significant emissions impact has resulted.

11. Certification Procedures—Fuels

For the purposes of Phase 1 nonroad small SI compliance testing, EPA has decided to allow the optional use of Indolene fuel in addition to the Clean Air Act Baseline (CAAB) fuel that was specified in the proposal. (Indolene is the trade name for the fuel specified at 40 CFR 86.113 for most light-duty compliance test procedures, referred to as ''Otto-cycle test fuel'' in the regulations.) Since the CARB regulation allows the use of either Indolene or Phase 2 fuel, a test performed using Indolene could be used to satisfy both federal and CARB requirements for small SI engines. The Agency reserves the right to perform confirmatory testing as well as selective enforcement audits on either CAAB or Indolene, regardless of which fuel the manufacturer chooses for its data submittal.

This rule sets forth no special standards nor test procedures for engines that utilize fuels other than gasoline. These regulations apply regardless of the fuel utilized by a small SI engine, so long as the engine otherwise meets the criteria for coverage under this rule. The Agency will consider whether additional guidance or regulation is appropriate regarding any relevant issues brought to its attention concerning engines that use fuels other than gasoline. The Agency requests that such concerns be relayed to EPA as they arise.

The Agency may revisit the fuel specifications issue in a future small nonroad engine rulemaking, depending upon the standards and technology anticipated to be necessary for compliance.

12. Certification Procedures—Emission Test Procedure for HC, CO, and NO_X

The rule establishes a single test procedure that includes a test cycle for measuring HC, CO, and NO_X. There are three different cycles available: one cycle applies to all Class III, IV, and V engines (Cycle C), while two cycles are permissible for use with Class I and II engines (Cycles A and B).

Cycle B can be used for those Class I and II engine families in which 100 percent of the engines are sold with a governor that maintains engine speed within ± 2 percent of rated speed (the manufacturer-specified maximum power of an engine) under all operating conditions. Cycle B is a six-mode steady state cycle consisting of five power modes at rated speed and one no-load mode at idle speed. For all other Class I and II engines, Cycle A is required. Cycle A is identical to Cycle B, except the five power modes are run at intermediate engine speed (85 percent of rated speed).

The engine manufacturer must use Cycle C for engines falling into Classes III, IV, and V. Cycle C is a two-mode steady state cycle consisting of one power mode (at rated speed) and one no-load mode at idle speed. The test modes for each cycle must be run in a prescribed order.

The methods used to measure the gaseous emissions of HC, CO, and NO_X for all small engines are independent of engine type and test cycle. Manufacturers may sample emissions using either the Raw Gas Method or the Constant Volume Sampling Method. Using either method, each test engine must be stabilized at each mode before emission measurement began. After stabilizing the power output during each mode, the concentration of each pollutant, exhaust volume, and fuel flow is determined. The measured values are weighted and then used to calculate the grams of exhaust pollutant emitted per kilowatt-hour.

13. Confirmatory Testing Options

The Agency's confirmatory testing provisions set forth in this rule allow EPA flexibility in determining when and where engine testing may occur. The Agency may require confirmatory engine testing at any given location, including at a manufacturer's facility, and may also require the manufacturer to make available specified instrumentation and equipment. Any testing conducted at a manufacturer's facility must be scheduled by the manufacturer as promptly as possible. Authorized EPA personnel must be given access to the facilities to observe such testing.

14. Retention of Information; Amendments to the Application

The manufacturer is responsible for retaining certain information applicable to each test engine, along with copies of the submitted applications for individual certificates of conformity. The manufacturer must also submit an amendment to the application or certificate of conformity whenever additional small SI engines are added to an engine family or changes are made to a product line covered by a certificate of conformity. Notification normally would occur prior to either producing such engines or making such changes to a product line.

15. Selective Enforcement Auditing Program

The small SI engine SEA program, authorized by CAA section 213, is an emission compliance program for new production nonroad engines that allows EPA to issue an SEA test order for any engine family for which EPA has issued a certificate of conformity. Failure of an SEA may result in suspension or revocation of the certificate of conformity for that engine family. To have the certificate reinstated subsequent to a suspension, or reissued subsequent to a revocation, the manufacturer must demonstrate by showing passing data that improvements, modifications, or replacements have brought the family into compliance. The manufacturer may challenge EPA's suspension or revocation decision based on application of the sampling plans or the manner in which tests were conducted.

16. No Useful Life Period, In-use Enforcement, or Mandatory In-use Testing Program

The final rule does not determine a small SI engine useful life period or establish an in-use enforcement program. However, as further explained in the Response to Comments document, the Agency is allowing a voluntary in-use testing program modeled on the testing program it proposed in the NPRM. The Agency will not require approval of in-house test programs voluntarily created by manufacturers nor creation of such programs. Instead, the Agency will provide guidance according to the testing program proposed in the NPRM to those manufacturers who choose to conduct a program by which they could test a sample of engines while in-use.

Although EPA has promulgated no in-use emission standards for Phase 1 engines, it anticipates that manufacturers would take appropriate actions to prevent recurrence of in-use noncompliance should it be discovered. Voluntary in-use testing will not be a requirement that needs to be fulfilled under a conditional certificate program. Therefore, the conditional certificate program that was proposed for Phase 1 is not being adopted.

One commenter suggested that a voluntary testing program be developed