

### United States

**Environmental Protection Agency** Office of Transportation and Air Quality

# Nonroad Engine In-Use Testing Report (Large Spark Ignition Engines) Last Revision: August 2010 Version Number: 1.3

| Basic II                         | nformatio   | n   |                               |                          |              |                           |                                      |                  |                                |               |                |            |   | Submission Date   |                     |
|----------------------------------|---|---|-------------------------------|--------------------------|--------------|---------------------------|--------------------------------------|------------------|--------------------------------|---------------|----------------|------------|---|---|---------------------|
|                                  | Manufactui<br>In-Use Tesi<br>Email Addr<br>Phone #: | t Contact:                                    |                               |                          |              |                           |                                      |                  | Engine Family<br>Min. Tests Re | /:<br>quired: |                | J          |   |   |                     |
|                                  | FEL/ Emiss  | sion Limit(s)<br>HC+NOx<br>CO                 |                               |                          | Н            | C+NOx Unit<br>CO Unit     |                                      |                  |                                |               |                |            |   |   |                     |
|                                  | Comments  | s:  |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| Engines Disqualified and Reason: |   | oisqualified<br>on:                           |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| <mark>n-Use l</mark>             | Engines T   | Test Resul                                    | ts                            |                          |              |                           |                                      |                  |                                |               |                |            | 1                                       |   |                     |
|                                  |   |   |                               |                          |              |                           |                                      |                  |                                |               | Interim Ca     | lculations |   |   |                     |
|                                  | Engine<br>Model                                     | Engine<br>Serial<br>Number                    | Engine<br>Manufacture<br>Date | Engine<br>Usage<br>Hours | Test<br>Date | Test<br>Time              | Diagnostic<br>System<br>Functioning? | Test<br>Invalid? | HC+NOx<br>Result               | CO<br>Result  | HC+NOx<br>Mean | CO<br>Mean | Adjustments, Modifications, and Repairs | If engine in noncompliant or if the test is invalid, explain why. | Additional Comments |
| 1                                |   |   |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| 2 -                              |   |   |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| 4                                |   |   |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| 6                                |   |   |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| 7                                |   |   |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| 9                                |   |   |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| 10<br>11                         |   |   |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| 12                               |   |   |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| 13<br>14                         |   |   |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| 15                               |   |   |                               |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
| C                                | Current In  | n-Use Test                                    | Status                        |                          |              |                           |                                      |                  |                                |               |                |            |   |   |                     |
|                                  | Number of<br>Number of                              | HC+NOx Test<br>CO Tests Perl<br>Tests Require | formed:                       | 0<br>0<br>0              |              | Pollutant<br>HC+NOx<br>CO |                                      |                  |                                |               |                |            |   |   |                     |
|                                  |   |   |                               |                          |              |                           |                                      |                  |                                |               |                | ]          |   |   |                     |



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|----------------------------------|-------------------|----------------------------|-----|--|
| nufacturer Notes                 |                   |                            |     |  |
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| ease provide any additional note | es here.          |                            |     |  |
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### Manufacturer Data Submission Template -- INSTRUCTIONS

#### I. About

This template allows engine manufacturers to submit in-use testing data in a simple, consistent format. Based on the information entered by the submitter, the template performs the required sample size calculations and displays the current status of the test.

It is intended that a copy of this template be created for each engine family for which you are required to report in-use testing results. Please include the engine family name in the submission file name. 40 CFR Part 1048.420 (a) indicates that this information must be submitted within three months after you have finished testing an engine family. It is intended that one copy of a template be maintained per engine family.

Three versions of this template are available, one each for Marine SI, Large SI, and Small SI engines. The instructions in this document are specific to the Large SI template.

#### II. General

- The primary worksheet for entering in-use testing data is the worksheet labeled 'Submission Template.' You may only modify values in cells that are white. All other cells contain either labels or calculated values.
- The 'Notes' worksheet provides space for a manufacturer to provide any additional notes or relevant information for the engine family's in-use testing information

#### III. Entering In-Use Test Information

At the top of the 'Submission Template' worksheet, there are spaces to enter general information about the production line test you are reporting. Please provide as much information as possible. These fields include:

- Manufacturer contact information;
- Engine family identifier;
- Minimum number of tests required (see 40 CFR Part 1048.410);
- FEL or Emissions Limits for each pollutant being tested;
- Unit of measure for test results for each pollutant (g/bhp-hr, g/kW-hr);
- Additional comments about the in-use tests for the engine family; and
- A description of the engines disqualified and the associated reasons(s) for the disqualification.

### IV. Entering In-Use Engine Test Results

Each in-use test is comprised of tests of one or more individual engines within the engine family being tested. Please include any invalid or incomplete engine tests. Begin entering your data in the first row (beginning in cell D34) of the 'Submission Template' worksheet. Please enter specific engine tests in the order in which they occurred and do not skip rows as you enter your results.

The fields for which you will be entering data (specific to each engine test) are listed in the following table. The official reporting requirements can be found in 40 CFR Part 1048.420.

Engine Model
Engine Serial Number
Engine Manufacture Date
Engine Usage (hrs)
Test Date
Test Time
Diagnostic System Functioning?
Test Invalid?
NOX/NMHC+NOX Result
PM Result
CO Result
Adjustments, Modifications, and Repairs
Invalid Reason
Additional Comments

Immediately following the rows reserved for engine test results is a box labeled 'Current In-Use Test Status'. The cell labeled 'Number of Tests Performed' displays a count of the complete, valid engine tests entered. The cell labeled 'Number of Tests Required' computes the total number of tests required per 40 CFR 1048.410. If you have entered the required number of engine tests, and the average result of all pollutants tested is less than the provided FEL/standard, the test status should read 'PASS'. Otherwise, the test status should read 'OPEN'.

#### V. How to Submit this Form

Please submit by email to in use@epa.gov. If you prefer to send us a CD or diskette with an electronic copy of this form, please send it via courier to:

Manager, Heavy-duty and Nonroad Engines Group US Environmental Protection Agency Attn: In-use Data 310 L St, NW

Mail Code 6403J Washington, DC 20005

You may also send it via regular mail. However, please be advised that regular mail is irradiated. Irradiation may compromise the integrity of your CD or diskette. If using regular mail, please send your submission to:

By Regular Mail: 1200 Pennsylvania Avenue MC 6403J Washington, DC 20460

We are working on other methods for you to submit this form. Please contact your certification representative for the latest information.

### **Paperwork Reduction Act Notice**

The public reporting and recordkeeping burden for this collection of information is estimated to average 21 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed Form 5900-93 to this address.

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