Production Line Testing
Manufacturer Data Submission Template -- INSTRUCTIONS

I. About

This template allows engine manufacturers to submit production line testing data in a simple, consiste information entered by the submitter, the template performs the required CumSum and sample size ca 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 testing results. Please include the engine family name in the submission file name. 40 CFR Part 91.5 information must be submitted on a quarterly basis. It is intended that one copy of a template be mair year. For instance, the file submitted for the second quarter will contain all test results previously sub the results from the second quarter added on. The template provides a field to indicate the associate level.

Please note that the instructions in this document are specific to the Marine SI template.

II. General

● The primary worksheet for entering production line testing data is the worksheet labeled 'Submissio 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 relevan family's production line testing information.

● The resulting calculations, including an indication of whether the test results yield a status of Pass, I the 'Calculations' worksheet.

III. Entering PLT Test Information

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

● Manufacturer contact information;

● Engine family identifier;

● Projected annual production volume; and

● Indication if this engine family is a carry over engine family.

 If you have indicated in the template that the engine family is a carry-over engine family, for the first e of the final engine test from the previous year's equivalent engine family. Your required sample size w this. If you have indicated that the engine family is a carry-over engine family, the first row in the calc in pink.

IV. Entering PLT Engine Test Results

Each PLT test is comprised of multiple tests of individual engines within the engine family being tested the first row (beginning in cell D23 of the 'Submission Template' worksheet). Be sure to enter specific which they occurred, as the template's CumSum calculations depend on the correct order. In additior

you enter your results.

The following data fields are available for each engine test. Fields that are required by federal regula[...]
calculations are indicated. The official reporting requirements can be found in 40 CFR Part 91.509 (e[...]

- Test Number (required); this should be numeric and sequential
- Test Date (required)
- Test Time
- Test Quarter
- Engine ID (required)
- Build Date (required)
- Service Hours Accumulation (required)
- Service Hours Location (required)
- Include in CumSum? Indicator (required)
- HC+NOx Initial Result (required)
- HC+NOx Final Result (required)
- HC+NOx Emission Limit or FEL (required)
- Unit of measure (g/bhp-hr or g/kW-hr)
- Deterioration Factor
- Test Location
- Test Contact
- Invalid Test Indicator (required -- must be yes if test is declared invalid)
- Invalid Reason
- Failure Reason
- Remedy
- Repairs
- Test Comments

V. The Calculations Worksheet

The 'Calculations' worksheet checks the data that you enter and attempts to determine the current sta[...]
test will appear to be in exactly one of three possible statuses -- FAIL, PASS, or OPEN.

- FAIL: Your PLT Test will be in a failing status if, for one or more pollutants, you had consecutive eng[...]
calculated CumSum statistic exceeds the calculated Action Limit value. Once a test has reached a fa[...]
not change it.

- PASS: Your PLT Test will be a passing status if, for all required pollutants, the actual number of incl[...]
greater than or equal to the required test sample size (N), and for all required pollutants, the mean res[...]
the provided emission limit or FEL.

- OPEN: Your PLT Test will remain in an open status if it has not yet reached a fail or pass status.

VI. Troubleshooting

If you are experiencing odd or unexpected results in the 'Calculations' worksheet, please check the fo[...]

- Have you entered all engine tests sequentially without skipping rows?

- For each engine test, have you entered the Final Result and Emission Limit, and have you indicate[...]
CumSum?

- Have you inadvertently marked an included test as Invalid?

- If the required sample size does not appear to be calculating correctly, verify that you have not ente[...]
Production Volume.

EPA Form No. 5900-91

The public reporting and recordkeeping burden for this collection of information is estimated to averag
Send comments on the Agency's need for this information, the accuracy of the provided burden estim
methods for minimizing respondent burden, including through the use of automated collection techniq
Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Wa
Include the OMB control number in any correspondence. Do not send the completed form to this add

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Production Line Testing
Manufacturer Data Submission Template   **(Marine SI)**

PLT Test Information

Manufacturer:		**Engine Family:**
PLT Test Contact:		**Projected Annual Production Volume:**
Email Address:		**Is this a carry-over engine family?** no
Phone #:		

Comments:

PLT Engine Test Results

	Test Number	Test Date	Test Time	Test Qtr	Engine ID	Build Date	Service Hours Accumulation	Service Hours Location	Include in CumSum?	HC+NOx Initial Result	HC+NOx Final Result	HC+NOx Emission Limit/FEL	Unit	HC+NOx Det. Factor	Test Location	Test Contact	Test Invalid?	Invalid Reason	Failure Reason	Remedy	Repairs	Test Comments
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Production Line Testing
Calculated Results Data

Current PLT Test Status:

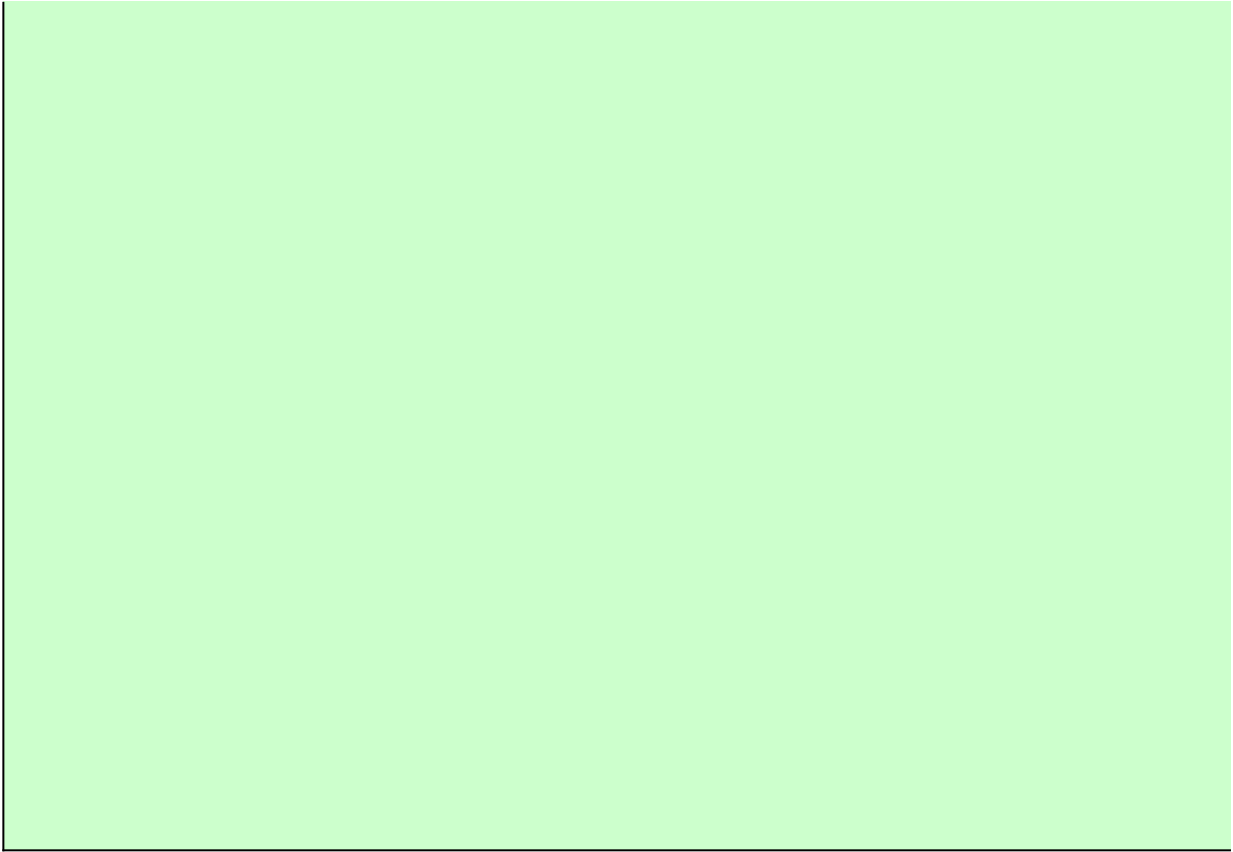|	
Engine Family:	0
HC+NOx (passing status?)	#N/A
Current PLT Test Status:	#N/A #N/A
Notes:	

* Number of included HC+Nox tests (n) is less than the required number (N).

HC+NOx - Calculations

Actual Sample Size (n)	Required Sample Size (N)	Mean Result	Standard Deviation	Prior CumSum	CumSum	Action Limit	Sample Requirement Met?	HC+NOx Fail?

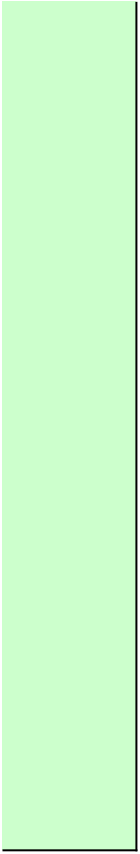**HC+NOx (N-met?):** No

Maximum Required Tests: 30

Production Line Testing

Manufacturer Notes   **(Marine SI)**

Please provide any additional notes here