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 c 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 90. 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 Small 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;

● Indication of whether CO testing is required; and

● Indication of whether the test data apply to 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 the final engine test from the previous year's equivalent engine family. Your required sample size will If you have indicated that the engine family is a carry-over engine family, the first row in the calculatior pink.

IV. Entering PLT Engine Test Results

 Each PLT test is comprised of multiple tests of individual engines within the engine family being teste in the first row (beginning in cell D23) of the 'Submission Template' worksheet. Be sure to enter speci 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 90.709 (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)
● HC+NOx Unit of measure [g/bhp-hr or g/kW-hr]
● HC+NOx Deterioration Factor
● CO Initial Result
● CO Final Result
● CO Emission Limit or FEL
● CO Unit of measure [g/bhp-hr or g/kW-hr]
● CO 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 st
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 indicated
CumSum?

● Have you inadvertently marked an included test as Invalid?

● Remember that if CO testing is required, you must continue to test both pollutants until both have m
requirement (N).

● If the required sample size does not appear to be calculating correctly, verify that you have not ente
Production

EPA Form No.: 5900-123

ent format. Based on the
alculations and displays the

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709 (e) indicates that this
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n Template.' You may only

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

PLT Test Information

Manufacturer:	
PLT Test Contact:	
Email Address:	
Phone #:	

Engine Family:	
Production Volume:	
Are you required to test CO?	
Is this a carry-over engine family?	

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	Units	HC+NOx Det. Factor	CO Initial Result	CO Final Result	CO Emission Limit/FEL	Units	CO Det. Factor	Test Location	Test Contact	Test Invalid?	Invalid Reason	Failure Reason
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Production Line Testing
Calculated Results Data

Current PLT Test Status:

Engine Family: 0

HC+NOx (passing status?)	#N/A
CO (passing status?):	CO not Tested

**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
	CO (N-met?):	CO not tested
	Maximum Tests:	30

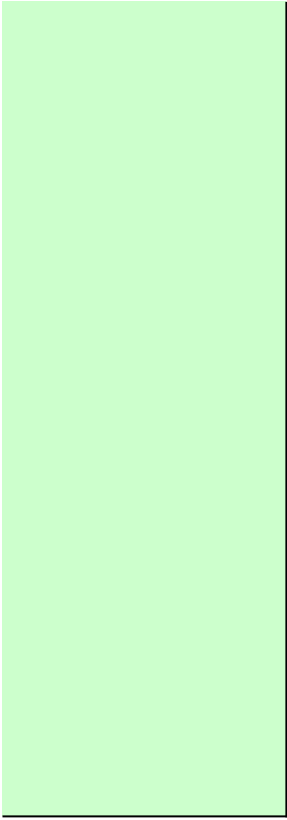|	CO - Calculations							
HC+NOx Pass?	Actual Sample Size	Required Sample Size (N)	Mean Result	Standard Deviation	Prior CumSum	CumSum	Action Limit	Sample Requirement Met?
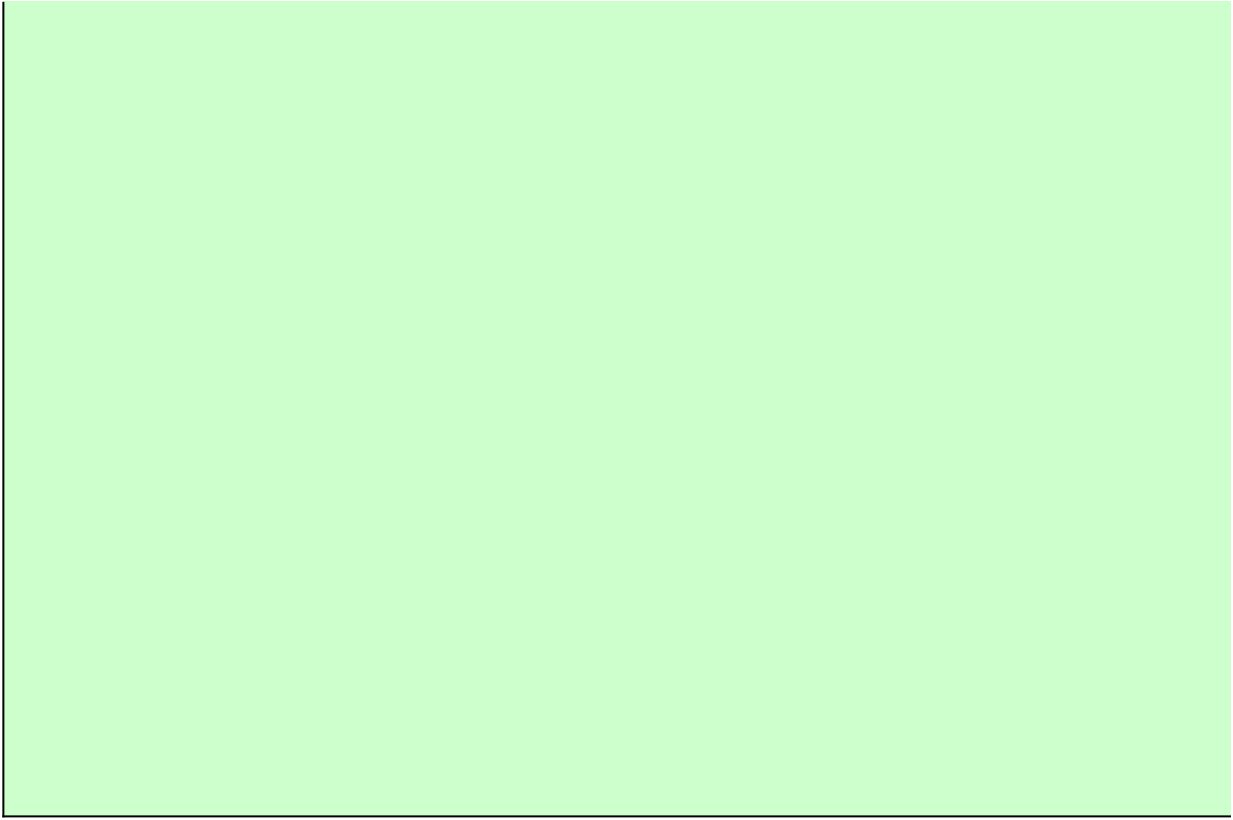
CO Fail?	CO Pass?		Warnings

Production Line Testing
Manufacturer Notes **(Small SI)**

Please provide any additional notes here