

**LARGE OFF-ROAD EVAPORATIVE EQUIPMENT CERTIFICATION  
(Applicable to engines/equipment ≤ 1 Liter engine displacement)  
Certification Summary Sheet**

**1. Model Year:**

**2a. Manufacturer:**

**2b. EPA Assigned Manufacturer Code:**

**2c. Manufacturer Contact Information:**

a) Manufacturer Contact Contact: Title: Company: Address:  Phone No.: Fax No.: Email:	b) Production Plant Location/Contact Contact: Title: Company: Address:  Phone No.: Fax No.: Email:
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**3. Evaporative Family Name:**

**4. Engine families within the evaporative family above:**

**5. Process Code:**

**6. Executive Order (For ARB Use Only):**

*Confidential*

7. California Sales Volume (units): \_\_\_\_\_ 8. 50-State Sales Volume (units): \_\_\_\_\_

**9. Equipment Applications:**

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Walk-Behind Lawnmower | <input type="checkbox"/> Snowblower          | <input type="checkbox"/> Edger              |
| <input type="checkbox"/> Riding Mower          | <input type="checkbox"/> Non-Backpack Blower | <input type="checkbox"/> Brushcutter        |
| <input type="checkbox"/> Tractor               | <input type="checkbox"/> Backpack Blower     | <input type="checkbox"/> Chainsaw           |
| <input type="checkbox"/> Compressor            | <input type="checkbox"/> Line Trimmer        | <input type="checkbox"/> Leaf Blower/Vacuum |
| <input type="checkbox"/> Pump                  | <input type="checkbox"/> Pressure Washer     | <input type="checkbox"/> Go-Cart            |
| <input type="checkbox"/> Hedge Trimmer         | <input type="checkbox"/> Tiller              | <input type="checkbox"/> Other _____        |
| <input type="checkbox"/> Stump Beater          | <input type="checkbox"/> Ice Auger           |   |
| <input type="checkbox"/> Generator Set         | <input type="checkbox"/> Commercial Turf     |   |

**10. Certification Application:**

- a) Performance Standards \_\_\_\_\_  
Fill out pages 1-3, 7-12
- b) Design Standards \_\_\_\_\_  
Fill out pages 1, 4-5, 7-12
- c) Equipment fueled by on-road vehicle/marine vessel fuel tank \_\_\_\_\_  
Fill out pages 1, 6-12 (as applicable)

## FOR SYSTEMS CERTIFIED TO PERFORMANCE STANDARDS (Section 2754(a)) Large Off-Road Evaporative Certification Summary Sheet

### 1. Certification Information

- a) New Testing?: \_\_\_\_\_ b) if carry over/carry across, from which evaporative family: \_\_\_\_\_  
 c) Test Engine or Equipment Model: \_\_\_\_\_ d) Test Equipment ID: \_\_\_\_\_  
 e) Test Fuel: \_\_\_\_\_  
 f) Running Loss Vented Emissions Controlled (yes/no): \_\_\_\_\_ (If yes, please provide running loss description in the evaporative emission system description section, item #5)  
 g) Test Procedure: \_\_\_\_\_  
 h) Alternative Test Procedure Approval Number (if applicable): \_\_\_\_\_  
 i) Declared Evaporative Model Emission Limit (EMEL) in grams: \_\_\_\_\_  
 j) Associated Evaporative Family Emission Limit Differential (EFELD) in grams: \_\_\_\_\_

Note: *No engine or equipment emissions within the family could be closer to its respective standard than the EFELD calculated from the declared EMEL for the worst case engine or equipment.*

### 2. Special Test Equipment

### 3. Fuel Cap

- a) Is the cap permanently tethered? (Yes/No) \_\_\_\_\_  
 b) Does the fuel cap make a vapor seal? (Yes/No) \_\_\_\_\_  
     If no, innovative product Executive Order # \_\_\_\_\_  
 c) Is the user provided with an audible or physical feedback of the establishment of vapor seal?  
 (Yes/No) \_\_\_\_\_  
 Please provide description of the fuel cap's features as part of the evaporative emission system description in item #5

### 4. Certification Data

a. Test No.	b. Type (Certification CTG or Confirmatory RTG)	Official 24-Hour Diurnal Test Results, g/day <sup>(1)</sup>		
		c. Test Completion Date	d. Certification Test Result (g/day)	e. Standard (g/day)

Note: (1) Diurnal emissions and standards must be expressed to two significant digits.

**5. Evaporative Emission System**

**a) Provide an engineering description of the evaporative emission system. The description must also explain how vented tank emissions are controlled from being emitted into the atmosphere during engine operation.**

**b) Provide a description and engineering diagram of the fuel cap design (including permanent tethering method and vapor seal.)**

6.

Processed By:  Date Processed  Reviewed By:  Date Reviewed:

## FOR SYSTEMS CERTIFIED BY DESIGN (Section 2754(b)) Large Off-Road Evaporative Certification Summary Sheet

### 1. Certification Information

- a) New Testing?: \_\_\_\_\_ b) if carry over/carry across, from evaporative family: \_\_\_\_\_
- c) Test Fuel: \_\_\_\_\_
- d) Running Loss Vented Emissions Controlled (yes/no): \_\_\_\_\_ (If yes, please provide running loss description in the evaporative emission system description section, item #4)
- e) Specify Fuel Tank Barrier Type (i.e., Metal, Coextruded, HDPE, etc.): \_\_\_\_\_
- f) Test Procedures(s): \_\_\_\_\_
- g) Alternative Test Procedure(s) Approval Number(s) (if applicable): \_\_\_\_\_
- h) Test component identification:

Tank	Hose	Vent Control

### 2. Fuel Cap

- a) Is the cap permanently tethered? (Yes/No) \_\_\_\_\_
- b) Does the fuel cap make a vapor seal? (Yes/No) \_\_\_\_\_  
If no, innovative product Executive Order # \_\_\_\_\_
- c) Is the user provided with an audible or physical feedback of the establishment of vapor seal? (Yes/No) \_\_\_\_\_  
Please provide description of the fuel cap's features as part of the evaporative emission system description in item #4

### 3. Certification Data

	Official Design Declaration					
	1a. Test No	1b. Type (Certification CTG or Confirmatory RTG)	1c. Test Completion Date	1d. Measured Design Value	2. or Component Executive Order Number(s)	3. Regulatory Design Requirement
a. Fuel Hose Permeation					Complete page 7 if using certified components	
b. Fuel Tank Permeation <sup>(1)</sup>					Complete page 7 if using certified components	
c. Carbon Canister Butane Working Capacity					Complete page 7 if using certified components	
d. Other Vent Control					Complete page 7 if using certified components	

Note: (1) Fuel tank permeation emissions must be expressed to two significant digits.

#### 4. Evaporative Emission System

Provide an engineering description of the evaporative emission system. The description must also explain how vented tank emissions are controlled from being emitted into the atmosphere during engine operation.

5.

Processed By:

Date Processed

Reviewed By:

Date Reviewed:

**EQUIPMENT FUELED BY ON-ROAD VEHICLE/MARINE VESSEL FUEL TANK (Section 2766(c))  
Large Off-Road Evaporative Certification Summary Sheet**

**1. Certification Information**

- a) New Testing?: \_\_\_\_\_ b) if carry over/carry across, from which evaporative family: \_\_\_\_\_  
 c) Test Fuel: \_\_\_\_\_  
 d) Test Procedure: \_\_\_\_\_  
 e) Alternative Test Procedures Approval Number: \_\_\_\_\_  
 f) Test component identification: \_\_\_\_\_

**2. Fuel Line**

	Official Design Declaration					
	1a. Test No	1b. Type (Certification CTG or Confirmatory RTG)	1c. Test Completion Date	1d. Measured Design Value	2. or Component Executive Order Number(s)	3. Regulatory Design Requirement
a. Fuel Hose Permeation					Complete page 7 if using certified components	

3.  
 Processed By:  Date Processed  Reviewed By:  Date Reviewed:

## Large Off-Road Evaporative Certification Database Form (Supplementary Information)

### MODEL SUMMARY

S1. Worst Case (Check One)	S2. Engine or Equipment Model	S3. Sales Codes (check all appropriate)			S4. Engine Class $\leq 1$ L (Yes or No)	S5. Fuel System (FI or CARB)	S6. Fuel Tank Vol. (Liters)		S7. Fuel Tank Internal Surface Area (m <sup>2</sup> )	S8. Fuel Line Type	S9. Nominal Fuel Line Length <sup>(1)</sup> (mm)	S10. Fuel Line Inside Diameter (mm)	S11. Exhaust Family	S12. Fuel Tank Executive Order	S13. Fuel Line Executive Order	S14. Carbon Canister or Other Venting Control Executive Order
		CA Only	49-State	50-State			Total	Nominal								

(1) The nominal fuel line lengths can be grouped into increment of  $\pm 3$  inches (76 mm)

**Large Off-Road Evaporative Component Parts Summary Sheet**

**MODEL SUMMARY**

S2. Engine or Equipment Model	S12a. Fuel Tank Part Number(s)	S13a. Fuel Line Part Number(s)	S14a. Carbon Canister or Other Venting Control Part Number(s)



S15. LABELING:

Evaporative emission label format approved? No \_\_\_ Yes \_\_\_ If yes, reference approval: \_\_\_\_\_

Sample label attached? No \_\_\_ Yes (place label in #S17) \_\_\_

Have any changes been made since the last approval? No \_\_\_ Yes \_\_\_ If yes, provide a brief explanation of the changes:

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S16. WARRANTY:

Evaporative emission warranty approved? No \_\_\_ (Provide full warranty statement in #S18)

Yes \_\_\_ (Reference approval: \_\_\_\_\_)

Have any changes been made since the last approval? No \_\_\_ Yes \_\_\_ If yes, provide a brief explanation of the changes:

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S17. EVAPORATIVE EMISSION LABEL INFORMATION

S18. EVAPORATIVE EMISSION WARRANTY STATEMENT

A large, empty rectangular box with a thin black border, occupying most of the page. It is intended for the user to provide the evaporative emission warranty statement.

#### S19. FUEL TANK SOAK INFORMATION

Submit fuel tank soak data, Figure 1 of TP-901 (Test Procedure for Determining Permeation Emission from Small Off-Road Engines and Equipment Fuel Tanks) and the calculated correlation coefficient. (This section is only applicable to tanks that are soaked at non-elevated temperature ( $30^{\circ}\text{C} \pm 10^{\circ}\text{C}$ ) for less than 140 days and tanks with a nominal wall thickness of greater than 0.2" (5 mm) that are soaked at an elevated temperature ( $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ ) for less than 140 days).

**S20. WORST-CASE DETERMINATION**

Provide an engineering evaluation as to the basis/analysis for the worst-case test engine/equipment or component (fuel line, fuel tank, canister) selection for certification testing.

S21. ADDITIONAL INFORMATION AND COMMENTS

