

CHAPTER 7

The Stack Form: SV-101

In This Chapter:

- Form Overview
- Form Relationship
- Form Completion Instructions
- Chapter Lesson: Adding and Deleting Stacks Records



CHAPTER 7: The Stack Form

(Complete prior to entering data into the EU-101 Form)

FORM REFERENCE		Record 1 of 7	
Form Type	AOD Source ID (SRID)		
SV-101	Z9999		
STACK IDENTIFICATION			
AOD Stack ID	Operator's Stack ID	Remove from MAERS	Dismantle Date
SV00008	SV-BOILER	No	00/00/0000
Operator's Stack Description			
BOILER STACK			
Actual Stk Height Above Ground	50 feet	Inside Stack Diameter	8 inches
Exit Gas Temperature	90 degrees Fahrenheit	Actual Exit Gas Flow Rate	45 cubic feet per minute
Stack Orientation			
Vertical			
Latitude	42.7323 Dec. Degrees	Longitude	84.5593 Dec. Degrees
Source Map Scale	Horizontal Accuracy Measure	Horizontal Reference Datum	30
	25 Meters		02
Reference Point Code	106	Bypass Stack Only	If Yes, Operator ID of Main Stack

FORM OVERVIEW

The Stack Form, SV-101, collects information about stacks that are connected to emission units listed on the Emission Unit Form, EU-101 (see Chapter 8).

Stack information must be reported for all stacks that have actual emissions of any pollutant equal to or greater than the threshold levels listed in Table 7-1 (following page). These threshold levels refer to the amount of emissions per emission unit, not per stack (see Chapter 2 for a detailed discussion of emission units). For example, if one emission unit has six stacks and individually each stack is below the threshold levels, but combined the threshold levels are exceeded, the stacks must be reported. However, if more than one emission unit exhausts through one stack and each emission unit is below the threshold levels, but the combined amount exceeds the threshold levels, the stack must be reported (Figure 7-1).

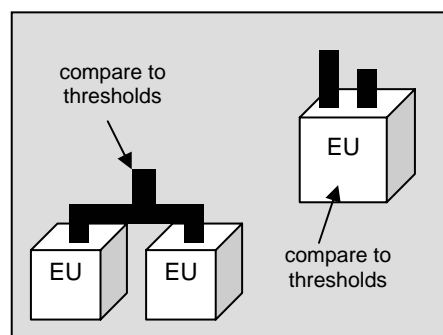


Figure 7-1: Reporting Thresholds

If an existing stack that was entered during a previous year falls below the threshold levels during the current reporting year, it can be removed from MAERS by checking the “Yes” box in the Remove from MAERS field (see step 3 of the Form Completion Instructions). However, this only means that the SV-101 form does not have to be completed – all of the other MAERS forms are still required. The emissions from the stack must still be reported on the E-101 form because the emissions are reported at the emission unit level, not at the stack level.

Table 7-1. Stack Reporting Threshold Levels.

POLLUTANT	THRESHOLD LEVEL (tons per year)
Carbon monoxide (CO)	100
Nitrogen oxides (NO _x)	40
Sulfur dioxide (SO ₂)	40
Particulate matter (PM)	25
Particulate matter < 10 microns (PM ₁₀)	15
Volatile organic compounds (VOC)	10
Lead (Pb)	0.6



TIP: If you are unsure as to whether or not your emission unit exceeds the thresholds listed in Table 7-1, wait to complete this form until after you have completed the Emissions Form (E-101). The E-101 form provides the emissions data needed to

NOTE: It is **HIGHLY** recommended that facilities subject to the ROP program report all stacks with applicable requirements. Stacks with applicable requirements must be reported in the ROP renewal application. If these stacks are reported in MAERS you will not have to complete SV-101 forms in your ROP application.

FORM RELATIONSHIP



The Operator's Stack ID created in Step 2 of this form will be entered as a selection in the drop-down list in the Emission Unit Stack(s) Section on the EU-101 form.

FORM COMPLETION INSTRUCTIONS

This form consists of two sections: the Form Reference section and the Stack Identification section. If a stack at your facility exceeds the thresholds in Table 7-1, you must add it to the SV-101 form by completing the information in the Stack Identification Section (see the Chapter Lesson on page 7-6), unless it was added during a previous year, in which case this information will already be pre-filled. If you do not have any stacks that exceed the thresholds in Table 7-1 or if the information pre-filled is still accurate, you do not have to complete this form and you may proceed to the EU-101 form (Chapter 8). If any information about any stack is incorrect or needs to be changed, enter the correct information in the Stack Identification Section. Following is an explanation of each section of the SV-101 form, as well as step-by-step instructions on how to complete the required fields.

Form Reference Section (There are no editable fields in this section)

FORM REFERENCE		Record 1 of 7
Form Type	AQD Source ID (SRH)	
SV-101	Z9999	

This information is pre-filled and cannot be edited. Make sure that your SRN appears in the window. If “PRACTICE” appears in this window, it means you are currently in the practice database, which is to be used only for practice and cannot be submitted.

This section also identifies the record currently displayed in the upper right hand corner. On this form, “Record 1 of 7” indicates that stack record 1 of 7 is currently displayed on the screen. If more than one stack record exists, the counter will keep track of the record displayed (e.g. Record 2 of 7). To move to a different record, use the arrow buttons on the tool bar, or click on the browse button and select the stack of interest.

Stack Identification Section

Complete the fields in this section for new stacks or to make changes to old information. Follow the steps below.

STACK IDENTIFICATION

AQD Stack ID	Operator's Stack ID	Remove from MAERS	Dismantle Date
SV00005			00/00/0000
Operator's Stack Description			
Actual Stk Height Above Ground	feet	Inside Stack Diameter	inches
Exit Gas Temperature	degrees Fahrenheit	Actual Exit Gas Flow Rate	cubic feet per minute
Stack Orientation			
Latitude	Dec. Degrees	Longitude	Dec. Degrees
Source Map Scale	Horizontal Accuracy	Meters	Horizontal Reference Datum
Reference Point	Bypass Stack Only	If Yes, Operator ID of Main Stack	

1. **AQD Stack ID:** This is a unique ID assigned to the stack by the software. This number is automatically assigned and cannot be edited.
2. **Operator's Stack ID:** Enter a unique ID for each stack that must be reported. Stack operator IDs begin with an “SV” prefix plus any combination of up to 14 letters, numbers, or keyboard characters. Spaces are not allowed within the operator's ID. Stack IDs may have already been established in an ROP or Permit to Install, if so, be sure to use the ID that is in the permit. If a stack ID does not already exist create an ID that is easy to associate with the stack that it represents (e.g. SVSTACK#1, SVBOILER#3).

- 3. Remove from MAERS:** If this is an existing stack that was entered during a previous year, but fell below the threshold levels listed in Table 7-1 during the current reporting year, you may select “Yes.” This will remove the stack record from MAERS. If “Yes” is selected, Steps 4-13 are not required. Otherwise, choose “No” from the options in the drop-down box.

Note: Even if emissions are below the thresholds for this reporting year, you may want to leave the stack data in your MAERS report. The emissions may exceed the thresholds in future years.

- 4. Dismantle Date:** If the stack was dismantled or rendered permanently inoperable during the reporting year, enter the date that this occurred. Although the stack has been dismantled, Steps 5-19 must still be completed. If a dismantle date is entered **do not** select “Yes” for “Remove from MAERS” as these fields are independent. If this is a portable source, the dismantle date should be left blank.
- 5. Operator’s Description:** Provide a brief description of the stack.
- 6. Actual Stack Height Above Ground:** Enter the height of the stack in feet from the ground up to the discharge point.
- 7. Inside Stack Diameter:** If the stack is circular, enter the inside stack diameter, in inches, at the top of the stack. If the stack is rectangular, convert the area inside of the stack to a circular diameter using the following procedure:
- Obtain the length and width in inches.
 - Calculate the area by multiplying the length times the width.
 - Divide the area by 3.14.
 - Take the square root of the value from step (c) to obtain the radius.
 - Calculate the diameter by multiplying the radius (from step [d]) by 2.
 - Enter the diameter (from step [e]) in item 7.
- 8. Exit Gas Temperature:** Enter the stack exit gas temperature in degrees Fahrenheit.
- 9. Actual Exit Gas Flow Rate:** Enter the stack exhaust volume in actual cubic feet per minute, at actual operating load and temperature.
- 10. Stack Orientation:** From the drop-down list, select the most appropriate orientation.

For steps 11 through 17, smaller sources can use the same coordinate information that was entered on the S-101 form. Larger sources should enter the specific coordinates for each stack. These fields are not required for portable sources.

- 11. Latitude:** Enter the source’s latitude in decimal degrees. If you do not know the facility’s latitude refer to the instructions in the box below.
- 12. Longitude:** Enter the source’s Longitude in decimal degrees. If you do not know the facility’s longitude refer to the instructions in the box below.

How Do I Find My Latitude and Longitude?

Latitude and longitude information can be obtained using a U.S. Geological map, a handheld global positioning system (GPS), or web sites such as the Toxic Release Inventory (TRI) Program siting tool at www.epa.gov/tri/report/siting_tool/index.htm, Microsoft's TerraServer USA at <http://terraserver.microsoft.com/>, or Google Earth at <http://earth.google.com/>.

13. **Horizontal Collection Method:** From the drop-down list, select the collection method used to determine the latitude and longitude listed. If you are using the TRI siting tool referenced above, select code 30. If you are using a different website select codes 07 or 27. If you are using a hand-held global positioning system (GPS) unit, use codes 12-17 (most GPS users should choose code 16).
14. **Source Map Scale:** Enter the scale of the map used. This field is only required if the horizontal collection method code entered is "018."
15. **Horizontal Accuracy:** Enter the accuracy measure of the collection method and report in meters, based on the map or GPS used. If using a website, enter 25 meters.
16. **Horizontal Reference Datum:** From the drop-down list, select the datum code used to determine the latitude and longitude. If using one of the websites identified on the previous page to determine longitude and latitude, select code 002. If you are using a GPS, the code should be listed in the instruction booklet.
17. **Reference Point:** From the drop-down list, select the point that best describes the location where the latitude and longitude were taken. For instance, if using horizontal collection method code "001," reference point code "106 Point where substance is released" may be used. If using a GPS, choose the point closest to wherever you were standing when reading the GPS.
18. **Bypass Stack Only:** From the drop-down list, select "Yes" if this stack is used only when emissions are bypassing the emission control equipment. Otherwise select "No." "No" is the default selection.
19. **If Yes, Operator ID of Main Stack:** If "Yes" was selected for Step 18, select the Operator's Stack ID of the stack that this vent bypasses. Otherwise leave this field blank.

- SAVE THE CHANGES AND CLOSE THE SV-101 FORM -

**NEED
HELP?**

For assistance with completing the SV-101 form, contact your AQD district office (see Appendix D) or the Environmental Assistance Program at: (800) 662-9278.



CHAPTER LESSON: ADDING & DELETING STACK RECORDS

ADDING A STACK

Follow the steps below to add a stack to your MAERS report.

1. Click anywhere in the Stack Identification Section; the section title bar will appear blue.
2. Choose **Edit** on the menu bar and select **Add Stack** (Figure 7-2).
3. A new SV-101 form will be displayed for you to complete.
4. Follow Steps 1 – 19 in the Form Completion Instructions.

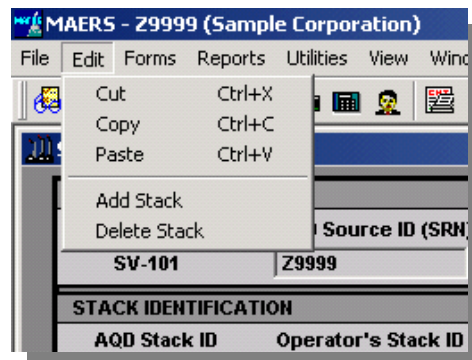


Figure 7-2: The Edit Menu

DELETING A STACK

If you have stack information that you would like to delete and if the stack information was entered during this reporting year (i.e. the information did not exist before this reporting year), follow the steps below.

1. Go to the stack record you would like to delete (e.g. Record 2 of 3).
2. Choose **Edit** on the menu bar and select **Delete Stack**.
3. The stack record will be deleted. If this record was linked to an EU-101 form, the operator's stack ID will be automatically removed from the Emission Units Stack(s) Section.

Important Note: You cannot delete a stack record that was reported during a previous year (i.e. an existing stack record) using the method above. The above method is to be used only to delete stack information entered during this reporting year. To delete a stack record that was entered during a previous year (e.g. during the current reporting year the stack did not exceed the reporting thresholds listed in Table 7-1, or was permanently dismantled) select "Yes" in the Remove from MAERS field (see Step 3 in the Form Completion Instructions).