

CHAPTER 10

The Activity Form: A-101

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CHAPTER 10: The Activity Form

(Complete after the EU-101 or RG-101 form, and before the E-101 form)

SEASONAL MATERIAL USAGE SCHEDULE				OPERATING SCHEDULE		
(IF THROUGHPUT IS > 0, THEN SEASONAL PERCENTAGES MUST TOTAL 100%)						
Winter (Jan, Feb & Dec)	Spring (Mar-May)	Summer (Jun-Aug)	Fall (Sep-Nov)	Hours per Day	Days per Week	Days per Year
25	25	25	25	24	7	365

FORM OVERVIEW

The Activity Form, A-101, describes operating schedules and material information for an emission unit or reporting group. One A-101 form must be completed for each reporting group, each emission unit that is not part of a reporting group, and each Rule 201 exempt emission unit that must be reported. For Rule 201 exempt emission units that contain a number of identical process devices, add together the material throughputs of all the devices to obtain an overall material throughput for the emission unit. For example, if a source has 6 cold cleaners and each has an annual throughput of 200 gallons, the material throughput would be 1,200 gallons

FORM RELATIONSHIP



An A-101 form was automatically generated for each emission unit and/or reporting group entered on the EU-101 and RG-101 forms. For each SCC entered on the A-101 form, an E-101 form will be automatically generated. Furthermore, if an activity record is removed from MAERS the removal date will automatically be entered on the E-101 form.

FORM COMPLETION INSTRUCTIONS

This form consists of three sections: the Form Reference section, the Activity Information section, and the Material Information section. All activity information that was entered for emission units in previous years will be pre-filled, except the material throughput information. This is a required field that must be updated every reporting year. If any other information needs to be updated, edit the proper fields. If no other information needs to be added and if all the information that is pre-filled is still accurate, all you have to do is enter the proper material throughput information for each activity and move on to the E-101 form (Chapter 12). Following is an explanation of each section of the A-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		EU/RG 1 of 2
Form Type	A-101	AQD Source ID (SRN) Z9999
Operator's ID	EUBOILER	

The Form Reference Section identifies the **Form Type** that is open (A-101), as well as the facility's **AQD Source ID** or State Registration Number (SRN). This information is pre-filled and cannot be edited.

This section also identifies the **Operator's ID**, which represents the emission unit or reporting group that was entered on the EU-101 or RG-101 form. For each Operator's ID identified, you must complete at least one Activity Information section and one Material Information section. You can have multiple activities per emission unit/reporting group, but only one material code per activity.

The numbers in the top, right corner of this section identify the emission unit/reporting group record currently displayed on the screen. On this form, "EU/RG 1 of 2" indicates that you are looking at the activity record for emission unit/reporting group 1 of 2. To move to a different activity record, click anywhere in the Form Reference section (the title bar should be blue) and use the arrow buttons on the tool bar or click on the browse button and select the emission unit/reporting group of interest.

Activity Information Section

Every source must complete one of these sections for each activity associated with the emission unit or reporting group displayed in the Form Reference Section.

1. **SCC:** The Source Classification Code (SCC) is an eight-character code that describes a process creating an emission from the emission unit or reporting group identified in the Form Reference section. Click on this field and a listing of all SCCs will appear (Figure 10-1). To find an SCC, you may want to refer to the **SCC Lookup** table located under **Utilities** on the menu bar (see Chapter 2 for more information about identifying correct SCCs). SCCs associated with a particular emission unit may also be identified in a Permit to Install or ROP. Select the SCC that most accurately describes the process from the drop-down list. If more than one activity takes place at the emission unit or reporting group, select an SCC for each of the processes that take place at the emission unit/reporting group. Once you have selected the first SCC, you may add additional SCCs by going to **Edit** on the menu bar and selecting **Add Activity**. You cannot use the same SCC more than once for the same emission unit or reporting group.

Note: When you save changes to this form you will no longer be able to change the SCC you have selected. To change the SCC, you must delete the activity. Go to **Edit** on the menu bar and select **Delete Activity**. This will clear the SCC and any other activity information that was entered.

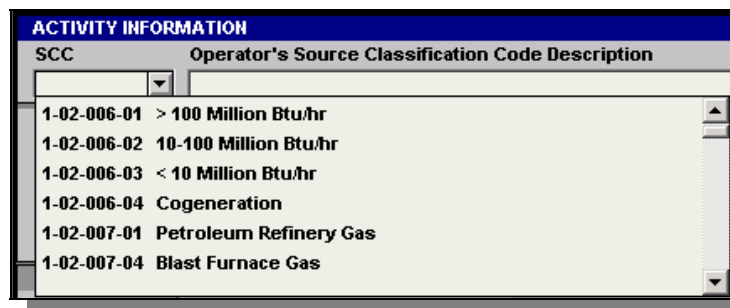


Figure 10-1: SCC Drop-Down List

2. **Operator's Source Classification Code Description:** Provide a brief description for the process that best represents this activity. You may use the description that is provided in the SCC Lookup Table.
3. **Remove from MAERS:** Select "Yes" if you would like to have this activity information removed from the MAERS system. Only remove an activity if the emission unit or reporting group no longer supports the activity.

4. **Seasonal Material Usage Schedule:** Enter the percentage of material used per season. The breakdown is as follows: January, February, and December 2004; March through May 2004; June through August 2004; and September through November 2004. The total of all four seasonal percentages must equal 100%.
5. **Hours per Day:** Enter the hours this emission unit or reporting group normally operates per day based on an annual average.
6. **Days per Week:** Enter the days this emission unit or reporting group normally operates per week based on an annual average.
7. **Days per Year:** Enter the days this emission unit or reporting group operated over the reporting year.

Material Information Section

Complete this section for each material identified for the SCC in Step 1.

The screenshot shows a form titled "MATERIAL INFORMATION" with the following fields and callouts:

- 8:** Material Code (COATING)
- 9:** Material Throughput (.0)
- 10:** Unit Code (GAL)
- 11:** Operators Material Description
- 12:** VOC Content (coatings or solvent) Weight Percent
- 13:** Density
- 14:** BTUs (fuel)
- 15:** Sulfur Content (fuel) Weight Percent
- 16:** Ash Content (fuel) Weight Percent

8. **Material Code:** This field is automatically pre-filled if the SCC selected in Step 1 has a material associated with it. If this field is not pre-filled, it means the SCC selected does not have a material associated with it. Click on the field and a drop-down list with a selection of material codes will be displayed. Select the most appropriate material for the SCC. To make your search easier you may want to refer to the **Material Code Lookup** table provided under **Utilities** on the menu bar.
9. **Material Throughput:** Enter the amount of material identified in Step 8 that was processed, produced, applied, or combusted during the reporting year. For example, if “Coating” is identified in the Material Code field, enter how many gallons (GAL) were applied during the reporting year. Be sure that the throughput entered in this field matches the unit code pre-filled or selected in Step 10.
10. **Unit Code:** This field should be pre-filled if Step 1 and Step 8 were completed.

- 11. Operator’s Material Description:** Provide a brief description of the material that is processed, produced, applied, or combusted.

Note: Entering multiple material descriptions for the same material code is not allowed. A single material code should be reported in Step 8, with a combined throughput entered in Step 9, and weighted averages for Steps 12 and 13.

Consider the following example: If a facility applies yellow, green, and blue water-based paints, the SCC “4-02-002-10” would be selected in Step 1. The material code “Coating” will be pre-filled in the material code field. The total throughput of all the colors should be entered in Step 9, and a weighted average for the VOC content and density would be entered in Steps 12 and 13. There should be only one Operator’s material description entered in Step 11 for the material code (e.g., “Yellow, Green, and Blue Paints”).

- 12. VOC Content:** This field is only required if the material is a coating or solvent. Enter the weight percent of the volatile organic compounds (VOC) contained in the throughput material, “as applied.” “As applied” refers to the composition of the throughput material at the point of application. If thinners are added to the throughput material, the VOC content of the thinner must be considered when calculating the weight percent of VOC “as applied.”

Weight percentages for all the components in a material may be found on an MSDS, environmental data sheet, or other technical data sheet supplied by the manufacturer. Details for calculating the weight percent of VOC are found in the “Coating Operations Emission Calculation Fact Sheet.”

- 13. Density:** Density is required for materials that have a mass throughput. In the first field, enter the density of the throughput material at standard temperature and pressure. Click on the second field and a drop-down list with unit options will appear. Select the appropriate units. For liquids, use pounds per gallon (LB/GAL). For solids and gases, use pounds per cubic foot (LB/FT3). Table 10-1 lists the densities of some common materials.

Table 10-1: Common Material Densities

Material	Density	Material	Density
Paint	10-15 LB/GAL	Southern Pine	40 LB/FT3
Varnish	7 LB/GAL	White Oak	48 LB/FT3
Water	8.33 LB/GAL	Sugar Maple	43 LB/FT3
		Elm	35 LB/FT3

14. **BTUs (fuel):** This field is required only if the material identified in Step 8 is a fuel. Enter the average heat content in BTUs in the first field. Click on the second field and select the appropriate unit code. Table 10-2 lists **typical** values for heat content, sulfur content, and ash content for the more common fuels.

Table 10-2: Typical Fuel Values

Type of Fuel	Heating Value BTU	% Sulfur (by wt.)*	% Ash (by wt.)
Solid fuels			
Bituminous Coal	13,000/LB	0.6-5.4	4-20
Anthracite Coal	12,300/LB	0.5-1.0	7-16
Lignite (at 35% moisture)	7,200/LB	0.7	6.2
Wood (at 40% moisture)	5,200/LB	N	1-3
Bagasse (at 50% moisture)	4,000/LB	N	1-2
Bark (at 50% moisture)	4,500/LB	N	1-3**
Coke (by product)	13,300/LB	0.5-1.0	0.5-5.0
Liquid fuels			
Residual Oil	150,000/GAL	0.5-4.0	0.05-0.1
Distillate Oil	140,000/GAL	0.2-1.0	N
Diesel	137,000/GAL	0.4	N
Gasoline	130,000/GAL	0.03-0.04	N
Kerosene	135,000/GAL	0.02-0.05	N
Liquid Petroleum Gas	94,000/GAL	N	N
Gaseous Fuels			
Natural Gas	1,050/FT3(S)	N	N
Coke Oven Gas	590/FT3(S)	0.5-2.0	N
Blast Furnace Gas	100/FT3(S)	N	N

* N= Negligible (numeric value not required to be reported, leave the field blank)

** Ash content may be considerably higher when sand, dirt, etc. are present.

15. **Sulfur Content:** This field is required only if the material identified in Step 8 is a fuel. Enter the sulfur content in weight percent. Table 10-3 provides **acceptable** sulfur content ranges for common fuels (the software will not accept sulfur content values outside of these ranges).

Table 10-3: Sulfur Content Ranges

Type of Fuel	% Sulfur (by wt)
Anthracite or Bituminous Coal	0.02-7.00
Distillate	0.01-2.00
Natural Gas	0.00-0.05
Residual Oil	0.01-5.00
Wood or Wood & Bark	0.02-5.00
Other Miscellaneous Fuels	0.01-7.00

- 16. Ash Content:** This field is required only if the material identified in Step 8 is a fuel. Enter the ash content in weight percent. Table 10-4 provides **acceptable** ash content ranges for common fuels (the software will not accept ash content values outside of these ranges).

Table 10-4: Ash Content Ranges

Type of Fuel	% Ash (by wt)
Anthracite Coal	0.01-11.00
Bituminous Coal	0.01-25.00
Natural Gas	0.00-0.05
Other Miscellaneous Fuels	0.01-25.00

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

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



CHAPTER LESSON: ADDING & DELETING ACTIVITY RECORDS

ADDING AN ACTIVITY RECORD

One A-101 form will automatically be generated for each emission unit or reporting group identified on an EU-101 or RG-101 form. If more than one process occurs at that emission unit or reporting group (i.e. the SCC selected does not cover all the processes at the emission unit/reporting group), you will need to add another activity record. To add an activity record, follow the steps below:

1. Choose **Edit** on the menu bar and select **Add Activity**.
2. A new A-101 form will be displayed.
3. Complete the Activity Information and Material Information Sections for the new activity.
Note: Do not use the same SCC more than once for the same emission unit or reporting group.

REMOVING / DELETING AN ACTIVITY RECORD

Activity records can only be deleted or removed from MAERS if the activity no longer supports the emission unit or reporting group.

To remove an existing activity record (i.e., an activity record created during a previous reporting year):

In the “Remove from MAERS” field select “Yes.” This will remove the activity from your MAERS database. The record will remain during this reporting year, but will no longer appear in your database in the next year.

Any emissions information linked to the removed activity record on the E-101 form will be automatically removed from MAERS. The emission information will still appear on the E-101 form; however, a remove date will be automatically entered in the “Remove Date” field in the Form Reference section.

To delete an activity record that was created during this reporting year:

1. Click anywhere in the Activity Information Section of the activity record you would like to delete (the title bar should be blue).
2. Choose **Edit** on the menu bar and select **Delete Activity**. This will delete the activity record that was created along with any material information that was entered. If the activity is linked to an E-101 form, a message will appear instructing you to delete the actual emission record(s) associated with the activity (Figure 10-2). If this message appears, save any changes, close the A-101 form, and go to Step 3.



Figure 10-2: Error Message

3. Open the E-101 Form
4. Find the emission record associated with the activity you wish to delete (the SCC and Material Code will appear in the Form Reference section).
5. Choose **Edit** on the menu bar and select **Delete Emission**.
6. Save the changes, close the E-101 form, and return to the A-101 form (see Step 1).

