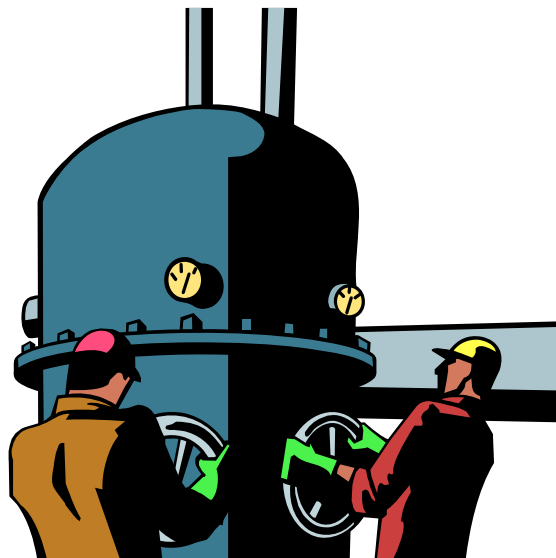


CHAPTER 8

The Emission Unit Form: EU-101

In This Chapter:

- Form Overview
- Form Relationship
- What Emission Units Need to be Reported?
- Form Completion Instructions
- Chapter Lesson: Adding and Deleting Emission Unit Records



CHAPTER 8: The Emission Unit Form

(Complete after the SV-101 form, and before the RG-101 or A-101 forms)

FORM REFERENCE		Record 1 of 9	
Form Type	AQD Source ID (SRID)		
EU-101	Z9999		
OPERATOR'S EMISSION UNIT IDENTIFICATION			
AQD Emission Unit ID	Operator's ID	HAICS Code (if different from S-101)	
EU00001	EU-BOILER		
	Installation Date MM/DD/YYYY	Dismantle Date MM/DD/YYYY	
	05/01/1990	00/00/0000	
Operator's Emission Unit Description			
80,000,000 BTU/HR NATURAL GAS FIRED BOILER			
Design Capacity	30.	Design Capacity Unit Numerator	E6BTU
		Design Capacity Unit Denominator	HR
Maximum Nameplate Capacity		Megawatts	
RULE 201 APPLICABILITY			
Grandfathered?	No		
Rule 201 Exempt	No	If Exempt, Rule Number	
If Rule 201 Exempt, is Throughput Below Reporting Thresholds?			
Permit?	Yes	If Yes Enter the Permit Number	
		MI-ROP-Z9999-2003	
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year?	Yes		
CONTROL DEVICE(S)		Control Device 1 of 1	
Control Device Code			
EMISSION UNIT STACK(S)		Stack 1 of 1	
Operator's Stack ID	SV-BOILER		

FORM OVERVIEW

The Emission Unit Form, EU-101, identifies and describes a facility's emission units. Emission units that were entered during previous reporting periods will be pre-filled. If you have an emission unit at your facility that is not already included on the EU-101 form, it may need to be added. Use the guidelines on the following pages to help you determine which emission units at your facility need to be reported. For more information about identifying emission units and Rule 201 exempt emission units, refer to Chapter 2 and Appendix C.

FORM RELATIONSHIP



For each emission unit entered on the EU-101 Form, an A-101 form is automatically generated. In addition, operator stack IDs that were created on the SV-101 form are linked to the EU-101 form in the Emission Unit Stack(s) Section.

WHAT EMISSION UNITS NEED TO BE REPORTED?

The EU-101 form is used to report information about the emission units at your facility; however, not all emission units may need to be reported in MAERS. The guidelines below and the decision tree on page 8-4 (Figure 8-1) will help you decide when to include an emission unit in your MAERS report.

1. **If the emission unit is not Rule 201 exempt (see Chapter 2):** It must be reported (this includes grandfathered emission units).
2. **If the emission unit is Rule 201 exempt:** It must be reported if it meets any one of the following:

- The Rule 201 exempt emission unit is included in a Permit to Install, Opt Out Permit, or Renewable Operating Permit (ROP).
Note: *A Synthetic Minor or Opt Out Permit is a type of permit that sets legally enforceable limits on a facility's potential to emit. Facilities that would otherwise be subject to the ROP Program use the Opt Out Permit as a way to set limits on their emissions and stay below the threshold that would require them to obtain an ROP.*

If an emission unit is included in an ROP, it must be included in the MAERS report.

- The facility is subject to the ROP Program and the Rule 201 exempt emission unit is subject to a process-specific emission limit or standard (e.g. MACT or NSPS).
- The facility is subject to the ROP Program and the actual emissions from the Rule 201 exempt emission unit exceed 10 percent of significant, as defined in Rule 119(e) (see Table 8-1).
- The Rule that exempts the emission unit is identified in Table 8-2 and exceeds the corresponding throughput or equipment size listed.

Table 8-1: Significant Levels

Pollutant	Significant Level (Rule 119(e)) tons/year	10% of Significant Level tons/year
Carbon monoxide (CO)	100	10
Nitrogen oxides (NO _x)	40	4
Sulfur dioxide (SO ₂)	40	4
Particulate matter (PM)	25	2.5
PM-10	15	1.5
Volatile organic compounds (VOC)	40	4
Lead (Pb)	0.6	0.06

Rule 201 exempt emission units that are not required to be included in your MAERS report can still be included on the EU-101 form; however, throughput and annual emissions information, normally provided on the A-101 and E-101 forms, will not have to be entered. You may want to retain a Rule 201 exempt emission unit that does not have to be reported in MAERS for recordkeeping purposes, should the throughput exceed the reporting thresholds in future reporting years.

NEED HELP? For assistance with identifying emission units that should be included on the EU-101 form, contact your AQD district office (see Appendix D) or the Environmental Assistance Program at (800) 662-9278.

Table 8-2: Rule 201 Exempt Emission Units that must be reported in MAERS*

RULE 201 EXEMPTION	REPORTING REQUIREMENT
Rule 281(h)	Only report emissions of applicable criteria pollutants for cold cleaners having a total annual throughput greater than 1,000 gallons of cleaner. <i>Total annual throughput of cleaner = (cleaner used) – (cleaner reclaimed as waste)</i>
Rule 282(b)	Only report emissions of applicable criteria pollutants from fuel burning equipment that have a total annual throughput equal to or greater than any of the following: 50,000,000 cubic feet of gases in Rule 282(b)(i), 400,000 gallons of fuel oil in Rule 282(b)(ii), and 1,000 tons of wood in Rule 282(b)(iii).
Rule 283(1)(c)	Report all emissions of applicable criteria pollutants if the testing medium contains a VOC.
Rule 283(1)(d)	Report all emissions of applicable criteria pollutants if the testing medium contains a VOC.
Rule 284(e)	Report all emissions of applicable criteria pollutants.
Rule 284(f)	Report all emissions of applicable criteria pollutants.
Rule 285(g)	Only report emissions of applicable criteria pollutants for engines with 300 horsepower and larger. Exclude emergency generators whose sole function is to provide back-up power when local utility service is interrupted.
Rule 285(l)(vi)(C)	Only report emissions of applicable criteria pollutants for equipment operating at a rate of 30,000 cubic feet per minute or higher.
Rule 285(p)	Only report emissions of applicable criteria pollutants for annual grain throughputs equal to or greater than 4,000,000 bushels.
Rule 285(r)(iv)	Only report emissions of applicable criteria pollutants for cold cleaners having a total annual throughput greater than 1,000 gallons of cleaner. <i>Total annual throughput of cleaner = (cleaner used) – (cleaner reclaimed as waste)</i>
Rule 285(aa)	Report all emissions of applicable criteria pollutants.
Rule 286(b)	Report emissions of applicable criteria pollutants when 3,000 tons or more of plastic is processed annually (aggregate of all plastic processes combined).
Rule 287(c)	Report all emissions of applicable criteria pollutants.
Rule 290	Report all emissions of applicable criteria pollutants.

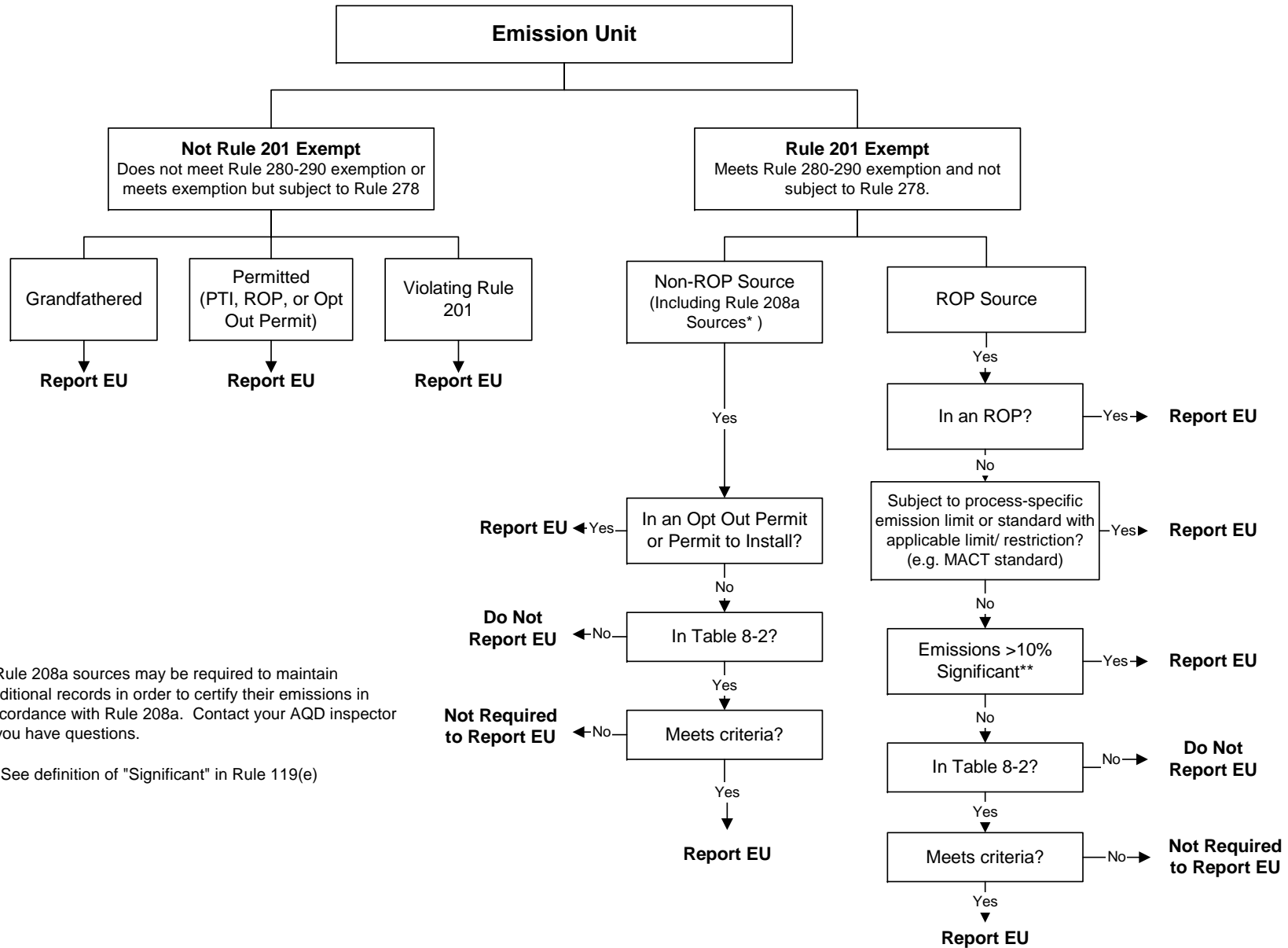
* Rules 280 through 290 can be accessed on the MAERS CD or by going to www.deq.state.mi.us/documents/deq-ess-caap-pti-exemptionbooklet.pdf.

Table 8-2 specifies when certain Rule 201 exempt emission units must be reported in MAERS. Consider the following example: If a non-ROP facility has three cold cleaners that are exempt from the Permit to Install requirement under Rule 281(h), but during the reporting year had an aggregate annual throughput of 1,500 gallons of cleaner, they must be reported. If the cold cleaners had an annual aggregate throughput of 600 gallons, they would not have to be reported.

Note: If “Report all emissions of applicable criteria pollutants” appears after the rule in Table 8-2 (e.g. Rule 287(c) and Rule 290), it means that an EU-101, A-101, and E-101 form must be completed for that emission unit, regardless of throughput.

WHAT EMISSION UNITS NEED TO BE REPORTED

(for emission units at facilities subject to MAERS reporting)



* Rule 208a sources may be required to maintain additional records in order to certify their emissions in accordance with Rule 208a. Contact your AQD inspector if you have questions.

** See definition of "Significant" in Rule 119(e)

Figure 8-1: MAERS Reporting Decision Tree

FORM COMPLETION INSTRUCTIONS

This form consists of five sections: the Form Reference section, the Operator's Emission Unit Identification section, the Rule 201 Exempt Section, the Control Device(s) section, and the Emission Unit Stack(s) section. If an emission unit was added to your facility during the reporting period and it must be reported, add it to the EU-101 form by completing the information in the Operator's Emission Unit Identification section (see the Chapter Lesson on page 8-11). In addition, you may have to add information for an existing exempt emission unit if, during the reporting year, it exceeded any of the thresholds listed in Table 8-2. For emission units that were added in previous years, the information will already be pre-filled. If any information has changed or needs to be updated, edit the appropriate fields. If no emission units were added during the reporting period and if all the information that is pre-filled is still accurate, you do not have to complete this form and you may proceed to the RG-101 or A-101 form (Chapters 9 and 10). You can use the **Source Summary Report** to review all source information (see Chapter 4). Following is an explanation of each section of the EU-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 5
Form Type	AQD Source ID (SRN)	
EU-101	Z9999	

The Form Reference Section identifies the **Form Type** that is open (EU-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 emission unit record currently displayed in the upper right corner. On this form, "Record 1 of 5" indicates that emission unit record 1 of 5 is currently displayed on the screen. If more than one emission unit record exists, the counter will keep track of the record displayed (e.g. Record 2 of 3). To move to a different record, use the arrow buttons on the tool bar, or click on browse and select the emission unit of interest.

Operators Emission Unit Identification Section

Complete the fields in this section for new emission units or to make changes to the previous year's report. Follow the steps below.

The screenshot shows a software interface titled "OPERATOR'S EMISSION UNIT IDENTIFICATION". It contains several input fields and dropdown menus. Numbered callouts (1-9) point to the following fields:

- 1: AOD Emission Unit ID (text box containing "EU00001")
- 2: Operator's ID (text box containing "EU-BOILER")
- 3: NAICS Code (if different from S-101) (dropdown menu)
- 4: Installation Date MM/DD/YYYY (text box containing "05/01/1990")
- 5: Dismantle Date MM/DD/YYYY (text box containing "00/00/0000")
- 6: Operator's Emission Unit Description (text area containing "80,000,000 BTU/HR NATURAL GAS FIRED BOILER")
- 7: Design Capacity (text box containing "80")
- 8: Design Capacity Unit Numerator (dropdown menu containing "E6BTU") and Design Capacity Unit Denominator (dropdown menu containing "HR")
- 9: Maximum Nameplate Capacity (text box containing "Megawatts")

1. **AQD Emission Unit ID:** This is a unique ID assigned to the emission unit by the software. This number is automatically assigned and cannot be edited.

2. **Operator's ID:** Enter a unique ID for this emission unit. Emission unit operator IDs must begin with an "EU" prefix plus any combination of up to 14 letters, numbers, or keyboard characters. Spaces are not allowed within the operator's ID. Make the emission unit operator's ID specific and easy to associate with the emission unit(s) it represents (e.g. EUPAINTBOOTH5, EUBOILER#2).

If an operator's ID has already been established in a Permit to Install or ROP, be sure that the ID entered in this field matches the ID in your permit.

3. **NAICS Code:** If the North American Industrial Classification System (NAICS) code for this emission unit is different than the NAICS code that was identified on the S-101 form, select the most appropriate NAICS code from the drop-down list.

4. **Installation Date:** Enter the date that the emission unit was first installed using the date format provided (MM/DD/YYYY).

5. **Dismantle Date:** If the emission unit was dismantled or rendered permanently inoperable during the reporting year, enter the date that this occurred. Although the emission unit has been dismantled, the remaining fields must still be completed. If a dismantle date is entered, you should select "No" in the Remove from MAERS field. If this is a portable source, the dismantle date should be left blank. Do not complete this field if it is not applicable to the emission unit.

6. **Operator's Emission Unit Description:** Enter a brief narrative description of the emission unit. Make sure that this description is specific and will help to identify the emission unit, especially if there are several emission units that are alike.

7. **Design Capacity:** Only complete this field if the emission unit is a boiler or turbine. Enter the design capacity.

8. Design Capacity Numerator and Denominator: Only complete these fields if you had to complete the Design Capacity field in Step 8.

- **Design Capacity Unit Numerator:** Choose the appropriate code from the Unit Code drop-down list. If the emission unit is a boiler, the numerator should be either BTUs (BTU), Million BTUs (E6BTU) or Horsepower (HP).
- **Design Capacity Unit Denominator:** Choose the appropriate code from the Unit Code drop-down list. If the emission unit is a boiler, report the denominator as Hour (HR). (If the numerator is Horsepower (HP), denominator does not apply. Leave this field blank.)

9. Maximum Nameplate Capacity: Only complete this field if this emission unit is used to generate electricity and you were required to complete Step 8 (e.g., a turbine). Report the electric generator’s rated design capacity at 100% (maximum) operation in megawatts.

Rule 201 Applicability Section

Complete the fields in this section for the emission unit identified above. Table 8-3 on page 8-10 provides guidance on how to complete the fields in this section.

10 RULE 201 APPLICABILITY	
Grandfathered?	No 10
Exempt from Rule 201?	Yes 11
If Rule 201 Exempt, is Throughput Below Reporting Thresholds?	No 13
Permit?	No 14
Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year?	Yes 16
If Yes, Rule Number	Rule 287(c) 12
If Yes Enter the Permit Number	15

10. Grandfathered?: Select “Yes” if this emission unit is considered to be “Grandfathered.” To be a Grandfathered emission unit it must have been installed prior to August 15, 1967; never modified, reconstructed, or relocated after August 15, 1967; and not Rule 201 exempt.

11. Exempt from Rule 201?: Select “Yes” if this is a Rule 201 exempt emission unit (see Page 2-5 for a definition of “Rule 201 Exempt Emission Unit”). Select “No” if the emission unit is not a Rule 201 exempt emission unit. If “No” is selected, skip Steps 13 and 14.

12. If Yes, Rule Number: The drop-down list provides rule citations for the exemptions listed in Table 8-2. If “Yes” was selected in the previous field, select the specific rule under which the emission unit is considered exempt. For example, if this is a Rule 201 exempt cold cleaner pursuant to Rule 285(r)(iv) of the Michigan Air Pollution Control Rules, select “Rule 285(r)(iv).” If a particular rule is not listed, select “Other” and provide the correct rule number in the “Operator’s Emission Unit Description” field.

13. If Rule 201 Exempt, is Throughput Below Reporting Thresholds?: Compare the annual throughput to the specific rule listed in Table 8-2. If the throughput is below the threshold, select “Yes.” If the emission unit exceeded the threshold listed under the exemption in Table 8-2, select “No” and continue. For some exemptions it is required that all emissions be reported (e.g. Rule 287(c) and Rule 290). If the emission unit is exempt under one of these rules, select “No” as well.

14. Permit?: Select “Yes” if this emission unit is identified in a permit (i.e., Permit to Install, Opt Out Permit, or Renewable Operating Permit). If this emission unit is not permitted select “No.”

15. If Yes Enter the Permit Number: If “Yes” was selected in the previous field (Step 15), enter the appropriate permit number (e.g. 115-87 or 115-87A, 199900999, MI-ROP-Z9999-2004).

Note: If the emission unit does not have a permit and is not a Rule 201 exempt emission unit pursuant to Rules 280-290, enter “00-00” in this field.

16. Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year?: Refer to the discussion, “What Emission Units Need to be Reported” on pages 8-2 through 8-4. Select “Yes” if the emission unit is any of the following:

- Not Rule 201 exempt (this includes grandfathered emission units).
- Rule 201 exempt and included in a Permit to Install, Opt Out Permit, or ROP.
- If an ROP source, Rule 201 exempt and subject to a process-specific limitation or standard (e.g., MACT or NSPS)
- If an ROP source, Rule 201 exempt and the actual emissions exceed 10 percent of significant.
- Rule 201 exempt where emissions reporting is required (see Table 8-2).

If this emission unit does not need to be reported select “No.” If “No” is selected, no other forms need to be completed for this emission unit.

Control Device Section

CONTROL DEVICE(S)		Control Device 1 of 1
Control Device Code	<ul style="list-style-type: none"> Activated Carbon Adsorption Activated Clay Adsorption AFS cntrl cde 147(Incrsed A/F Ratio AFS control code 133(Incinerator) AFS control code 148(Clean Burn) AFS control code 149(Pre-Combus AFS control code 150(Mechanical C 	EMISSION UNIT STACK(S)
Operator's Stack ID		Stack 1 of 1

17. Control Device Code: If there is a control device associated with the emission unit, select the most appropriate control device from the drop-down list.

If there is more than one control device, additional control device codes may be added. Follow the steps below to add a control device.

- (a) After the first control device code has been selected, go to **Edit** on the menu bar and select **Add Control Device**.
- (b) Another field will appear. Select another control device.

Emission Unit Stack Section

EMISSION UNIT STACK(S)		Stack 1 of 1
Operator's Stack ID	<div style="border: 1px solid black; padding: 2px;"> SVBOILERSTACK SVPAINTBOOTH#1 </div>	

- 18. Operator's Stack ID:** Click on this field and a drop-down list will appear containing the Stack ID's that were created on the SV-101 form. If a stack that had to be reported on the SV-101 form is associated with the emission unit, select the appropriate Stack ID. **Every Stack ID that was created on the SV-101 form must be listed on at least one EU-101 form.**

If more than one reported stack is associated with the emission unit, additional Stack IDs may be added. Follow the steps below to enter additional Stack IDs.

- (a) After the first Stack ID has been selected, go to **Edit** on the menu bar and select **Add Stack ID**.
- (b) Another field will appear. Select another Stack ID.

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

NEED HELP?

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

Table 8-3: How to Complete the Rule 201 Applicability Section on the EU-101 Form

	EU is <u>not</u> Rule 201 Exempt			EU <u>is</u> Rule 201 Exempt				
	Grandfathered	Permitted	Violating Rule 201	Non-ROP Source		ROP Source		
				EU In an Opt Out Permit or Permit to Install	EU In Table 8-2	EU in ROP	EU >10% Significant	EU In Table 8-2
“Grandfathered?”	Yes	No	No	No	No	No	No	No
“Exempt from Rule 201?”	No	No	No	Yes	Yes	Yes	Yes	Yes
“If Yes, Rule Number”	Blank	Blank	Blank	Rule #	Rule #	Rule #	Rule #	Rule #
“If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?”	Blank	Blank	Blank	Blank	Yes/No*	Blank	Blank	Yes/No*
“Permit?”	No	Yes	No	Yes	No	Yes	No	No
“If Yes Enter The Permit Number”	Blank	Permit to Install #	Blank	Opt Out or Permit to Install #	Blank	ROP #	Blank	Blank
“Is This Emission Unit Required To Report Emissions To MAERS For This Reporting Year?”	Yes	Yes	Yes	Yes	Yes/No**	Yes	Yes	Yes/No**

* Compare Rule 201 exempt emission unit to the criteria in Table 8-2. If the criteria is exceeded or it says “report all emissions” select “No.”

** "If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?" = Yes, then select “No” in this field
 “If Rule 201 Exempt, Is Throughput Below Reporting Thresholds?” = No, then select “Yes” in this field



CHAPTER LESSON: ADDING & DELETING EMISSION UNIT RECORDS

ADDING EMISSION UNITS

To add an emission unit to a MAERS report use the following procedure:

1. Click anywhere in the Operator's Emission Unit Identification section. The title bar should appear blue.
2. Choose **Edit** on the menu bar and select **Add Emission Unit** (Figure 8-2).
3. A new Operator's Emission Unit Identification section will be created for you to complete.

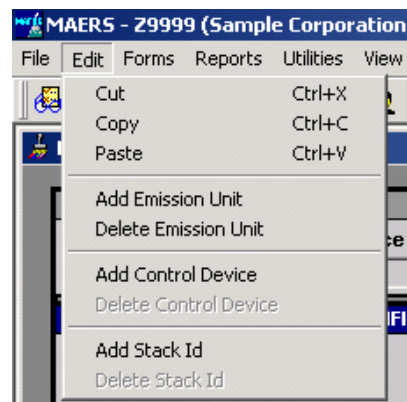


Figure 8-2: Edit Menu

REMOVING / DELETING EMISSION UNITS

There are two methods for deleting an emission unit record from the MAERS system. **Method 1** should be used to remove an existing emission unit record (i.e., the information was entered during a previous year's submittal). **Method 2** should be used to delete an emission unit record entered during this reporting year (i.e., it is new information and has not been submitted during a previous year).

Method 1

Use the following method to remove an existing emission unit record:

1. On the EU-101 form, go to the "Remove from MAERS" field and select "Yes." Save the changes and close the EU-101 form. If the emission unit is linked to a reporting group go to Step 2. If not linked to a reporting group, go to Step 5.
2. Open the RG-101 form and find the reporting group that contains the Operator's ID you wish to remove.
3. Once the Operator's ID has been located, highlight it, choose **Edit** on the menu bar and select **Delete Emission Unit**.
4. Save the changes and close the RG-101 form. Go to step 8.
Note: Deleting an emission unit from a reporting group will change the activity and emissions information on the A-101 and E-101 forms. Make sure this information is updated for the reporting group.

Form information that was submitted during a previous reporting year cannot be deleted by the source. By selecting "Yes" in the "Remove from MAERS" field, the information will remain in the AQD central database, but will be removed from your database the following year.

5. Open the A-101 form and find the activity record(s) this emission unit is linked to. The emission unit Operator's ID will appear in the Form Reference section of the A-101 form.
6. In the Activity Information section, find the field "Remove from MAERS" and select "Yes." If more than one activity record is linked to this emission unit, repeat this step for each record.
7. Save the changes and close the A-101 form. Any emissions information linked to the removed activity record(s) will be automatically removed from MAERS. The emission information will still appear on the E-101 form for that emission unit; however, a remove date will be automatically entered in the "Remove Date" in the Form Reference section.
8. The emission unit record and associated activity and emissions records will be removed from MAERS. The Operator's ID will still appear on this year's report, but will be removed for the next reporting year.

Method 2

It is important to remember that the emission unit records created on the EU-101 form may be linked to several different forms. Consequently, before you can delete an emission unit record from the EU-101 form, it must first be deleted from any of the other forms it is linked to by the Operator's ID that was created. If you try to delete an emission unit record without first deleting the records linked to it, you will receive error messages instructing you to delete the associated record(s). Follow the steps below to delete an emission unit record that was created during this reporting year.

1. Go to the emission unit record you wish to delete on the EU-101 form.

2. Choose **Edit** on the menu bar and select **Delete Emission Unit**. If the emission unit is not linked to any other forms it will be deleted. If it is linked to an activity form, you will get a message telling you to delete all the activity records associated with it (Figure 8-3). If you get this message, go to step 3.



Figure 8-3

3. Save any changes and close the EU-101 form.

4. Open the A-101 form and find the activity record(s) this emission unit is linked to. The Operator's ID will appear in the Form Reference section of the A-101 form.

5. Choose **Edit** on the menu bar and select **Delete Activity**. The activity record will be deleted. Save the changes, close the A-101 form, and return to Step 1. If the activity is linked to an E-101 form, a message will appear instructing you to delete all the actual emission records associated with the activity (Figure 8-4). If you get this message go to Step 6.



Figure 8-4

6. Save the changes and close the A-101 form.

7. Open the E-101 form and find the emission record(s) this emission unit is linked to. The Operator's ID will appear in the Form Reference section of the E-101 Form.
8. Choose **Edit** on the menu bar and select **Delete Emission**. Delete all the data in the Emission Information Section that is linked to this Operator's ID (see Chapter 12 for more information about deleting emission records).
9. Once you have deleted all the emission records associated with the activity and emission unit, save the changes, close the E-101 form, and return to Step 4.

If the emission unit you are deleting is part of a reporting group, you should delete the Operator's ID from the RG-101 form it appears on. Follow the steps below.

1. Open the RG-101 form and find the Operator's ID to be deleted.
2. Once the Operator's ID has been located, highlight it. Choose **Edit** on the menu bar and **select Delete Emission Unit**.
3. Save the changes and close the RG-101 form.

