

# Welcome

## Introduction to MAERS Workshop



# Introduction to MAERS Workshop

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# Registration Materials

Michigan Air Emissions Reporting System

**Log in Card**

**Workbook**

**Quick Guide**

**FAQ**

# **MAERS**

## ***User Guide & Workbook***

A Guide for Completing an Electronic MAERS Report



Michigan Department of Environmental Quality  
Office of Environmental Assistance  
(800) 662-9278

January 2013

# Today's Goal

**Prepare you to complete and submit an administratively complete MAERS Report.**

# Agenda

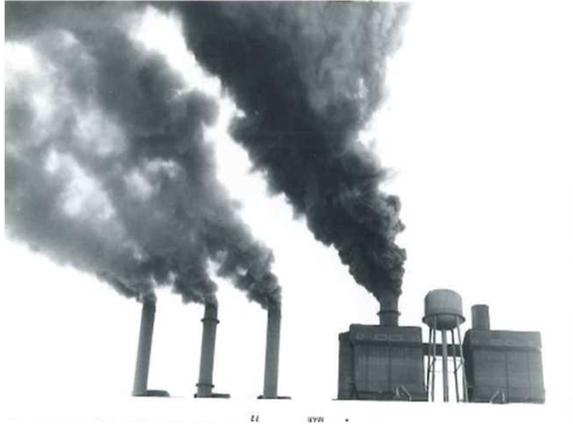
- \* **Overview**
- \* **Registration**
- \* **Log into system**
- \* **MAERS Navigation/Tools**
- \* **Form Completion Instructions**
- \* **Submitting a MAERS Report**
- \* **Get you Registered!**

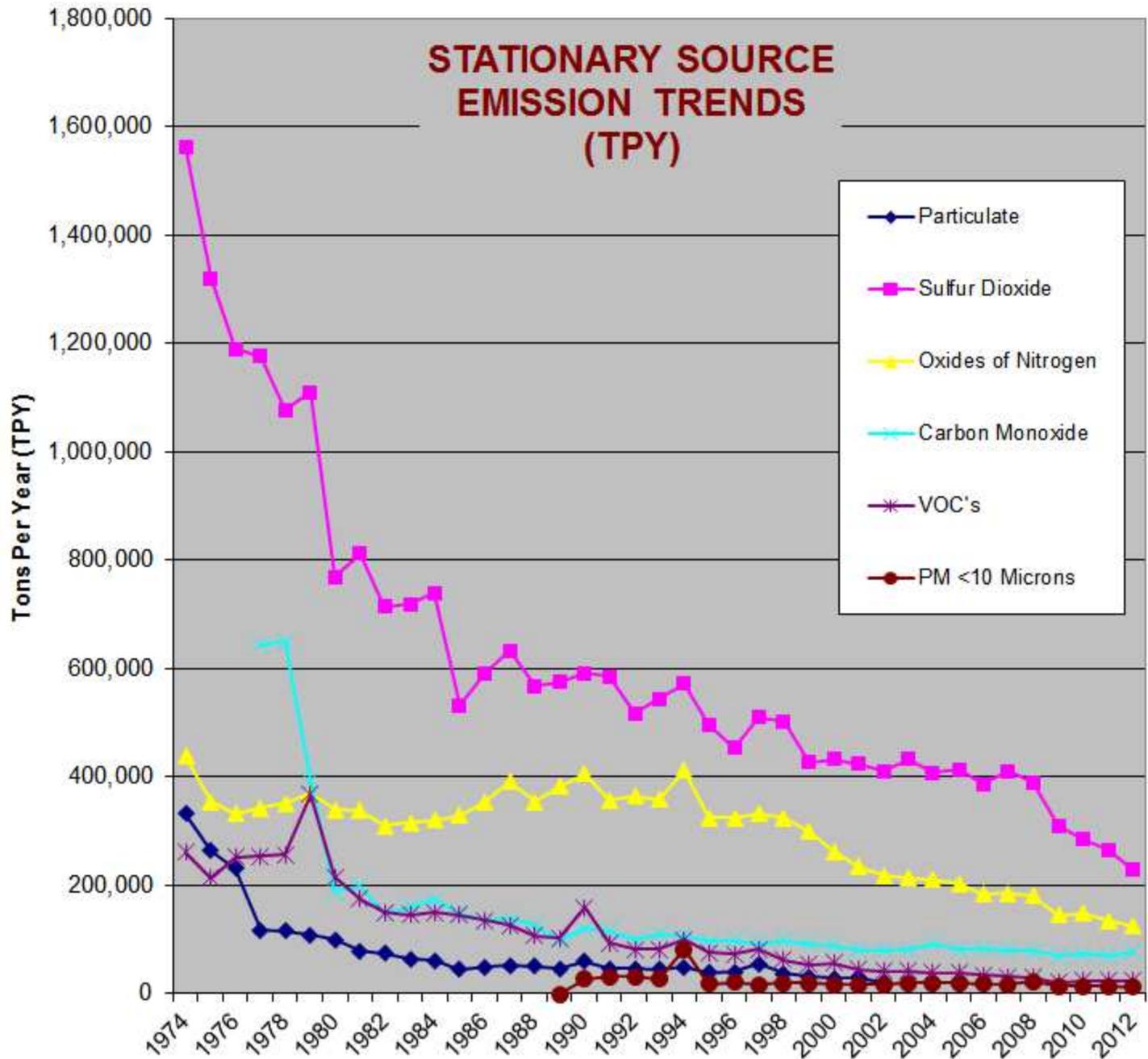
# Why MAERS?

- \* **Overall Inventory**
- \* **Identify Program Needs**
- \* **Assess Program Effectiveness**
- \* **Permitting**
- \* **Fees**

# The Year of Clean Air

\* Contact: Steve Lachance, 616-356-0239

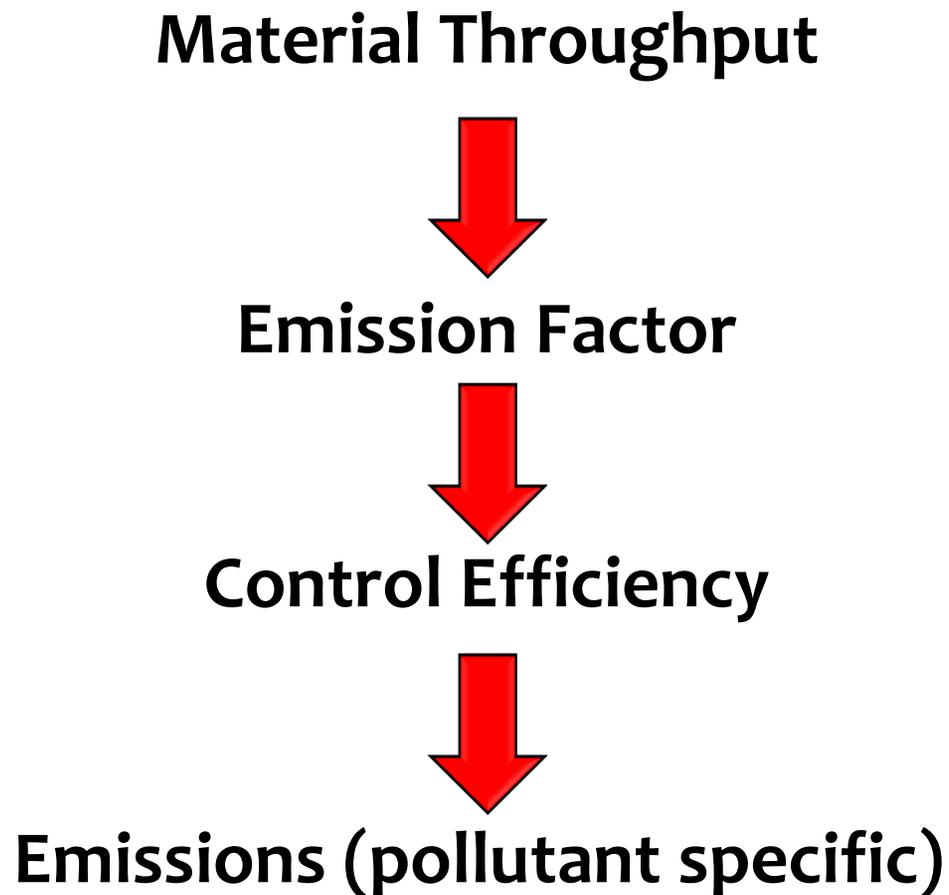




# How Does MAERS Work?



# How Does MAERS Work?



# How Does MAERS Work?

**lbs of NO<sub>x</sub> emitted from natural gas combustion?**

**100 mmcf x (100 lbs NO<sub>x</sub>/mmcf) x (1 – 0.50) =**

**5,000 lbs NO<sub>x</sub>**

# How Does MAERS Work?

## 1. AQD Notifies Facilities

**Air Quality  
Division**



# How Does MAERS Work?

**2. Facility IDs Primary Preparer**



**Primary Preparer**

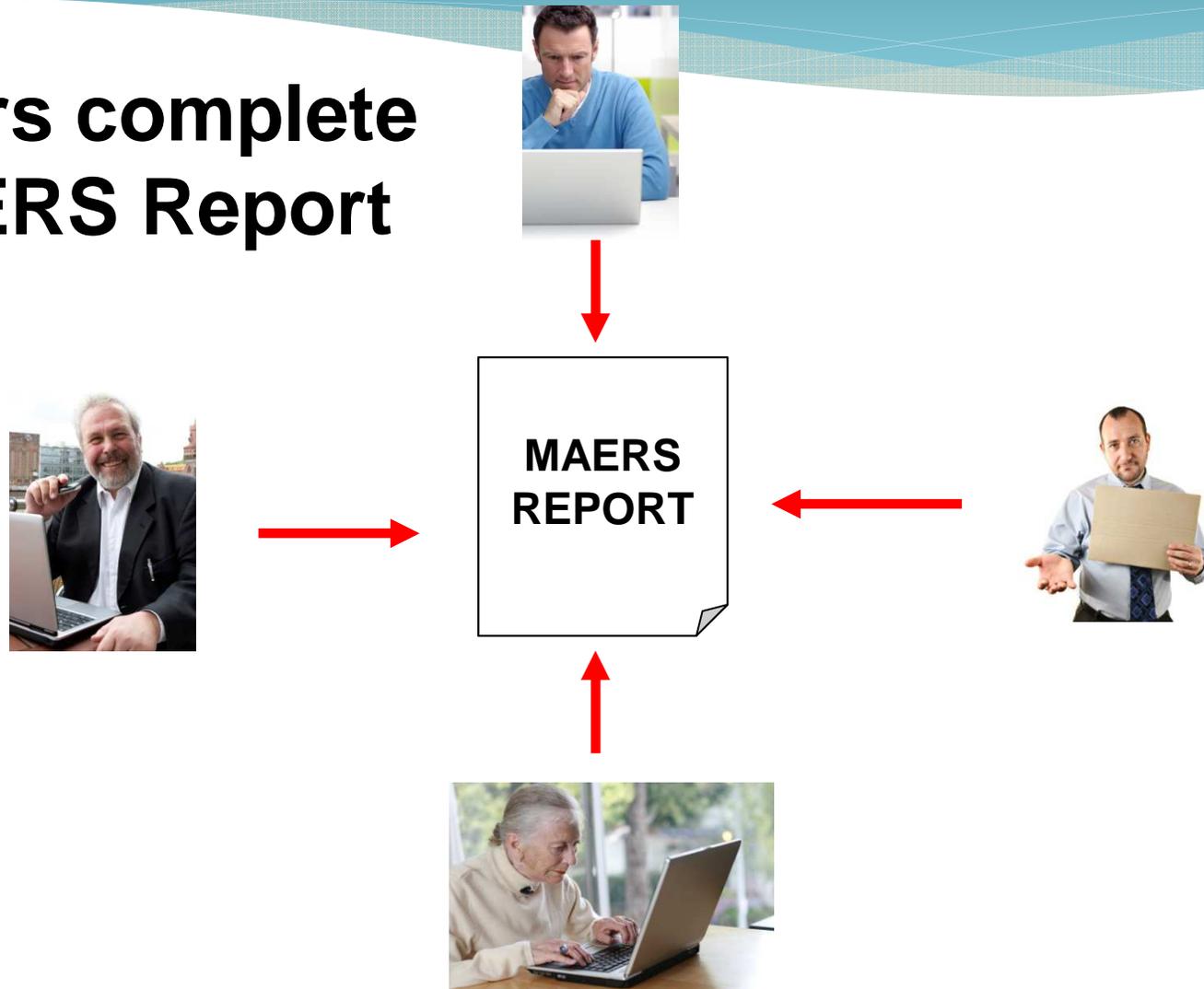
**3. Primary Preparer assigns users**



**Registered Users**

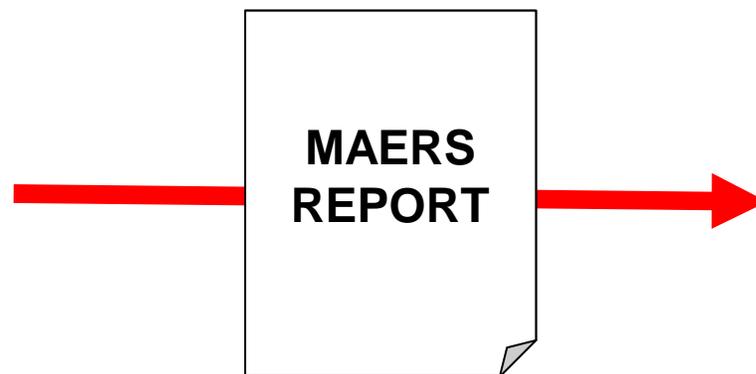
# How Does MAERS Work?

## 4. Users complete MAERS Report



# How Does MAERS Work?

## 5. Primary Preparer Submits using PIN



# Timeline

- \* **Sources Notified**
- \* **Workshops**
- \* **Webinars**
- \* **MAERS Due March 16**

# Registration

**Workbook Page 9**

# How do I Get Started?

- ▶ Determine Your User Role



**Workbook Page 10**

# Primary Preparer

- ▶ Must be employed at the company.
- ▶ Manages MAERS account information.
- ▶ Can edit MAERS Report
- ▶ Can submit MAERS report.
- ▶ Each source must have ONE, and only one, Primary Preparer.



# Secondary Preparer

- ▶ User, other than the Primary Preparer, employed at a source
- ▶ Can edit MAERS data
- ▶ Cannot submit
- ▶ Cannot access facility MAERS information until assigned to the source by Primary Preparer.



# Consultant

- ▶ User that is not employed at a source.
- ▶ Can edit MAERS data
- ▶ Cannot submit
- ▶ Cannot access facility MAERS information until assigned to the source by the Primary Preparer.



# Reviewer

- ▶ Can view but not edit MAERS data.
- ▶ Cannot access facility MAERS information until assigned to the source by the Primary Preparer.



# So What type of MAERS User Are You?

- ▶ Primary Preparer
- ▶ Secondary Preparer
- ▶ Consultant
- ▶ Reviewer



# So What type of MAERS User Are You?

- ▶ User role defines  
functions you can  
access





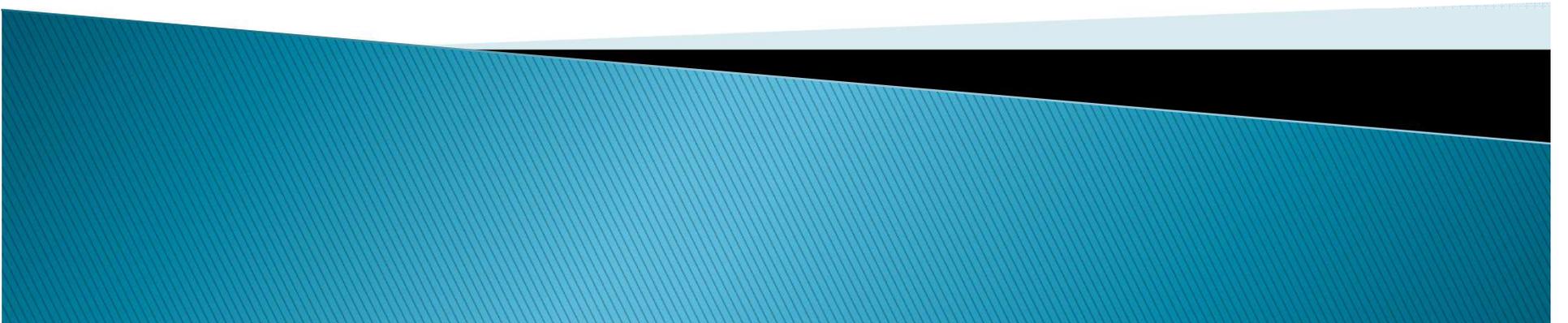
Sample Corp.

Submit

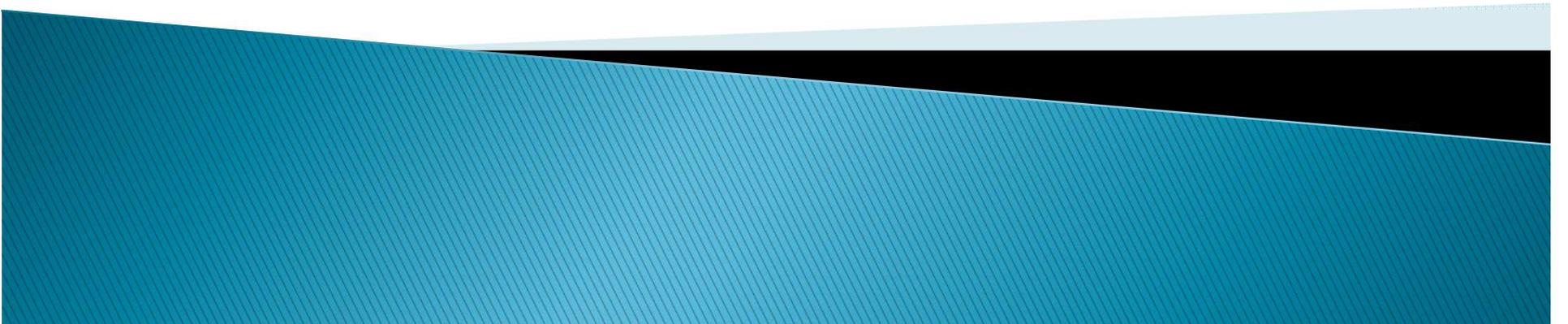
Mid-Enterprise Reporting System



**Let's Get Registered!**



Demo



# What's Next

- ▶ Primary Preparer
  - Wait for e-mail from AQD that includes PIN and notification that account has been activated
- ▶ Access MAERS Account
- ▶ View Account Data
- ▶ Manage Users
- ▶ Complete and Submit MAERS Report



# What's Next

- ▶ Secondary Preparer, Consultant, Reviewer
  - Wait until Primary Preparer grants you permission to access facility data

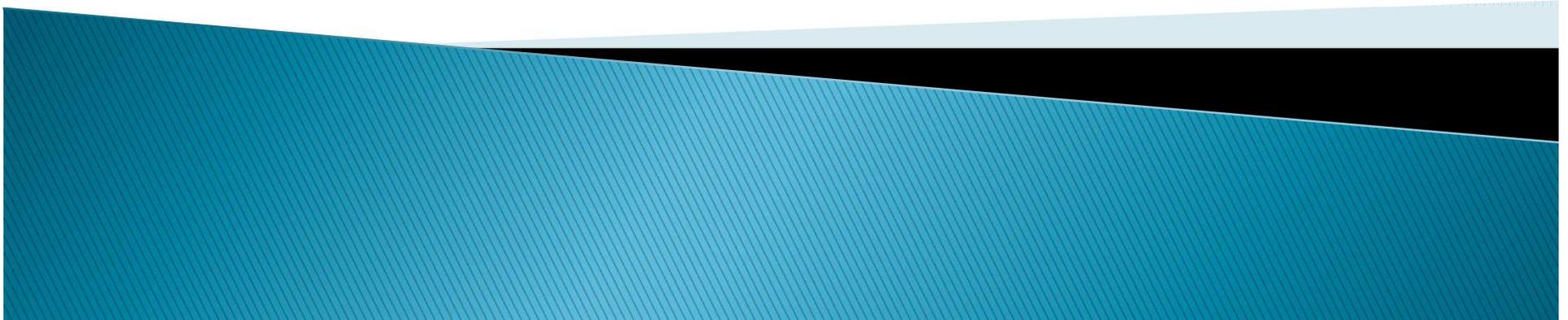


# Let's Log In!

<http://maers.state.mi.us/training>

**USER ID: Z\_\_\_\_\_**

**Password: password**



# MAERS Navigation/Tools

- \* Utilities
- \* Accessing MAERS Report
- \* MAERS Report Navigation

## Michigan Air Emissions Reporting System (MAERS) User Quick Guide

1. **Log in.** Go to <http://maers.state.mi.us/facility>.

2. **Check MAERS Report Status.** Under the MAERS Report tab the screen will list all the reports you have access to in a list as well as their current status (e.g., when you are working on the report it will say "Draft." When you have submitted it will say "Submitted").

View/Edit	SPN	Source Name	County	NAICS Code	Portable?	MAERS Rpt. Modified By	RTRP	MAERS Report Status
	2999	Sample Corporation	JACKSON	All Other Motor Vehicle Parts Manufacturing	N		Y	Draft

3. **Navigation Tabs.** The different components of MAERS can be accessed by clicking on the Home, MAERS Report, Fee Source, System Utilities, My Account tabs at the top of the screen.



4. **Changing Password.** You can change your password by going to "My Account." When you change your password an e-mail will be sent to you soon after notifying you of the change that was made.

5. **MAERS Site Map.** This function provides user with a collapsible tree view of MAERS report. After running the completeness check the Site map will identify any errors or warnings.

6. **Historical Records.** You can view MAERS reports from past years by going to MAERS Report History, located under the MAERS Report Management.

7. **Share a Draft of your Report with the Air Quality Division.** Your MAERS report cannot be viewed by the AQD until it has been submitted. You can share the draft version of your report with AQD by checking the box titled "Share Draft MAERS Report with AQD Staff" located on the Source Form.



8. **On Screen Error/Warning Identification.** After you "Save" changes made to a form, MAERS will display any errors or warning for that form at the top of the screen. Errors (red) must be resolved to submit the report. Warnings (yellow) do not need to be resolved to submit.

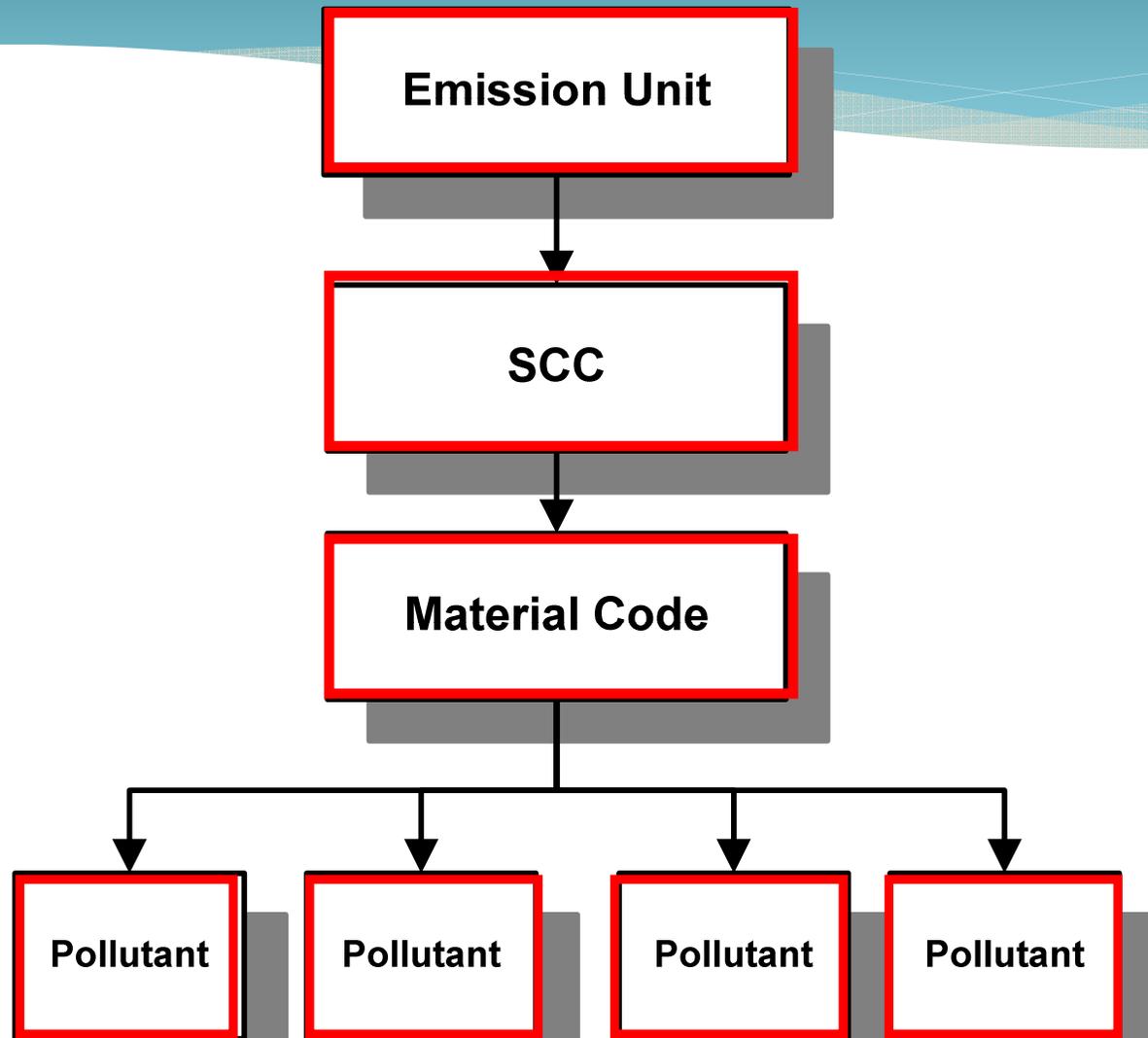
# Form Completion

**Workbook Page 17**

# MAERS Forms

- \* **Source Form**
- \* **Contact Form**
- \* **Emission Unit Form**
- \* **Reporting Group Form**
- \* **Activity & Emissions Form**

# Form Relationships



# The Source Form

**Workbook Page 19**

# The Contact Form

**Workbook Page 23**

# The Stack Form

**Workbook Page 25**

# Reporting Thresholds

CO	100 tons/yr
NO <sub>x</sub>	40 tons/yr
SO <sub>2</sub>	40 tons/yr
PM	25 tons/yr
PM-10	15 tons/yr
VOC	10 tons/yr
Lead	0.6 tons/yr

# ROP Sources

**Facilities subject to the ROP program should be certain to report all stacks with applicable requirements.**

# Exercise 1

**While completing report you realize that SV-COAT1-3 was dismantled back in 2012. What do you do?**

## Exercise 2

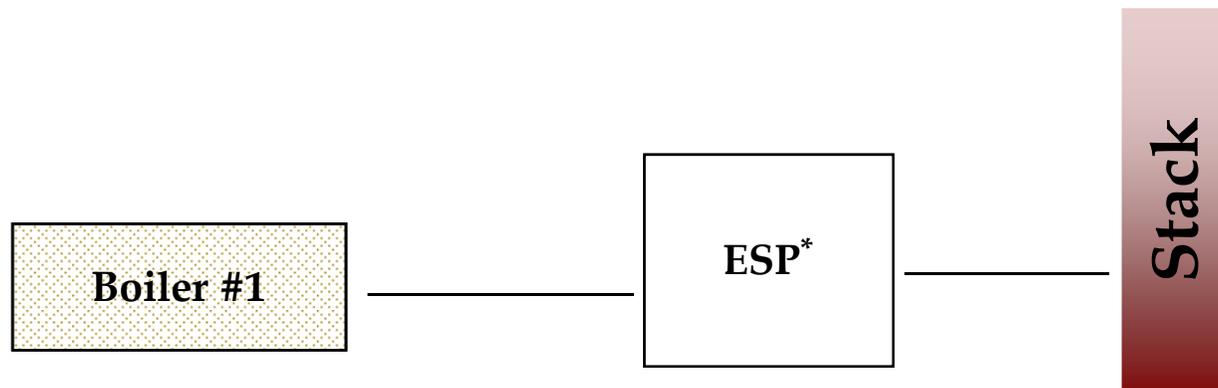
**During renovations at sample corporation last June, they dismantled SV-OVEN<sub>2</sub>.**

# The Emission Unit Form

**Workbook Page 31**

# Emission Unit

**A collection of one or more process devices, zero or more control devices and related stacks.**



\* Electrostatic Precipitator

# Arranging Devices into Proper Emission Units

## AQD Policy AQD-06

	<b>AIR QUALITY DIVISION POLICY AND PROCEDURE</b>	DEPARTMENT OF ENVIRONMENTAL QUALITY
Original Effective Date: February 20, 1996 Revised Date: Reformatted Date: January 29, 2014	Subject: Procedure For Determining Emission Units  Program Name: Permit to Install and Renewable Operating Permit (ROP) Programs  Number: AQD-006	Category: <input type="checkbox"/> Internal/Administrative <input checked="" type="checkbox"/> External/Non-Interpretive <input type="checkbox"/> External/Interpretive
	Page: 1 of 10	

*A Department of Environmental Quality (DEQ) Policy and Procedure cannot establish regulatory requirements for parties outside of the DEQ. This document provides direction to DEQ staff regarding the implementation of rules and laws administered by the DEQ. It is merely explanatory; does not affect the rights of, or procedures and practices available to, the public; and does not have the force and effect of law.*

### INTRODUCTION:

There has been a considerable amount of confusion and uncertainty among the regulated community and Air Quality Division staff in determining what constitutes an emission unit. This applies to preparing applications for Permits to Install and Renewable Operating Permits, as

# Emission Units are in:

# MAERS

## Emission Unit List

Items per page: 100

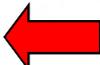
1 - 5 of 5 item(s)

View/Edit	Emission Unit ID	Emission Unit Desc	Installed Date	Dismantle Date	Delete
	EU-BOILER	80,000,000 BTU/HR NATURAL GAS FIRED BOILER	05/01/1990		
	EU-COAT1	MAIN COATING LINE, 3 SPRAY BOOTHS	05/15/1990		
	EU-COLDCLEAN	2 COLD CLEANERS	06/02/1994		
	EU-OVEN1	DRY OFF OVEN FOR COATING LINE 1. NATURAL GAS FIRED. 700,000 BTU/HR	05/20/1990		
	EU-OVEN2	DRY OFF OVEN FOR COATING LINE 2. NATURAL GAS FIRED. 100,000 BTU/HR	01/02/2014		

# Emission Units are in:

## Permits to Install

### Emission Unit Identification

Emission Unit ID	Emission Unit Description	Stack Identification
EU-TURBINE1 	Natural-gas fired turbine with dry low-NOx burner operating in simple-cycle mode	SV-TURBINE1
EU-TURBINE2 	Natural-gas fired turbine with dry low-NOx burner operating in simple-cycle mode	SV-TURBINE2
EU-TURBINE3 	Natural-gas fired turbine with dry low-NOx burner operating in simple-cycle mode	SV-TURBINE3
EU-EDFP 	Emergency diesel fire pump	SV-EDFP
Changes to the equipment described in this table are subject to the requirements of R336.1201, except as allowed by R336.1278 to R336.1290.		

# Emission Units are in:

## Renewable Operating Permit

C. Emission Unit/Process Group Summary Table

Unit/Group ID	Emission Unit/Process Group Description	Installation/Modification Date	Control Device Description	Stack/Vent ID	Requirement Table No.
EGCOLDCLEANERS	There are currently 5 Safety Kleen metal parts cleaners located throughout the facility. Stoddard solvent is used in all.	After 7/1/79	NA	NA	F-01.2
EGBOILER#3	back-up boiler. Natural gas fired with #2 fuel oil as back-up. Initial rated capacity is 90,000 # steam/hr (121 MMBtu/hr).	1951 9/69	NA	SVBOIL3_STACK	F-01.1
EGBOILER#4	primary boiler. Natural gas fired with #2 fuel oil as back-up. Initial rated capacity is 125,000 # steam/hr (169 MMBtu/hr).	2/1/70	NA	SVBOIL4_STACK	F-01.1
EGPAPERMACHINE	akes the pulp and forms it into paperboard then dries it. Coloring may be added at the beginning or end of the process. The end of the machine has a rewinder and trimmer. The emissions from this can be directed to two cyclones that emit outside or to a bin in the basement. The cyclones empty to the hydropulpers.	1940's	DVPAPERCYCLONE1 DVPAPERCYCLONE2	SVPAPMACH9-1 SVPAPMACH9-2 SVPAPMACH9-3 SVPAPMACH9-4 SVPAPMACH9-5 SVPAPMACH9-6 SVPAPMACH9-7 SVPAPMACH9-8 SVPAPMACH9-9 SVPAPMACH9-10 SVPAPMACH9-11 SVPAPMACH9-12 SVPAPMACH9-13 SVPAPMACH9-14	E-01.1

**Question:**

**Does Every Emission  
Unit Have to be Included  
in MAERS?**

**Answer:**

**It depends.**



# Rule 201 Exempt Emission Unit

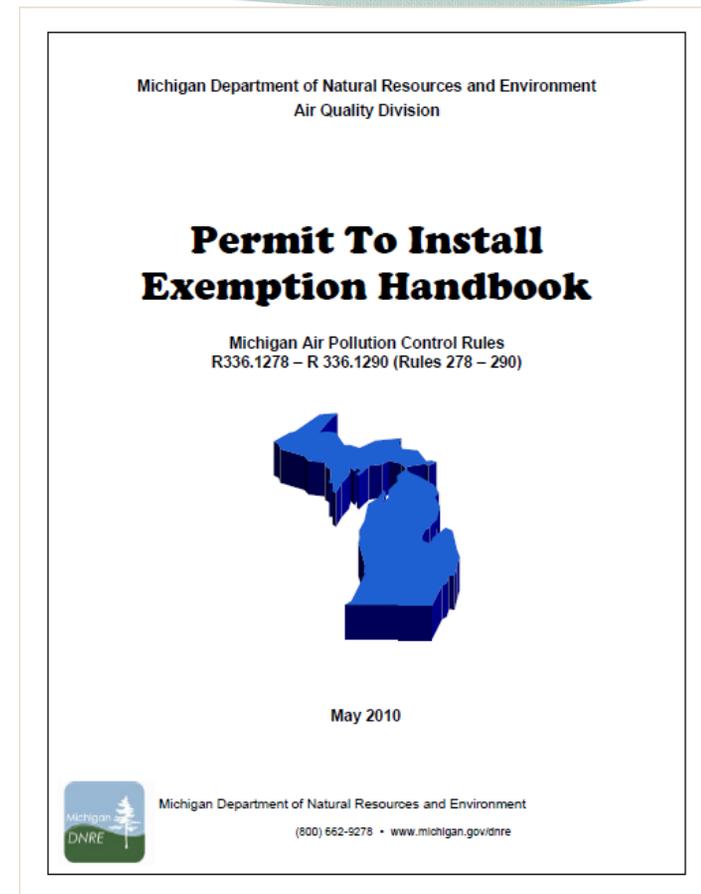
**Page 31**

**or**

**Appendix C**

# Rules 280 - 290

## Exempt Insignificant Emission Units



# Rule 278

## Significant Levels

**WARNING!**

\* CO = 100 tons

\* PM-10 = 15 tons

\* NO<sub>x</sub> = 40 tons

\* VOC = 40 tons

\* SOX = 40 tons

\* LEAD = 0.6 tons

\* PM = 25 tons

**Rule 278**

# Rule 201 Exempt Emission Unit

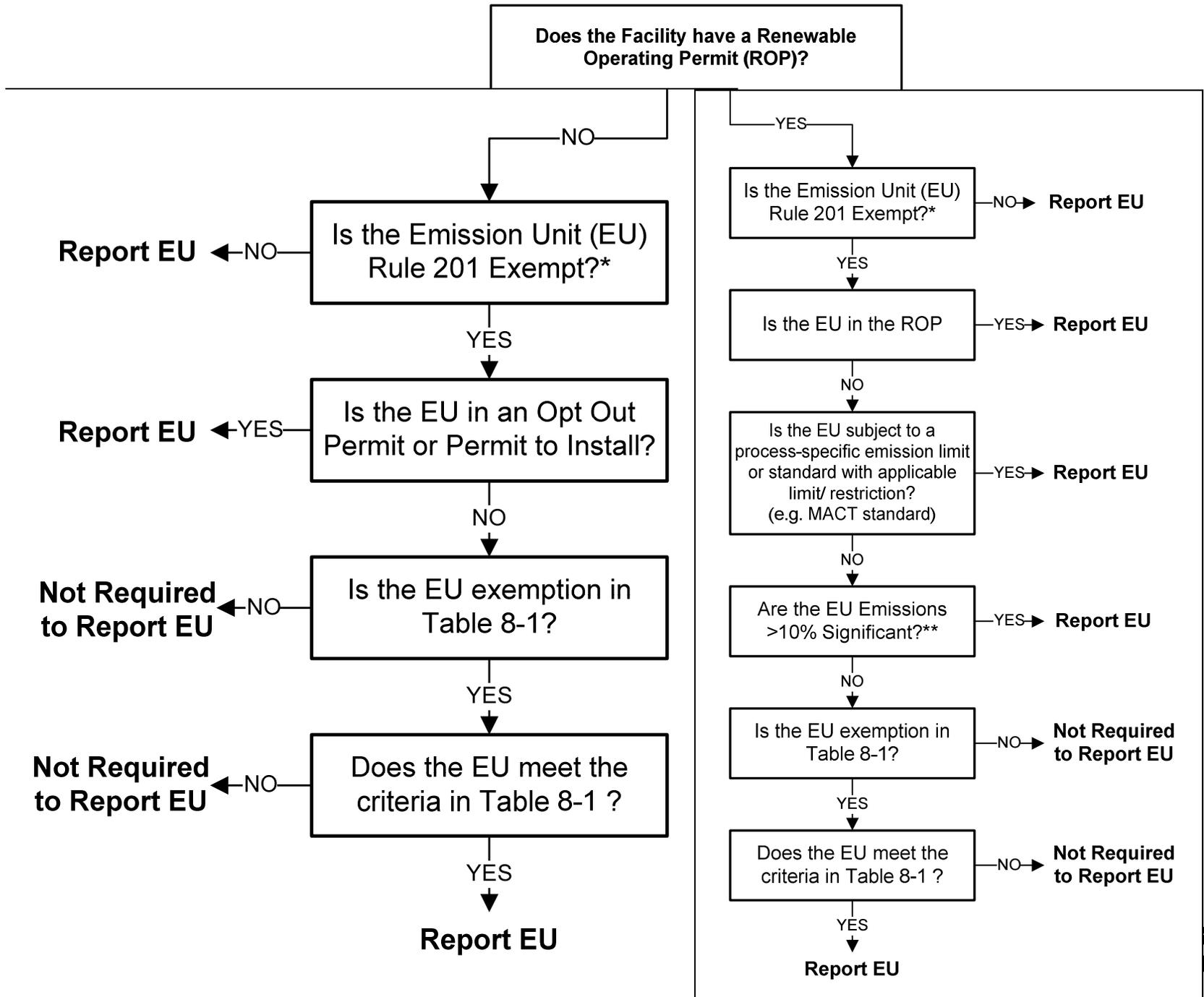
- 1. Identified in Rules 280-290**
- 2. Not subject to Rule 278**

# Original Question:

**Does an EU need to be included  
in MAERS?**

**If Not Rule 201 Exempt → YES**

**If Rule 201 Exempt → MAYBE**



# Table 8-1

	<b>RULE 201 EXEMPTION</b>
Rule 281(h)	Only report emissions of applicable criteria pollutants for cold cleaners having a total annual throughput greater than 1000 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.

# ROP Sources

**All EUs in your existing  
ROP must be reported in  
MAERS.**

# Exercise 1

**EU-COAT1 was taken apart and sold to another company in May 2014. What do you do?**

**“Dismantle”**

## Exercise 2

**LINE A and LINE B were installed in June 2014. Add these two processes into MAERS.**

**EU-LINEA**

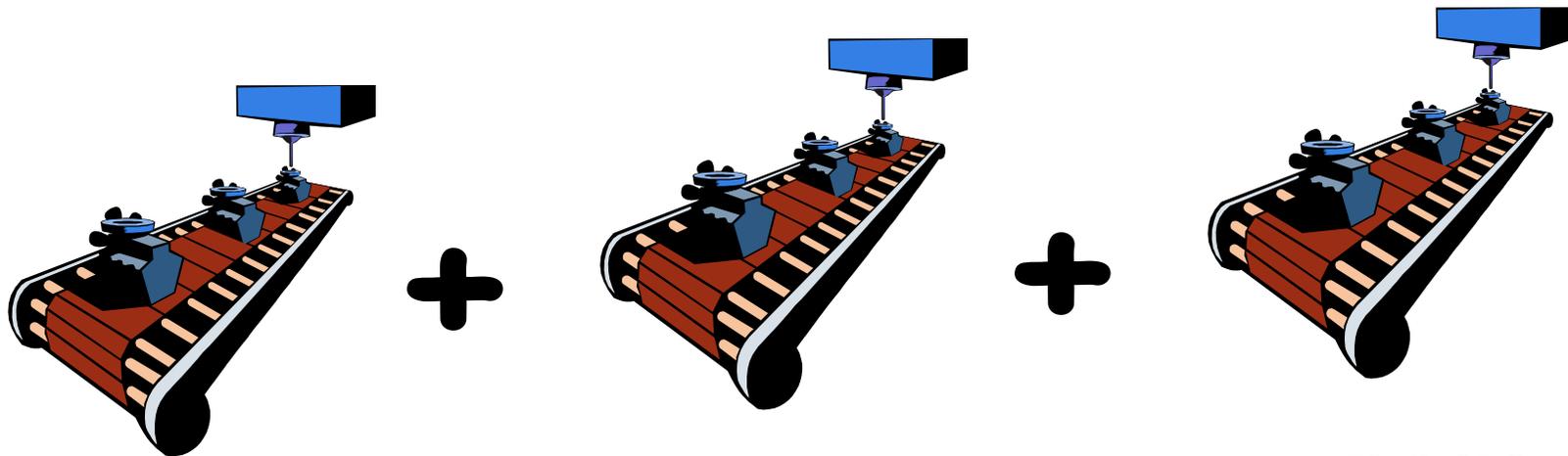
**EU-LINEB**

# The Reporting Group Form

**Workbook Page 41**

# Reporting Group

**An optional grouping of  
emission units**



# Reporting Group vs. Flexible Group

- \* **Reporting Group** = Used only in MAERS to simplify reporting emissions
- \* **Flexible Group** = Used in ROP and PTI to combine emission units with the same applicable requirements
- \* *You can create a Reporting Group to match a flexible group in your permit if the activity is the same*

# No Reporting Group

**EU<sub>1</sub>** → **Activity & Emissions**  
**EU<sub>2</sub>** → **Activity & Emissions**  
**EU<sub>3</sub>** → **Activity & Emissions**

## With Reporting Group

**EU<sub>1</sub>** ↘  
**EU<sub>2</sub>** → **RG<sub>1</sub>** → **Activity & Emissions**  
**EU<sub>3</sub>** ↗

# Exercise

**Create a new reporting group that includes EU-LINEA and EU-LINEB**

**RG-LINEAB**

# The Activity and Emissions Form

**Workbook Page 43**

# Activity and Emission Form

- \* **Activity Detail**
- \* **Emission Information**

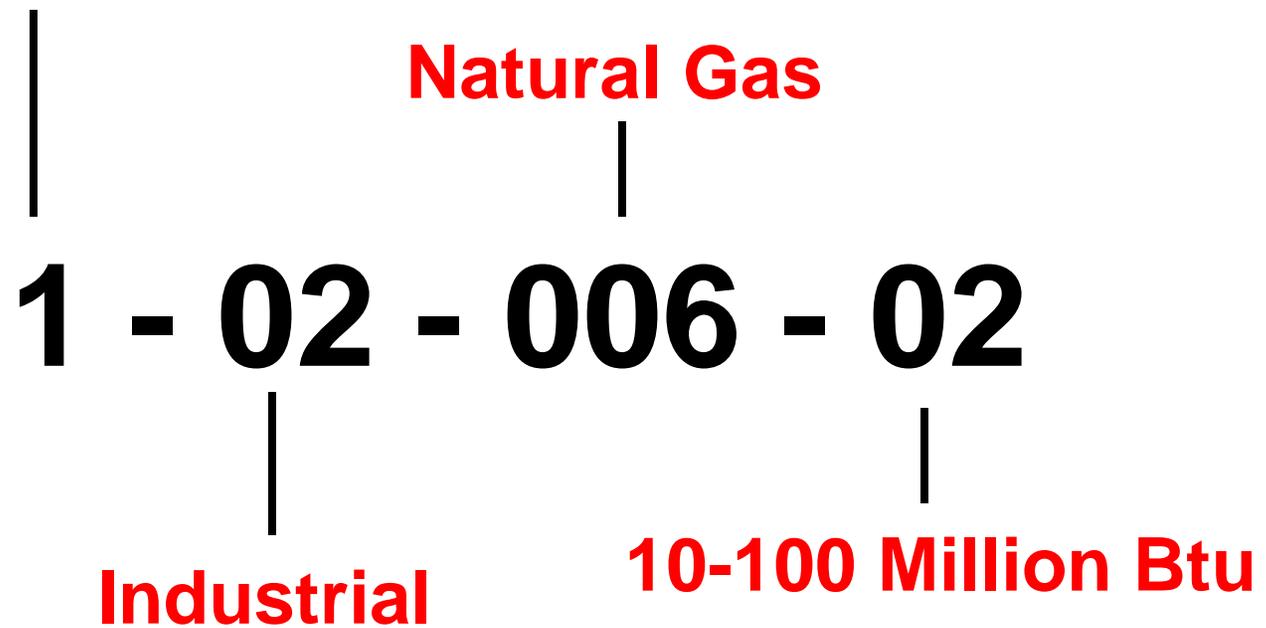
The screenshot shows a software interface with a title bar that reads "Activity & Emission Information" in green text. Below the title bar is a horizontal tabbed menu. The first tab, labeled "Activity Detail", is highlighted with a yellow border. The second tab is labeled "Emissions" and the third is labeled "Attachment".

# Source Classification Code (SCC)

- \* **An eight-digit numeric code**
- \* **Links devices/emission units with emission factors**
- \* **Emission unit can have more than one**

SCC for a natural gas fired boiler with a rated heat input capacity of 20 million btu

**External Combustion Boilers**



# Activity Detail

# Emissions Information

# Reporting Emissions

- \* **MAERS Emission Factor – Page 52**
- \* **Other Emission Basis – Page 53**

# What Pollutants Need to be Reported?

- **Ammonia**
- **CO**
- **Lead**
- **NO<sub>x</sub>**
- **SO<sub>x</sub>**
- **PM**
- **VOCs**

$$1.0 - \left( \frac{\text{Controlled EF}}{\text{Uncontrolled EF}} \right) \times 100$$

**Uncontrolled = 1.320E1**

**Controlled = 7.800E0**

$$[1.0 - (7.8/13.2)] \times 100 = 40.91$$

# Completeness Check

**Workbook Page 57**

# Submitting a MAERS Report

**Workbook Page 61**

# Submitting MAERS Report

- \* **Run Completeness Check – p. 57**
- \* **Complete Preparer form (optional) – p. 61**
- \* **Enter PIN and security question to Submittal Authorization – p. 63**

# ROP Report Certification Form



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

## RENEWABLE OPERATING PERMIT REPORT CERTIFICATION

*Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.*

Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michigan's Renewable Operating (RO) Permit program must be certified by a responsible official. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as described in General Condition No. 22 in the RO Permit and be made available to the Department of Environmental Quality, Air Quality Division upon request.

### Other Report Certification

Reporting period (provide inclusive dates): From **1/1/2014** To **12/31/2014**

Additional monitoring reports or other applicable documents required by the RO Permit are attached as described:

**2013 Emission Inventory Report submitted via  
MAERS on 2/20/15**

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete.

**John Sample**

**President**

**(517) 555-1234**

Name of Responsible Official (print or type)

Title

Phone Number

**John Sample**

Signature of Responsible Official

**2/22/15**

Date

# Reports

**Workbook Page 65**

# Resources

- \* **Click on “Contact MAERS” to access:**
  - \* **Workbook**
  - \* **Tutorials**
  - \* **Instruction Documents**

# Questions and Comments

- \* **Infomaers@michigan.gov**
- \* **Report Issue/Comment  
Function in MAERS**
- \* **800-662-9278**

# MAERS Tutorials

[www.michigan.gov/deqworkshops](http://www.michigan.gov/deqworkshops)

**Click on “Online Learning” then  
“Michigan Air Emissions Reporting  
System”**

# Evaluation

**An evaluation will be e-mailed to you following the workshop.**

# Registration

\* Go to

<http://maers.state.mi.us/facility>

\* Click on “Self Registration”