



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
LANSING



C. HEIDI GRETHOR  
DIRECTOR

## 2016 MICHIGAN AIR EMISSIONS REPORTING SYSTEM (MAERS)

### INTRODUCTION

#### Submit Emissions Information by March 15, 2017

***SUBMITTAL OF EMISSIONS INFORMATION IS REQUIRED BY STATE LAW (Article I: Pollution Control, Chapter 1, Point Source Pollution Control, Part 55 of PA 451 of 1994, of the Natural Resource and Environmental Protection Act. The penalty for non-completion or falsification of MAERS forms is a misdemeanor.)***

### UPDATES FOR EMISSIONS INVENTORY (EI) YEAR 2016

- Michigan Air Pollution Control rules were amended in December 2016; go to [www.michigan.gov/deqair](http://www.michigan.gov/deqair) for the latest information on rule changes.
- Rule 208a –Rule 208a has been rescinded. Facilities utilizing Rule 208a should have an alternative in place to be in compliance with the Michigan Air Pollution Control Rules. If you have questions regarding Rule 208a, please contact your district inspector.
- EPA has retired over 500 Source Classification Codes (SCC), activity codes. AQD has mapped the retired SCC codes to valid SCC codes for facilities. For a complete list of SCC codes, go to [http://www.michigan.gov/documents/deq/deq-aqd-eval-era-MAERS-SCC-AMS-CODES\\_408395\\_7.xls](http://www.michigan.gov/documents/deq/deq-aqd-eval-era-MAERS-SCC-AMS-CODES_408395_7.xls).

### ADDITIONAL INFORMATION

- The MAERS web based application can be accessed at <http://maers.state.mi.us/facility>. In order for you to view and edit your MAERS Report, you first must register and be associated with your Facility. To register, click on the Self-Registration link at the internet address above. If you are registering as a Primary Preparer, please remember to send in your Electronic Signature Agreement to the Lansing Office for activation of your account. The mailing address is: Michigan Department of Environmental Quality, Air Quality Division, Attn: MAERS Administrator, P.O. Box 30260, Lansing, MI 48909-7760.
- Latitudes and longitudes that have been verified by AQD staff will be grayed out in MAERS and cannot be modified by the facility. If a verified latitude or longitude is incorrect, please send an e-mail to [INFOMAERS@michigan.gov](mailto:INFOMAERS@michigan.gov) with the correct information.
- MAERS workshops are offered throughout January and February. To find more information and register on-line go to [www.michigan.gov/deqworkshops](http://www.michigan.gov/deqworkshops).
- Primary Preparers/Manage Users – In addition to associating users, all secondary users and reviewer user roles **MUST** be defined. See [www.michigan.gov/deqmaers](http://www.michigan.gov/deqmaers) - Associating User Instructions for additional details.
- Users who change companies must create a new MAERS account.
- Be sure to check out the MAERS website for additional updates at [www.michigan.gov/deqmaers](http://www.michigan.gov/deqmaers).

As a reminder, sources with Renewable Operating Permits (ROPs) are required to certify their MAERS submittal using the Renewable Operating Permit Report Certification form (EQP 5736), signed by the source's Responsible Official. This is necessary in order to fully comply with the general conditions of the ROP. These sources are still required to complete the MAERS SB-101 Submit Form.

The Renewable Operating Permit Report Certification form (EQP 5736) is also available on the internet at [www.michigan.gov/deqair](http://www.michigan.gov/deqair). Select Permits; Renewable Operating Permits; ROP Forms & Application Software; Report Certification and Deviation Reporting. Then select ROP Report Certification (EQP 5736)."

**Mailing Contents:**

New sources and paper submitters received a "brief" MAERS General Instructions Booklet and cover letter.

The entire MAERS General Instructions booklet is available on line at <http://www.michigan.gov/deqmaers>, under Forms & Documents, Paper Reporting Instructions and Forms Guide. The booklet is divided into guides including Introduction, General Form Information, Submittal Instructions and Table I. Instructions, examples and blank forms can be found under Forms & Documents, MAERS Forms and Instructions.

**Submittal Options:**

Submittals of the MAERS information can be submitted via internet or by paper copy.

**Procedural Clarifications:**

Before starting the MAERS data entry, make sure that you have a copy of the previous year's summary report or forms. Having these copies will help you to complete the MAERS emissions data.

To request that source-specific, partially completed, hard-copy forms be e-mailed or mailed to you, please contact your district office (see Table 1) or contact the MAERS Helpdesk at [InfoMAERS@michigan.gov](mailto:InfoMAERS@michigan.gov) or 800-662-9278. You will need to complete these hard-copy forms and mail them back to the appropriate district office for data entry. The Material Throughput amount on the Activity form and all emission information on the Emissions form have been removed. The summary report/forms from last year's report may help in completing the Emission forms. Also, for portable sources, the counties and their percentages have been removed.

## GENERAL INSTRUCTIONS

### **Authority:**

The annual emission inventory report is required by the administrative rules of the Michigan Department of Environmental Quality (DEQ) under authority of Article II: Pollution Control, Chapter 1, Point Source Pollution Control, Part 55 of PA 451 of 1994, the Natural Resources and Environmental Protection Act. Section 182 (a) (3) (B) of the Clean Air Act requires the development of an emission statement program by each state containing an Ozone Non-Attainment area. In addition, a person who knowingly falsifies a report or fails to respond is guilty of a misdemeanor; this is punishable by a fine of not more than \$10,000 per day, and imprisonment for not more than one year, for each violation. Therefore, by providing an annual emissions inventory report, a person certifies to the truth and accuracy based on belief, and to administrative completeness of the submittal by the deadline.

### **Who must file:**

Manufacturing, commercial, and institutional establishments are required to file an annual report for each location with source emissions for criteria pollutants as required per Rule 336.202, and as outlined in AQD Policy and Procedure AQD-013. Renewable Operating Permit (ROP) facilities, and those facilities that have opted out of the ROP program, are also required to report. Reporting should be in accordance with these general instructions and any supplemental instructions available for any specific industrial sector.

### **Reporting Period:**

Information is to be provided for calendar year 2016. This will require reporting of actual data for the period January 1, to December 31. If records of actual data are not available, estimates based on information and belief formed after reasonable inquiry are acceptable.

### **Reporting Requirements for Fugitive and Other Non-Stack Emissions:**

The requirement to report annual emissions includes fugitive and other non-stack emissions, as well as emissions from releases where the emissions are quantifiable. Some examples of specific instances where fugitive emissions must be reported are as follows:

- A source operates an emission unit with a permit or emission standard which regulates fugitive emissions.
- A source is listed in a specific source category identified as having fugitive emissions under the definition of potential to emit (Rule 116(m)).\*
- A source reports fugitive emissions to the Toxic Release Inventory.\*

Further information on fugitive emissions may be obtained from the following EPA websites:

- <https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors> to search by source category; and
- <http://www.epa.gov/ttnchie1/le> to search by emission type.

To identify processes with fugitive emissions, select a document of interest on these websites. Select “find” while using the term “fugitive” for the specific emission type or source category.

Fugitive, non-stack, and release emissions must be considered when determining if a company is required to report emissions as specified in AQD Policy and Procedure AQD-013.\*\* These emissions must also be included when determining whether to report emissions from exempt processes or process equipment under Rule 212(7).

Please note: AQD may require reporting of a specific air contaminant if such reporting is considered by the department as necessary (and is specifically requested by the department) for the proper management of the air resources (Rule 2).

*\* For exempt processes referenced in Rule 212(7), reporting is required if the process is subject to a process-specific emission limitation or standard or if the total emissions from the process exceed 10% of the significance levels\*\*\* described in the following table.*

### REPORTING THRESHOLDS

Pollutant	** AQD Policy and Procedure Thresholds (per facility)	*** Rule 212(7) “10% of significant thresholds (per process), for fee-subject emissions from specified exempt processes
Carbon monoxide	100 tons/year	10 tons/year
Nitrogen oxides	40 tons/year	4 tons/year
Sulfur dioxide	40 tons/year	4 tons/year
PM	25 tons/year	2.5 tons/year
PM-10	15 tons/year	1.5 tons/year
VOCs	10 tons/year	4 tons/year
Lead	0.5 tons/year	0.05 tons/year

## BEFORE YOU BEGIN

Before you begin your MAERS report, have all the information needed to fill out the forms available to you. The table below lists some of the items that may be required to complete the MAERS forms.

### MAERS CHECK LIST

- Computer with Internet access (recommended)
- SRN (State Registration Number) – this is the number that appears on all your permits & correspondence with the AQD
- Paper copy of last year's submittal
- MAERS General Instructions Examples and Reference Tables
- Calculator
- Air Use Permits, Consent Orders, or Consent Judgments
- MSDS, data sheets, specification sheets, etc. for equipment and materials used at facility
- Purchase records
- Plant layout map
- List of emission units at facility
- Any testing or recordkeeping data
- Material usage logs
- Other guidance documents (fact sheets, workbooks, etc.)
- Renewable Operating Permit Report Certification, if applicable (Form EQP 5736; only sources with a ROP)

## Reporting Options

The Michigan Air Emissions Reporting System (MAERS) is a web-based system that allows emissions inventory information to be submitted by the company "Primary Preparer." The Primary Preparer will receive a user ID and PIN after registering with the DEQ Air Quality Division. The data entry may be completed by a "Preparer," which may be company personnel, consultant, etc. The Primary Preparer acknowledges that the data is true and accurate to his/her best knowledge.

A submittal may be prepared using the MAERS web-based application or a paper report may be submitted for those without internet access.

### **Benefits of Filing MAERS Electronically:**

- Majority of data is prefilled.
- Review of "MAERS Report Site Map" enables an overall view of forms.
- More accurate way to submit data (typographical errors).
- Use of completeness checker improves accuracy and assures that submittal is acceptable.
- Electronic tools to assist sources: calculator, utility reports, etc.
- Paper copies of reports and forms can be printed for future use.
- Faster submittal.

### **MAERS Web-based Submittals:**

Please note: web based submittals done by a consultant (when the company does not have internet access) will not be considered administratively complete until a completed PPP-101 Primary Preparer Proxy form signed by the company is received in Lansing. The mailing address is: Michigan DEQ, Air Quality Division, Attn: MAERS Administrator, P.O. Box 30260, Lansing, MI 48909-7760.

Sources with ROPs must submit a certification that the submittal is true, accurate and complete by including a Renewable Operating Permit Report Certification (Form EQP 5736). This is located on the web or in the General Instructions and Forms booklet, signed by the source's Responsible Official. The EQP 5736 should be sent to your district office.

### **Paper Submittals:**

A copy of the previous year's MAERS Source Summary Report/Forms may be helpful in completing the forms. Requests for this report can be made by contacting the appropriate AQD district office

Paper Forms Assembly Flow:

- Source Forms (S-101 and S-102)
- Stack Forms (SV-101)
- Emission Unit Forms (EU-101)
- Reporting Group Forms - optional (RG-101)
- Activity Forms (A-101)
- Supplemental Portable form (SP-101) \*\*For portable sources only

- Emissions Forms (E-101)
- Preparer Form – optional (P-101)
- Submit Form (SB-101)
- ROP Certification (Form EQP 5736) \*\*For ROP sources only

Before submitting, please review all forms for completeness and accuracy. **SUBMIT ALL PAPER COPY FORMS TO THE APPROPRIATE AQD DISTRICT OFFICE.**

Additional forms may be needed if you report all the required data by paper submittals. Photocopy the original blank forms (located in the back of these instructions) as needed. If additional blank forms are needed, they may be downloaded from the Emissions Reporting Homepage at [www.michigan.gov/degmaers](http://www.michigan.gov/degmaers) “MAERS Forms and Instructions.” If additional assistance is needed, contact your AQD district office by e-mail or phone.

For a paper submittal to be considered administratively complete, a completed Submit form (SB-101), along with any required emission/calculation documentation, must be mailed to the district office. If you are not using the MAERS system, go to Figure 1 or Table I. This will help you find the county name in which the source is physically located and then determine the appropriate district office. For portable sources, submit data to the district office responsible for the county where the S-101 Source form address is located, which should be the company’s home office address. Portable sources submitting emissions information on paper must use the SP-101 Supplemental Portable form along with the SB-101 Submit form for the submittal to be considered administratively complete. Sources with ROPs must include certification that the submittal is true, accurate and complete by including a Renewable Operating Permit Report Certification (Form EQP 5736), signed by the source’s Responsible Official.

**Related Reference Information:**

The following reference information is available on the Emissions Reporting homepage at [www.michigan.gov/deqmaers](http://www.michigan.gov/deqmaers) under Online Services, MAERS Reference Tables. If you are unable to obtain the information you need, please contact your AQD district office via e-mail or phone. Information may be available in paper form upon request.

Control Device Codes  
Horizontal Reference Datum Codes  
Horizontal Collection Method Codes  
Reference Point Code  
MAERS Emission Factors  
NAICS Codes  
Pollutant/Material/Unit Codes  
Reference Point Codes  
SCC Listing

The MAERS User Guide & Workbook has examples of how to calculate emissions. To access the *MAERS User Guide & Workbook*, and *MAERS Online Tutorials* go to [www.michigan.gov/deqmaers](http://www.michigan.gov/deqmaers) under **MAERS Assistance**.



## Definitions

**AQD Emission ID:** A system generated ID that the DEQ-AQD uses to identify an emission unit. Facilities submitting MAERS reports in paper format for the first time should leave the AQD Emission Unit ID blank. The AQD Emission Unit ID will be generated by the MAERS application.

**AQD Reporting Group ID:** A system generated ID that the DEQ-AQD uses to identify Reporting Groups. Facilities submitting MAERS reports in paper format for the first time should leave the AQD Reporting Group ID blank. The AQD Reporting Group ID will be generated by the MAERS application.

**AQD Source ID (SRN):** A source is assigned an AQD Source ID by DEQ-AQD. This number is also called a State Registration Number (SRN).

**AQD Stack ID:** A system generated ID that the DEQ-AQD uses to identify a stack. Facilities submitting MAERS reports in paper format for the first time should leave the AQD Stack ID blank. The AQD Stack ID will be generated by the MAERS application.

**Criteria Pollutants:** Criteria Pollutants are those for which National Ambient Air Quality Standards (NAAQS) are set. The following pollutants must be reported because (1) they are a criteria pollutant or (2) because they result in the formation of a criteria pollutant. The material code is listed in the priority of the most preferable designation, and this code may vary from activity to activity due to available emission factors.

<b><u>Pollutant</u></b>	<b><u>Material Code</u></b>
Ammonia	AMMONIA
Carbon Monoxide	CO
Lead	LEAD
Oxides of Nitrogen	NOX
Particulate Matter less than 10 Microns (Primary)	PM10,PRIMARY
Particulate Matter less than 10 Microns (Filterable)	PM10,FLTRBLE
Particulate Matter less than 2.5 Microns (Primary)	PM2.5,PRIMRY
Particulate Matter less than 2.5 Microns (Filterable)	PM2.5,FLTRBL
Sulfur Dioxide	SO2
Volatile Organic Compounds	VOC
Non-Methane Organic Compounds *	NMOC
Total Non-Methane Organic Compounds *	TNMOC
Total Organic Compounds *	TOC

\* These pollutants can be used as VOC surrogates if a VOC emission factor is not available.

**Device:** Any process equipment, control equipment, or stack, on or within which, one or more processes can occur or a pollutant is exhausted into ambient air.

**Dismantle:** To physically remove or render permanently inoperable.

**Emission Factor (EF):** A factor used to multiply against the material throughput and its unit code to determine the resultant pollutants emitted. See the MAERS User Guide & Workbook for example emission factors.

**Emission Unit (EU):** An emission unit is a device or group of devices that operate together, with a dependency between devices that emits or has the potential to emit an air contaminant. An emission unit contains at least one process device and may contain control devices and related stacks. Examples of an emission unit would include:

- a single degreaser (degreaser only)
- a topcoat painting line (booths, ovens, incinerator, stacks)
- a chemical manufacturing process (reactors, condensers, dryers, baghouse, stacks)
- a coal fired boiler (boiler, stack, control device)

**Emission Unit Activity:** The flow of material into and out of processes or between devices that may discharge to the atmosphere. Materials are related to processes by Source Classification Codes (SCCs).

**EU ID:** Emission Unit (EU) Identification assigned by a source representative. EU ID's will begin with a two-letter prefix (**EU**) plus a combination of up to 14 letters, numbers or keyboard characters. Any combination of letters, numbers and keyboard characters can be used to create ID's. Example Emission Unit ID: EU-Line2spray.

**Note: If you have an ROP (Renewable Operating Permit), verify that your MAERS submittal accurately reflects the organization of your current ROP with regard to emission units (EUs). The naming convention for EU's in your ROP should be carried over to MAERS. This will simplify the process in the future.**

**Fee-Subject Facility:** As defined in Article 1: Pollution Control, Chapter 1, Point Source Pollution Control, Part 55 of PA 451 of 1994, of the Natural Resources and Environmental Protection Act, MCL 324.5501(k) certain sources of air pollutants are required to pay fees. In practice, these include major sources subject to the Renewable Operating Permit program; sources subject to federal New Source Performance Standards (NSPS); and area sources subject to National Emission Standards for Hazardous Air Pollutants (NESHAP).

**Grandfathered:** With respect to Michigan permitting requirements, this is an emission unit installed prior to August 15, 1967 and not subsequently modified or reconstructed. Such a unit is considered "grandfathered".

**Material:** Any product or substance (including elements, compounds, or a mixture thereof) in any physical state (solid, liquid, gas) including more than one physical state at the same time, that flows through a process. Some examples of "material" are fuel, coating, solvent, metal, grain, chemical, and product.

**Password:** An 8 character alphanumeric code (contains letters and numbers) that is created by the MAERS System. This password may be changed by going to the "My Account" and clicking the change password area.

**Pin:** A 4 to 8 character alphanumeric code created by the MAERS System for electronic submittals. This pin will be assigned when the MAERS Administrator receives the Primary Preparer's electronic signature agreement.

**Portable Source:** A facility, process or process equipment that commences operation and is located at a geographic site for not more than twelve consecutive months (e.g. asphalt batch plant). These are not devices which may be moved around within a stationary source (e.g. forklifts, welding machines).

**Preparer:** A company employee or consultant that prepares the MAERS report for the Primary Preparer to approve and submit to the DEQ-AQD.

**Primary Preparer:** A source representative that is responsible for the emission report's completeness and accuracy.

**Remove from MAERS:** An activity can be administratively removed from the MAERS reporting requirements if it meets the following requirements: The activity or its associated emissions fall below established thresholds and reporting is not otherwise required.

**Reporting Group:** Reporting Group (RG) Identification assigned by a source representative. RG ID's will begin with a two-letter prefix (**RG**) plus a combination of up to 14 letters, numbers or keyboard characters. Any combination of letters, numbers and keyboard characters can be used to create ID's. A reporting group is an optional grouping of emission units that is created to simplify reporting emissions. These emission units should have similar emission limits, stack parameters, operational parameters, emission factors, etc. Examples of reporting groupings include:

- A grouping of several emission units (for example, all of the coating lines or boilers) for an overall emission limit.
- A grouping of several emission units (for example, material handling systems or printing lines) with common activities and emission characteristics.

**Rule 201 Exempt:** With respect to MAERS, an emission unit is considered "Rule 201 exempt" when it meets the following requirements:

- The EU is not grandfathered from Rule 201 permitting requirements;
- The EU is not included in a permit to install, opt out permit, or Renewable Operating permit;
- The EU is identified in Rules 280 through 290 of the Michigan Air Pollution Control Rules; and
- The EU is not excluded from exemption per the provisions of Rule 278.

**Secondary Preparer:** A company employee or consultant that prepares the MAERS report for the Primary Preparer to approve and submit to the AQD.

**Source:** A facility or plant that contains an emission unit(s). A facility is assigned an AQD Source ID (SRN) and has a physical location.

**Stack ID:** A stack identification assigned by a source representative. Stack ID's will begin with a two-letter prefix (**SV**) plus a combination of up to 14 letters, numbers or keyboard characters. Any combination of letters, numbers and keyboard characters can be used to create ID's. Example Stack ID: SVBOFbagogue.

## ACRONYMS

AQD	Air Quality Division	NOX	Oxides of Nitrogen
CEM	Continuous Emission Monitor	PASS-ROP	Permit Application Submittal System for Renewable Operating Permits
CO	Carbon Monoxide	PM	Particulate Matter
DEQ	Department of Environmental Quality	ROP	Renewable Operating Permit
EPA	Environmental Protection Agency	SCC	Source Classification Code
GPS	Global Positioning System	SIC	Standard Industrial Classification
HAP	Hazardous Air Pollutant	SO2	Sulfur Dioxide
MAERS	Michigan Air Emissions Reporting System	SRN	State Registration Number
NAAQS	National Ambient Air Quality Standards	TNMOC	Total Non-Methane Organic Compounds
NAICS	North American Industrial Classification System	TOC	Total Organic Compounds
NMOC	Non-Methane Organic Compounds	VOC	Volatile Organic Compounds