

## ***Determining Applicability: Air Permitting Overview***

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### **What's an Air Permit?**

- A legal document that identifies facility responsibilities
- Some analogies to a contract
- Always tied to emissions of air contaminants
- Not everything that emits an air contaminant requires a permit

### **Michigan's Air Permit Programs**

- Renewable Operating Permit (ROP)
- Permit to Install (PTI)

### **ROP Overview**

- Almost any type of facility, industrial or otherwise
- Generally, for facilities with "larger" emissions
- All state and federal air quality requirements in a single permit
- Renewed every five years
- Post-construction

### **PTI Overview**

- Almost any type of facility, industrial or otherwise
- Most often:
  - Installing or constructing new equipment
  - Modifying existing equipment or existing process
  - Sometimes for other purposes
  - Pre-construction/pre-change

### **What is an ROP?**

- Legally enforceable document/"contract"
- Emission limits and regulatory requirements
- Authorizes operation of process/equipment
- Requires monitoring and record-keeping
- Obtained for operating processes/equipment
- All state and federal air quality requirements in a single permit

### **ROP: Types of Sources**

"Major" and "minor" sources of emissions

### **Emissions: Actual vs. Potential**

Your potential emissions will normally be larger than your actual emissions

### **Potential to Emit: Each Pollutant**

(Maximum hourly emission rate) x (8760 hours)

- Each process operated at 100% of design capacity;
- Each process operated 24 hours/day, 365 days/year;
- Materials emitting the highest amount of air contaminants used/processed; and
- Air pollution control equipment either is not in use or is turned off.

### **Major Source Thresholds**

Potential to Emit

- ≥ 100 tons/yr single "Regulated New Source Review Pollutant"
- ≥ 10 tons/yr single Hazardous Air Pollutant
- ≥ 25 tons/yr total Hazardous Air Pollutants

**100 Tons per Year Pollutants**

- Particulate matter (each size category)
- Carbon monoxide
- Nitrogen oxides
- Sulfur dioxide
- Volatile organic compounds
- A few more

**25/10 Tons per Year Pollutants**

- List of 188 pollutants
- Includes:
  - Benzene
  - Xylene
  - Methyl alcohol
  - Chromium and compounds

**Other Reasons for ROP**

- Relatively few and far between

**What if I Think I Need an ROP?**

- Don't procrastinate!
- Apply 18 months before becoming a major source
- Find help online: [www.michigan.gov/air](http://www.michigan.gov/air) "Permits" "Renewable Operating Permits"
- Questions? Contact your inspector!

**What is a Permit to Install?**

- Legally enforceable document/"contract"
- Emission limits and regulatory requirements
- Authorizes operation of process/equipment
- Requires monitoring and record-keeping
- Usually specific to a particular project/equipment
- Authorizes construction, installation, ...
- Obtained before construction begins

**Permit to Install: When/Why?**

Rule 201 of the Michigan Air Pollution Control Rules:

- Install, construct, reconstruct, relocate, modify ...
- ... any process or process equipment ...
- ... may emit any air pollutant ...

**Permit to Install NOT Required**

If process/equipment:

- Has no air emissions
- Is "grandfathered"
  - Installed before August 15, 1967
- Is exempt
  - Rules 278 - 291

**Do I Need a Permit to Install?**

Key questions to ask yourself:

- Does it emit air contaminants?
- When was it installed?
- Is there an exemption that might fit?

**Permit to Install Exemptions?**

- Residential cooking equipment
- Internal combustion engines with maximum heat input < 10 million BTU/hour
- Some are more complex
- Some require record-keeping
- All may be restricted by Rule 278

**Rule 278**

Exception to the Use of Exemptions

- “Major Source” or “Major Modification”
- If “Regulated Pollutant” emissions exceed “Significant” levels
- Subject to 40 CFR Part 61

**“Significant” Emission Rate**

Pollutant	Emission Rate
CO	100 tons per year (tpy)
SO <sub>2</sub>	40 tpy
Nitrogen Oxides	40 tpy
PM <sub>10</sub> and PM <sub>2.5</sub>	15 tpy and 10 tpy
VOC	40 tpy

**Working with Rule 278**

- Rule 278 applies to entire project (the “activity”)
- Compare emissions from entire project to significant emissions thresholds
- Check HAP emission totals
- Check 40 CFR Part 61

**Working with Rule 278**

- Is there an exemption?
- Are project emissions less than “significant” for all pollutants emitted?
- Are hazardous air pollutant emissions less than “major” (10 tpy each, 25 tpy total)?
  - Does 40 CFR Part 61 apply?

**Tracking Exemptions**

- Consult with District office on exemption\*
- Keep exemption determination on file

**Applying for a Permit to Install**

Application Form

- AQD’s web site [www.michigan.gov/air](http://www.michigan.gov/air)
- Environmental Assistance Center 800-662-9278

**Applying for a Permit to Install**

- Complete the form
- Include supporting information
  - Process Description
  - Regulatory Discussion
  - Control Technology Analysis
  - Emissions Summary and Calculations
  - Stack/Vent Information
  - Site Descriptions and Drawings

**Need Help with Your Application?**

- AQD Permit Section staff
- Environmental Assistance Center
- Permit to Install Workshop
  - Information at [www.michigan.gov/deqevents](http://www.michigan.gov/deqevents)
    - Information at AQD site: [www.michigan.gov/air](http://www.michigan.gov/air), “Permits” then “Permits to Install”
  - Look for “Forms, Instructions, and Procedures”

**Your Air Permit**

- Contains requirements that apply to your source
- “Contract” between State of Michigan and you
  - Identifies requirements
  - Emission limits and material limits
  - Operational restrictions
  - Record-keeping, monitoring, reporting

**Need One but Don't Have One?**

- Start the process ASAP!
- Contact District Office

**Need More Air Information?**

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

(For all your Air Quality needs)