Ohio EPA Air Pollution Permit Requirements

March 8, 2022 2022 Ohio Safety Congress and Expo Supplemental Environmental Sessions



Environmental Specialist 3
Office of Compliance Assistance and Pollution Prevention
March 8th, 2022





Learning Objectives

- Participants will understand why obtaining a permit before installation is important;
- Participants will be able to identify what types of sources need air permits;
- Participants will gain a basic knowledge of permit application forms, completion tips, and processing timeframes; and
- Participants will gain knowledge about what permitting resources are available.



It's Poll Time



Poll Question

Do you currently work at a non-Title V facility or a Title V facility, or work with both kinds of facilities?

- A. Non-Title V facility
- B. Title V facility
- C. Both kinds of facilities
- D. Neither
- E. Don't know



Air Pollution: Facility Classification

Title V – PTI/PTO

 Potential emissions exceed 100 TPY for criteria pollutants; single HAP exceeds 10 TPY; combined HAPs exceed 25 TPY

Synthetic Minor - FEPTIO

Potential emissions are restricted below Title V thresholds

True Minor - PTIO

Potential emissions are under Title V thresholds

Permit Exempt

- OAC 3745-15-05: De minimis emissions
- OAC 3745-31-03: Permit exemptions and permit-by-rule



Basic Permit Liability

- It is the company's obligation to determine if an air permit is needed and obtain it.
- Permit needed before installing & starting up equipment.
- New permit is needed before moving equipment to a new address.
- Permits can be transferred to new owners.



Why Permits Are Important: Focus of EPA Inspections

- Permit summarizes all applicable federal and state regulations.
- Inspector will check if company is maintaining records required by air permits.
- During an inspection, an inspector will check to see if everything that needs an air permit has one.



Common Air Pollution Violations

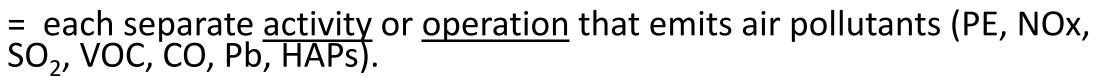
- Installing and operating equipment without obtaining proper permits.
- Not maintaining records required by permits.
- Exceeding permit limits (i.e. visible particulate emissions)
- Not maintaining air pollution control equipment.





What needs an air permit?

- No definitive list exists!
- Need permit for an:
 - ✓ air pollution source
 - ✓ air contaminant source
 - √emissions unit



 Permit only covers that air pollution source. Company may need several air permits to cover all plant operations.







What may need an air permit?

4 Rules of Thumb:

- 1. Something with a stack, vent, or dust collector.
- 2. Something that uses solvents, paints, inks, or adhesives.
- 3. Something that burns fuel.
- 4. Something that causes smoke, dust, or odors.



Common Things Needing Air Permits











Does everything need an air permit?

NO – three options for exemption:

- 1) Permanent exemptions [OAC 3745-31-03(B)(1)]
- 2) Permit-by-rule provisions [OAC 3745-31-03(C)]
- 3) "De minimis" source exemption [OAC 3745-15-05]



Air Permit Exemption

1) Permanent exemptions [OAC 3745-31-03(B)(1)]

- Lists 60+ types of equipment and processes that do not need air permits.
- No Ohio EPA notification required.



Some Things Exempt Under Permanent Exemptions...









More Examples



Solvent stills <20 gal. capacity





w/non-chlorinated solvent





It's Poll Time



Poll Question

In Ohio, roadways and parking areas are eligible to use which of the following regulatory tools? (Pick all that apply.)

- A. De minimis exemption
- **B.** Permanent exemption
- C. Permit-by-rule
- D. General permit
- E. Case-by-case (standard) permit



Air Permit Exemptions

2) Permit-by-rule provisions (PBR) [OAC 3745-31-03(C)]

- Emergency generators
- Plastic parts molding
- Small crushers
- Crematory units

- Auto body shops
- Gas stations
- Gas-fired boilers
- Printing facilities
- Small roadways

Pre-defined operating conditions and recordkeeping. <u>Simple single page notification required</u>, effective upon submittal - no waiting and no fee!



Emergency Generator





Air Permit Exemptions

- 3) "De minimis" source exemption [OAC 3745-15-05]
 - Emits less than 10 lbs/day of PE, NOx, SO₂, VOC, CO, and Pb
 - Less than 2,000 lbs/yr of hazardous air pollutants
 - Can't be subject to federal rules

Requires emission calculations to be kept on-site

potential to emit (PTE) calculations – source operating
 24 hrs/day at maximum rated capacity.

Air Permit Self-Assessment

- **Step 1**: Tour your plant to identify all air pollution sources using the 4 Rules of Thumb.
- **Step 2**: Determine what operations fit the permanent exemptions or permit-by-rule.
- **Step 3**: Determine if remaining operations can be 'de minimis' by doing emissions calculations.
- Step 4: Assume what is not exempt needs a permit.



Types of Air Permits

Title V facilities require two permits:

Permit-to-Install (PTI)

Permit-to-Operate (PTO)

All other non-Title V facilities require one permit:

Permit-to-Install and Operate (PTIO)



Air Permits

- For existing units equipment installed after January 1, 1974 require an air permit
- A permit is required before installing and operating equipment
 - Certain construction activities are permitted prior to obtaining air permits in accordance with OAC rule 3745-31-33
- Permit issuance: 1-6 months to get, depends on complexity
- Permit expires 18 months after issuance if haven't started construction or entered into contract



Air Permits By Facility Type

Title V Facilities

(~ 550 large emitters) need:

• Permit-to-Install (PTI) for each new installation or modification

+

One Title V Operating Permit (PTO)
 covering everything for continued
 operation





Air Permits By Facility Type

Non-Title V Facilities:

Permit-to-Install and Operate (PTIO)





- True Minor Facilities (> 6,000 small emitters)
 - 10-year term for PTIO
- Synthetic Minor Facilities (~ 800 that voluntarily restrict emissions to avoid more complex regs)
 - 5-year term for PTIO
 - Permit requires quarterly reporting
 - Federally enforceable restriction
 - 30-day comment period



Types of PTI/PTIOs

Individual PTI/PTIO

- Permit is customized for facility operations & equipment
- Referred to as "case-by-case" permit

General PTI/PTIO

- "Canned permit," can view beforehand but can't change
- Faster processing 45 days or less
- Simplified application form no emissions data
- Only requires: General Qualifying Criteria form and an EAC form



General Permit Categories

- Dry cleaning
- Boilers
- Stone crushing
- Ready-mix concrete
- Metal parts painting
- Oil & gas well sites
- Human crematories

- Stationary diesel engines
- Roadways & parking areas
- Storage piles
- Mineral extraction
- Anaerobic digesters
- Natural gas compressor stations

More categories being developed



Ways to Apply for Permit

- Hard copy
 - –Non-Title V True Minor facilities only

- Online using Air Services (eBusiness Center)
 - —Title V facilities mandatory
 - -Synthetic Minor facilities mandatory
 - –Non-Title V True Minor facilities optional





It's Poll Time



Poll Question

Have you completed and submitted an air permit application for a facility in Ohio?

- A. Yes, I have without any external assistance
- B. Yes, with the assistance of an environmental consultant
- C. No, I have not
- D. No, but I will need to in the near future
- E. I am not sure if I need an air permit



Air Permit Application Forms: PTI/PTIO

Part I: Form 3150a

- 1) Section I General company data and signature
- 2) Section II Control equipment info, emissions calculations, and process flow diagram

Part II: Emission Activity Category (EAC) Form

Equipment and process data, very specific – 43 types of EAC forms (based on type of process)



Part I: Form 3150a, Section I

- Facility address and contact persons
- Applicable federal rules
- Annual Permit Evaluation Report (PER) date choice
- Trade Secret claim
- Signature



Part I: Form 3150a, Section II

- Installation/operation proposed schedule
- Description of pollution control equipment
- Stack and emission point data for modeling (if required)
- Best available technology description
- Request for voluntary conditions and limits
- Air emissions data
- Include the following attachments:
 - -Process Flow Diagram
 - -Calculations



Emissions Data - Form 3150a

- PE, SO₂, NOx, CO, VOC, OC, and Lead
- Hazardous Air Pollutants (HAPs)
- 303 Air Toxics (OAC 3745-114-01)
- Estimates of maximum emissions expected potential-to-emit (PTE) required
- Actual emissions (normal ops.)
- Requested emissions (max ops.)



Calculating Emissions

Emissions Factor:

- Fundamental permitting tool for quantifying emissions
- A representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant.
- Sources: Compilation of Air Pollutant Emission Factors, AP-42, Volume I; material balance; industry groups; stack testing; WebFire; vendor info; etc.
- Potential-to-emit emissions (PTE) is the amount of emissions of an air contaminant which would be emitted from a source during a 24-hour calendar day or calendar year basis (24hrs x 365 days = 8,760 hrs/yr)

Calculating Emissions: Potential-to-emit (PTE) Example

Example #1

- Process: Stone Primary Crushing
- SCC: 30502001
- Max Annual Rate: 900,000 tons of Limestone
- Emissions Factor: 0.00059 lb PE/ton of rock

PTE = (900,000 tons rock/Yr *0.00059 lb PE/ton of rock)* 1 ton/2,000 lbs

PTE = 0.3 ton per year of PE

Example #2

- Process: Glass Melting Furnace
- SCC: 30501404
- Emissions Factor: 10.5 lbs SO₂/hr

PTE = $(10.5 lbs SO_2/hr * 8,760 hrs) * 1 ton/2,000 lbs$

PTE = 46 ton per year of SO₂





Part II: EAC Form Data

- Detailed specs and capacities of equipment being installed/operated
- Usage rates of raw materials, fuels
- Production rates of finished products
- Types of pollution control measures



EAC Form Example

Emissions Activity Category (EAC) form #3103 Surface Coating Operations

		tic High Volume Low Pressure (HVLP)
Other, describe:		
Electrodeposition:	Tank capacity (gallons):	Tank Dimensions (feet): length height width
Dip Tank:	Capacity (gallons):	Dimensions (feet): length height width
Roll Coating	Brush	Bead-Type Extrusion Powder Coating
Other, describe:		
How are parts transfe	rred in and out of coating opera	tion?
Other, describe:		



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Part II: Emission Activity Category (EAC) Form

Equipment and process data, very specific – 43 types of EAC forms (based on type of process)



How much does an air permit cost?

- No permit application fees
- One-time fee with issued PTI/PTIO initial installation
- Fees vary depending on type and capacity of equipment (\$100 \$1,250 typical)
- Fee automatically doubles if already installed

See fee schedule at:

https://epa.ohio.gov/static/Portals/47/facts/feeschedule.pdf



Permit Process - Step 1:

Company completes PTIO application & submits it to the appropriate Ohio EPA <u>District</u> Office (DO) or Local Air Agency (LAA).

- Plan ahead for timing:
 - ✓ Construction schedule
 - ✓ Draft permit issuance
- Make sure the application is <u>complete</u>:
 - ✓ Signed by appropriate official
 - ✓ All required elements
 (Sections I and II, EAC form, process diagram, etc.)
 - ✓ Forms completed for maximum operational flexibility



Permit Process - Step 2: DO/LAA reviews for Preliminary Completeness within 14 days, notifies company by letter. The name, phone number, and email address of permit reviewer is included in the letter.

Permit Process - Step 3: DO/LAA does technical review, writes permit, sends to Central Office (Columbus) for final review. Usually takes 1-3 months. If there are questions or concerns, the permit writer will reach out to you at this time.

Permit Process - Step 4: Central Office performs final permit review. Usually takes < 1 month; returns to district if needed. May receive request for additional clarification from DO/LAA or Central Office reviewers.

Permit Process - Step 5

- Central Office issues permit usually within 2-4 weeks
 - Permit Issued Draft (some permits must have a 30-day public comment period)
 - PTI and PTIO synthetic minor permits
 - permits of high public interest
 - major NSR sources
 - Permit Issued Final
 - mailed/emailed a copy
 - also available through **eDocs** on our website





What is in an air permit?

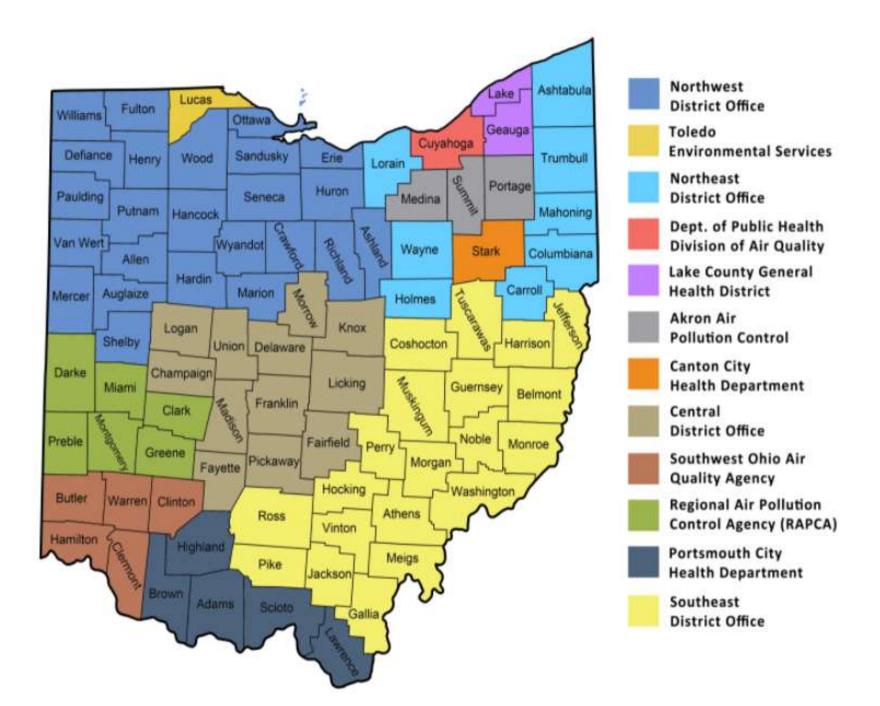
- Cover Pages General info and important dates
- Standard Terms Same in all permits of that type
- Facility-Wide Terms Apply to whole facility
- Emissions Unit Terms Emission unit specific
 - Equipment description
 - Rules and limits
 - "<u>Action</u>" items (monitoring, record keeping reporting & testing)



Key Takeaways

- Four "Rules of Thumb"
- Stay on top of equipment changes and modifications at your facility
- Maintain permit monitoring and recordkeeping requirements
- Communicate with Ohio EPA regarding equipment changes and throughout permitting process
- Don't be afraid to ask questions and reach out for assistance





The Division of Air Pollution Control's jurisdictional boundaries for District Offices and local air agencies



Division of Air Pollution Control Resources

- Permit application forms: https://epa.ohio.gov/divisions-and-offices/air-pollution-control/permitting/permit-application-forms
- Permit-by-rule (PBR) info and forms: https://epa.ohio.gov/divisions-and-offices/air-pollution-control/permitting/permit-by-rule-pbr
- General permit: https://epa.ohio.gov/divisions-and-offices/air-pollution-control/permitting/general-permit-program
- Permanent permit exemptions: <u>https://epa.ohio.gov/static/Portals/41/sb/publications/</u> AirPermitExemptions.pdf



Compliance Assistance Request:

Office of Compliance Assistance and Pollution Prevention (OCAPP)

- Non-regulatory , free, and confidential
- Excludes Title V permit assistance
- Assistance with permit applications and compliance with permit requirements
- Visit our website



Hotline

Chat

Contact Directly

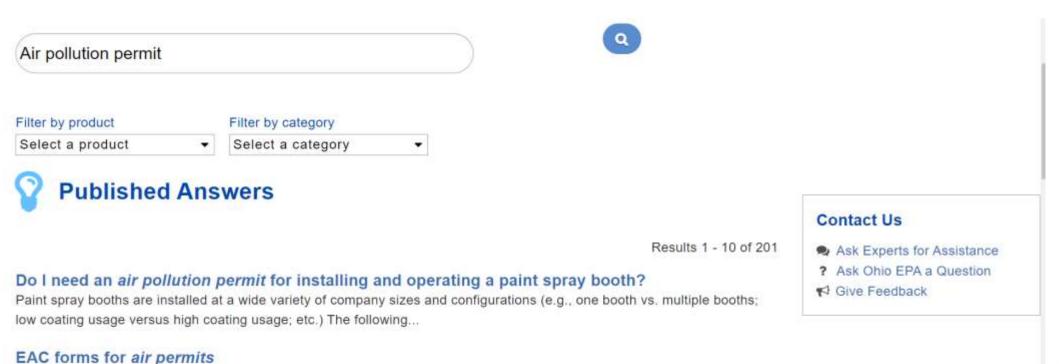
(800) 329-7518

Click Chat Live:

Email/Phone

Chat Live: An environmental specialist i available to help with permitting, environmental requirements, and grant applications.

Air Permitting Resources: Help Center



An Emissions Activity Form (EAC) is an air pollution permit application form that asks for information pertaining to a particular

type of air pollution source. Click here for a...



ohioepa.custhelp.com

Confidentially contact us with your questions about environmental requirements - by calling our hotline, clicking on the chat or contact links. Note all other options are not considered confidential.

Agents available via phone or chat 8 a.m. - 5 p.m. Monday through Friday.

Call



Call our toll-free hotline - (800) 329-7518 for help with permitting and environmental requirements.

Chat Live:



Chat Live: An environmental specialist is available to help with permitting, environmental requirements, and grant applications.

Contact



Contact an environmental specialist in your area directly

by email or phone.















K Z

Questions

Want answers?



Questions

- Please continue to submit your text questions and comments using the Questions Panel
- For more information please contact:

Samira Deeb

Samira.Deeb@epa.ohio.gov (614) 705-1013

 Note: Today's presentation is being recorded and will be provided within 48 hours. The presentation slides can be found by clicking on the Handouts Section of your control panel

Protection Agency



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- Recognizes organizations for exceptional achievements in environmental stewardship
- For businesses, trade associations, professional organizations, non-profits, higher education institutions, etc.



Encouraging Environmental Excellence for Communities (E3C)

- Recognizes communities for exceptional achievements in environmental stewardship
- Open to local governments



Encouraging Environmental Excellence in Education (E4)

- Recognizes schools for their achievements in environmental stewardship and efforts to involve students in environmental topics
- Open to K-12 public or private schools



Thank you for attending!

Up Next

- March 8, 3 p.m. 4:00 p.m. → BWC Safety Congress & Expo Live Sessions What to expect during an Ohio EPA Inspection
- March 9, 10 a.m. 11 a.m. → BWC Safety Congress & Expo Live Sessions Ohio EPA's
 Regulations What You Need to Know to Stay Out of Trouble
- Environmental Day April 5, 2 p.m. 3:00 p.m. → <u>Water Resource Restoration</u>
 <u>Sponsorship Program</u>

Register for Upcoming Sessions

- Visit our website at https://epa.ohio.gov/about/media-center/events to see the date and time for upcoming webinars and other Ohio EPA events
- Visit our website at epa.ohio.gov/divisions-and-offices/environmental-financial-assistance/training to view recordings of sessions you may have missed
- Create an Ohio EPA Customer Support Center Account at https://ohioepa.custhelp.com/ to receive email notifications of future webinars

