



# **Understanding Air Permitting Thresholds**

**Construction Permits**

**Operating Permits**

**01-19-2022**

# Housekeeping

- All participants are muted.

To Join by a Video System: Dial [24855688172@sonvideo.webex.com](mailto:24855688172@sonvideo.webex.com)

You can also dial **173.243.2.68** and enter the event number: **2485 568 8172**

- If you are having audio issues when connecting via computer, please call in via phone at: **1-408-418-9398** Using Access Code: **2485 568 8172**
- This event will be recorded and available at <http://dee.ne.gov/NDEQProg.nsf/OnWeb/VideoEvent>
- Alternatively, you can find this and past events on the agency's homepage at <http://dee.ne.gov>
  - Type in "Video Events" (without quotes) in the search bar.

# Questions

- Please feel free to submit questions in chat throughout the presentation. They will be answered (in order received) during specified breaks during, and following the presentation.
- We can stay on longer than the originally scheduled end time to answer questions.
- The slide deck and Q & A document will be uploaded to the video events page following the event.

# Mark Your Calendars

- February 8<sup>th</sup>, 2022 10:00 AM to 12:00
- Topic: Construction Storm Water Webinar and Panel Discussion
- Stay Tuned for the next NDEE Outreach and Assistance list serv announcements!

Here's the instruction link to sign up for future communications:

[NDEE\\_OutreachandAssistance\\_ListServ\\_Signup](#)



# **Understanding Air Permitting Thresholds**

**Construction Permits**

**Operating Permits**

**01-19-2022**

# What pollutants do we regulate?

There are different types of pollutants that CP (State) and OP regulate for example: CAPs, HAPs and VOCs.

- *6 Criteria Air Pollutants (CAPs):*

- (1) CO – Carbon Monoxide;
- (2) NO<sub>2</sub> – Nitrogen Dioxide;
- (3) PM – Particulate Matter ;
- (4) SO<sub>2</sub> – Sulfur Dioxide,
- (5) O<sub>3</sub> – (Ground level) Ozone; and
- (6) Pb - Lead.

**Note:** These pollutants are commonly referred to as "*criteria pollutants*" because the EPA sets National Ambient Air Quality Standards (NAAQS) for them based on criteria, which are characterizations of the latest scientific information on health and environmental effects. The EPA uses these pollutants as indicators of air quality.

# What pollutants do we regulate?

- *Hazardous Air Pollutants (HAPs):*

The term "air toxics" is often used synonymously with the regulatory term "hazardous air pollutants", which refers to the air pollutants listed under section 112 of the Clean Air Act and on the Environmental Protection Agency (EPA)'s HAPs website.

There are currently **187 listed** HAPs.

**Note:**

(1) HAPs are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effect;

(2) On December 22, 2021, the EPA Administrator signed the final rule to add 1-bromopropane (1-BP) to the list of hazardous air pollutants. This action was published in the Federal Register on January 5, 2022. Effective February 4, 2022, 1-bromopropane will be added to the HAP list.

# What pollutants do we regulate?

- *Volatile Organic Compounds (VOCs):*

For purposes of the air program, as defined in 40 CFR Part 51.100(s):

“Volatile organic compounds (VOC) means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate which participates in atmospheric photochemical reactions.

(1) This includes any such organic compound other than the following, which have been determined to have negligible photochemical reactivity: **methane; ethane; ...; acetone; etc.**”

Many HAPs are also considered VOCs.



**Any Questions so far?**

**Purpose of CP:**

# CONSTRUCTION PERMITS (CP)

## (Project Specific)

Allows the source to construct and begin operation of a permitted project. (SHORT TERM)

**When Needed:**

When a project's net potential to emit (PTE) in tons per year (tpy) exceeds the following CP thresholds.

**Permitting Thresholds:**

[\(Title 129 Chapter 17\)](#)

15 tpy of PM<sub>10</sub> Emissions

10 tpy of PM<sub>2.5</sub> Emissions

40 tpy of SO<sub>x</sub> Emissions (SO<sub>2</sub> or SO<sub>3</sub> or any combination)

40 tpy of NO<sub>x</sub> Emissions (calculated as NO<sub>2</sub>)

50 tpy of CO Emissions

0.6 tpy Lead Emissions

40 tpy of VOC Emissions

2.5 tpy Individual HAP Emissions

10 tpy Total HAP Emissions

**Note:** most incinerators, regardless of emissions, must have a CP.

# CONSTRUCTION PERMITS (CP)

## (Project Specific)

### **Content of CP:**

Prescribes emissions limits

Prescribes emissions control equipment

Prescribes operation and monitoring requirements

Prescribes recordkeeping and reporting requirements

Requires initial emissions testing (sometimes subsequent testing until operating permit is issued)

**Any Questions so far?**

# OPERATING PERMITS (OP)

## (Source Wide)

### When Needed:

1. Must submit an OP application within 12 months of startup.
2. When Source's actual emissions in tons per year (tpy) exceeds the following OP thresholds.

### Permitting Thresholds: ([Title 129 Chapter 5](#))

One half of Major Source Thresholds as stated below:

50 tons – individual air pollutant

12.5 tons – total combined HAP

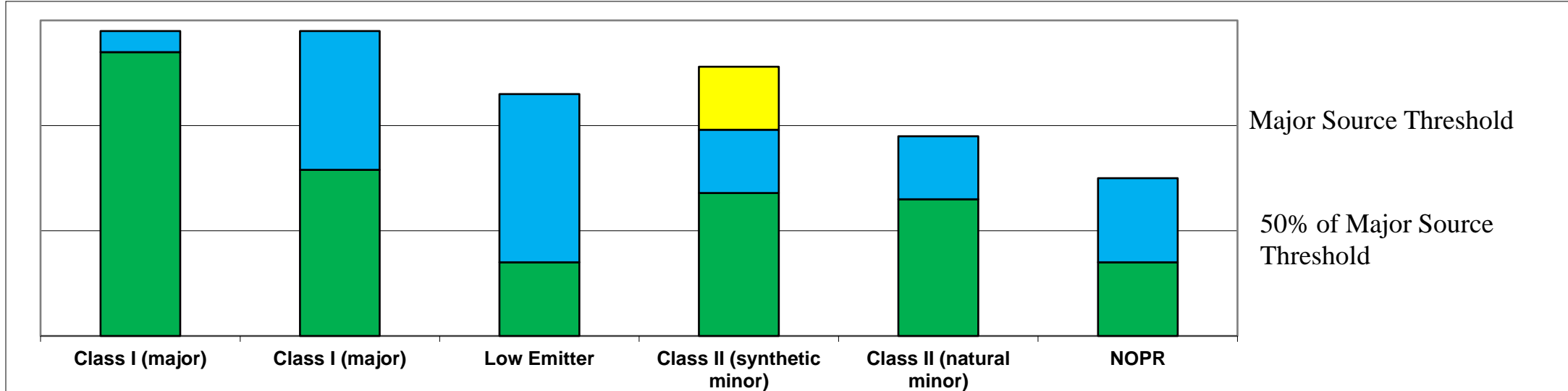
5 tons – individual HAP

2.5 tons – lead

# OPERATING PERMITS (OP)

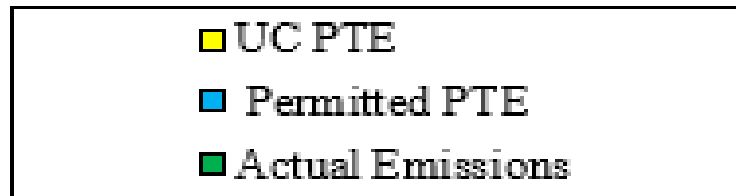
(Source Wide)

## OP Types and when required:



**Major Source Thresholds**

- 100 tons - individual air pollutant
- 25 tons - total combined HAP
- 10 tons - individual HAP
- 5 tons - lead



UC PTE = Uncontrolled Potential to Emit  
 PTE = Potential to Emit  
 NOPR = No Permit Required

The two Class I (major) bars indicate that PTE determines Class I, *not Actual emissions*.

# OPERATING PERMITS (OP)

(Source Wide)

**Purpose of OP:**

To standardize air quality permits and the permitting process. (Includes ALL active CP's)

Allows the Source to operate (LONG TERM)

**Content of OP:**

Includes CP required emissions limits

(Can set more stringent emissions limits, if requested)

Includes CP required emissions control equipment

(Can require additional emissions control equipment to meet more stringent emissions limits, if requested)

Includes CP required operation, monitoring, reporting and recordkeeping

(Can prescribe additional monitoring and recordkeeping requirements)

Prescribes required reporting under the OP program (Deviation Reports, Certification of Compliance Reports, Emissions Inventories, etc.)

Requires PERIODIC emissions testing requirements

# Any Questions?

## Reminders:

- \* Slide Deck and Video will be available after this presentation on the NDEE website.  
<http://dee.ne.gov/NDEQProg.nsf/OnWeb/VideoEvent>
- \* Additional questions please send it to [NDEE.airquality@nebraska.gov](mailto:NDEE.airquality@nebraska.gov)
- \* Next Event: Tuesday, February 8<sup>th</sup>, 10AM-12:00  
Webinar and Panel Discussion- Construction storm water





**Thank you!**

Pati West - NDEE Air Construction Permitting Supervisor  
David Christensen - NDEE Air Operating Permit Supervisor

Contact Information: [NDEE.airquality@nebraska.gov](mailto:NDEE.airquality@nebraska.gov)