

The Minnesota Pollution Control Agency (MPCA) issues several types of air permits to facilities with potential emissions above state or federal thresholds.

The factor that determines whether you need a permit for your facility is the amount of your potential emissions. Therefore, your first step should be to calculate your potential emissions to see whether they exceed state or federal thresholds for any of the pollutants on the chart below. If they do, you need a permit.

Potential emissions above certain threshold levels and specific rules may dictate which type of permit a facility must get. However, some facilities may have several options available to them.

After calculating your potential emissions, you may limit your actual emissions to below certain thresholds to qualify for different permits.

For instance, a facility that has potential emissions above federal thresholds may take limits in its permit that will keep actual emissions below federal thresholds, enabling them to get a state permit. This is referred to as a “synthetic minor” permit.

Levels of Permitting

A facility’s “permitting level” is dependent upon where its allowable emissions fall, relative to state and federal permit thresholds. Allowable emissions are the maximum actual emissions allowed in your permit.

Federal Part 70 permits

Part 70 refers to the part of the U.S. Environmental Protection Agency (EPA) regulations concerned with air quality permits. Permits issued under Part 70 are sometimes referred to as Title V permits referring to a section of the federal Clean Air Act Amendments. Part 70 permits are those permits for which the allowable emissions exceed federal thresholds.

Federal permits expire every five years and require a 45-day EPA review of the draft permit in addition to (usually, but not always, concurrent with) the 30-day public notice period.

State permits

State permits are those written for facilities whose potential emissions fall below federal thresholds but above the state thresholds where they are different, which is the case for particulate matter smaller than 10 microns, sulfur dioxide, and lead.

State permits are also issued to “synthetic minor” sources. These are facilities that have potential emissions over the federal thresholds but take permit limits to keep their actual or allowable emissions below those levels. Most state permits are issued to synthetic minor sources.

Another category of sources requiring a state permit are those subject to a New Source Performance Standard (NSPS, 40 CFR pt. 60). If a facility whose potential emissions are below the thresholds, but all or part of the facility is subject to more than the notification and record-keeping provisions of an NSPS, then a state permit is required. If a facility’s potential emissions are below all permitting thresholds, but all or part of the facility is subject only to the notification or record-keeping provisions of one or more NSPSs, then a permit is not required.

The state thresholds were set using modeling to predict whether the federal ambient air quality standards would be violated by certain emission levels.

Most state permits do not expire. That is, you do not have to reapply every five years as you do with federal permits.

The table on the following page shows the potential emission thresholds for state and federal permit requirements

Permit thresholds

Pollutant	State Threshold	Federal Threshold
Carbon Monoxide (CO)	100 tons per year (tpy)	100 tpy
Nitrogen Oxides (NO _x)	100 tpy	100 tpy
Sulfur Dioxide (SO ₂)	50 tpy	100 tpy
Particulate Matter (PM)	100 tpy	100 tpy
PM smaller than 10 microns (PM ₁₀)	25 tpy	100 tpy
PM smaller than 2.5 microns (PM _{2.5})	100 tpy	100 tpy
Volatile Organic Compounds (VOC)	100 tpy	100 tpy
Lead (Pb)	0.5 tpy	10 tpy
Single Hazardous Air Pollutant (HAP)	10 tpy	10 tpy
Combined HAPs	25 tpy	25 tpy
Carbon Dioxide Equivalent (CO ₂ e)*	100,000 tpy	100,000 tpy

* Calculated as the weighted aggregate of carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, using the gases' global warming potential.

Permit Types

Facility-specific permit (Federal Part 70 or State)

A facility-specific permit is tailored to a specific company. Such a permit takes into account the total operation of the facility and often covers many different emissions points.

These permits are for facilities that have allowable emissions over either state or federal thresholds. The MPCA has a permit guide and application forms available for these types of permits.

An individual facility-specific permit is required to go through a 30-day public notice and comment period.

General permits (Federal Part 70 or State)

General permits have been developed for certain industry groups that have similar equipment and processes. Because industry representatives have been asked for input during the development of the general permits, operational flexibility is built into the general permits to allow for typical operating scenarios.

Depending on the allowable emissions, general permits can be either State or Federal Part 70 permits. General permits have industry-specific streamlined application forms.

General permits are placed on public notice when they are developed. Therefore, when an individual facility is issued a general permit, the public notice has already taken place and need not be repeated. The exception to this is when a general permit is issued for construction of a new facility; in that case, a public notice may be required.

General permits are currently available for the following types of facilities:

- Stationary nonmetallic mineral processing plants (sand and gravel, crushed and broken limestone/granite, etc., Standard Industrial Codes (SIC) 1422, 1423, 1429, 1442, 1446)
- Portable nonmetallic mineral processing plants (same as above)
- Facilities manufacturing fiberglass products or parts
- Manufacturing facilities with cleaning, painting, coating, and/or grinding operations plus fuel combustion (SIC codes - typically 3500 category)

Some facilities in the above categories may be able to choose between the general permit and other permit options such as the registration permit (below), and the facility-specific permit, depending on their individual size and operational needs.

Registration permits (State)

The MPCA has developed streamlined permits for companies that have low actual emissions relative to potential emissions.

Many small facilities being issued permits for the first time as a result of the 1990 Clean Air Act Amendments may fall into this category - as may many sources already holding permits. If calculated potential emissions are over either state or federal

thresholds, you must get an air permit, but low actual emissions may enable you to qualify for the more streamlined registration permits.

Registration permits have allowable emissions below federal thresholds so they are state permits. A guidance manual and application forms are available for the registration permits.

Once a facility has its permit, changes within the facility are allowed without a permit amendment as long as the facility remains eligible for the registration permit. Like general permits, no public notice is required at the time of individual permit issuance.

There are four different types of registration permits. Some examples of categories of facilities which may be eligible for a registration permit are listed under each option.

Option A: A facility needs a permit solely because a New Source Performance Standard applies (the potential emissions from the source fall below the permitting thresholds). For example:

- Storage vessels for petroleum liquids (Code of Federal Regulations part 60, subp. K, Ka)

Option B: A facility purchases or uses less than 2,000 gallons of VOC -containing materials in any 12-month period and has no other emissions. For example:

- Auto body shops

Option C: A facility has emissions only from boilers, internal combustion engines, VOC-containing materials (or a combination of all three). For example:

- Publicly owned treatment works
- Hotels/motels
- Schools
- Nursing homes/small hospitals
- Airports

Option D: A facility that has actual emissions below the thresholds in the table below. The effect of certain pollution control equipment may be considered in calculating emissions for Option D. Facilities that commonly qualify for Option D include:

- Meat/dairy/fruit/vegetable producers
- Grain elevators and feed mills
- Surface coating operations

As you go from option A to option D, the application forms and worksheets get more complicated, yet are still much simpler than the facility-specific application forms.

Option D emission thresholds

Pollutant	Threshold
CO	50 tpy
NO _x	50 tpy
PM	50 tpy
PM ₁₀	
• Attainment area	50 tpy
• Nonattainment area	25 tpy
SO ₂	50 tpy
VOC	50 tpy
Lead	0.5 tpy
Single HAP	5 tpy
Combined HAP	12.5 tpy
CO ₂ e	50,000 tpy

Understanding the Various Permit Requirements and Conditions

This fact sheet was written to give a brief overview of the different levels and types of air quality permits. In general, the level of comprehensiveness and complexity rises as you go from registration permits to general permits to facility-specific permits. Facility-specific permits require public notification while general and registration permits are public noticed once at time of development by the MPCA. The basic difference between state and federal permits is that federal permits require an additional 45-day EPA review and expire every five years.

It is important to evaluate the quantity of your actual emissions compared to specific permit thresholds. You do not want to restrict yourself so much that an expansion may take you over a specific threshold so that you would have to start all over again to apply for the appropriate type of permit. It is important to know where you are and where you want to go with your air quality permit.

For More Information

Fact sheets and copies of air quality rules are available through the MPCA website (<http://www.pca.state.mn.us>) or by contacting the MPCA at 651-296-6300 or 800-657-3864. Fact sheets that may be of interest include the following:

- Air Quality Operating Permit Rules fact sheet
- MPCA Air Emissions Registration Permits fact sheet
- Hazardous Air Pollutants fact sheet