



Municipal Wastewater Treatment Facilities

Air Quality Permits

This fact sheet is intended to assist you in determining if your municipal Wastewater Treatment Plant (WWTP) is required to have an air emission permit from the Minnesota Pollution Control Agency (MPCA). Effective on July 1, 2011, more WWTP's may be required to obtain air emission permits due to the amount of their potential emissions of greenhouse gases as determined through the calculation of emitted Carbon Dioxide Equivalents (CO₂e). Your WWTP facility may need an air emission permit if any of the following two criteria apply to your facility:

1. The Potential To Emit Of Your WWTP is Greater Than Permitting Thresholds

Potential to Emit (PTE) is defined as the maximum amount of emissions that can be generated by your WWTP and your WWTPs associated equipment (boilers, incinerators, generators, flares, liquid processing, etc.) when operated at maximum physical capacity.

If the PTE of your WWTP, including any other emission units located at the WWTP, exceeds any of the thresholds in Table 1, a Part 70 or state operating permit is required.

Table 1: Potential emissions and air permit requirements

Pollutant	Total WWTP PTE thresholds (tons per year (tpy))	
	Part 70 permit threshold	State permit threshold
Total Particulate Matter (PM)	100	100
PM less than 10 microns (PM ₁₀)	100	25
PM less than 2.5 microns (PM _{2.5})	100	100
Nitrogen Oxides (NO _x)	100	100
Sulfur Dioxide (SO ₂)	100	50
Carbon Monoxide (CO)	100	100
Volatile Organic Compounds (VOC)	100	100
Lead	NA	0.5
Any single Hazardous Air Pollutant (HAP)	10	10
Any combination of 2 or more HAP	25	25
Carbon Dioxide Equivalents (CO ₂ e)	100,000	100,000

How do I determine the potential to emit of my WWTP?

To determine your WWTP's emissions, see the Facility Emissions Summary instructions found on MPCA form GI-07 (http://www.pca.state.mn.us/index.php?option=com_docman&task=doc_download&gid=458). Once your emissions are determined, compare the totals of each pollutant to the thresholds in Table 1. If one or more threshold is exceeded, you will be required to obtain the relevant air emission permit for your facility.

2. Your WWTP is subject to the applicability of Federal Standards

If Federal Standards apply to your WWTP, you may need to obtain an air permit.

If Federal Standards apply to your WWTP, you may need to obtain an air permit regardless of whether any of the thresholds from Table 1 are exceeded. You must review the potential Federal Standards that may apply to your facility to determine what is applicable to your facility. Those standards include New Source Performance Standards (NSPS) under 40 CFR Part 60 and National Emission Standards for Hazardous Air Pollutants (NESHAP) under 40 CFR Part 61 and/or Part 63. The following standards may apply to your facility, although there may be others (it is the WWTP's responsibility to review all potential applicable standards).

NSPS 40 CFR pt. 60, Subp:

- IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (which may be applicable to emergency generators based on their manufacture date. In addition, there are some exceptions as to when a permit is needed based upon this standard – see Minn. R. 7007.0300, subp. 1.B.(5)).
- O - Standards of Performance for Sewage Treatment Plants (State Sewage Sludge Incinerator Standards are found at Minn. R. 7011.1305 and Minn. R. 7011.1310).
- Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. (If the PTE of the facility is below all the thresholds in Table 1, and no other Federal Standard applies, applicability of NSPS Subpart Dc by itself does not require a permit. See Minn. R. 7007.0300, subp. 1.B (5)).

NESHAP

- HAP emissions are such that the WWTP is defined as an area source (see 40 CFR pt. 63).
- Mercury emissions are such that 40 CFR pt. 61, Subpart E-National Emission Standards for Mercury also apply.

What other Federal Standards might apply to my WWTP?

If you operate a stationary gas turbine at the WWTP, the turbine may be subject to NSPS Subpart GG, Standards of Performance for Stationary Gas Turbines; NSPS Subpart KKKK, Standards of Performance for Stationary Combustion Turbines; and/or NESHAP subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines (if the HAP PTE is ten tpy or more for a single HAP, or 25 tpy for any combination of two or more HAP). All of the combustion turbine standards require that the facility obtain an air emission permit.

If you operate a stationary engine or generator, depending on the age, type, and size, it may be subject to NSPS Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines; and/or NESHAP Subpart ZZZZ, NESHAP for Reciprocating Internal Combustion Engines. All of these standards require that the facility obtain an air emission permit.

Your WWTP may also be subject to the Mandatory Greenhouse Gas Reporting rule, which can be found in Part 98, at the e-CFR Web address listed at the end of this fact sheet.

I have determined that my WWTP needs a permit, what do I do?

If you determine that your WWTP needs a permit, there may be several types of permits available, depending on the PTE, actual emissions, and which standards apply. Information on the different types of permits can be found on the MPCA's Web page at:

<http://www.pca.state.mn.us/index.php/air/air-permits-and-rules/air-permits-and-forms/air-permits/all-about-air-permits.html?menuid=&missing=0&redirect=1>.

Application forms for all types of air quality permits can be found at:

<http://www.pca.state.mn.us/index.php/air/air-permits-and-rules/air-permits-and-forms/air-forms/air-quality-forms-permit-application-notifications-compliance-and-miscellaneous.html?menuid=&redirect=1>.

How do I get more information?

After thoroughly reviewing the Standards and permitting information available to you and you are in need of additional assistance or have questions, contact the MPCA at 651-296-6300 or 800-657-3864.

Need additional resources?

MPCA's Web site: www.pca.state.mn.us.

U.S. Environmental Protection Agency (EPA) Office of Air Quality Planning and Standards. Research Triangle Park, NC.: www.epa.gov/ttn/chief/ap42/index.html.

Electronic Code of Federal Regulations (e-CFR) Web site (select "Title 40" from the list):

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=%2Findex.tpl>.

Minn. R. ch. 7007, Permits and Offsets:

<https://www.revisor.mn.gov/rules/?id=7007>.