

AIR MANAGEMENT PROGRAM FACT SHEET



AM-506 2023

When Do WWTP and Water Supply Systems Need an Air Permit?

April 2023

This factsheet helps small wastewater treatment plants (WWTP) and municipal water supply systems determine whether their facility is required to obtain an air pollution control permit.

A permit is not required when:

The facility would be exempt if it meets operation permit exemption criteria; for example, when the only equipment at the facility that emits air pollution includes:

Emergency electrical generators that meet all of these criteria:

- with electrical output less than 3000 kilowatts
- operates less than 200 hours per year
- do not offset electrical rates, peak shave or participate in a financial arrangement with another entity
- fueled by natural gas, ultra-low sulfur diesel (ULSD), distillate fuel oil or gasoline

Boilers that are:

- natural gas-fired or distillate fuel oil-fired with max rated heat input capacity of not more than 25 mmbTU per hour.

Municipal water supply systems and/or WWTP that do not have an anaerobic digester unit can often fit into this category.

While a permit is not required, the facility is still required to meet emission limits and management practices of federal standards for the emergency generators. [Appendix 1](#) in this document summarizes requirements for emergency engines. For more detail, visit the DNR's Small Business Environmental Assistance Program (SBEAP) webpage for [Internal Combustion Engines](#) or the U.S. Environmental Protection Agency's (EPA) [Stationary Engines](#) webpage.

If the facility has several emission units that individually meet the exemptions described above, contact the SBEAP to help the facility ensure that no permitting requirements are triggered by the cumulative impact of all units.

A permit is required when:

An air pollution control permit is required if one or more of the following apply:

- The facility-wide total capacity of all biogas-fired engines is \geq 120 hp (90 kilowatts)
- The facility's engine is operated as a peak-shaving unit or supply power as a financial arrangement with another entity
- The facility operates combustion units not fitting the exemption criteria listed above such as flares

A permit may be required when:

If it is unclear from these categories whether a permit is needed, the facility can review the criteria for permit exemptions on the [Air Permit Exemptions](#) webpage. If the facility meets all criteria for one of the exemptions, then no permit is needed. Some exemption options require the facility to submit an application to the DNR to gain approval for the exemption. In addition, the facility should maintain all appropriate records that demonstrate the facility qualifies for the exemption at all times while in operation.

If a permit is required, most WWTP and water supply facilities will qualify for the streamlined registration operation permit (ROP). For more information on ROP options, review the [registration permit options](#) webpage.

If not eligible for a ROP, visit the [Air Permit Options](#) webpage and review the Operation tab.

For more information:

- Questions on applying for a ROP can be directed to the ROP Coordinator at DNRRamROPSairpermit@wisconsin.gov
- Contact SBEAP for other questions at 855-889-3021 or DNRRsmallbusiness@wisconsin.gov. [SBEAP](#) provides information to Wisconsin small businesses in understanding air pollution requirements and how to comply with regulations. The program is advisory, non-regulatory and free of charge.

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Appendix 1

Requirements for emergency engines/generators

Each engine is required to:

- have a non-resettable hour meter
- operate according to manufacturer's written instructions
- be certified to meet U.S. EPA Tier 1 or Tier 2 or later standards for the same model year and name plate power rating
- burn diesel fuel with sulfur content of 15ppm or less

Operating limits for each emergency engine generator set:

- Maintenance checks and readiness testing are limited to 100 hours per year.
- Any operation other than emergency operation, maintenance and testing and operation in non-emergency situations for more than 50 hours per year is prohibited.

Note: there is no time limit on the amount of use during an emergency situation.

Management practices for engines:

- Change oil and filter every 500 hours of operation or annually, whichever comes first.
- Inspect air cleaner or spark plugs every 1,000 hours of operation or annually, whichever comes first.
- Inspect all hoses and belts every 500 hours of operations or annually, whichever comes first, and replace as necessary
- Minimize time spent at idle. Start-up time should not exceed 30 minutes. **Note:** after 30 minutes non-startup, emission limitations apply

Reporting and recordkeeping requirements:

- Note deviations from operating limits including the total operating time and date of the deviation
- Keep records of:
 - the maintenance conducted
 - manufacturer's certification
 - written operating instructions
- Keep records of hours spent for emergency and non-emergency operations
- Notify U.S. EPA of emergency situations