



Potential emissions vs. actual emissions and the MN General Permit for Low Emitting Facilities

When assessing what level of air permitting applies to a facility, potential to emit must be calculated and compared to certain thresholds. Potential to emit, or PTE is defined as the maximum capacity of an emission unit or source to emit a pollutant under its physical and operational design while operating at the maximum possible number of hours. Though a process that generates air pollutants may only occur for a certain number of hours at a facility, PTE is typically calculated using the process physical and operational maximum rates, operating 24 hours a day, 365 days a year. The resulting calculated PTE is compared to state and federal thresholds for “criteria” pollutants (NO_x, SO₂, CO, Lead, Volatile Organic Compounds, Particulate Matter), greenhouse gases, and Hazardous Air Pollutants (HAPs). When PTE exceeds federal thresholds for any of these pollutants, the facility is considered a “major source” and must obtain a Title V Operating Permit.

For many small businesses, there is a large disparity between actual emissions from a process and calculated potential to emit. This is particularly true for auto-body shops, spray coating operations, metal fabrication facilities, and facilities that have engines, boilers, or storage tanks on-site; where operations that generate air emissions may only occur a few hours a day, a limited number of days per year, or sporadically. Yet, based on potential to emit, these facilities often are considered to be “major sources” under federal regulations, and are subsequently required to obtain a Title V Operating permit. For smaller businesses with high potential to emit but low actual emissions, the cost of applying for and complying with a Title V Individual Operating permit can be prohibitive.

The Minnesota Pollution Control agency has a Part 70 Low-Emitting Facility General Permit for low-emitting, high PTE facilities that fulfills the federal requirement to obtain a Title V Operating permit when federal thresholds are exceeded, while reducing the cost and time involved in applying for a Title V Individual Operating Permit. Target facilities for the Low-Emitting Facility General Permit are existing unpermitted low-emitting facilities with primarily cleaning, painting/coating, grinding, sanding/blasting, fibreglassing and fuel combustion operations, with

or without pollution control equipment. The Low-Emitting Facility General Permit: 1) limits facility emissions to less than 25 tons per year for criteria pollutants, 5 tons per year for a single HAP, and 12.5 tons per year for total HAPs; 2) enacts BACT-equivalent controls, emission limits, and operating limits; 3) addresses applicable NESHAP Source Category (MACT) standards; and 4) Provides a less-expensive option for facilities to come into compliance with Title V permitting requirements.

If your Minnesota facility does not have an air permit and has high potential to emit but low actual emissions, obtaining coverage under the Low-Emitting Facility General Permit is a cost-effective way to come into compliance with air permitting requirements. Please call U.S. Compliance with any questions regarding coverage under the Low-Emitting Facility General Permit—we're happy to help!