

Instructions for Form EC: Emissions Calculations

- Complete Form EC for EACH Emission Point included in this application.
- This form provides information on the amount of regulated emissions that could be emitted from the emission point.

Understanding EC Form Information: Each number provides an explanation for the corresponding field on the form.

Company Name: This is useful if application pages become separated.

1. **Emission Point ID:** Provide the emission point identifier applicable to the provided calculations.
2. **Emission Calculation Methodology:** Describe the method used to calculate emissions. The department does not prescribe a method but requests applicants use the best possible method available. Emission estimates may be based on: emissions factors, a mass or material balance, stack test data, or other appropriate methods. For additional detail on the options available to calculate emissions, please refer to the [DNR guidance on calculating emissions](#).
3. **Calculations:** Emissions calculations can either be completed on the Form EC in #4 or provided on an attached sheet. If including an attached sheet, please check the box. The attachment must be labeled "EC-3A" and provide the formulas or methods used to derive the emissions calculations.
4. **Potential Pollution Emission Summary:** Summarize the **potential** emission rate for each air pollutant emitted from this emission point (stack or vent) which may or may not be comprised of multiple emission units.

"**Potential**" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit pollutants, including control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Only federally enforceable limitations on raw materials, fuels, capacity or hours of operation can be used to limit potential emissions. "Bottlenecks" do not count unless federally enforceable.

Additional detail on how to calculate emissions for Form EC is contained in [DNR guidance on calculating emissions](#)..

Emission Factor: Enter the numerical emission factor (in pounds per unit of measure) used to calculate the potential emissions from this emission unit.

Emission Factor Units: Enter the emission factor units of measure. Typical emission factor units of measure are expressed in pounds of pollutant emitted per unit of production or unit of fuel combusted. Examples are pounds/ton, pounds/gallon, pounds/million cubic feet, etc.

Emission Factor Source: Indicate the emission factor source. When using AP-42 as an emission factor source, please specify the table in which the emission factor was found.

Control Efficiency: If there is control equipment installed on the emission point, enter the percent control efficiency. Ensure the control efficiency corresponds to the specific air pollutant.

Potential Hourly Emissions: Calculate and provide the hourly controlled emissions from the emission point. If the emission point does not have any control, list the uncontrolled emissions in this box.

Annual Hours of Operation: List the hours per year the emission point will operate. Annual hours of operation should be 8760 hours unless requesting a permit limit on the number of hours the emission point will operate each year.

Potential Annual Emissions: Calculate the annual potential emissions by multiplying the **Potential Hourly Emissions** by the **Annual Hours of Operation** and converting pounds per year to tons per year.

Note: Applicants should provide calculations for any additional regulated pollutants emitted from the emissions point in addition to the pollutants already listed in this form such as:

- Greenhouse gases (GHG)
- Total reduced sulfur (TRS)
- Sulfuric Acid Mist (H₂SO₄)
- Hydrogen Sulfide (H₂S)
- Hydrogen Fluoride (HF)