

Air Pollution Control Registration Construction and Operating Permit Modeling Assessment Attachment

Notice: Pursuant to ss. NR 406.17(4)(a), and 407.105(4)(a), Wis. Adm. Code, completion of this form is required to apply for coverage under the Registration Operation Permits (ROP) or to report changes made to ROP sources that triggered modeling requirements. Failure to submit complete information as required on the form shall be grounds for denial of the application. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Record Law [ss. 19.31 - 19.39, Wis. Stats.].

Facility Information

Facility Name

Facility Physical Address

<input type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village of:	County		
Permit Contact Person Name	Title		
Phone (include area code)	Email		
Mailing Address	City	State	ZIP Code
Facility NAICS code description:	Facility identification number (FID):		

INSTRUCTIONS: Complete only **Part 1** OR **Part 2** of this form. If you have conducted an air dispersion modeling analysis and want to report the results, please complete **Part 1**. If your facility meets the prescribed stack configuration¹ and you are requesting the Department to perform the modeling analysis, please complete **Part 2**. Tables 1 and 2 list the emission threshold of each pollutant to be included in the air dispersion modeling analysis for each type of Registration Permit. Please consult the ROP Application Guidebooks for details, <https://dnr.wisconsin.gov/topic/AirPermits/Registration.html>.

Table 1. Facility that meets the prescribed stack configuration.²

Pollutant	ROP-A	ROP-B	ROP-C	ROP-G
PM₁₀	> 5 TPY of PM	> 5 TPY of PM ₁₀	> 5 TPY of PM ₁₀	5 TPY of PM ₁₀
NO_x	N/A	> 25 TPY	N/A	> 25 TPY
SO₂	N/A	> 25 TPY	N/A	> 25 TPY
CO	N/A	N/A	N/A	> 50 TPY
Pb	> 0.2 TPY	> 0.2 TPY	> 0.2 TPY	> 0.2 TPY

Table 2. Facility that DOES NOT meet the prescribed stack configuration.

Pollutant	ROP-A	ROP-B	ROP-C	ROP-G
PM₁₀	> 5 TPY of PM	> 5 TPY of PM ₁₀	> 5 TPY of PM ₁₀	5 TPY of PM ₁₀
NO_x	> 5 TPY	> 5 TPY	N/A	> 5 TPY
SO₂	> 5 TPY	> 5 TPY	N/A	> 5 TPY
CO	N/A	N/A	N/A	> 5 TPY
Pb	> 0.2 TPY	> 0.2 TPY	> 0.2 TPY	> 0.2 TPY

¹ A facility meet the prescribed stack configuration if all stacks at the facility other than stacks that are general building ventilation or stacks venting emission units excluded from modeling as listed in the Registration Operation Permit can meet all the following:

- a) The stacks at the facility must be taller than all buildings on which they are located and all buildings that could significantly influence the stacks' emissions as they spread out from their exhaust points into the surrounding area. A building is considered to influence a stack's emissions if the stack is located within 5 building heights of that building.
- b) All stacks at the facility must discharge upwards (within 10 degrees of vertical).
- c) All stacks at the facility must discharge to the atmosphere without alteration of flow due to an obstruction (e.g., rain hat) while the process they serve is operating.

² Use the **maximum controlled emission** rate to compare against each annual emission threshold. Multiply the maximum controlled hourly emissions by 8,760 hours per year to obtain the annual emission rate. If it is not physically possible to operate 8,760 hours per year, the facility is allowed to take into consideration realistic operating scenarios.

Air Pollution Control Registration Construction and Operating Permit Modeling Assessment Attachment

PART 1 – RESULTS OF DISPERSION MODELING ANALYSIS

Note: Air quality modeling analysis should be conducted according to the current [Wisconsin Air Dispersion Modeling Guidelines \(AM-528\)](#). Copy of the modeling files shall be kept in your records and available to the Department upon request. If the facility is conducting the dispersion modeling analysis after the initial coverage under a Registration Operation Permit was granted, the results shall be attached to the next annual compliance certification.

Use the following table to indicate the impact of each pollutant as indicated in Table 1 or 2 above:

Pollutant	PM ₁₀	SO ₂		NO ₂	CO		Pb
	24-hr	1-hr	3-hr	Annual	1-hr	8-hr	3-month
Total of the facility impacts from the dispersion modeling results plus the background concentrations* for your county (in micrograms per cubic meter).							
Air quality standards (in micrograms per cubic meter).	150	196	1,300	100	40,000	10,000	0.15

*Note: The background concentration is available at DNR's website at <https://dnr.wisconsin.gov/sites/default/files/topic/AirPermits/AQBackgroundConcentrationGuidance.pdf>

Air Pollution Control Registration Construction and Operating Permit Modeling Assessment Attachment

PART 2 - REQUEST FOR DISPERSION MODELING ANALYSIS

Note: The Department will only perform dispersion modeling for facilities that meet the prescribed stack configuration of Registration Operation Permits. If any stacks at your facility do not meet the stack requirements, you must perform air dispersion modeling for your facility and provide the results of air dispersion modeling in Part 1 or make modification to the stacks so that they do meet the prescribed stack configuration.

Instructions:

- **DO NOT COMBINE STACKS:** Each stack that vents externally should be listed separately. Add rows and columns as necessary. You do not need to include stacks used only for general ventilation and stacks venting only exempt emissions units listed in the Registration Permit.
- **ATTACH** to this form a scaled facility plot plan including building heights as necessary for the timely completion of the modeling analysis. Please ensure the following information is on the plot plan:
 - True north
 - A scale (e.g. 1 in = 100 ft)
 - Clearly marked structures and structure heights
 - All externally vented stacks
 - Any fences, roadways, and physical obstructions to plant property
 - Property line
- Complete the following table and only include the maximum controlled emission rate of each pollutant exceeding the emission thresholds listed in Table 1 or 2 above.

Stack Identifier (e.g. S01, S02, etc.)						
Emission(s) Unit Identifier - optional (e.g. P01, P02, etc.)						
Stack Height Above Ground (ft)						
Stack Diameter or Dimensions (ft)						
Normal Exhaust Temperature (°F)						
Normal Exhaust Flow (acfm)						
PM ₁₀ Maximum Controlled Emission Rate (lb/hr) - as applicable						
SO ₂ Maximum Controlled Emission Rate (lb/hr) - as applicable						
NO _x Maximum Controlled Emission Rate (lb/hr) - as applicable						
CO Maximum Controlled Emission Rate (lb/hr) - as applicable						
Pb Maximum Controlled Emission Rate (lb/hr) - as applicable						

Need help filling out this Part? If your facility reports to the air emissions inventory, stack specific information such as previously assigned stack and process identifiers, and stack modeling parameters may be available in your inventory report.