

AIR MANAGEMENT PROGRAM FACT SHEET



Type C Registration Operation Permit for Printers

May 2023

What is a registration permit?

A registration operation permit (ROP) is a standardized permit for use by facilities with low actual annual emissions. The registration permit for printers contains standard requirements that apply to the printing industry and is available only to printing facilities with low actual emissions. The registration permit for printers is the Type C registration operation permit, or ROP-C.

What are the benefits of a registration permit for printers?

- Flexibility to construct, modify, or replace equipment without obtaining a construction permit as long as the facility continues to comply with all conditions of the registration permit after the change.
- Generic organic compound limitations for process lines that allow the printer to elect the appropriate permit conditions to meet the requirements of ch. NR 424 that replace the case-by-case review and approval process by the Department of Natural Resources (DNR).
- Less frequent and less prescriptive monitoring and recordkeeping requirements.
- Swift DNR permit decisions—15 days or less.
- Simplified permit applications and permitting process.
- Lower administrative costs—no construction permits, permit renewals, or revisions.

What facilities can get a ROP-C?

Printing facilities whose actual annual emissions are, and will remain, less than 25% of the major source threshold for all criteria pollutants (except for lead emissions) and less than 50% of the major source threshold for federally regulated hazardous air pollutants. The emission levels associated with 25% or 50% of major source thresholds may change if an attainment area is redesignated as nonattainment or if a nonattainment area has its classification changed. The table below contains the eligibility thresholds for the registration permit for printers in Wisconsin.

Pollutant	Eligibility Threshold
Particulate Matter less than 10 microns and 2.5 microns (PM ₁₀ and PM _{2.5})	25 tons/year
Volatile Organic Compounds	25 tons/year
Nitrogen Oxides	25 tons/year
Sulfur Dioxide	25 tons/year
Carbon Monoxide	25 tons/year
Lead	0.5 tons/year

Pollutant	Eligibility Threshold
Federally Regulated Hazardous Air Pollutants (For a list of federally regulated HAPs go to EPA's webpage .)	<ul style="list-style-type: none"> • 5 tons/year for any <i>single</i> pollutant • 12.5 tons/year for a <i>combination</i> of all pollutants

In addition to meeting the eligibility thresholds, the facility must be one of the following types of printer: non-heatset offset lithographic, heatset web offset lithographic, gravure or flexographic, screen presses, digital, or letterpresses. Printing may not be an ancillary operation. For the purposes of the permit, a printer is any facility that identifies a primary Standard Industrial Classification (SIC) Code of 23, 26, or 27 or a primary North American Industry Classification System (NAICS) code of 3231xx or 5111xx for operations at the facility. There are other eligibility criteria listed below that the facility must meet before applying for the registration permit.

Other eligibility criteria:

- Combustion units used at the facility may burn only natural gas, propane or distillate fuel oil containing 0.0015% sulfur by weight or less.
- Particulate matter may only be emitted by the facility from emissions units listed in Table 1 (Page 4), heatset web offset presses, and combustion units.
- Facilities with heatset web offset presses or facilities combusting distillate fuel oil should meet the following three stack requirements, for all stacks except those serving insignificant emissions units:
 - must have vertical, unobstructed exhaust points
 - must be at least as tall as the surrounding buildings¹
 - must not discharge horizontally or in a downward direction
- Letterpress printers that can emit more than 0.2 tons of lead per year are also required to conduct or request the DNR complete an air dispersion modeling analysis.
- Facility must have control efficiencies equal to, or greater than, the efficiencies in Table 2 (Page 5). Facilities opting to use a control efficiency greater than those listed in the permit to demonstrate compliance must have stack test results available from within the last 5 years.
- Facility cannot be required to have a case-by-case determination of Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) determinations for ch. NR 445 hazardous air contaminants.
- All existing permits must be revocable by the DNR. For most facilities this will be possible.

What requirements are in the permit?

- Emissions may not exceed the eligibility thresholds on an annual basis.
- Maintain annual records of production/usage data necessary to calculate emissions.
- Follow operation and maintenance procedures for all air pollution control devices and associated monitoring equipment.
- Keep records of pollution control device operating parameters.
- Meet the organic compound limitations for process lines in [s. NR 424.03\(2\) or \(3\), Wis. Adm. Code](#).
- Meet all other [state](#) and federal air pollution requirements that apply to the facility.
- Submit annual compliance certification/monitoring report and report emissions to the [air emission inventory](#) (AEI) each year.

¹ *Surrounding buildings include all buildings located within a circle around the building with the stack, the radius of which is 5 times the height of the building.*

Is there a downside to a registration permit?

Yes. The permit does not list all the federal and state air pollution requirements that apply to a facility. It is up to the permitted facility to determine what these are. However, the Printers' Environmental Compliance Assistance Workbook and Self-Certification Checklist that are part of DNR's Environmental Results Program are available to help facilities determine what their applicable requirements are and how to comply with them. These files can be found on the Environment tab on the [Printer Portal](#) webpage.

What are the next steps?

Complete [application](#) form 4530-172 for coverage under the Type C ROP for Printers. The DNR has 15 days to review each application and either grant or deny coverage or ask for more information.

A complete application ensures the DNR is able to quickly complete the review. The ROP-C application guide (AM-582) walks through each of the application form questions and offers examples or explanations of how a facility might respond. In addition, the facility can prepare for operating under ROP-C coverage by reviewing the ROP compliance checklist (AM-519).

Once a facility is granted coverage under the ROP-C, the ROP compliance checklist should be completed if not already done. Another step to help the facility maintain compliance through the transition to ROP coverage, is to review the ROP compliance certification form (form 4530-178) that will be completed and submitted by March 1 each calendar year following coverage.

For more information:

- For more information on registration permits visit the ROP-C tab on the [Registration Permit Options](#) webpage.
- Contact the Registration Permit Coordinator at DNRamROPSairpermit@wisconsin.gov with questions.
- For additional assistance contact the Small Business Environmental Assistance Program (SBEAP) at DNRSMBusiness@wisconsin.gov.

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Table 1: Emission units not subject to certain requirements

<ol style="list-style-type: none"> 1. Convenience space heating units with heat input capacity of less than 5 million Btu per hour that burn gaseous fuels, liquid fuels or wood 2. Convenience water heating 3. Maintenance of grounds, equipment and buildings, including lawn care, pest control, grinding, cutting, welding, painting, woodworking, general repairs and cleaning, but not including use of organic compounds as cleanup solvents 4. Boiler, turbine, generator, heating and air conditioning maintenance 5. Pollution control equipment maintenance 6. Internal combustion engines used for warehousing and material transport, forklifts and courier vehicles, front end loaders, graders and trucks, carts and maintenance trucks 7. Fire control equipment 8. Janitorial activities 9. Office activities 10. Fuel oil storage tanks with a capacity of 10,000 gallons or less 11. Stockpiled contaminated soils 12. Demineralization and oxygen scavenging of water for boilers 13. Purging of natural gas lines 14. Particulate matter from natural gas combustion in press dryers, control device, and other heating units so long as fuel usage or heat input capacity caps are met 15. Aerosol cans 16. Pad printing 17. Pre-press equipment, such as: photo-processing, typesetting, or image-setting equipment 18. Proofing systems utilizing water-based, ink jet, dry toner, or dye sublimation or proof press designed to evaluate product quality 	<ol style="list-style-type: none"> 19. Plate-making equipment or screen preparation activities utilizing water-based developing solutions 20. Equipment used to make blueprints 21. Cold cleaning manual parts washers with less than 10 square feet of surface area 22. Dry toner or other digital presses that apply water-based inks 23. Substrate finishing activities which involve paper folding, cutting, folding, trimming, die cutting, embossing, foil stamping, drilling, saddle stitching, sewing, perfect binding, vacuum forming or other activities that do not generate VOCs and whose particulate emissions are vented inside the facility 24. Adhesive application activity involving hot melt, extrusion, catalyzed solvent-less, or water-based adhesives 25. Pneumatic system for collecting paper/film/paperboard scrap from cutting operations 26. Any emission unit, operation, or activity that has, for each air contaminant, maximum controlled emissions that are less than the level specified in Table 3 of ch. NR 407, Wis. Adm. Code. Multiple emissions units, operations, or activities that perform identical or similar functions shall be combined for the purposes of this determination. 27. If the maximum controlled emissions of any air contaminants listed in Table 3 of ch. NR 407, Wis. Adm. Code, from all emission units, operations or activities at a facility are less than 5 times the level specified in Table 3, for those air contaminants, any emission unit operation or activity that emits only those air contaminants
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Table 2: Air Pollution Control Device Efficiencies*

Control Device	Overall Control Efficiency for Total Enclosure			Overall Control Efficiency for Hoods		
	PM	PM ₁₀ and PHAP**	VOC and VHAP**	PM	PM ₁₀ and PHAP	VOC and VHAP
Low efficiency cyclone	40%	20%	-	32%	16%	-
Medium efficiency cyclone	60%	40%	-	48%	32%	-
High efficiency cyclone	80%	60%	-	64%	48%	-
Wall filters (including paint overspray filters and rotary drum filters)	95%	95%	-	76%	76%	-
Fabric filters and HEPA filters (e.g., baghouse, cartridge collectors)	98%	92%	-	78%	73%	-
Thermal oxidizers	-	-	90%	-	-	76%
Catalytic oxidizers	-	-	90%	-	-	76%
Condenser	-	-	70%	-	-	56%
Biofilter	-	-	80%	-	-	64%

* Total enclosure means 100% capture efficiency, and hood capture means < 100% capture efficiency. The overall control efficiency is calculated by multiplying your capture and control efficiencies.

** VHAP = Volatile hazardous air pollutant, PHAP = Particulate hazardous air pollutant