Running a Print Shop?
Know Your Ohio EPA Regulations

If you run a print shop, it's important for you to know the environmental regulations that may apply to your business. Many different types of printers are subject to Ohio EPA's regulations, including lithographic, flexographic and screen printers. Under Ohio EPA regulations, you may be required to get permits for air and wastewater discharges. You may also be required to notify Ohio EPA of your hazardous waste generator activities or to complete other reports. Complying with some regulations, such as getting an air or wastewater permit, may take some time. So, the earlier you look into your responsibilities under the rules, the better.

This fact sheet summarizes some of the major Ohio EPA requirements that could apply to your print shop. It provides a starting point for identifying areas where your business might be subject to regulation. It may not cover every environmental requirement and should not be used as your sole source of information on Ohio EPA regulations.

Air Pollution Permits and Regulations

You may be required to obtain air permits for your presses, depending on your operations and material usage. Potential sources of air pollution at print shops include materials that contain volatile organic compounds (VOCs) such as:

- inks (including some water-based inks);
- coatings;
- adhesives;
- fountain solution;
- clean-up chemicals.

> Qualifying for an Ohio EPA Air Pollution Permit exemption does not relieve a print shop of record-keeping requirements. Accurate record keeping is required to demonstrate that you meet and comply with the exemption regulations. Stating that you meet an exemption does not mean you may operate free of Division of Air Pollution Control oversight. You must be able to back up your claim with the appropriate documentation.

In lieu of obtaining air permits, printing facilities may demonstrate that they qualify for an Ohio EPA exemption from permitting.

The following is a list of exemptions that print shops may qualify for:

- Non-heatset or sheet-fed presses that have a potential to emit fewer than three tons per year of organic compounds (OCs), which includes volatile organic compounds (VOCs). See *OAC 3745-31-03(A)(1)(s)* and Ohio EPA *Engineering Guide #68* for more information.
- De minimis is a permit exemption for small air pollution sources. These sources are exempt if they emit fewer than 10 pounds per day of any criteria pollutant such as particulate matter, OCs, sulfur dioxide, etc., and fewer than 2,000 pounds per year of hazardous air pollutants. See *OAC 3745-15-05*.
- Permit-by-Rule for Small/Midsize Printing Facility. This streamlined option covers all press operations and requires notification to Ohio EPA plus simple record-keeping and operating practices. See OAC 3745-31-03(A)(4)(k or l) (*epa.ohio.gov/portals/27/pbr/pbrprinting.pdf*)

If a print shop does not qualify for one of the exemptions listed above, the facility will need to submit a Permit-to-Install/Permit-to-Install and Operate (PTI/PTIO) application to get air permits for the presses. The permits will establish emission limits for VOCs and will also require record keeping and reporting of material usage or production rates.

If a PTI/PTIO is needed, requirements for ink VOC content, add-on control equipment, operating conditions, and recordkeeping are derived from the following regulations of the Ohio Administrative Code (OAC):

OAC 3745-21-09(Y) – Flexographic, packaging rotogravure, and publication rotogravure printing

OAC 3745-21-22 – Lithographic and letterpress printing (Cleveland and Akron areas only)

Running a Print Shop? Know Your Ohio EPA Regulations

The applicability and requirements of each regulation vary depending on the county in which the printing facility is located, the level of emissions, press size, and other conditions. At this time, Ohio EPA does not have similar state regulations for digital or screen printing processes.

Printing facilities emitting 100 tons per year or more of VOC, or 10 tons per year or more of a single hazardous air pollutant (HAP), or 25 tons per year or more of combined HAPs are classified as "major sources" that require Title V permits through Ohio EPA. Facilities needing Title V permits may also be subject to U.S. EPA regulations governing publication rotogravure (*NSPS 40 CFR 60, Subpart QQ*), or publication/packaging rotogravure and wide-web flexography (*NESHAP 40 CFR 63, Subpart KK*). Contact your *Ohio EPA district office or local air agency* for more information on which provisions of these rules apply to your printing facility.

Managing Hazardous Wastes

Any company that generates a waste must determine if that waste is a hazardous waste. Wastes that are ignitable, corrosive, reactive or toxic are defined as characteristic hazardous wastes. In addition, there are specific lists of hazardous wastes in Ohio EPA's regulations. If you have a waste that possesses a characteristic or is on one of lists, then your waste is a hazardous waste. Many print shops generate hazardous wastes. Some of the common hazardous wastes generated include:

- waste inks and adhesives;
- spent process chemicals such as washes and alcohol;
- spent cleaning solvents;
- solvent contaminated wipers;
- spent film or plate processing chemicals;
- used fluorescent bulbs (containing mercury).

If you need more information on how to identify hazardous waste, refer to Ohio EPA's fact sheet *Identifying Your Hazardous Waste*.

If your business generates hazardous waste, you are required to follow Ohio's hazardous waste regulations. These regulations include properly managing your hazardous waste on-site and keeping certain records. Hazardous waste must be sent to a permitted hazardous waste facility for treatment or disposal and CANNOT be disposed of in your trash dumpster. In addition, if your company generates more than 220 pounds (100 kilograms) of hazardous waste in a month, you must obtain a hazardous waste generator identification number from Ohio EPA. A permit is not required to generate hazardous waste.

Wastewater

Many print shops generate industrial wastewater from film processing, plate processing, screen reclamation, equipment cleaning, floor washing and other sources. Different requirements apply to industrial wastewater depending upon if your print shop has a direct discharge or an indirect discharge. If your print shop is connected to a public wastewater treatment plant (POTW), you may be able to discharge your process wastewater to the treatment plant. Before you discharge wastewater to the POTW, you need to contact the POTW to see if they can handle the type of wastewater your shop will generate. Depending on the size and nature of your business, you may be required to get a permit before you can discharge your wastewater to the POTW.

It is important to know that Ohio EPA's regulations do not allow for the discharge of process wastewater or chemicals into an on-site sewage treatment system, like a septic tank and leach field. Discharging chemicals into an on-site septic system

Running a Print Shop? Know Your Ohio EPA Regulations

can kill the helpful bacteria that break down sewage wastes. In addition, chemicals can leach from the system into nearby ground water.

If you want to run a print shop from a business location that is connected to an on-site sewage treatment system, you must install a holding tank and have your process wastewater hauled off-site for disposal. A holding tank requires a permit-to-install (PTI) from Ohio EPA's *Division of Surface Water*. The PTI must be prepared by a professional engineer.

You can contact your local *Ohio EPA district office, Division of Surface Water* for more information on the wastewater discharge and permitting requirements. You can contact your local water or utilities department to get contact information for your POTW.

Drinking Water

If your business has its own well that supplies water for drinking, cooking, washing hands, washing dishes or bathing, it may meet Ohio EPA's definition of a public water system. A public water system is one that has at least 15 service connections or regularly provides water to 25 or more people for 60 or more days a year. Under these regulations, you must submit plans for installing or changing a well. In addition, well systems must be tested periodically and the test results reported to Ohio EPA. Contact your local *Ohio EPA district office, Division of Drinking and Ground Waters* for more information on well system requirements.

Storm Water

Activities, such as material handling and storage, equipment maintenance and cleaning, industrial processing or other operations that occur at industrial facilities are often exposed to storm water. The runoff from these areas may discharge pollutants directly into nearby waterbodies or indirectly via storm sewer systems, thereby degrading water quality.

A printing facility is subject to Ohio EPA's storm water program and must obtain a *National Pollutant Discharge Elimination System (NPDES)* permit unless exempt. If raw materials, manufacturing processes and wastes are managed in ways that prevent exposure to storm water, your facility may qualify for no exposure certification and therefore not require an NPDES permit. For more information, refer to Ohio EPA's fact sheet *Does My Small Business Need a Storm Water Permit?* or the Ohio EPA's *Division of Surface Water storm water webpage*.

Pollution Prevention

You can likely save money and reduce your regulatory burdens if you find ways of preventing pollution. These can include recycling or reducing waste streams and emissions. Pollution prevention options for print shops can include:

- using non-VOC or low-VOC fountain solution;
- using non-hazardous solvents and cleaning materials;
- using inks, coatings and adhesives with low VOCs;
- using good house-keeping practices to minimize spills and leaks;
- recycling materials when possible.

Industry Resources

The *Printers' National Environmental Assistance Center (PNEAC)* has a lot of helpful information about environmental regulations, pollution prevention techniques, energy efficiency training, and initiatives such as the Great Printers Project, P2PRINT, Design for the Environment, etc. All information is designed specifically for the printing industry.

Need More Help?

If you have questions or need help in understanding Ohio EPA's regulations, you can contact Ohio EPA's Office of Compliance Assistance and Pollution Prevention (OCAPP) for help. OCAPP is a non-regulatory Ohio EPA office with a goal of helping small businesses comply with environmental regulations and permitting requirements. For more information, contact OCAPP at (800) 329-7518, or visit our webpage at *epa.ohio.gov/ocapp/*.