Running a Crushed Stone or Sand and Gravel Pit? Know Your Ohio EPA Rules

Rock, crushed stone and sand and gravel are natural aggregate products used for a variety of applications including road and utility construction, backfill, erosion control and slope protection. If you are running an aggregate processing facility, you should be aware of Ohio EPA’s rules that may apply to your activities. Common aggregate processing operations including crushing, screening, size classification, material handling and storage operations produce air pollution and may require an air permit from Ohio EPA. Additionally, Ohio EPA’s wastewater, storm water, waste programs and drinking water program rules may also apply.

This fact sheet highlights some of the major Ohio EPA requirements that may apply to your aggregate processing facility. It may not cover every requirement, but it will provide a starting point in identifying Ohio EPA rules that your operations may be subject to.

**Air Pollution Requirements**

Many of the activities typically performed at aggregate processing facilities are sources of air pollution. Activities such as material crushing, screening, handling and storage can be significant sources of particulate matter, or dust, which is regulated by Ohio EPA. Paved and unpaved roadways, parking areas and fuel-burning equipment can also be regulated as air pollution sources. In Ohio, all sources of air pollution require an air permit unless they are specifically exempt. It is very important that you identify all air pollution sources at your facility and determine if you need an air permit.

**Is my facility required to get an air permit?**

Not all air contaminant sources need a permit. If you have equipment and operations at your facility that are sources of air pollution, it is helpful to first consider whether any of your emission sources are exempt from air permitting. Currently there are several scenarios in which an air emission source could be exempt from air permitting: your source meets a permanent exemption; your source meets a permit-by-rule exemption; or your source meets the de minimis exemption.

**Permanent Exemptions**

Ohio EPA has determined that certain types of equipment and industrial activities do not require air permits. These permanent exemptions are listed in the regulations and include a variety of emission sources. Some common aggregate processing facility sources that may be exempt include:

- unpaved roadways and parking areas that meet specific mileage and emission criteria;
- paved roadways and parking areas that meet specific mileage and emission criteria;
- certain non-road engines; and
- fuel storage tanks that meet specific material and capacity requirements.

In most cases, sources must meet specific criteria to qualify, and there can be some exceptions. Therefore, it is important to read the permanent exemption language carefully and be sure that your source qualifies. The complete list of permanent exemptions is in Ohio Administrative Code (OAC) rule 3745-31-03. If you have a source that is permanently exempt, you are not required to notify Ohio EPA. However, emissions from exempt sources must be considered when calculating facility-wide emissions to determine regulatory applicability (for example, Title V).
Permit-by-Rule Exemptions

Other sources may qualify for an air permit exemption known as Permit-by-Rule or PBR. The PBR exempts the air emission source from the formal paperwork permitting process. Monitoring, record keeping and reporting requirements still apply. Currently, there are three PBRs that you may apply to your operations. These include: **PBR for crushing and screening plants**, **PBR for unpaved roadways and parking areas** that do not meet the permanent exemption requirement; and **PBR for paved roadways and parking areas** that do not meet the permanent exemption requirements.

If your crushing/screening operations or facility roadways qualify for the PBR exemption, simply complete and submit the one-page notification to your local air agency or Ohio EPA district office.

De Minimis Exemption

In most cases, if an air emission source emits less than ten pounds per day of air pollutants and less than one ton per year (2,000 pounds) of hazardous air pollutants, then it is considered de minimis and does not require an air permit. Whether a unit is de minimis usually depends on factors such as the size of the equipment and type of materials used (for example, low-VOC or water-based coatings).

To determine if a source is de minimis, you must first calculate emissions from the source. Ohio EPA has developed a *de minimis fact sheet* that explains step-by-step how to calculate your emissions. If you determine you have a de minimis source, you are required to keep paperwork to prove the unit is de minimis. There are additional conditions in the de minimis rule (OAC rule 3745-15-05) that you must comply with.

How do I get an air permit?

If you determine that the air pollution source at your facility is not exempt, an air permit (known as a Permit-to-Install and Operate, or PTIO) is required. The PTIO acts as both the permit-to-install and the permit-to-operate the emissions source. To obtain a PTIO, you must complete a permit application and submit it to your Ohio EPA district office or local air agency. Air permits will be issued for each source and will usually include emission limits, monitoring, record keeping and reporting requirements. Once you get a permit, it is very important that you read and understand the terms and conditions. If you are already operating your business and discover that you need an air permit, you must still complete and submit a PTIO application.

Reasonably Available Control Measures (RACM)

Ohio EPA's air pollution rules require that crushed stone/sand and gravel plant operators control dust by using what is called Reasonably Available Control Measures or RACM. Some common examples of RACM include: water sprays or enclosures on crushers and screens; chemical dust suppressants on roadways; telescopic chutes for truck loading; and baghouse- or cyclone-type dust collectors on other operations. Ohio EPA rules also limit the visible thickness of dust plumes (a term called opacity) and the amount of time emissions can be seen by the naked eye. U.S. EPA also has additional requirements for the dust emissions from some sand, gravel, crushed stone, asphalt and concrete processing plants. The federal requirements, identified in 40 CFR Part 60, Subpart OOO, require notification, record keeping, emission limits and testing requirements. Contact your local Ohio EPA district office, Division of Air Pollution Control or call Ohio EPA’s confidential assistance hotline at 800-329-7518 for more information about your air pollution permit requirements.
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Wastewater Requirements
It is common for aggregate processing plants to generate wastewater from wash screen operations, wet processing and vehicle/truck wheel wash stations. Wastewater generated from these types of processes is considered industrial wastewater and is regulated by Ohio EPA. If you plan to discharge to your industrial wastewater to a local wastewater treatment plant (called a publicly owned treatment works, or POTW), it is important that you contact them to ensure they’ll accept your wastewater and to see what requirements they may have for your discharge. If your wastewater discharges to a stream, river, lake, pond, marsh or any other waters of the state, then you must obtain a National Pollutant Discharge Elimination System (NPDES) permit from Ohio EPA. Additionally, an NPDES permit is required if your wastewater enters a ditch, storm sewer or other conveyance system that leads to a waterway. Additionally, wastewater should not be discharged directly onto the ground. If you want to install a holding tank or other wastewater collection, storage or treatment unit, a permit-to-install (PTI) from Ohio EPA is required. Contact your local Ohio EPA district office, Division of Surface Water for more information about your wastewater requirements.

Storm Water Requirements
Storm water discharges are generated by runoff from land and impervious areas such as paved streets, parking lots and building rooftops during rainfall and snow events. Storm water often contains pollutants in quantities that could adversely affect water quality. Most storm water discharges are considered point sources and require coverage by an NPDES permit. There are two storm water permitting options: apply for an individual NPDES permit for your storm water discharge, or, for facilities that meet certain requirements, a general permit. To obtain coverage under the NPDES general industrial storm water permit, you will need to submit an Industrial Notice of Intent (NOI) form and application fee to Ohio EPA. You must also prepare a comprehensive storm water pollution prevention plan (known as an SWP3) before submitting your NOI. Contact your local Ohio EPA district office, Division of Surface Water for more information about your storm water requirements.

Drinking Water Requirements
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 rules, you must submit plans for installing or changing a well. Additionally, 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 about well system requirements.

Waste Management Requirements
You may not be aware that some of the wastes you generate are considered hazardous waste and require certain management and disposal methods. Some common hazardous wastes generated at aggregate facilities include waste antifreeze contaminated with metals, spent lead-acid batteries, solvents and used oil from equipment and vehicle maintenance and spent fluorescent bulbs (waste lamps) from office areas. If your facility generates a hazardous waste, you must manage and dispose of that waste according to Ohio’s hazardous waste rules. Your facility likely also generates other non-hazardous wastes such as scrap tires, scrap metal and non-hazardous antifreeze. Although considered non-hazardous, many of these wastes still have specific handling, transportation and disposal requirements. Contact your local Ohio EPA district office, Division of Environmental Response and Revitalization for more information about hazardous waste management requirements and the Division of Materials and Waste Management for more information about solid waste management requirements.

Need more help?
If you have questions or need help understanding Ohio EPA’s rules, you can contact Ohio EPA’s Office of Compliance Assistance and Pollution Prevention (OCAPP). OCAPP is a non-regulatory and confidential office within Ohio EPA whose goal is to help you comply with environmental regulations and permitting requirements. For more information, contact OCAPP’s hotline at (800) 329-7518, or visit OCAPP’s webpage at epa.ohio.gov/ocapp.
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Ohio EPA District Offices

Central District Office
50 W. Town St., Suite 700
Columbus, OH 43215
(614) 728-3778
Fax: (614) 728-3898
Non-Emergency Complaints: (800) 686-2330
epa.ohio.gov/districts.aspx

Northeast District Office
2110 E. Aurora Rd.
Twinsburg, OH 44087
(330) 963-1200
Fax: (330) 487-0769
Non-Emergency Complaints: (800) 686-6330
epa.ohio.gov/districts.aspx

Northwest District Office
347 N. Dunbridge Rd.
Bowling Green, OH 43402
(419) 352-8461
Fax: (419) 352-8468
Non-Emergency Complaints: (800) 686-6930
epa.ohio.gov/districts.aspx

Southeast District Office
2195 Front St.
Logan, OH 43138
(740) 385-8501
Fax: (740) 385-6490
Non-Emergency Complaints: (800) 686-7330
epa.ohio.gov/districts.aspx

Southwest District Office
401 E. Fifth St.
Dayton, OH 45402
(937) 285-6357
Fax: (937) 285-6249
Non-Emergency Complaints: (800) 686-8930
epa.ohio.gov/districts.aspx

Toll-free numbers are for citizens with questions or concerns about environmental issues. The regulated community should use the business line for routine business. Spills and emergencies should be reported to (800) 282-9378.