

OHIO EPA AND DATA CENTERS

Role and Responsibilities

Ohio Environmental Protection Agency

Overview

The role of the Ohio Environmental Protection Agency (Ohio EPA) is to protect and improve air quality, water quality, and waste management in Ohio. To do so, Ohio EPA issues permits that regulate and limit pollutants that are released into the environment.

Ohio EPA's Data Center Regulatory Role

Ohio EPA regulates, monitors, and limits data centers' air emissions and wastewater discharges.

As with all industries, data centers must meet strict pollution regulations set by the state and federal government that are protective of the environment and public health. If a company cannot meet these regulations, Ohio EPA is prohibited from issuing permits. However, if a company can meet these regulations, Ohio EPA is required to approve the permits and provide ongoing oversight to ensure pollution stays within these regulations.

Ohio EPA does not have authority over where data centers are located.







Air Quality

Ohio EPA's Division of Air Pollution Control (DAPC) issues air permits that set limits on the amount of air pollution a data center can emit. DAPC also regularly inspects and monitors data centers to ensure facilities adhere to state and federal law.

Emergency Backup Generators

Most data centers operate on electricity from Ohio's power grid but maintain emergency backup generators in case of power loss. Although data center emergency generators typically only operate a few hours per month to maintain operability, they still require an air permit for the occasions the generators are in use.

All data centers must meet strict standards to ensure air pollution from emergency generators does not exceed the amount allowable under state and federal regulations.

Dedicated Power Plants

In some circumstances, a data center may operate on electricity from a dedicated, nearby power plant instead of using power from Ohio's power grid. Ohio EPA regulates these power plants in the same way all power plants are regulated. A data center power plant must abide by air and water permit requirements that keep pollution and discharge levels below state and federal standards.

Water Quality

Ohio EPA has two divisions focused on water quality:

- The Division of Surface Water (DSW) regulates the construction and operation of data centers through several different permitting programs
- The Division of Drinking and Ground Waters (DDGAW) regulates public water systems and has limited authority over non-potable wells

These divisions ensure that economic development projects, including data center projects, are developed and operated in ways that are protective of Ohio's water quality.

Construction and Storm Water

Similar to other large construction projects, data center construction may disturb large areas of land. Ohio EPA's Stormwater Program in DSW oversees construction projects to help prevent mud, sediment, and pollutants from washing into nearby waterways. Under the program, any construction project that disturbs one acre or more of land must:

- Obtain a Construction Stormwater General Permit
- Create a Stormwater Pollution Prevention Plan (SWP3) that explains how sediment and erosion will be controlled during construction
- Submit a Notice of Intent (NOI) to Ohio EPA and receive an approval letter before beginning work

Although Construction Stormwater General Permits are temporary and will expire once construction is complete, data centers are still required to manage stormwater after construction ends as part of their SWP3. This includes maintaining stormwater ponds or other systems designed to reduce pollution.

Streams, Wetlands, and Lakes

Because construction projects may affect nearby streams, wetlands, or lakes, state and federal laws require these impacts to be minimized and mitigated before work begins.

If a project will discharge or place fill or dredge material into any stream, river, wetland, or other waterbody, a federal or state permit is required to protect water quality and aquatic habitats. Ohio EPA and federal agencies review these projects to help protect water resources.

Mitigation may also be necessary to offset any impacts caused by development.

When mitigation is required to restore, create, or protect water resources, Ohio EPA conducts site visits and evaluates performance metrics to ensure required mitigation is properly implemented.

The amount of mitigation required depends on the quality of the water resource. Higher-quality wetlands or streams generally require more mitigation. Applicants must pay for wetland or stream mitigation at a local mitigation bank or in-lieu fee program or conduct an approved wetland or stream mitigation project that will require subsequent monitoring, sometimes up to 10 years.



Wastewater and Cooling

If a data center does not connect to a public sanitary sewer, an Ohio EPA National Pollution Discharge Elimination System (NPDES) permit is required to discharge wastewater into a stream or river.

Wastewater can come from:

- Cooling systems
- Boiler systems
- Air compressors
- Water treatment systems

NPDES permits require regular monitoring of the wastewater discharge and include limits and conditions that are protective of human health and the environment. Any entity that releases wastewater into rivers or streams must follow Ohio's Water Quality Standard rules:

- Wastewater cannot harm fish or wildlife
- Streams must remain safe for recreation
- Water sources used for drinking water must be protected



Waste Management

Sanitary wastewater should go to a public sewer when possible. If there is no sewer nearby, the facility must treat the wastewater on-site. Ohio EPA approval is required before new wastewater treatment systems are created and require a wastewater permit-to-install.

Drinking and Groundwater

If a data center needs more potable water (drinking water) than the local water system can provide, public water systems may need to be developed or expanded to meet demand. Before any work begins, new or expanded public water systems require approval from Ohio EPA. This ensures the water people drink will be safe, clean, and in compliance with the Safe Drinking Water Act.

The agency's Division of Drinking and Ground Waters (DDAGW) oversees drinking water provided through existing or new public water systems. In limited capacity, Ohio EPA may also review non-potable (non-drinking) water wells to ensure compliance with well-siting rules.