

Ohio EPA Oversight of the Nuclear Plants

Ohio EPA is the environmental member of the [Utility Radiological Safety Board](#) (URSB), which was established by Ohio Revised Code (ORC) 4937. To support the goals of the URSB, monthly, annual, and special operating reports on air, water, and hazardous waste generation from the nuclear plants in Ohio are collected by Ohio EPA. These reports are evaluated for indications of, and trends in, environmental compliance and broad operating patterns that may affect safety. The Ohio EPA URSB staff reports this information on a monthly basis and a synopsis is prepared for the URSB meetings on a quarterly basis. In addition, information from the Nuclear Regulatory Commission (NRC) site that tracks [Reactor Status](#) and [Event Reports](#) is included. The types of reports received directly by Ohio EPA are explained below. Reported violations of these permits are included in the monthly report and can be found in that [Resource Section](#).

Water Discharges

Ohio EPA receives and evaluates the monthly [wastewater discharge reports](#) submitted under [National Pollutant Discharge Elimination System](#) (NPDES) permits administered by Ohio EPA. These permits establish limits on discharges of: hydrocarbons, metals, treatment chemicals, dissolved oxygen, and waste heat from the plant process effluent out falls.

Violations of the NPDES permits by the nuclear plants are infrequent, maybe happening once or twice a year. They are normally for a pH or water treatment chemical, such as chlorine, violation.

Air Emissions

The only routine air emissions associated with the operation of a nuclear power plant are the periodic release of radioactive gases removed from the primary coolant. These gases pass through a series of filters and storage devices to remove most of the radioactivity through normal decay. These emissions are regulated by the [Nuclear Regulatory Commission](#) (NRC) instead of the State.

The only Ohio EPA air permits issued to the Davis-Besse or Perry nuclear plants are for emissions during testing of the emergency diesel generators (EDGs), and the startup boilers which are not used during normal operations. The EDGs provide power to operate plant equipment in case the normal plant power supply is lost.

Because there are no conventional air pollution sources in normal operation at nuclear power plants, no greenhouse gasses are released by these plants by the generation of electric power.

Air emission violations by nuclear plants are extremely uncommon. Those that do occur are usually a smoke report from testing the diesel generators during their normal maintenance.

Solid and Hazardous Waste

Both the Davis-Besse and the Perry plant have a hazardous waste generator identification number. Any facility generating more than 200 pounds of hazardous waste a month must register and obtain this identification number. Hazardous waste is not radioactive waste, that is a different category.

A generator's identification number allows the plant to store and manifest hazardous waste for shipment and disposal offsite. Holders of a hazardous waste generator's identification number

must submit an annual report each calendar year to Ohio EPA's, [Division of Materials and Waste Management](#) by March 1 of the following year. These reports detail the types of waste generated and the quantities involved. These reports also list where each waste is sent for treatment, storage or disposal.

Hazardous waste violations are infrequent at nuclear power plants.

Nuclear power plants have many of the hazardous wastes normally associated with industrial processes, such as; sludges, cleaners and oils. The plants also have [radioactive wastes](#) which are also defined as hazardous in OAC 3745 Sections 50 and 51. These are called mixed wastes. Mixed wastes must be sent to a special disposal facility permitted to handle mixed wastes.

Low level radioactive wastes (LLRW) are non-chemical hazards contaminated with radioactive material, but not other specific radioactive waste. LLRW is currently treated by compacting for temporary storage until a LLRW repository is ready to accept the material. The generation of LLRW from nuclear plants has been decreasing in both volume produced and total radioactivity. This is occurring primarily due to improvement in radiological work practices involving tools and disposable supplies and by increasing costs of LLRW waste disposal.

Community Right-To-Know

Under State and Federal Law, any releases of oil, a hazardous substance, or a hazardous waste in excess of the "reportable quantity" must be reported. Under [Section 3750.06](#) of the Ohio Revised Code, any release of a hazardous waste in excess of one pound must be reported if there is a detectable quantity sent off the site. There have been no right-to-know release reports made by the Ohio nuclear plants.

Under Section 3750.08 of the Ohio Revised Code any industry that stores more than 10,000 pounds of a hazardous material must file a chemical inventory form. This form must be updated and filed by March 1 each year with the state, county, and local fire department. These forms are used in the chemical emergency planning process.

Davis-Besse and Perry have filed the required annual chemical inventory reports.

Water Quality Monitoring and Drinking Water

The Beaver Valley Power Station is located on the Ohio River just east of the Ohio-Pennsylvania border. Both the Davis-Besse and Perry Nuclear Power Plants are located adjacent to Lake Erie. In Michigan the Fermi II plant is located next to Lake Erie near the city of Monroe.

National drinking water standards have been established to ensure that our drinking water does not contain unhealthy levels of contaminants. Contamination standards for inorganic chemicals, volatile organic chemicals, pesticides and herbicides are expressed as maximum contaminant limits (MCL). Public water providers must test their water regularly and submit the results to Ohio EPA. Each year, public water providers have to test their raw and finished water for 83 substances. The level of radioactivity is part of these tests.

There have been no MCL exceedances at the power plant systems or in waters downstream from the power plants.