Fact Sheet

U.S. DEPARTMENT OF ENERGY | Legacy Management

Pinellas County, Florida, Site

A CERCLA/RCRA site

This fact sheet provides information about the **Pinellas site**. Long-term stewardship responsibilities for this site are managed by the **U.S. Department of Energy Office of Legacy Management** under the **Resource Conservation and Recovery Act**.

Site Information and History

The Pinellas County site is located in Largo, Florida, about 10 miles north-northwest of St. Petersburg and across Tampa Bay from the city of Tampa. General Electric Company constructed the original Pinellas Plant in 1956 and sold the facility to the U.S. Atomic Energy Commission, a predecessor agency of the U.S. Department of Energy (DOE), the following year. GE continued to operate the plant under a 25-year contract. The facility developed and manufactured components for the nation's nuclear weapons program.

The Pinellas Plant ceased operations in 1994 and DOE sold the facility to the Pinellas County Industrial Council in 1995. The sales contract included clauses to ensure continued compliance with federal, state, and local regulations while DOE remediated the site. In 1999, the Pinellas County Industrial Council was dissolved, and ownership of the facility, now called the Young - Rainey Science, Technology, and Research (STAR) Center, changed to the Pinellas County government. The STAR Center houses more than 20 businesses that include a variety of administrative and light manufacturing operations.

As a result of historical waste disposal practices and leaks during DOE operations, portions of the subsurface and the shallow surficial aquifer were contaminated with organic solvents and metals. The contaminated areas are designated as solid waste management units (SWMUs). A total of 17 SWMUs were identified and investigated at the Pinellas site. DOE recommended, and the U.S. Environmental Protection Agency (EPA) Region IV and Florida Department of Environmental Protection (FDEP) approved, no further action decisions for 15 of these SWMUs. Two of the SWMUs, the Northeast Site and the Wastewater Neutralization Area, were conditionally closed in July 2016. Another SWMU, the 4.5 Acre Site, was closed with no conditions in September 2019.

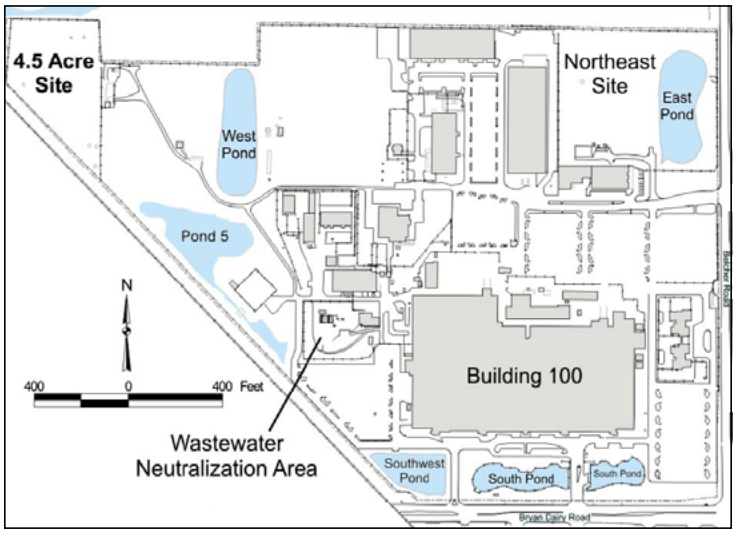
The two remaining SWMUs — the Old Drum Storage Area and the Industrial Drain Leaks–Building 100 — have contamination in the surficial aquifer groundwater at levels that exceed cleanup standards. These two SWMUs are collectively known as the Building 100 Area. The DOE Office of Legacy Management (LM) is responsible for administration of DOE activities at the STAR Center.

Building 100 Area

Building 100, the largest building at the STAR Center, covers approximately 11 acres. During the period of DOE operations, the building was used for offices, laboratories, and production facilities. Groundwater contamination at the Building 100 Area resulted from historical leaks of underground drain lines located beneath the building and from leaks or spills at the former drum storage pad near the northwest corner of the building. Groundwater contaminants of concern are trichloroethene, dichloroethene, vinyl chloride, and 1,4-dioxane. The drum storage pad was removed in 1983, and use of the underground drain lines was discontinued in 1989.

A groundwater extraction and treatment system operated at the Building 100 Area from 1997 to 2005. This system extracted contaminated groundwater through two recovery wells adjacent to the building and treated it with an air-stripper treatment system. Studies conducted in 2005 showed that the treatment system did not contribute significantly to plume containment or mass removal and it was shut down.

By 2012, additional monitoring identified that the groundwater plume extended offsite, with one leg of the plume extending to the south and one to the east. To address this contamination,



Solid Waste Management Units at the Pinellas County, Florida, Site.

DOE has used enhanced biodegradation to treat the volatile organic compounds (VOCs) in the contaminated groundwater plume, including the south and east plumes. Injection of emulsified soybean oil was conducted on the STAR Center property in 2014, on the off-site properties in 2015, and beneath the building in November 2015. Additional on-site and off-site bioinjection activities were completed in 2016, 2017, and 2019, and monitoring is ongoing. To date, these activities are successfully reducing VOCs in the groundwater and additional bioinjections may be conducted if data indicates a need.

Regulatory Setting

In 1987, EPA performed a Resource Conservation and Recovery Act facility assessment at the Pinellas site to gather information on potential releases of hazardous materials. In 1990, EPA issued a Hazardous and Solid Waste Amendments (HSWA) corrective action permit to DOE, enabling DOE to remediate the SWMUs.

In 2000, the state of Florida received HSWA authorization from EPA, and FDEP issued a new HSWA permit to DOE in 2002. Groundwater standards for the Pinellas site are the applicable FDEP cleanup target levels.

FDEP global Risk-Based Corrective Action (RBCA) regulations were codified in 2005, under Chapter 62–780, *Florida Administrative Code*. The purpose of this regulation is to apply the default cleanup target levels provided in Chapter 62–777 statewide. In 2007, FDEP issued a revised HSWA permit to the Pinellas site, which incorporated the global RBCA regulations. The current 10-year HSWA permit was reissued in 2021.

Legacy Management Activities

At the Pinellas site, LM is pursuing closure of the Building 100 Area under FDEP RBCA rules.

LM's primary responsibility at the Pinellas site is to maintain compliance with the HSWA corrective action permit. Activities include site inspections, groundwater monitoring, monitoring well maintenance, bioremediation, property owner support, and dewatering support. Annual reports are available electronically on the LM Pinellas public website at www.energy.gov/lm/pinellas-county-florida-site.

LM also works closely with the STAR Center and affected property owners during site activities to keep them informed.

CONTACT INFORMATION

IN CASE OF AN EMERGENCY AT THE SITE, CONTACT 911

LM TOLL-FREE EMERGENCY HOTLINE: (877) 695-5322

Site-specific documents related to the **Pinellas County, Florida, Site**, are available on the LM website at **www.energy.gov/lm/pinellas-county-florida-site**

For more information about LM activities at the Pinellas site, contact:
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