



## Ashtabula, Ohio

### A MED/AEC LEGACY SITE

This fact sheet provides information about the **Ashtabula site**. Long-term stewardship responsibilities for this site are managed by the **U.S. Department of Energy Office of Legacy Management** as a **Manhattan Engineer District/Atomic Energy Commission Legacy Site**.

### Site Information and History

The Ashtabula, Ohio, Site comprises 42.5 acres of privately owned land adjacent to the city of Ashtabula, about 55 miles east of Cleveland. From 1962 to 1988, Reactive Metals Inc. (RMI) operated a facility on the property that manufactured metallic uranium tubes and rods and experimental quantities of thorium metal for use in the Hanford, Washington, and Savannah River, South Carolina, weapons program reactors. The facility operated under contract to the U.S. Atomic Energy Commission and its successor agency the U.S. Department of Energy (DOE). RMI also extruded depleted uranium under a U.S. Nuclear Regulatory Commission (NRC) license and extruded nonradioactive materials, primarily copper-based, for the private sector.

RMI once operated a small wastewater evaporation pond near the northern boundary of the plant area for disposal of sodium nitrate solution, which also contained trace quantities of uranium and technetium-99 (Tc-99), a contaminant in recycled uranium. Trichloroethene (TCE) was used as a degreasing solvent at the plant from 1962 to 1966, and it is speculated that a single, unauthorized disposal of TCE occurred in the pond sometime before 1972.

The pond overflowed periodically, and contaminated pond water flowed through a swale and over an embankment to low-lying areas north of the main plant area, contaminating soils in these areas as well. The pond was closed in 1984.

RMI began environmental remediation after the plant closed in 1988. In December 2003, DOE elected to terminate the contract with RMI and issue a competitive bid for the remaining cleanup at the site. In September 2005 the contract was awarded to LATA-Sharp Remediation Services to plan and complete the remediation.

Site remediation was grouped into two hazard areas, designated Hazard Area 1 and Hazard Area 2. Hazard Area 1 comprised approximately 12 acres, and remediation required removal of soils, soil piles, structures, asphalt, and concrete infrastructure contaminated with uranium and Tc-99. Thirty-five buildings were either demolished or decontaminated to free-release criteria.

Hazard Area 2 was designated a waste management unit and consisted of the 1-acre location of the former evaporation pond. This area was the only location where groundwater contamination was confirmed. Groundwater contaminants included TCE and degradation products,

uranium, Tc-99, and nitrate. Cleanup in this area consisted of bioremediation and soil excavation to remove the source of groundwater contamination.

Remediation included excavation, transportation, and disposal of approximately 15,000 tons of low-level radioactive waste soil, more than 13,000 tons of low-level radioactive waste concrete debris, demolition and disposal of 12 contaminated structures, and excavation and disposal of about 4,500 tons of hazardous or mixed waste. All contaminated materials recovered during site remediation were shipped off-site to a licensed disposal facility.

Cleanup was completed in September 2006. The Oak Ridge Institute of Science and Education in Oak Ridge, Tennessee, performed an independent verification survey of the site and reviewed and concurred with the remediation contractor's final radiological survey status reports. Regulatory closure of the site was achieved when the Ohio Department of Health terminated the site license in January 2007.

## Regulatory Setting

NRC approved a decommissioning plan for the Ashtabula site in 1997. Pursuant to Section 274 of the Atomic Energy Act of 1954, a state may reach an agreement with NRC (and the state then becomes an Agreement State), allowing that state to regulate the use of the NRC-licensed radioactive materials within its borders. Decommissioning oversight for the Ashtabula site was transferred to the state of Ohio when the state became an NRC Agreement State in 1999.

The Ohio Department of Health regulated RMI's radioactive materials license and had approval authority to release the site once remediation criteria specified in the decommissioning plan had been met. The Ohio Environmental Protection Agency regulated RMI's Ohio hazardous waste permit and had oversight for the material, including groundwater, regulated under the Resource Conservation and Recovery Act. The radiological cleanup necessary to release the site for unrestricted use proceeded according to the requirements of Title 10 *Code of Federal Regulations*, Part 40, "Domestic Licensing of Source Material."

## Current Site Conditions

Final site remediation was completed in December 2006, and in January 2007 the Ashtabula site was released back to RMI for unrestricted use.

## Legacy Management Activities

Responsibility for maintaining historical records for the Ashtabula site transferred to the DOE Office of Legacy Management (LM) in 2010. No monitoring, maintenance, or site inspections are required for the site. LM's responsibilities consist of managing government-owned site records and responding to stakeholder inquiries.

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## 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 **Ashtabula, Ohio, Site** are available on the LM website at [www.energy.gov/lm/ashtabula-ohio-site](http://www.energy.gov/lm/ashtabula-ohio-site).


For more information about LM activities at the **Ashtabula, Ohio, Site**, contact:

**U.S. Department of Energy  
Office of Legacy Management  
2597 Legacy Way  
Grand Junction, CO 81503**

Email:


[public.affairs@lm.doe.gov](mailto:public.affairs@lm.doe.gov)

DOE Office of Legacy Management  
**(970) 248-6070**

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