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U.S. DEPARTMENT
of **ENERGY**

Office of Legacy Management



TOLEDO

★ COLUMBUS

OHIO

Toledo, Ohio | Site

A FUSRAP SITE

This fact sheet provides information about the **Toledo site**. Long-term stewardship responsibilities for this site are managed by the **U.S. Department of Energy Office of Legacy Management** under the **Formerly Utilized Sites Remedial Action Program**.

Site Information and History

The Toledo, Ohio, Site (formerly known as Baker Brothers, Inc.) is located at 2551–2555 Harleau Place in Toledo at the intersection of Harleau Place and Post Street. The site consists of several buildings and grounds situated approximately 0.25 miles east of Interstate Highway 75 and 0.25 miles west of State Route 24.

Under subcontract to the U.S. Army Corps of Engineers Manhattan Engineer District (MED), Baker Brothers, Inc., machined and shaped natural (neither enriched or depleted) uranium from processed uranium metals for both the Clinton Semi-Works in east Tennessee and the Hanford nuclear reactor complex in the state of Washington. The estimated amount of material machined at the Toledo site was between 90 and 300 tons. The primary radioactive material of concern was uranium-238. After the subcontract with MED was terminated in 1944, the site was decontaminated and determined to be in compliance with guidelines in effect at that time. In 1944, Baker Brothers assets were liquidated and the property was sold to two independent interests.

The U.S. Department of Energy (DOE) surveyed the Toledo site in 1989 and 1990 and identified localized areas of residual uranium contamination above applicable guidelines.

The site was included in the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1992.

When the northern portion of the property was re-sold in 1992, the new owner contacted DOE and inquired about the radiological status of the property. DOE subsequently learned that soil and debris potentially contaminated with residual uranium had been moved from the site to a 7-acre residential property at 4400 Piehl Road in Ottawa Lake, Michigan, approximately 15 miles northwest of Toledo, for use as fill material. This property (formerly known as the Ottawa Lake Vicinity Property) comprises one owner-occupied house, a barn, and a small, 0.4-acre pond. It was included in FUSRAP in 1992.

Remediation of the Toledo site was completed in September 1995 and consisted of: (1) south building floors, shelves, concrete floors, and a manhole cover; (2) north building floors, walls, overhead structures, and portions beneath the concrete floor; and (3) exterior soil, concrete bins, courtyard walls, a concrete pad, and manholes. Remediation techniques included high-efficiency particulate air vacuuming, use of hand tools, mechanical shot-blasting, mechanical grinding, cutting with pneumatic-powered saws, demolition, and excavation. Approximately 356 cubic yards of low-level

radioactive waste and 5 cubic yards of mixed waste were generated from the Toledo site.

At the former Ottawa Lake Vicinity Property, radioactively contaminated soil and debris were excavated using earthmoving equipment. Where access was limited, this material was removed manually. Main areas of contamination/excavation were a 2,200-square-yard section located south (the front) and east of the house, a 6-foot tall and 50-foot long L-shaped berm northwest of the house, and isolated spots (mostly near the berm). Approximately 1,920 cubic yards of contaminated material were removed and transported for disposal to a licensed disposal facility in Clive, Utah, including soils, gravel, asphalt, concrete debris, and organic material (e.g., grass, roots, stumps, and shrubbery).

Regulatory Setting

The U.S. Atomic Energy Commission (AEC), the predecessor agency to DOE, established FUSRAP in March 1974 to evaluate radioactive contamination at sites used in the development of the nation's nuclear weapons and atomic energy programs. DOE has the legislative authority under the Atomic Energy Act (AEA) of 1954, as amended, to perform radiological surveys, monitoring, and maintenance at sites used to support the nuclear activities of DOE's predecessor agencies. DOE also has legislative authority under the AEA to remediate FUSRAP sites identified as requiring some form of response action. In 1997, Congress transferred responsibility for FUSRAP site characterization and remediation from DOE to the U.S. Army Corps of Engineers. The DOE Office of Legacy Management (LM)

retains responsibility for long-term care of remediated FUSRAP sites. For more information about the program, please see the [FUSRAP fact sheet](#).

The Toledo site was remediated to criteria in DOE Order 5400.5, *Radiation Protection of the Public and the Environment*. A notice of cleanup certification for the site was published in the Federal Register on August 27, 2001.

In fiscal year 2004, DOE transferred long-term stewardship responsibilities for the Toledo FUSRAP site from the DOE Office of Environmental Management to LM.

Current Site Conditions

Post-remedial action survey data indicate that the radiological condition of the Toledo site is in compliance with applicable DOE standards and guidelines for cleanup of residual radioactive contamination. An independent verification survey conducted after the completion of remedial action detected no residual radioactivity that exceeded current guidelines. Therefore, DOE released the site for unrestricted use.

Legacy Management Activities

No monitoring, maintenance, or site inspections are required for the Toledo site. LM's responsibilities consist of managing site records and responding to stakeholder inquiries.

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 **Toledo, Ohio, Site** are available on the LM website at www.energy.gov/lm/toledo-ohio-site.

For more information on FUSRAP site history or current long-term stewardship activities, contact:

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