



NEW YORK

TONAWANDA

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Tonawanda, New York | Site

A FUSRAP SITE

This fact sheet provides information about the **Tonawanda 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

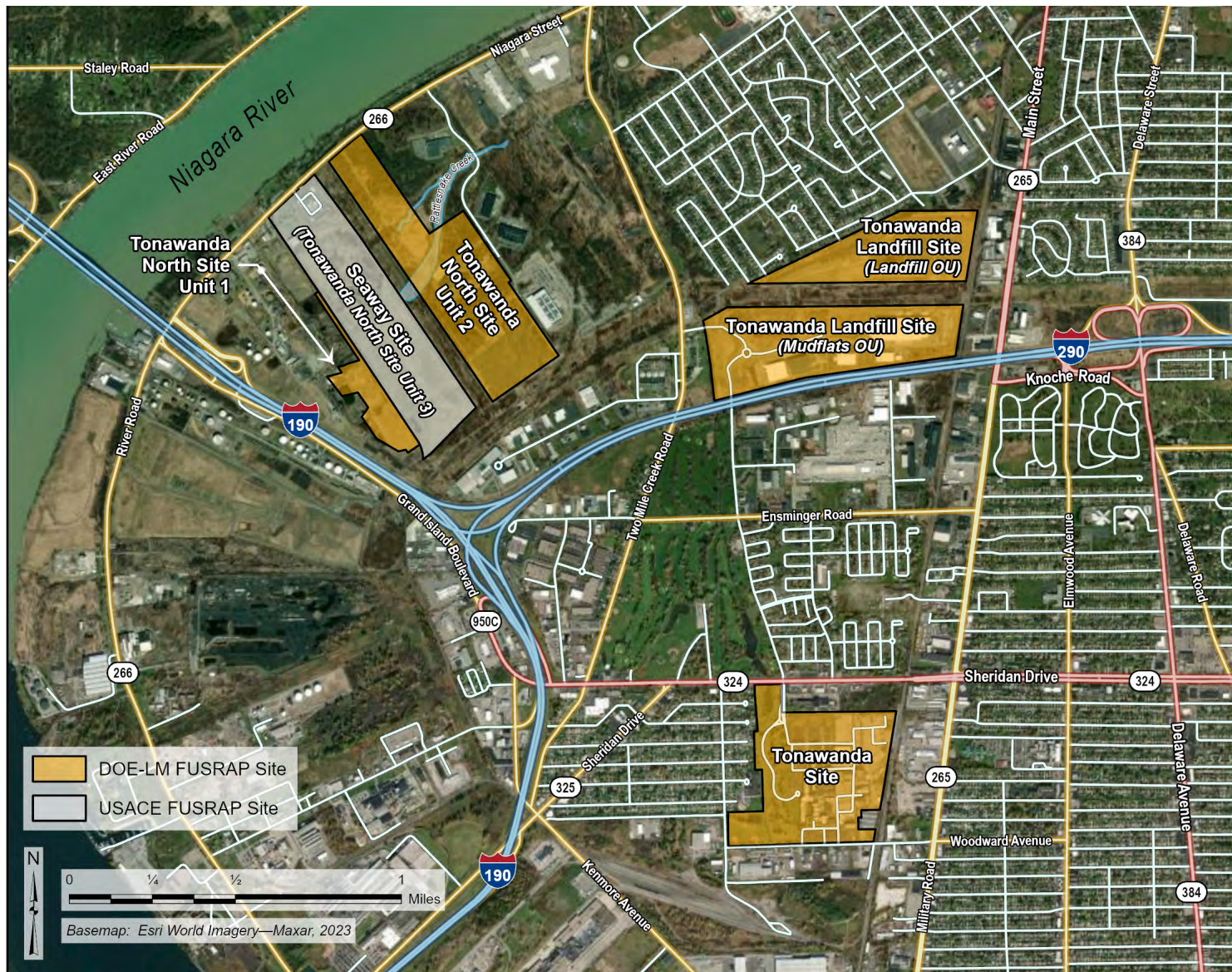
The Tonawanda, New York, Site (former Linde Air Products site) is a privately owned, 135-acre facility located at 175 East Park Drive in Tonawanda, just north of Buffalo. Linde Plc (formerly Praxair) currently owns and operates the site as an active industrial gas production facility with several buildings, including warehouses, fabrication buildings, storage areas, and parking lots.

Between 1942 and 1946, the U.S. Army Corps of Engineers (USACE) Manhattan Engineer District (MED) contracted with the Linde Air Products Division of Union Carbide to process uranium ore at its facility. Portions of the facility were used for separating uranium dioxide from uranium ores and converting uranium dioxide to uranium tetrafluoride. The processing and disposal activities resulted in elevated levels of radioactive contamination in portions of the property, buildings, and groundwater. Subsequent waste disposal and relocation from the site spread contamination to nearby landfills. [Tonawanda North Units 1 and 2](#) (Ashland 1 and Ashland 2) and the [Tonawanda Landfill](#) have been cleaned up and are under long-term care by the U.S. Department of Energy (DOE) Office of Legacy Management (LM). The Tonawanda Landfill Mudflats did not require remediation. The Tonawanda North Unit 3 site (Seaway) is undergoing remediation by USACE.

In 1980, DOE designated the Tonawanda site for remediation under the Formerly Utilized Sites Remedial Action Program (FUSRAP). The site contaminants of concern were determined to be radium-226, thorium-230, total uranium (U-234, U-235, and U-238), and their decay products. Contamination was limited to surface and subsurface soil, sediment, structure surfaces, and groundwater.

DOE began investigation and removal actions at the site in 1996. In 1997, Congress transferred administration and execution of FUSRAP cleanups from DOE to USACE. USACE conducted remedial actions at the site from 1997 until they were completed in 2013. These remedial actions included excavating contaminated soil, building surfaces, and infrastructure with off-site transportation and disposal at a licensed disposal facility. The cleanup criteria was developed to provide for an acceptable level of protection based on a commercial/industrial exposure scenario, which was determined to be the most likely future land use at the site.

USACE issued three Records of Decision (RODs) for the Tonawanda site. The ROD for the soil operable unit (OU) was issued in 2000 and authorized remediation of residual radioactive materials in soil and on surfaces of buildings and infrastructure (with the exception of Building 14). The ROD for Building 14 OU was issued in 2003 and authorized



The Tonawanda, New York, Site in relation to the other FUSRAP sites in the area.

removal of Building 14 and contaminated material beneath the building. The ROD for the groundwater OU was issued in 2006. "No Action" was the selected alternative for groundwater because there were no complete exposure pathways to groundwater. Radiological constituents in the groundwater posed no current or future threat to human health or the environment and further action under FUSRAP was not warranted.

USACE issued a site closeout report and declaration of response action completion in March 2015. The report stated that the response actions conducted at the Tonawanda site complied with all statutory requirements and achieved the degree of cleanup and protection specified in the RODs for all pathways of exposure. USACE recommended that FUSRAP-eligible residual radiological concentrations remaining at the Tonawanda site allow for current and future anticipated land use (commercial/industrial) on the property without any use

restrictions. As a result of the remedial actions, no FUSRAP-eligible material addressed by the RODs remains on-site above the cleanup requirements and no further action to address FUSRAP-eligible contamination was required.

The site transferred from USACE to LM for long-term surveillance and maintenance in March 2017 following the two-year monitoring and maintenance period required after site closure.

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 had 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 USACE, and since 1997, response actions at FUSRAP sites have been conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, and the National Oil and Hazardous Substances Pollution Contingency Plan. LM retains responsibility for long-term stewardship of remediated FUSRAP sites. For more information about the program, please see the FUSRAP fact sheet.

Legacy Management Activities

LM's long-term surveillance and maintenance responsibilities consist of managing site records, responding to stakeholder inquiries, maintaining a site fact sheet and webpage, annual desktop assessment, and performing additional stewardship activities that align with LM's mission of protecting human health and the environment. No monitoring, maintenance, or site inspections are required moving forward, and the site has been released for unrestricted use.

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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 **Tonawanda, New York, Site** are available on the LM website at **www.energy.gov/lm/tonawanda-new-york-site**.

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

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