



FACT SHEET

UNDERGROUND STORAGE TANKS (UST) REMOVAL PROJECT AT THE FORMER LAKE ONTARIO ORDNANCE WORKS (LOOW), NY

Title/Name: Former Lake Ontario Ordnance Works (LOOW)

Location: The site is located approximately 10 miles north of the City of Niagara Falls within the Towns of Lewiston and Porter in Niagara County, New York. The UST removal project is on the Town of Lewiston and Waste Management (WM), CWM Chemical Waste Services LLC properties within the former LOOW.

Project Description: The purpose of this project is to remove eleven underground storage tanks (USTs) located on the former LOOW site. The Buffalo District awarded a remediation contract to Environmental Chemical Corporation (ECC) Bloomfield of Bridgewater, New Jersey on June 30, 2008. The project is expected to be completed by December 2008. Major project activities include:

Mobilization and Work Planning	July – September 2008
Field Work	September – October 2008
Demobilization and Closure Report	November – December 2008

These tanks were targeted for removal after a review of historical information and site inspections. The information developed indicates that these tanks were installed and used for Department of Defense (DoD) activities at the site. Six tanks on the WM property were installed to store fuel oil (diesel) for the former NIKE Missile Battery NF – 03/05 Launch Control Area North, South Generator Buildings and Barracks Building. Four additional tanks on the WM property stored solvents for the former Navy Interim Production Pilot Plant (IPP) Thermal Pyrolysis Area. One tank on the Town of Lewiston property was installed at the former LOOW Wastewater Treatment Plant (WWTP) as part of the Army's trinitrotoluene (TNT) production facility. It is believed to have been used to store fuel oil (diesel). Each tank is believed to be between 1,000 and 3,400 gallons in size. The presence, precise location, and size of the tanks will be confirmed during execution of the project.

Field work will include brush clearing to provide access to some UST locations, geophysical surveying and trenching to determine the exact location and size of the tanks, removal of asphalt or concrete at some UST locations, soil excavation and sampling, emptying and cleaning each UST, ensuring each UST is inert, transport and disposal of waste material, managing groundwater, post excavation sampling, backfilling with clean fill, and restoration of disturbed terrain.

Where tanks are present and removed, confirmatory samples of the undisturbed soils will be taken. These samples will be analyzed utilizing the USEPA SW-846 analytical methods for Target Compound List (TCL) Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), explosives, pesticides, Polychlorinated Biphenyls (PCBs), and Target Analyte List (TAL) metals plus boron and lithium.

Wastes generated during the tank removal process will be sampled and analyzed utilizing the toxicity characteristic leaching procedure (TCLP), USEPA SW-846 analytical methods for Target Compound List (TCL) Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), explosives, pesticides, Polychlorinated Biphenyls (PCBs), and Target Analyte List (TAL) metals plus boron and lithium. Utilizing data from the National Nuclear Data Center for calculation of activities and concentration, waste samples will be characterized for radiological analyses including gross alpha, broad

gamma spectroscopy, and alpha spectroscopy (including Isotopic Uranium (238/235/234), Isotopic Thorium (232/230), Isotopic Radium (226/228), and Isotopic Plutonium). All wastes will be properly shipped and disposed at a licensed waste treatment, disposal or storage facility.

A rigorous occupational safety and health program will be in place to ensure worker safety. All work will be performed in accordance with applicable local, state, and federal laws and regulations. Completed work products and reports will be publicly released.

Importance: The purpose of this project is to eliminate the source of potential environmental contaminants by removing the USTs, their contents, and contaminated soil if encountered.

Consequence: Without this project, the USTs could continue to pose a potential source of contamination to the environment.

Site History: The original site was established in 1942 and encompassed approximately 7,500 acres. During World War II, the US Army built and operated a TNT plant on approximately 2,500 acres of the site known as the “developed zone”. The remaining 5,000 acre “undeveloped zone” served as a “buffer area” around the TNT plant. The plant manufactured bulk TNT for approximately nine months and was decommissioned in 1943.

- **Undeveloped Zone:** Beginning in 1945, the 5,000 acre “undeveloped zone” was declared excess, subdivided, and sold to the public through 1950. This acreage now consists of over 450 individual parcels which have been redeveloped for residential, commercial, agricultural, and local government use. The Lewiston Porter Schools campus was built on former “undeveloped zone” property.

- **Developed Zone:** Beginning in 1944, the remaining 2,500 acre “developed zone” was used for a number of US Army, Navy, and Air Force activities. The Manhattan Engineer District (MED) and the Atomic Energy Commission (AEC) also used approximately 1,650 acres in the “developed zone”. From 1944 to 1952 the MED and AEC brought radioactive materials from the nation’s early atomic energy program to the site. The AEC gradually reduced the footprint of its operation and the property was subdivided and sold to the public.

Current federal ownership of the former “developed zone” is limited to two properties. The first is the 191-acre Niagara Falls Storage Site (NFSS) which contains the Interim Waste Containment Structure (IWCS) built by the US Department of Energy to serve as a repository for the MED and AEC radioactive residues and wastes. The second is the 860-acre National Guard training site (the former TNT storage area) north of Balmer Road.

Current non-federal land use in the “developed zone” includes chemical waste treatment, storage, and disposal services, hazardous waste and solid waste landfill operations, industrial operations, power transmission line right of way, and local government uses.

Project Authority: The USACE is executing this project under the authority of the Defense Environmental Restoration Program – Formerly Used Defense Sites (DERP-FUDS).

Project Cost: The cost of this project is approximately \$500,000

Additional Information: For additional information about this project please visit the Buffalo District website at <http://www.lrb.usace.army.mil/derpfuds/loow-nfss/index.htm>, or contact Ms. Arleen Kreuzsch, Outreach Program Specialist, at (716) 879-4438 or (800) 833-6390. Members of the public are invited to contact us to receive project updates by email.

