



REPLY TO  
ATTENTION OF

## DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS  
1776 NIAGARA STREET  
BUFFALO, NEW YORK 14207-3199

30 JUL 2008

Special Projects Team

SUBJECT: Project Update on the Former Lake Ontario Ordnance Works Wastewater Treatment Plant

Mr. Fred Newlin  
Lewiston Town Supervisor  
Town Hall  
1375 Ridge Road  
PO Box 330  
Lewiston, New York 14092

Dear Mr. Newlin:

I'm writing to provide you an update on the US Army Corps of Engineers (USACE) projects at the former Lake Ontario Ordnance Works (LOOW) which involve the Town's property containing the former LOOW wastewater treatment plant (WWTP). Our mission is to determine whether environmental impacts from past Department of Defense (DoD) activities exist and require remediation to protect human health and the environment.

In June, the Buffalo District Corps of Engineers awarded two new contracts to continue our progress in site investigations and cleanup.

**Phase-IV Remedial Investigations:** A contract was awarded to Earth Resources Technology and EA Engineering for additional work on our ongoing Remedial Investigation - Feasibility Study of the former LOOW site. This project includes a dedicated field investigation and analysis dedicated to the WWTP parcel. This project also includes a public information session to provide an opportunity for members of the public to discuss the technical aspects of this project with Corps project staff and contractors prior to the preparation of work plans and field work. We anticipate this will occur in the fall of 2008 and once a date is scheduled we will make notifications.

**Underground Storage Tank Removal:** A contract was awarded to Environmental Chemical Corporation (ECC) Bloomfield for the removal of eleven underground storage tanks at the former LOOW. One of these tanks is located on the WWTP parcel and is believed to be a heating oil tank installed during the original construction of the WWTP in the 1940s. Field work is expected to start in the October 2008 timeframe.

**Site Visit:** The Corps is planning to execute a pre-work site visit for the Phase-IV Remedial Investigation project with our Contractors on Tuesday August 5, 2008 beginning at 9AM. The Corps has coordinated this with Mr. Tim Lockhart, Water Pollution Control Administrator for the Town of Lewiston who plans to attend the site visit.

**Work Area Preparations:** Based upon recent site inspections of the property by the Buffalo District staff, there are areas of overgrown vegetation, a number of open pits, hanging debris, unsafe structures, tripping and falling hazards, and possibly some residual asbestos-containing building materials on site. As a routine part of our environmental investigations, we require our contractors to make the site safe for the project staff. Our intent to make the site safe includes covering open pits and removing overgrown vegetation, tripping and falling hazards, and any asbestos-containing building materials which may be encountered. The Corps will properly handle and dispose of asbestos materials at a licensed off site disposal facility. On site debris would be consolidated at a safe location on site. The Corps will restore disturbed ground at the conclusion of field operations, and ensure you are satisfied with our restoration.

**Real Estate Right of Entry:** The current Right of Entry (ROE) for conducting environmental investigations expires on December 01, 2008. A renewal of this ROE will be required for the Corps to continue working on the Town of Lewiston property beyond that date. I have asked our District Real Estate Officer, Ms. Jennifer Janik, to contact the Town Attorney and begin the renewal process. Ms. Janik may be contacted at 879-4113.

**Additional Information:** I have included for your information copies of the project fact sheets. Additional information is available on our website at

<http://www.lrb.usace.army.mil/derpfuds/loow/index.htm>

If you have any specific concerns or questions, please contact me at 879-4418 and I will be glad to provide additional information.



WILLIAM E. KOWALEWSKI, P.E., P.M.P  
Lake Ontario Ordnance Works Program Manager



US Army Corps  
of Engineers  
Buffalo District

July 2008

## FACT SHEET

### PHASE IV REMEDIAL INVESTIGATION AND FEASIBILITY STUDIES 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. This project will involve former LOOW properties currently owned by the Town of Lewiston, CWM Chemical Services LLC., and Occidental Chemical Corporation.

**Project Description:** The purpose of this project is to continue the ongoing Remedial Investigation – Feasibility Study (RI-FS) activities at the former LOOW. The project will be conducted in accordance with the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the processes for conducting Remedial Investigations and Feasibility Studies established by the United States Environmental Protection Agency (USEPA). The project will be executed from 2008 to 2010.

Remedial Investigation activities include an evaluation of the nature and extent of potential Department of Defense (DoD) contamination and associated risks to human health and the environment at the former LOOW Waste Water Treatment Plant (WWTP). The former LOOW WWTP is located on property currently owned by the Town of Lewiston. It was built during World War II and provided primary treatment of storm, sanitary, and process wastewaters from the original TNT production plant and later DoD operations. The principal objectives of the Remedial Investigation at the WWTP site include:

- Define the nature and extent of DoD contaminants within the WWTP site
- Determine if DoD contaminants migrated from the plant structures or pipelines to the surrounding soil or water
- Assess risks to human health and/or the environment from DoD contaminants at the WWTP

Feasibility Study activities include an evaluation of alternatives for mitigating and/or removing human health and/or ecological risks resulting from DoD contamination at the Town of Lewiston (former WWTP), CWM Chemical Services LLC., and Occidental Chemical Corporation properties. The Feasibility Studies will utilize data collected during all phases of the Remedial Investigation. The principal objectives of the Feasibility Studies include:

- Define remedial action objectives
- Develop and screen treatment and disposal alternatives and technologies
- Perform a detailed analysis of alternatives

The Corps will sponsor public meetings to engage interested members of the community prior to field investigations and upon completion of the Corp's findings and reports.

**Importance:** The Buffalo-Niagara region has a legacy of environmental contamination issues resulting from decades of industrial and defense activities. There are widespread community concerns over human health and ecological risks and adverse social-economic impacts resulting from this contamination. The purpose of this project is to identify and address environmental impacts resulting from DOD activities at the former LOOW. Successful completion of this project will significantly contribute

to resolving risks and adverse impacts, real and perceived, from historic defense activities at the former LOOW.

**Consequence:** Without this project, real and perceived human health and ecological risks and adverse socio-economic impacts could continue to impact the Towns of Lewiston and Porter.

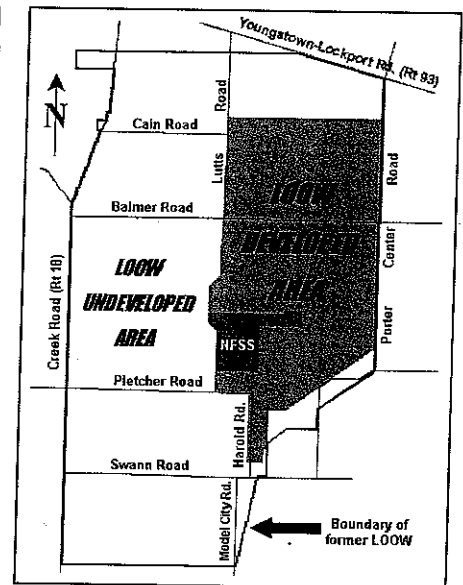
**Site History:** The original site was established in 1942 and encompassed approximately 7,500 acres. During World War II, the US Army built and operated a TNT plant on approximately 2,500 acres of the site known as the "developed zone". The remaining 5,000 acre "undeveloped zone" served as a "buffer area" around the TNT plant. The plant manufactured bulk TNT for approximately 9 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 \$1,500,000

**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 Kreusch, 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.



US Army Corps  
of Engineers  
Buffalo District

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## 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.

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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 Kreusch, 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.

