



U.S. Army Corps of Engineers
Buffalo District
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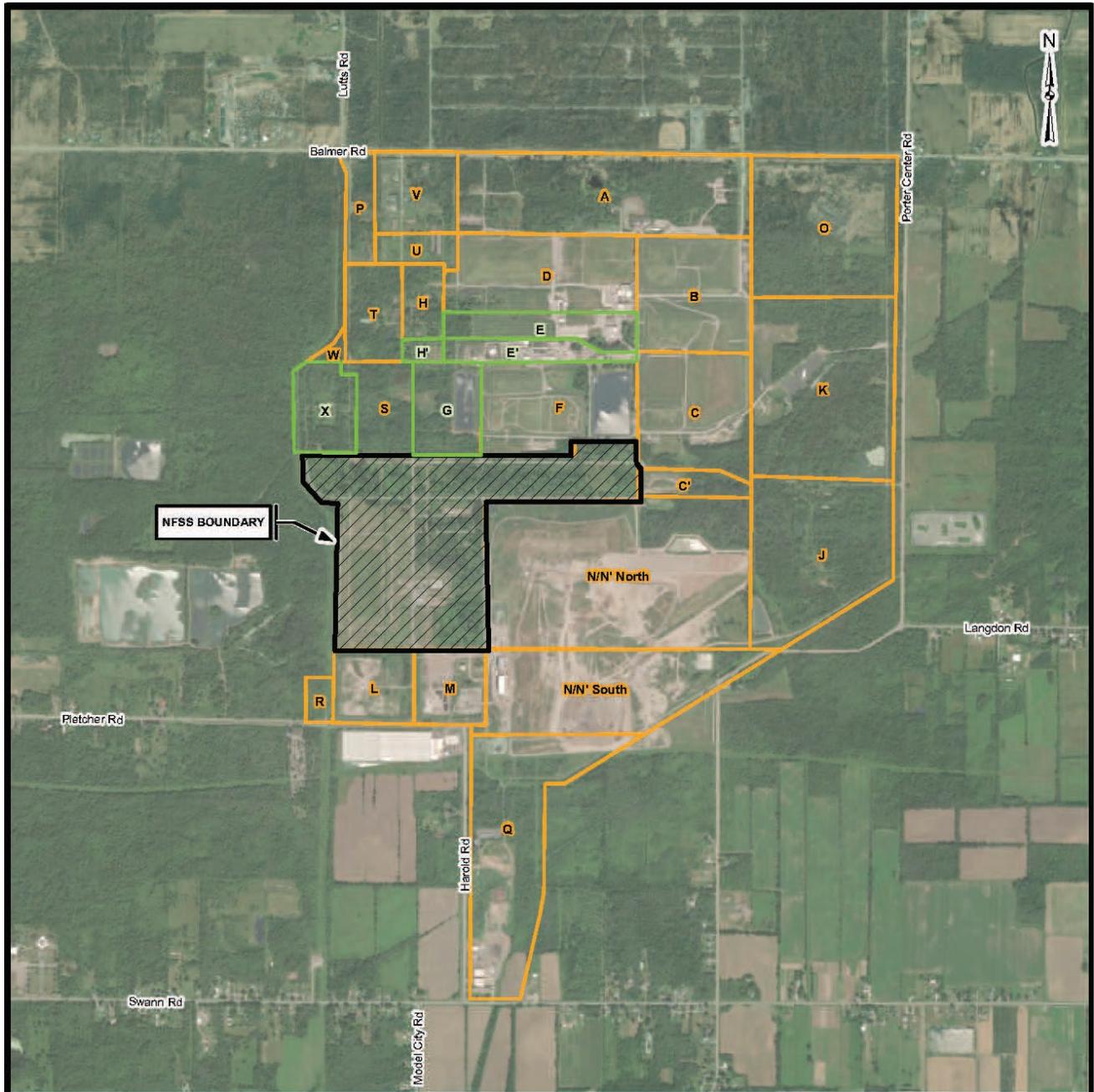
Formerly Utilized Sites Remedial Action Program

The Formerly Utilized Sites Remedial Action Program (FUSRAP) was initiated in 1974 to identify, investigate, and if necessary, clean up or control sites throughout the United States that were contaminated by activities related to the nation's early atomic energy program. Congress transferred execution of FUSRAP from the U.S. Department of Energy (DOE) to the U.S. Army Corps of Engineers (Corps) in 1997. When implementing FUSRAP, the Corps follows the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, and the National Oil and Hazardous Substances Pollution Contingency Plan.

Description and History

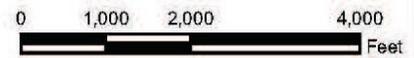
During 1942, the Department of Defense built the Lake Ontario Ordnance Works (LOOW) on agricultural lands that were acquired by the government in the Towns of Lewiston and Porter in New York. LOOW was built for the purpose of manufacturing trinitrotoluene, or TNT, to be used in World War II. TNT production ceased and the facility was decommissioned within one year of commencing operations. In 1944, 1,500 acres from the southern portion of the LOOW production area were transferred to the Manhattan Engineer District (MED). This area was called the Lake Ontario Storage Area (LOSA). The MED and the Atomic Energy Commission (AEC) brought residues from uranium processing to LOSA because they were thought to have sufficient concentrations of uranium and other metals and low, but recoverable, concentrations of precious metals that would have future economic value. Of the original 1,500 acres in LOSA, 191 acres continue to be owned by the federal government and are now known as the Niagara Falls Storage Site (NFSS), while the remaining acreage is owned by other entities and known as NFSS vicinity properties (VPs). (Figure 1, next page.)

During the 1980s the DOE began cleanup and consolidation of the radioactive wastes and residues that were on NFSS and its VPs. The DOE found that VP C and VP H did not require remedial action. Remedial action performed on VPs A, B, C Prime (C'), D, F, H Prime (H'), L, M, N/N Prime (N/N') North, N/N' South, P, Q, R, S, T, U, V, W, X, W was completed in 1986. The DOE closed those VPs; certified they were in compliance with DOE decontamination criteria and standards at the time, which were developed to protect human health, safety, and the environment; and released the VPs for unrestricted use.



Legend

- Open Vicinity Property
- Closed Vicinity Property



 U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
BUFFALO, NY
US Army Corps of Engineers
Buffalo District

VICINITY PROPERTY LOCATIONS

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NIAGARA FALLS STORAGE SITE
LEWISTON, NEW YORK

FIGURE 1

Property use at the time of characterization and remediation activities performed by the DOE on the VPs prevented access to several small areas on three VPs that are owned by CWM Chemical Services, LLC: (1) soil beneath Lagoon 6 and the berm surrounding that lagoon on VP E, (2) soil beneath a roadway and storage tanks containing polychlorinated biphenyls (PCBs) on VP E', and (3) soil beneath the liquid treatment pond on the western portion of VP G. Since VP E, VP E', and VP G had not been fully characterized, they were not certified as remediated and remain open.

During 2001 and 2002, the Corps performed geophysical surveys and excavated six trenches over eight acres of the southern portion of VP G to locate and investigate the suspect former University of Rochester burial area. Based upon the findings of strontium-90 and plutonium-239/240 in debris and K-65-like radium-226 concentrations in subsurface soils, and the remaining inaccessibility of soil beneath the water treatment pond, further characterization of VP G is warranted.

During 2011, the DOE began reviewing some of the closed VPs in response to stakeholder concerns about final conditions at NFSS VPs where Knolls Atomic Power Laboratory (KAPL) wastes were temporarily stored. The DOE report, [*Assessment of Historical Knolls Atomic Power Laboratory Waste Storage Locations Niagara Falls Storage Site FUSRAP Site*](#) was issued in 2013. As a result of that review, in 2014, the DOE referred VP H' and VP X to the Corps for assessment and indicated they were potentially eligible for FUSRAP.

Vicinity Property H Prime

Vicinity Property H' is a four-acre parcel in Porter, New York, which is currently owned by CWM Chemical Services, LLC. Access to VP H' is restricted by the property owner. There are no buildings on the VP, but there are several small concrete pads or foundations on the eastern section. An out-of-service railroad track runs along the northern boundary of the VP.

In 2004, the Corps conducted intrusive work on VP H' under the Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS) to remove a former storage pad that was constructed in 2000 as part of a removal action of trinitrotoluene (TNT)-contaminated pipelines. As part of health and safety monitoring, radiological screening was performed and the Corps found elevated radioactivity in

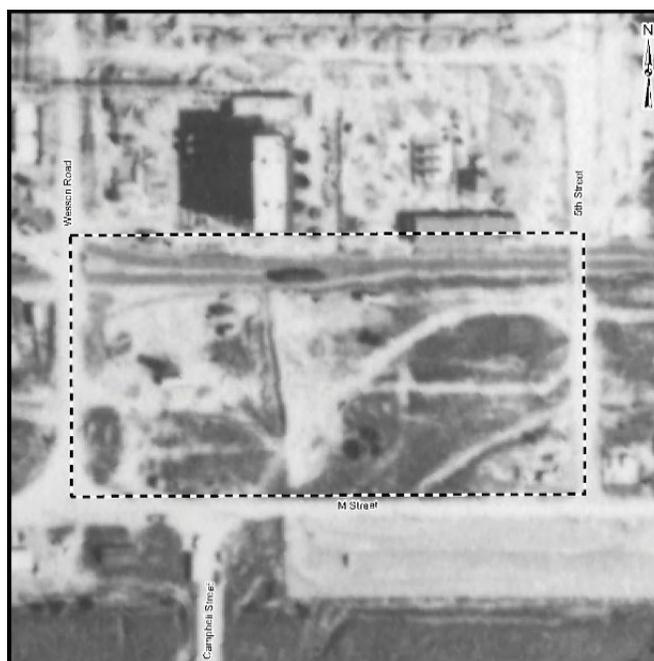


Figure 2: 1958 Aerial Photograph of VP H'

subsurface soil below the former storage pad. The Corps provided the information to the New York State Department of Environmental Conservation and the DOE.

In regard to VP H', the DOE report *Assessment of Historical Knolls Atomic Power Laboratory Waste Storage Locations Niagara Falls Storage Site FUSRAP Site* stated:

Information reviewed for VP-H' indicates a low potential for remaining KAPL waste. At the time of the verification, all concentrations were found to be within the FUSRAP guidelines for the NFSS VPs. However, additional information concerning Ra-226 results submitted to the DOE in 2004 may result in further coordination between the DOE and USACE concerning additional assessment and remediation.

The DOE referred VP H' to the Corps for further assessment during 2014.

In 2016, the Corps released a preliminary assessment report for VP H', which is available in the Reports Section of the project website. The report concluded there is no imminent threat to human health or the environment at the VP. The report also indicated that VP H' surface soils, subsurface soils, concrete slabs/foundations, sediment, surface water, and groundwater may have residual impacts from past storage and processing (burning) of FUSRAP material. The Corps recommended that VP H' undergo further investigation, in accordance with CERCLA, beginning with a remedial investigation to determine the nature and extent of AEC-related contamination and the associated risks to human health and the environment.

Vicinity Property X

Vicinity Property X is a 22-acre parcel located in the Towns of Lewiston and Porter, New York, which is currently owned by the Town of Lewiston. At one time the property included a former LOOW wastewater treatment plant, an electric shop, tool house, paint shop and two railroad loading platforms. Railroad tracks trended north-south through the shops area. (Figure 3, next page) During the 1950s, KAPL wastes were received at the railroad platforms and stored in the buildings before being moved to the NFSS.

Several investigations of the VP were conducted during the Corps' investigation of the former LOOW under DERP FUDS. Radiation screening was performed during these investigations as a prudent health and safety measure.

In 2011, the Office of Economic Adjustment (OEA) conducted a safety project at the wastewater treatment plant to mitigate public safety hazards. Structural remnants of the former LOOW wastewater treatment plant including an Imhoff tank, a chlorine contact basin, and a collection tank are the only remaining aboveground structures on the property. Several underground wastewater treatment plant pipes and two sludge beds (one bed has been partially removed) are present. The entire area is surrounded by chain-link fences to restrict public access.

There is no evidence of contaminated waste burial on VP X, but past radiological surveys performed by the DOE found areas in the West Drainage Ditch, on soil in the southern portion of the property and near wastewater treatment plant structures that exhibited signs of contamination. Runoff from residues stored on the NFSS was believed to be the source of contamination in the West Drainage Ditch, and operations near the former railroad loading platforms were thought to have caused the elevated radiation levels in soil in the southern portion of the property.

Next Step

The Corps is currently preparing a remedial investigation report for VP H', and performing a site inspection of VP X. The Corps will investigate the VPs E, E', and G once the areas are accessible for investigation and sufficient funding is available.



Figure 3: 1958 Aerial Photograph VP X

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