

From: [REDACTED]
To: Sentinel@wnypapers.com
Subject: Article regarding NFSS and LOOW (UNCLASSIFIED)
Date: Tuesday, November 22, 2011 10:15:18 AM
Attachments: [Lew Port Sentinel Article Final.docx](#)
[Lew Port Sentinel Article Final.pdf](#)

Classification: UNCLASSIFIED
Caveats: NONE

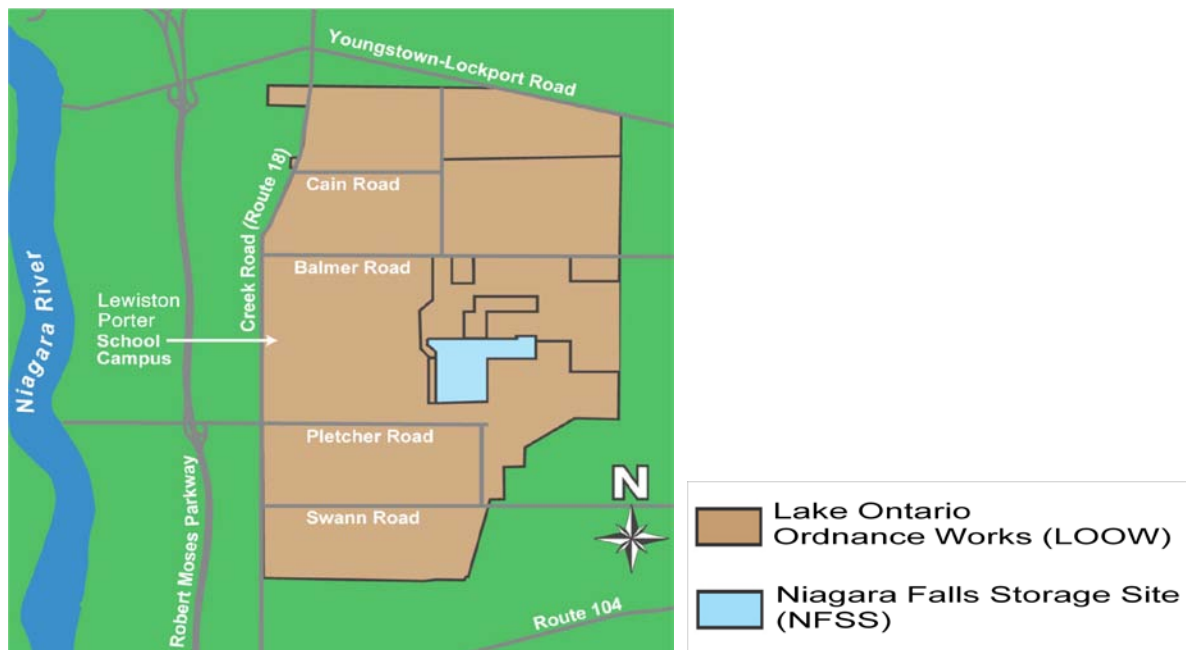
[REDACTED]
Attached is a word version and pdf version of our article trying to clarify the difference between NFSS and LOOW. I will be out of the office tomorrow. If you have any questions, please let me know today if possible. Thank you for the opportunity. Have a happy Thanksgiving!

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News from the Army Corps of Engineers Buffalo District

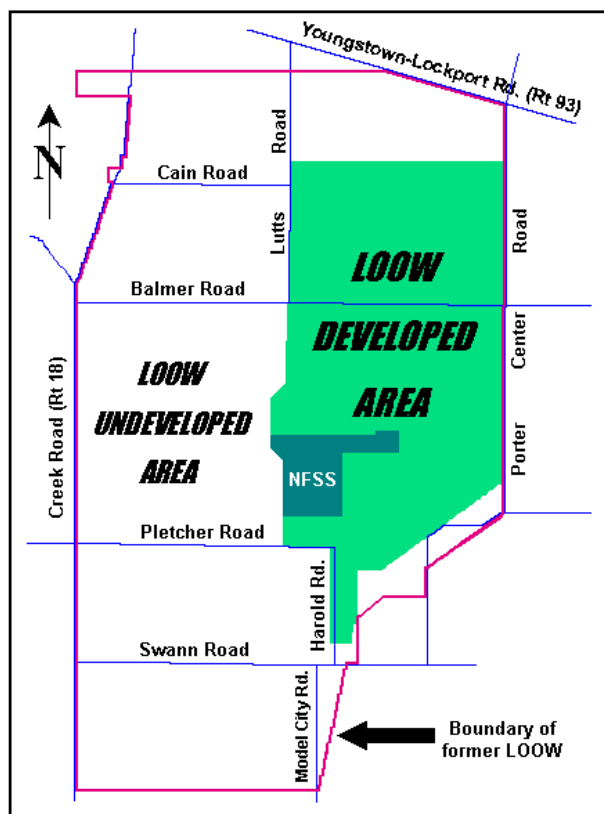
November 22, 2011



The U. S. Army Corps of Engineers Buffalo District is responsible for the environmental investigation of two distinct projects located in the towns of Lewiston and Porter, the former Lake Ontario Ordnance Works (LOOW) Site and the Niagara Falls Storage Site (NFSS). During investigation of these sites, the Corps follows the Comprehensive Environmental Compensation, Response, and Liability Act (CERCLA).

In 1941 the Department of Defense (DOD) purchased 7,500 acres of land in Niagara County, on which was built the former Lake Ontario Ordnance Works (LOOW), for the purpose of manufacturing trinitrotoluene (TNT) during World War II.

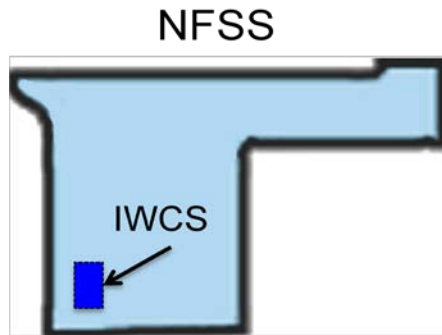
The TNT production, production support, and storage areas of the LOOW were constructed on approximately 2,500 acres. The remaining 5,000 acres, were left undeveloped. During World War II, the Army manufactured TNT for about 9 months at a facility on the site, which included a power plant, hospital, fire department, water supply system, and waste treatment system.



The LOOW TNT plant was decommissioned in 1943. In 1945, 5,000 acres outside the production areas (or undeveloped zone) were declared excess and transferred to General Service Administration for disposition to private landowners. The remaining acres were used by various government agencies other than the Department of Defense (DOD). As DOD operations decreased, additional property was sold.

In the 1940s approximately 1,500 acres in the southern portion of the LOOW production area were transferred to the Manhattan Engineering District (MED), which later became the Atomic Energy Commission (AEC) and then the Department of Energy (DOE). The DOE still owns 191 acres known as the Niagara Falls Storage Site (NFSS). The Corps is investigating NFSS under the Formerly Utilized Sites Remedial Action Program (FUSRAP). The FUSRAP focuses on addressing radiological contamination from the nation's early atomic energy program.

In 1944 the Niagara Falls Storage Site (NFSS) was used by the Manhattan Engineer District (MED) to store radioactive residues and wastes from uranium ore processing. Radioactive wastes and residues continued to be brought to the site for storage until 1952. In 1982 the Department of Energy (DOE) began clean-up and consolidation of the radioactive wastes and residues in an earthen containment cell constructed on the property, which was completed in 1986. This 10-acre structure is called the Interim Waste Containment Structure (IWCS).



The Remedial Investigation (RI) Report for NFSS was publicly released in December 2007. In response to comments received from the public on the RI Report, additional sampling was performed to develop an addendum to the RI which was released in April 2011.

For the Feasibility Study, which is the next phase of the CERCLA process, the NFSS was divided into three operable units: the IWCS, Balance of Plant (remaining site soils), and groundwater. The Feasibility Study develops and evaluates a range of remedial alternatives. A proposed plan is then developed which identifies the preferred alternative for the site. This proposed plan will be released for formal public comment, public comments received on the Proposed Plan will be considered and necessary changes made. The final decision will be recorded in a Record of Decision.

To encourage early public input and involvement on key technical issues that have impacts on the selection and evaluation of remedial alternatives for the IWCS OU, five technical memoranda will be prepared for the IWCS FS as follows:

- Radon Assessment
- Development of Remedial Action Objectives and Applicable or Relevant and Appropriate Requirements for both the Interim Waste Containment Structure and Balance of Plant Operable Units
- Development of Waste Disposal Options and Fernald Lessons Learned
- Interim Waste Containment Structure Remedial Alternatives Technologies Development and Screening
- IWCS Exposure Assessment

Comments for each technical memoranda will be considered during the development of the IWCS OU Feasibility Study.

The preliminary remedial alternatives being evaluated in the IWCS Feasibility Study are as follows:

- Alternative 1: Removal of the Entire IWCS Contents with Off-site Disposal

- Alternative 2: Removal of all Residues, excluding the R-10 Materials, with Off-site Disposal
- Alternative 3: Removal of K-65 Residues with Off-site Disposal
- Alternative 4: Removal of Residues with Placement in a New, Engineered, On-site, Long-term Storage Facility
- Alternative 5: Limited Action – Enhanced IWCS Containment and Environmental Monitoring
- Alternative 6: No Further Action
- Alternative 7: No Action

The Corps will conduct a detailed analysis of each IWCS alternative (including security, maintenance, and monitoring requirements), consisting of an individual analysis of each alternative against the first seven of the nine CERCLA evaluation criteria per the National Contingency Plan (40 CFR 300.430). The nine evaluation criteria, as specified in *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA*, are as follows:

- (1) Overall Protection of Human Health and the Environment
- (2) Compliance with ARARs
- (3) Long-Term Effectiveness and Permanence
- (4) Reduction of Toxicity, Mobility, or Volume Through Treatment
- (5) Short-term Effectiveness
- (6) Implementability
- (7) Cost
- (8) State Acceptance (Support Agencies)
- (9) Community Acceptance

The final two criteria (State and Community Acceptance) will be addressed in the Record of Decision after comments on the Proposed Plan have been received in accordance with CERCLA. Therefore, the final two criteria will not be included in the FS Report. The individual IWCS FS remedial alternative analysis will include:

- (1) A technical description of each IWCS alternative that outlines the waste management strategy involved and identifies the ARARs associated with each alternative
- (2) A discussion profiling the performance of that alternative with respect to each of the evaluation criteria.

On Wednesday, November 30, the Corps will be available at the Lewiston Senior Center at 4361 Lower River Road, Youngstown, NY 14174 beginning at 6 p.m to discuss the results of the LOOW Phase IV Remedial Investigation of a portion of the former LOOW Site that is currently owned by the Town of Lewiston. The purpose of this investigation was to define the nature and extent of Department of Defense (DoD) contaminants within the Waste Water Treatment Plant (WWTP) portion of the former LOOW Site, currently owned by the Town of Lewiston. The report was prepared as part of the Corps' environmental response project conducted under the Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS).