



# Niagara Falls Storage Site Feasibility Study Technical Memorandum Development

**U.S. Army Corps of Engineers  
Buffalo District**

**Building Strong<sup>®</sup>**

## **Formerly Utilized Sites Remedial Action Program (FUSRAP)**

December 2010

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 Technical Memorandum

### Purpose

This fact sheet announces that the U.S. Army Corps of Engineers will be developing a technical memorandum to identify Remedial Action Objectives (RAOs) and Applicable or Relevant and Appropriate Requirements (ARARs) to be used in conducting the Feasibility Studies (FSs) for the Interim Waste Containment Structure (IWCS) and Balance of Plant (BOP) Operable Units (OUs) at the Niagara Falls Storage Site (NFSS). Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process, the FS is the phase used to evaluate technologies and alternatives that can be used to remediate the site. This technical memorandum will identify the RAOs and ARARs for the contaminants of concern associated with the IWCS and BOP OUs as outlined in the "RAOs and ARARs Technical Memorandum Objective" section presented below. Although the IWCS and BOP OUs will be dealt with in two separate feasibility studies, this technical memorandum is addressing both so as to allow for a comprehensive assessment of the RAOs and ARARs for the entire site since the BOP OU addresses the entire site except the contents within the IWCS. By release of this Fact Sheet, the Corps is soliciting input from the public on the objective of the technical memorandum addressing the RAOs and ARARs for both the IWCS and BOP OUs, recognizing that there are various waste streams to consider with different concentrations and volumes (i.e., K-65 residues, other residues, R-10 materials, contaminated soils in the IWCS, and the BOP). The K-65 residues account for approximately 90% of the total curie content in the IWCS, but only about 2% of the total volume. The results of this technical memorandum will be used to support both the IWCS FS and the BOP FS. The Corps seeks input from the public so that the Corps can address public concerns during the initial stages of the development of this technical memorandum. The Corps intends to complete this technical memorandum and provide it to the public by the Fall of 2011.

### Project Background

The NFSS is a 191-acre Federal property containing the 10-acre IWCS. Radioactive residues and wastes brought to the site by the Manhattan Engineer District and the Atomic Energy Commission during the 1940s and 1950s were consolidated into the IWCS by the U.S. Department of Energy in the 1980s. In 1997, the Corps became the Federal agency responsible for implementing the Formerly Utilized Sites Remedial Action Program (FUSRAP) subject to CERCLA. As previously announced, the Corps has begun transitioning into the feasibility study phase. The Corps will prepare a number of technical memoranda that will be made available to the public prior to the development and release of the FS. In this manner, the public will be given the opportunity for review and comment as we progress through the development of the FS.

### RAOs and ARARs Technical Memorandum Objective

This technical memorandum will be developed to present RAOs and ARARs for both the IWCS and BOP OUs. RAOs are established to protect human health and the environment and provide the basis for selecting appropriate technologies and developing remedial alternatives for the site. The RAOs developed for the IWCS

and BOP OUs will account for media-specific (e.g., soils, water, building foundations, etc.) contaminants of concern, exposure routes and receptors, and an acceptable contaminant level, or range of levels, for each exposure route based on the expected future land use. ARARs will be evaluated in the technical memorandum to identify potential Federal or state standards, requirements, criteria, or limitations that are determined to be legally applicable or relevant and appropriate for the IWCS and/or BOP OUs. RAOs developed for the IWCS and BOP OUs will be based on ARARs, whenever possible, and will be selected to ensure long-term protection of human health and the environment.

Preliminary RAOs being considered for the IWCS and BOP OUs include:

- Reduce exposure/direct contact to the waste materials placed inside the IWCS;
- Remove or prevent exposure/direct contact to soil, building foundations, etc. containing concentrations of contaminants of concern that exceed cleanup criteria based on ARARs or acceptable risk limits;
- Reduce the transport of media-specific contaminants of concern at the NFSS and waste materials within the IWCS to other environmental media (soil, groundwater, surface water, sediment and air), both on-site and off-site;
- During implementation of the remedial alternative(s), restrict releases and other impacts that could adversely affect human health and the environment, including ecological receptors;
- Specific to the BOP OU only, remediate the site to a condition consistent with its current and anticipated future use(s), and
- Comply with ARARs.

Additionally, general response actions will be developed for the IWCS OU and presented in the technical memorandum. General response actions describe medium-specific actions that satisfy the RAOs and may include containment, treatment, excavation, pumping, or other remedial actions. Volumes or areas of media to which general response actions may apply will also be identified.

## Public Input Regarding the Technical Memorandum

The Corps encourages input from the public regarding the objective of this specific technical memorandum. Input should be provided to the Corps by January 3, 2011, to allow the Corps to consider the input while developing the technical memorandum. Responses to public comments on the objectives of this technical memorandum or on RAOs and ARARs that should be considered will be made available on the project website. Input can be sent via e-mail to [fusrap@usace.army.mil](mailto:fusrap@usace.army.mil) (please be sure to note "RAOs and ARARs Technical Memorandum" in the subject of the e-mail) or mail your comments to the FUSRAP Team at the address noted below.

## Administrative Record File

The Administrative Record File for the NFSS FUSRAP Site contains the Remedial Investigation Report, Baseline Risk Assessment, Groundwater Flow and Contaminant Transport Modeling and other CERCLA-related documentation for the NFSS. Reports and documents in the Administrative Record may be viewed at the following locations:

US Army Corps of Engineers  
1776 Niagara Street  
Buffalo, New York 14207  
(by appointment only)

Town of Lewiston Public Library  
305 South 8th Street  
Lewiston, NY 14092

Youngstown Free Library  
240 Lockport Street  
Youngstown, NY 14174

---

### U.S. ARMY CORPS OF ENGINEERS – BUFFALO DISTRICT FUSRAP TEAM

1776 NIAGARA STREET, BUFFALO, N.Y. 14207

Phone: 800-833-6390 (Option 4)

Email: [fusrap@usace.army.mil](mailto:fusrap@usace.army.mil)

Website: [www.lrb.usace.army.mil/fusrap/nfss/index.htm](http://www.lrb.usace.army.mil/fusrap/nfss/index.htm)