

**MOBILIZATION PLAN
FOR
REMEDIAL INVESTIGATION
AT THE
NIAGARA FALLS STORAGE SITE
LEWISTON, NY.**

**Prepared for:
U.S. Army Corps of Engineers
Buffalo District
1776 Niagara Street
Buffalo, NY.**

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MOBILIZATION PLAN

This mobilization plan details activities that have been completed and activities which will be performed prior to initiation of sampling at the Niagara Falls Storage Site (NFSS) in Lewiston, New York. The NFSS is being remediated under the Formerly Utilized Site Remedial Action Program (FUSRAP). FUSRAP actions at the NFSS are being carried out under the direction of the Buffalo District, U.S. Army Corps of Engineers (USACE). This plan is organized by the major tasks that have or will be completed prior to and during mobilization activities.

I. Equipment Acquisition

Due to the volume of materials required to perform the Remedial Investigation at the NFSS, the equipment has been broken down into three sub-categories. A list of items required to complete this phase of the investigation is attached to this plan.

A. Drilling Equipment and Services

The drilling services, provided by Maxim, are being scheduled. Materials (i.e., 2-inch slotted polyvinyl chloride (PVC) casing for the temporary well points, portland cement and bentonite grout mix, plastic sheeting, drums [an initial order of 150], pallets, and additional sampling devices) will be ordered and acquired. Additionally, decontamination pad sidewalls will be fabricated and constructed.

B. Health and Safety Equipment

Equipment (i.e., hard-hats, Tyvek coveralls, overboots, gloves, and decontamination supplies) will be ordered and acquired. This equipment will be left on the site for the duration of the project. All necessary meters (radiological, organic vapor, water quality, and toxic gas) will be shipped to the site.

C. Additional Equipment

Tanks for the storage of Liquid Investigation Derived Waste (IDW) (one 1,000 and one 1,500 gallon tanks) have been purchased and delivered to the site. A 550 gallon tank for the storage of clean decon water at the decon pad has been purchased and delivered to the site. Down-hole gamma sensors will be rented.

II. IDW Storage

1. Solid IDW (consisting of drums of soil, PPE, and temporary well construction materials) will be stored on the former foundation pad of Building 430 as shown on Figure 1. Empty drums and pallets will be staged in this area until they are used.

2. Liquid IDW (consisting of monitoring well development and purge water, and decontamination water), will be stored in 1,000 and 1,500 gallon polyethylene tanks. The tanks will be placed in a secondary containment cell constructed of dimensional lumber (2"X 4") and plywood and lined with a minimum of 12 mils of polyethylene plastic sheeting or poly-tarps. The tanks will be located south of Building 429 as shown on Figure 1.

III Fences

The north-south trending fence line which bisects the NFSS will be cut across each roadway and will be left open during the duration of the remedial investigation. The fence will be cut at the nearest post on one side of the roadway and rolled to the other side of the roadway. Any fence posts located in the roadway will be removed or cut flush with the ground. The opening of this internal fence line (not the site boundary fence) will not compromise security of the site.

The following presents the rationale and justification for cutting the fences at each location. The location of the fence section to be cut is shown on Figure 1.

1. "N" Street approximately 200 feet east of Campbell Street - The current fence restricts east-west access along "N" Street and will require vehicles to travel approximately 3,380 feet to get from Boring Location 407 to Boring Location 406 (a minimum driving distance of 200 feet if the fence is cut).
2. "O" Street approximately 200 feet east of Campbell Street - The current fence restricts east-west access along "O" Street and will require vehicles to travel approximately 2,400 feet to get from Boring Location 403 to Boring Location 408 (a minimum driving distance of 350 feet if the fence is cut).
3. "X" Street approximately 200 feet east of Campbell Street - The current fence restricts east-west access along "X" Street and will require vehicles to travel approximately 450 feet to get from Boring Location 407 to Boring Location 406 (a minimum driving distance of 50 feet if the fence is cut).
4. Southern driveway to Building 401 approximately 200 feet east of Campbell Street - This fence location limits access to 14 boring locations around Building 401 to the northern driveway only.

III. Trailer(s) and Utilities

To provide a base of operations, Maxim will mobilize an office trailer and storage containers to the site. These trailers and the utilities that will be needed are described in the following three sections. Proposed locations of the trailers are shown on Figure 1.

A. Main Trailer (Office)

The main trailer will serve as a communication center (with telephone, fax, and computer); shelter during foul weather; a meeting area; and a restroom facility. This trailer will be 12' X 64' in size to accommodate all personnel at the site. The trailer will be located south of Building 429 immediately north of the inside security fence.

B. Storage Containers

Two 40' sea containers have been leased and delivered to the site. One container will be utilized for "clean" storage (i.e., sampling equipment, well materials, sample jars, coolers, and PPE). The other container will be used for "dirty" storage (i.e., pumps, hoses, generators, and fuel). These containers have been placed adjacent to the office trailer location.

C. Utilities

The following sections describe the utilities that will be provided to the office trailer and the liquid IDW storage area.

1. Electricity

Electricity will be provided to the office trailer by temporary service extended from Building 429. A check meter and pole will be installed to distinguish power used by during project activities from Building 429 power usage.

2. Water

In the spring of 2000, potable water will be provided to the office trailer by direct connection to an existing water line. If feasible, a second water connection will be supplied to the decontamination pad.

Temporarily, potable water for decontamination and the office trailer will be stored in aboveground tanks.

3. Sewer

An aboveground septic storage tank will be provided for the wastewater generated from the office trailer. An outside contractor has been retained to provide weekly servicing of the above ground septic tank. Two sets of male and female portable toilet facilities will be provided. Maxim has scheduled cleaning and pumping of these facilities on a weekly basis while personnel are on site.

4. Telephone

Telephone, fax, and modem service to the office trailer will be provided by the local phone company, Bell Atlantic.

IV. Site Clearing, Tree Removal, and Earthwork

Following initiation of mobilization to the site, some site clearing will be performed to facilitate access to 14 soil boring locations. The clearing will be performed by the NFSS Maintenance contractor or a local union contractor. No permanent roadways will be constructed. However, temporary dirt pathways, temporary culvert installation, and potential embankment construction and/or clearing or ground smoothing may be necessary. Phase I boring locations which may need some earthwork prior to sampling activities are locations 215, 401, 410, and 810.

Maxim representatives, including a subcontractor health physicist, will be present. To minimize potential exposures, soil to be moved will be scanned for radiological parameters prior to, during, and promptly after unearthing. Equipment and manpower used during the clearing operations will be decontaminated and scanned for radioactive levels prior to leaving the clearing area and before leaving the site.

Where practical, site clearing activities will be completed in accordance with the USACE Guide Specification for Construction, Division 02 - Site Work, Section 02230, Clearing and Grubbing, CECS-02230 (June 1997) and USACE Guide Specification for Construction, Division 02 - Site Work, Section 02233, Clearing (Timber and Structure), CECS-02233 (November 1992). In addition to the specification, all trees, brush, and soil moved during clearing activities will be placed out of the way of potential roadways and paths. Pathways will be of sufficient width to accommodate the drilling and/or support vehicles. Debris will be either piled in a location in proximity of the clearing activities (not near the planned boring location) or placed out of the way along the sides on the temporary roadway. No debris will be removed from the site. Maxim will not dispose of any material generated from the clearing operations.

(Notes: The exact location, width, and length of the clearing activities may not exactly correspond to those area marked on Figure 1. Care will be taken to remove as few trees as necessary to complete the sampling activities. If larger trees can be avoided, a more circuitous path may be completed to transport equipment to the sampling location.)

In general, due to overhanging limbs or scrub brush, minor clearing may be needed at one-quarter of the proposed sampling locations. However, the following Phase I boring locations will need substantial tree removal or construction activities prior to drilling operations. These locations are shown on Figure 1.

Boring Location 215 - This boring is located near an in-ground vault structure northwest of Building 401 and east of Campbell Street. Several trees (6-8" in diameter) and undergrowth surround the proposed sampling location. Also, a ditch on the east side of Campbell Street

precludes access without an additional 120 linear feet of trees being removed. Approximately 50 linear feet of trees and undergrowth will be removed and a temporary 12" culvert will be installed for access.

Boring Location 301 - This boring is located north of the South 16 Ditch and south of "Z" Street in a shallow trench observed during the site walkover survey. Several trees (6-8" in diameter) and undergrowth surround the proposed sampling location. Approximately 300 linear feet of trees and undergrowth will be removed. This pathway will extend southwest the open area east from boring location 304.

Boring Location 305 - This boring is located northwest of the intersection of Castle Garden Road and "Z" Street in an area with a substantial depression. A few large trees (12-20" in diameter), smaller trees (<12" in diameter), and undergrowth surround the proposed sampling location. Approximately 50 linear feet of trees and undergrowth will be removed.

Boring Location 306 - This boring is located east of the former Building 430 near the former railroad bed observed during the site walkover survey. A few trees (6-8" in diameter) and undergrowth surround the proposed sampling location. Approximately 50 linear feet of trees and undergrowth will be removed.

Boring Location 401 - This boring is located west of Campbell Street north of "O" Street near two vertical pipes that were observed during the site walkover survey. A few trees (6-8" in diameter) and undergrowth surround the proposed sampling location. Approximately 40 linear feet of trees and undergrowth will be removed and a temporary construction road will be needed for access.

Boring Location 410 - This boring is located south of "N" Street in the middle of an area which is surrounded by hummocks. The topsoil will need grading prior to the start of drilling.

Boring Location 413 - This boring is located between "N" and "O" Streets near the former tank cradles. A few trees (6-8" in diameter) and undergrowth surround the proposed sampling location. Approximately 100 linear feet of trees and undergrowth will be removed.

Boring Location 414 - This boring is located between "N" and "O" Streets near the former tank cradles. A few trees (6-8" in diameter) and undergrowth surround the proposed sampling location. Approximately 150 linear feet of trees and undergrowth will be removed.

Boring Location 421 - This boring is located between "N" and "O" Streets near former ammonia plant. A few trees (6-8" in diameter) and undergrowth surround the proposed sampling location. Approximately 70 linear feet of trees and undergrowth will be removed.

Boring Location 601 - This boring is located west of the former Building 434 (the former K-65 storage tower). A few large trees (12-20" in diameter), smaller trees (<12" in diameter), and undergrowth surround the proposed sampling location. Approximately 150 linear feet of trees and undergrowth will be removed.

Boring Location 804 - This boring is located in the southeastern portion of the site. A few trees (6-8" in diameter) and undergrowth surround the proposed sampling location. Approximately 150 linear feet of trees and undergrowth will be removed and a temporary construction road will be needed for access.

Boring Location 808 - This boring is located east of Lutts Road and south of "N" Street. Several trees (6-8" in diameter) and undergrowth surround the proposed sampling location. Also, a ditch on the east side of Lutts Road precludes access. Approximately 60 linear feet of trees and undergrowth will be removed and a temporary 12" culvert will be installed for access.

Boring Location 810 - This boring is located near the southeast corner of the intersection of the Central Ditch and "N" Street. Undergrowth surrounds the proposed sampling location. Approximately 40 linear feet of undergrowth will be removed and a temporary construction road will be needed for access.

Boring Location 811 - This boring is located in the northeastern panhandle of the NFSS near fence with the CWM Chemical Services, Inc. A few trees (6-8" in diameter) and undergrowth surround the proposed sampling location. A path currently exists to this location. However, approximately 250 linear feet of trees and undergrowth will be removed to widen the path for drilling vehicles.

V. Storage and Preparation for Field Activities

Some equipment and materials will be shipped initially to the Maxim office in Hamburg, New York. Once the storage containers have been delivered and set up, the materials and equipment will be transferred to the NFSS. Maxim requests full site access and the authority to bring materials, equipment, and trailers to the site a minimum of two calendar weeks prior to the proposed start of sampling activities (November 1, 1999).

VI. Proposed Schedule of Phase I Sampling Activities

Attached to this mobilization plan is a proposed schedule for Phase I sampling activities. Due to the potential for weather delays, this schedule compresses the field activities into a one to one and a half month time frame by utilizing several field teams to concurrently conduct the various sampling discussed in the Field Sampling Plan.