

**HEALTH AND SAFETY PLAN
ADDENDUM NO. 2
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT
CALVERTON, NEW YORK**

**PREPARED BY
HALLIBURTON NUS
ENVIRONMENTAL CORPORATION**

**COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY
(CLEAN) PROGRAM**

**CONTRACT NUMBER N62472-90-D-1298
CONTRACT TASK ORDER NUMBER 0002**

JULY 1992





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ENVIRONMENTAL ACTION NAVY (CLEAN) PROGRAM**

**Submitted to:
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1.0 INTRODUCTION

This document is an addendum to the existing Health and Safety Plan (HASP) which covered HALLIBURTON NUS employees engaged in investigatory activities at the Naval Weapons Industrial Reserve Plant (NWIRP) in Calverton, New York. The existing Health and Safety Plan (July 1991) will serve as the general HASP for activities scheduled for July 1992. The general HASP, coupled with this addendum, will satisfy the requirements of OSHA Standard 29 CFR 1910.120. Neither of the aforementioned articles will serve as a stand-alone document for this particular task, therefore, site personnel must be cognizant of both general HASP and addendum requirements.

2.0 BACKGROUND

The following background information was taken from the Site Investigation Work Plan addendum:

A Site Investigation (SI) was conducted at the NWIRP Calverton in 1991. The investigation found soil and groundwater contamination at Site 2, Site 6A, and at other sites at the NWIRP. The contaminants observed included halogenated and nonhalogenated volatile organics, semivolatile organics, PCBs/pesticides, and metals. Applicable tables from the SI Report for Sites 2 and 6A are attached.

A groundwater recovery system was installed at Site 2 in 1987 by Marine Pollution Control (MPC). The system consists of a oil recovery well, a water recovery well, and an oil/water separator. MPC reports that the system operated at an average flow rate of 34 GPM in 1990. The treated water is discharged to the surface soils north of the fire training pit. As of the end of 1990, MPC reports that 216 gallons of free product have been recovered at this site.

A groundwater recovery system was also installed at Site 6A in 1987 by MPC. The system consists of a oil recovery well, a water recovery well, and an oil/water separator. MPC reports that the system operated at an average flow rate of 81 GPM in 1990. The treated water is discharged to an adjacent drainage ditch. As of the end of 1990, MPC reports that 1,115 gallons of free product have been recovered at this site.

3.0 SCOPE OF WORK

The field sampling activities consist of installing a sample tap (if necessary) and sampling the effluent from the pump-and-treat system at Sites 2 and 6A. The samples are to be collected after the oil/water separator and prior to any potential aeration of the water. Because detailed drawings are not

available, the actual sample location will have to be determined in the field. Reportedly, sample taps are available on these systems.

The system must be operating during the sampling period. In the event that the pump is not operating, the pump must be started and run for a minimum of 30 minutes prior to collection of the sample.

Prior to sampling, the sample tap should remain open for a minimum of 15 seconds to purge the tap. Depending on the flow rate through the tap, longer or shorter purge times may be acceptable. The purge water should be collected and transported to the discharge point of the pump-and-treat system.

Since samples will be collected directly from a sample tap, no other sampling equipment is required. Therefore no equipment rinsates or field blank samples will be collected.

The sample bottles are being shipped pre-preserved. The bottles are to be filled in accordance with HALLIBURTON NUS SOPs. The samples will be individually sealed in Ziplock bags and placed on ice in coolers. The samples will be shipped next-day delivery to NET Cambridge. Chain-of-Custody forms, sample log sheets, and a trip report are to be completed for each sample event.

During the sample event, the field team is to measure and record the pH and temperature of each non-QA/QC sample. Also, as possible with existing meters on the system, the field team will measure the instantaneous water discharge flow rate through each system, the total water discharge flow rate during the sample period (1 hour), and the total water discharge flow rate over the two week sampling period.

All other components of the Health and Safety Plan Addendum are as specified in the original document.

4.0 HAZARD ASSESSMENT

Based on the scope of work, potential exposure to site contaminants (via inhalation, skin absorption, and/or ingestion) could occur during the planned activities. Exposure to various organic compounds could occur due to volatilization of contaminants during sampling activities. Exposure to contaminants could also occur via direct skin contact and/or inhalation/ingestion of airborne particulates.

HAZARD EVALUATION

This task presents a low to moderate hazard rating based on the potential of contact with contaminated water. Contact can occur during the filling of sample containers as well as during the transfer of the purge water to the wastewater treatment plant. Contaminants and their concentrations found in the groundwater are summarized in the Work Plan Addendum 1.

5.0 AIR MONITORING ACTION LEVELS

Continuous monitoring with an HNu photoionization detector equipped with a 10.2 eV probe will be conducted during sampling activities. Monitoring will be initiated at any potential emission sources, then moved to the worker's breathing zone if positive readings are observed at the source. The following action levels will be utilized to control inhalation exposure to contaminants:

PID \leq Background = Continue Monitoring

PID > Background = Monitor Breathing Zones (B.Z.)

PID > Background = Air purifying respirators with organic vapor and acid
in B.Z.(sustained) gas/HEPA cartridges
and/or dusty
conditions evident

PID > 5.0 ppm (sustained in B.Z.) = Stop work, notify Health and Safety Department
(Pittsburgh).

In addition, if any odors are perceived by the field team during the planned tasks, personnel will position themselves in an upwind position to avoid potential exposure to contaminants. If this strategy does not eliminate the odors, personnel will don air-purifying respirators equipped with organic vapor and acid gas/HEPA cartridges.

6.0 PERSONAL PROTECTIVE EQUIPMENT (PPE) REQUIREMENTS

6.1 MINIMAL REQUIREMENTS

All personnel must wear, as a minimum, steel-toe/hard-soled work boots and side-shielded safety glasses while on site. Hardhats will be worn in areas where they are required by the facility.

6.2 PPE REQUIREMENTS FOR EACH SITE TASK

PPE required for sampling will consist of standard Tyvek protective coveralls, latex inner gloves, nitrile outer gloves, boot covers, taped ankle/wrist seams, and respirators in accordance with the action levels set forth in Section 5.0. PVC coveralls may be necessary if splashing causes saturation of Tyvek.

7.0 SPILL PREVENTION AND CONTROL (SPC)

In the performance of the planned site operations, spills of hazardous materials could potentially occur. This section addresses the prevention and control measures for these types of incidents, as required by 1910.120 (b)(4)(J) and (j).

7.1 SPC ACTIVITIES

The following activities will be implemented to minimize the potential for spills and releases:

- Any site personnel using/transporting any containers on site will be responsible for performing visual inspections prior to initiating any such activities.
- All containers used on site will be properly labeled as to their contents. Any unlabeled containers discovered during site operations will be considered to contain hazardous materials and handled accordingly.
- The FOL will be responsible for organizing site operations to minimize the amount of container movement activities.
- Any site employees whose work tasks involve container handling activities will be informed of the potential hazards presented by the operations, and the importance of spill prevention prior to task initiation.

- Spill response equipment (i.e., absorbent materials) will be maintained on site, available for immediate use, in areas where spills, releases, or ruptures may occur.
- Containers which appear that they cannot be moved without rupture, leakage, or spillage will be properly emptied into a sound container using an appropriate device classified for the material being transferred.

8.0 PERSONNEL, TRAINING, AND MEDICAL SURVEILLANCE

HALLIBURTON NUS employees who will be visiting the site to conduct these activities have received the initial 40 hours of Health and Safety Training and the necessary annual refresher training as specified in OSHA Standard 29 CFR 1910.120(e). In addition, HALLIBURTON NUS employees participate in the company medical monitoring program in accordance with 29 CFR 1910.120(f). Site-specific training will be conducted prior to work initiation and will include an overview of appropriate sections of the general HASP along with contents of this addendum.