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FINAL
REMEDIAL INVESTIGATION SITE AND DATA MANAGEMENT PLAN

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN) PROGRAM

NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE, NEW YORK

NORTHERN AND CHESAPEAKE DIVISIONS

CONTRACT N62472-90-D-1298, CTO 003

AUGUST 1991

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Environmental Corporation

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PARK WEST TWO • 2100 CLIFF MINE ROAD • PITTSBURGH, PENNSYLVANIA 15275-1071 • (412) 788-1080

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NAVAL WEAPONS INDUSTRIAL RESERVE PLANT BETHPAGE, NEW YORK

NORTHERN AND CHESAPEAKE DIVISIONS

Submitted To:
Northern Division
Environmental Branch, Code 1423/FK
Naval Facilities Engineering Command
Building 77-L, U. S. Naval Base
Philadelphia, PA 19112-5094

Submitted By:
HALLIBURTON NUS Environmental Corporation
Park West Two - 2100 Cliff Mine Road
Pittsburgh, PA 15275-1071

Contract No. N62472-90-D-1298, CTO 003

AUGUST 1991

SUBMITTED BY:

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PROJECT MANAGER

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PROGRAM MANAGER

technologies and services for a cleaner and safer world

SITE MANAGEMENT PLAN

Site Access

Access to the NWIRP facility is controlled by Grumman and all persons involved in the remedial investigation will be required to sign in at Plant 16 prior to entry. Individuals not part of the remedial investigation study team and not authorized to be on-site will be denied site access.

Access to the drilling sites will be controlled by the HALLIBURTON NUS Field Operations Leader (FOL) who will oversee all field activities.

Site Security

Security of the operations carried out at the Grumman site will be responsibility of the Grumman Aerospace Corporation. All partially completed boreholes will be secured at the completion of the work day so as to deter the introduction of foreign matter and protect public safety.

Site Clearance

Prior to the start of field operations, representatives from Grumman, NWIRP, and HALLIBURTON NUS will establish the exact drilling locations in the field. After site selection, it will be the responsibility of the drilling subcontractor to obtain the necessary state or local permits. It will be the responsibility of the Navy and/or HALLIBURTON NUS to contact the appropriate authority or agency to obtain markouts of any buried utilities, water mains, etc. At this time it is not anticipated that any utility connections will be necessary. All contractors will be required to provide their own electric service and water. (Any water source will require approval by HALLIBURTON NUS, approval will be based on laboratory analysis.)

Decontamination

The required decontamination procedures are described in the Quality Assurance Plan. At this time it is anticipated that all decontamination of drilling equipment, tools, etc. will take place on-site.

Disposal of Drill Cuttings, Fluids, and Development Water

All materials generated during the field activities (drill cuttings, fluids, and/or development water) determined to be nonhazardous will be disposed at the Navy's option. All materials determined to be

hazardous will be containerized and disposed either in the existing on-site treatment plant or off-site by private vendor.

Contingency Plans

The Health and Safety Plan contains information on contingency planning should site conditions change and require a change in safety procedures. All on-site personnel will be required to know the location of the nearest hospital.

Project Coordination

Project coordination will be carried out by the HALLIBURTON NUS Project Manager.

DATA MANAGEMENT PLAN

Organization

HALLIBURTON NUS has overall responsibility for the management and direction of the Remedial Investigation, including field investigations and report preparation. Project files containing data and reports generated during the RI/FS will be maintained at HALLIBURTON NUS', Pittsburgh, Pennsylvania office according to the procedures outlined in this document.

All laboratory documentation will be filed at the HALLIBURTON NUS' Pittsburgh office. Laboratory documentation (chromatograms and results of spike samples) will be maintained for purposes of validating analytical data collected during the RI/FS. All summary reports will be kept in HALLIBURTON NUS project file in Pittsburgh.

Data Transfer

All incoming data and reports will be logged and dated. All information generated from field activities will be documented on the appropriate HALLIBURTON NUS forms including the following:

- Sample/Core Log
- Water Sampling Log
- Chain-of-Custody Record
- Daily Log
- Drilling and Installation of Monitoring Wells Daily Checklist
- Utilities and Structures Checklist
- Location Sketch
- Water Level/Pumping Test Record
- Materials/Cost Log
- Sample Container Inventory
- Well Construction Log
- Sampling of Monitoring Wells Daily Checklist
- Telephone Conversation Log

Incoming documents will be date-stamped and filed. If distribution is required, the appropriate number of copies will be made and distributed to project personnel. In addition, all notes from project meetings and telephone conversations will be filed along with other project documents.

Data Reduction and Computer Storage

The reduction of field and analytical data will consist of summarizing water-level measurements, soil boring logs, well construction and sampling logs, field parameters, and laboratory analytical results. These data will be presented in the form of tables, illustrations, and/or graphs. The original data and reduction forms will be maintained at HALLIBURTON NUS' Pittsburgh office until acceptance of final reports.

Chemical and physical data will be stored and managed using a data-management computer system. Data entry will be performed by a designated person, so access to the data base is limited. Replicate measurements of a single sample will be averaged prior to further data reduction for data summary tables. Any tables or graphs generated will include the following:

- Sample identification
- Sample location
- Laboratory identification
- Sample matrix
- Analyses performed
- Date sampling occurred
- Detection limits
- Analytical results
- Quality control results
- Relevant notes regarding analyses

HALLIBURTON NUS Quality Assurance Reports

The HALLIBURTON NUS' quality assurance/quality control (QA/QC) advisor will audit all aspects of the implementation of the RI/FS on a regular basis and will be responsible for preparation and review of internal summary reports. Reviews will be performed at the completion of each field activity, and reports will be completed at those times. These reports will include an assessment of data quality and the results of system and/or performance audits. Any significant QA/QC deficiencies will be reported and identified, and an effort will be made to correct the deficiencies.

Corrective Efforts

If the quality control audit results in the identification of unacceptable conditions, the project QA/QC advisor and project manager will be responsible for developing and initiating corrective efforts, in

consultation with the project manager and project officer. The condition or problem will be specifically identified and investigated, and the cause determined. If necessary, the Navy will be consulted and efforts to eliminate the problem initiated. Corrective efforts may include the following:

- Reanalyzing the samples if the holding-time criteria and sample volume permits.
- Resampling and analyzing.
- Evaluating and amending sampling and analytical procedures.
- Accepting data while acknowledging a level of uncertainty.

Upon completion of the corrective effort, its effectiveness will be established, and the elimination of the condition verified.