DEPARTMENT OF THE NAVY
NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

IN REPLY REFER TO

5090
Code 1821/JLC

NOV 01 1995

Mr. John Barnes
Environmental Engineer 2
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Subj: REMEDIAL ACTION FOR OU1 SOILS, NWIRP BETHPAGE, NEW YORK

Dear Mr. Barnes:

Enclosed are copies of the U.S. Navy's final workplan and field sampling and analysis plan for remediation of contaminated soils associated with Phase 1 of OU1 at the NWIRP Bethpage, NY.

Implementation of these documents is scheduled to begin during mid November 1995. At that time, Foster Wheeler Environmental Corporation, our Remedial Action Contractor (RAC), will be taking soil samples for the purpose of delineating contaminated soil concentrations.

After receiving analytical results, excavation of the contaminated soils will begin, in accordance with the Record of Decision dated July 1995. Therefore, any comments regarding these documents must be submitted as soon as possible in order to be incorporated.

After completion of the soil excavations, confirmatory sampling will be conducted by the C.F. Braun Corporation. Their field sampling and analysis plan will also be forwarded to you after Navy review.

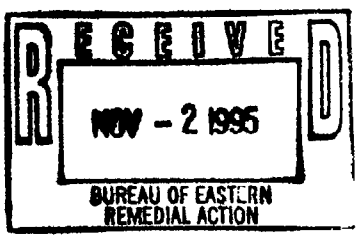
If you have any questions or require additional information, please give me a call at (610) 595-0567, extension 163. If you have any comments, you can fax them to me at (610) 595-0555.

Thank you for your continued participation in NWIRP Bethpage's IR program.

Sincerely,

JAMES L. COLTER
Remedial Project Manager
By direction of the Commanding Officer

Enclosures
Copy to: (w/o enclosures)
Naval Air Systems Command, Marty Simonson
DPRO Grumman, Abe Kern
REICC Bethpage, Al Taormina
Northrop-Grumman Corporation, John Ohlmann



WORK PLAN
FOR
REMEDIAL ACTION - OPERABLE UNIT 1 (SOILS)
AT
NAVAL WEAPONS RESERVE INDUSTRIAL PLANT
BETHPAGE, LONG ISLAND, NY

ISSUED:

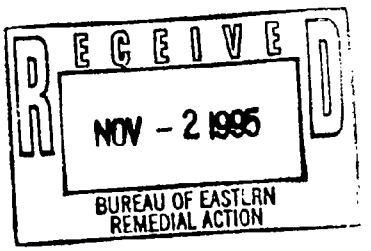
OCTOBER 23, 1995

PREPARED FOR:

Northern Division
Naval Facilities Engineering Command
10 Industrial Highway
Lester, PA 19113

PREPARED BY:

Foster Wheeler Environmental Corporation
2300 Lincoln Highway
One Oxford Valley Way- Suite 200
Langhorne, PA 19047-1829



REMEDIAL ACTION CONTRACT NO. N62472-94-D-0398
DELIVERY ORDER NO. 0004

WORK PLAN FOR
REMEDIAL ACTION CONTRACT N62472-94-D-0398
DELIVERY ORDER NO. 0004
NAVAL WEAPONS RESERVE INDUSTRIAL PLANT - BETHPAGE
REMEDIAL ACTION - OPERABLE UNIT 1 (SOILS)

Table of Contents

LIST OF FIGURES

1.0 INTRODUCTION

Foster Wheeler Environmental Corporation (Foster Wheeler) has been contracted by the Northern Division, Naval Facilities Engineering Command to perform the excavation and removal of contaminated soil at Sites 1 and 2 of the Naval Weapons Industrial Reserve Plant (NWIRP) at Bethpage, New York. This work plan has been prepared to meet the requirements of the Remedial Action Contract, Delivery Order (DO) 0004.

2.0 SITE DESCRIPTION

NWIRP Bethpage is located in Nassau County on Long Island, New York, approximately 30 miles east of New York City. A Site Location Map is provided as Figure 2-1. This 108 acre site is bordered on the north, west, and south by the Grumman facilities, which cover approximately 605 acres, and on the east by a residential neighborhood. The NWIRP is currently listed by the New York State Department of Environmental Conservation (NYSDEC) as an "inactive hazardous waste site (#1-30-003B), as is the Northrop Grumman Corporation (#1-30-300A) and the Hooker/Ruco Site (#1-30-004), located less than 1/2 mile west of the NWIRP Bethpage.

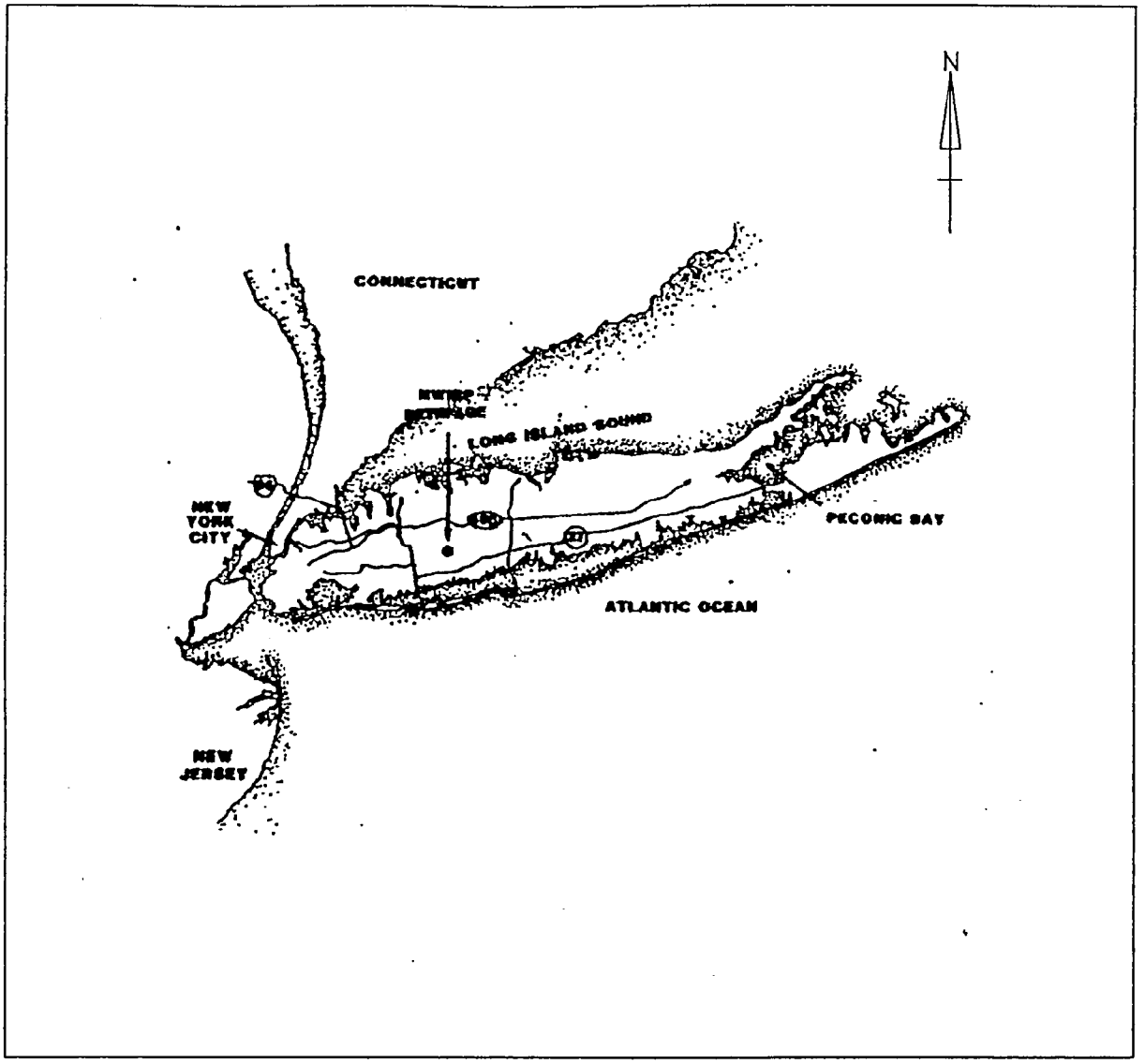
The NWIRP was established in 1933 and is still active. Since its inception, the primary mission for the facility has been the research prototyping, testing, design engineering, fabrication, and primary assembly of military aircraft.

The facilities as NWIRP include four plants (Nos. 3, 5, and 20 used for assembly and prototype testing, and No. 10, which contains a group of quality control laboratories), two warehouse complexes (north and south), a salvage storage area, water recharge basins, an industrial wastewater treatment plant, and several smaller support buildings.

DO 0004 involves the removal of contaminated soil at Sites 1 and 2. The sites are described below and presented in Figure 2-2.

SITE 1 - FORMER MARSHALING AREA: This area is located in the middle third of the NWIRP facility and east of Plant 3. It consists of two concrete drum storage pads (no longer active) and an abandoned cesspool leach field. In addition, this area has been used as a storage area for various types of equipment and heavy materials, including transformers.

SITE 2 - RECHARGE BASIN AREA: This area is located in the northeast corner of the Navy's property and north of Site 1. It contains three recharge basins which currently receive non-contact cooling water. Historically, these basins also received waters from Grumman operations. Also located on this site are the former sludge drying beds which no longer exist and have been filled in. Sludge from the Plant 02 industrial waste treatment facility was dewatered in these beds before being disposed of off-site.



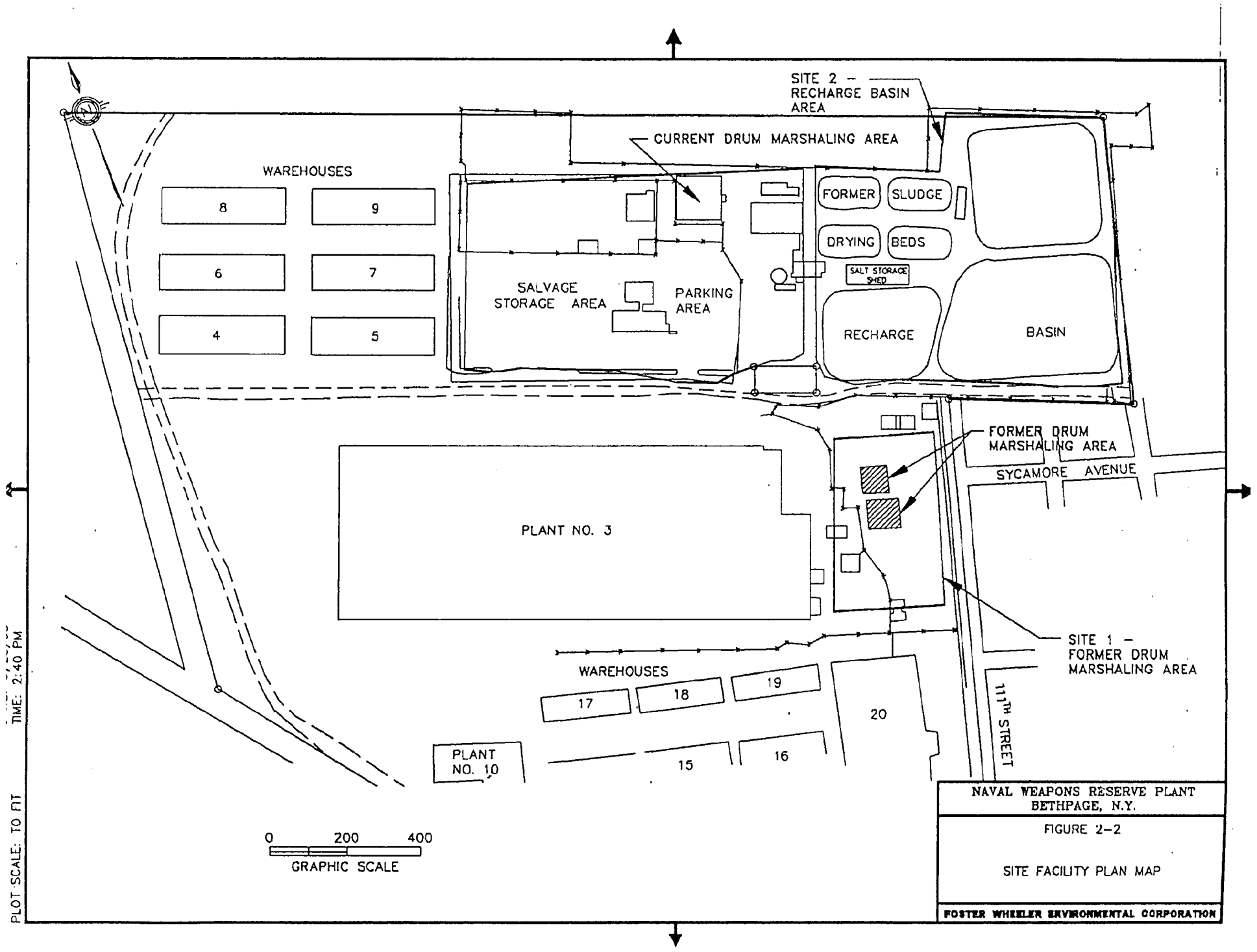
NAVAL WEAPONS RESERVE PLANT
BETHPAGE, N.Y.

FIGURE 2-1

SITE LOCATION MAP

FOSTER WHEELER ENVIRONMENTAL CORPORATION

CAD FILE NAME: DATE:
PLOT FILE: 1=1 TIME:



NYSDEC 063416

3.0 SCOPE OF WORK

3.1 GENERAL SCOPE OF WORK

The general scope of work is remediation of PCB and arsenic-contaminated soil at the NWIRP Bethpage, Long Island facility. Foster Wheeler will provide supervision, labor, equipment and material required to perform the removal activities in accordance with applicable regulations. Foster Wheeler will also provide construction quality control and health and safety personnel. Work will be performed in accordance with the delivery order specifications, project plans and Health and Safety Plan.

There are two sites with PCB contamination and one site with arsenic contamination of surface and subsurface soil that require excavation and disposal at an off-site facility. Foster Wheeler will perform the following Scope of Work (SOW) at Sites 1 and 2:

Site 1:

- Excavation and transportation of approximately 1,100 cubic yards of soil contaminated with PCBs at concentrations ranging from 10 ppm to 500 ppm. This soil will be sent to a TSCA-permitted off-site facility for disposal.

- Excavation and transportation of approximately 300 cubic yards of soil contaminated soil with PCBs at concentrations greater than 500 ppm. This soil will be incinerated at an off-site EPA-permitted facility.

- Excavation and transportation of approximately 600 cubic yards of arsenic contaminated soil designated as RCRA Characteristic Waste. This soil will be sent to a RCRA-permitted off-site facility for disposal.

Site 2:

- Removal and transportation of approximately 2,600 cubic yards of soil contaminated with PCBs at concentrations of 10 ppm to 500 ppm. This soil will be sent to a RCRA-permitted off-site facility for disposal.

Execution of the SOW will require completion of the following tasks:

- Preparation of Planning Documents

- Pre-excavation Sampling

- Mobilization and Site Preparation

- Excavation and Disposal of Contaminated Soils

- Site Restoration and Demobilization
- Permitting
- Project Completion and Closeout
- Project Management

The SOW and general methodologies for accomplishing each task are presented in the following sections:

3.2 PREPARATION OF PLANNING DOCUMENTS

The delivery order specifically requires that Foster Wheeler prepare a Work Plan, Quality Control Plan, Health and Safety Plan, Sampling and Analysis Plan, Waste Disposal Plan and Environmental Protection Plan. Based upon guidance provided by the Navy, Foster Wheeler will submit the following documents:

Work Plan: The Work Plan provides the approach to accomplishing the scope of work. It includes a site description, the statement of work, the breakdown of the work into tasks and activities, the project schedule and project staffing plan.

Quality Control Plan: The Quality Control Plan details the procedures to be used and the personnel responsible for the maintenance of project quality, documentation procedures, a list of subcontracts and a list of definable features of work. This document will be used to maintain quality in accordance with the specifications throughout the duration of the remedial action. The Quality Control Plan is provided as Section 6 to this Work Plan.

Health and Safety Plan (HASP): The HASP was developed during the project scoping activities and submitted on June 26, 1995. Approval was received on September 12, 1995. Foster Wheeler will respond to these comments and submit only the changed pages as directed by the Navy.

Sampling and Analysis Plan (SAP): Foster Wheeler will prepare a pre-excavation Sampling and Analysis Plan in order to determine the limits of the contamination present in Sites 1 and 2. The plan will follow the relevant EPA guidance. The SAP will also include a Quality Assurance Project Plan (QAPP).

Preexcavation Sampling Report: Foster Wheeler will prepare a report summarizing the results of the preexcavation investigation. The report will provide data summary tables, data interpretation, and conclusions. The volumes of soil requiring remediation will be revised as necessary based upon the sampling results.

Environmental Protection Plan: Foster Wheeler will prepare an environmental protection plan. The plan will describe the engineering controls and procedures necessary to protect the environment during site remediation. The Environmental Protection Plan is provided as Section 7 to this Work Plan.

Waste Disposal Plan: Foster Wheeler will prepare a Waste Disposal Plan listing the permitted disposal facilities which will receive the wastes. The plan will describe the methods for handling and transporting the waste to the disposal facilities. The Waste Disposal Plan is provided as Section 8 to this Work Plan.

3.3 PREEXCAVATION SAMPLING

Foster Wheeler will conduct preexcavation sampling in accordance with the approved SAP. The objective of the sampling is to determine the extent and level of contamination present at Sites 1 and 2. Samples will be collected and sent to an off-site laboratory for analysis. The laboratory will be certified by the State of New York. All samples will be analyzed for TCLP arsenic and PCBs. Twenty percent will undergo analysis for organics (volatiles, semivolatiles, pesticides/PCBs) and inorganics to confirm that there are no other contaminants present. Sampling will be conducted on a grid pattern spaced at approximately 25' between sampling locations. The grid will be laid out to ensure that the entire suspected area of contamination is covered, as shown in Figure 3-1. Samples will be collected at depths of 0, 4, 8, and 12 feet and sent for quick turnaround.

Foster Wheeler will sample the exterior points of the grid first to ensure that a clean end point is established. If the analytical results show that contamination above action levels exists at an exterior point, the grid will be extended. Addtional soil borings will be advanced and samples to ensure that a clean end point is established.

The results of the preexcavation sampling will be used to adjust the original estimates of the quantities of contaminated soil requiring excavation, transport, and disposal. Analytical data will be plotted on the nodes of the grid. Each node will represent the center of a cell with a volume of 2500 cubic feet (25' x 25' x 4') Cells with PCB or arsenic contamination above the actions levels will be marked for excavation.

After all samples are received, Foster Wheeler will submit the Preexcavation Sampling Report detailed in Section 3.1. This report will contain plots depicting the lateral extent, depth, and contamination concentrations. These plots will be used to develop topographic excavation maps and depths of excavations required. Excavation areas for PCBs will indicate whether the soil will be loaded into vehicles/containers for disposal at a landfill or be shipped to an incinerator. After approval by the Navy, the excavation depths and method of disposal will be marked on the grid using cut stakes.

3.4 MOBILIZATION AND SITE PREPARATION

Mobilization and site preparation consists of mobilization of equipment, office trailers, and support utilities to the project site and preparation for the initiation of work. Pre-mobilization activities include coordination of labor resources, procurement of surveying, drilling, and waste transport subcontractors and disposal facilities and purchasing of materials and supplies related to the remediation effort.

The specific requirements for site preparation for the NWIRP Bethpage work are listed below:

- Mobilization of an office trailer and installation of all required utilities. Electrical service (110V) will be provided by the Navy. Foster Wheeler will coordinate potable water supplies and telephone service. The location of the site trailer is provided in Figure 3-2.

- Designation of the exclusion zone, contaminant reduction zone (including location of the decontamination pad), and support zone, as shown in Figure 3-2.

- Identification and marking of vehicle haul routes, including the location of available truck scales.

- Implementation of erosion and sediment control measures.

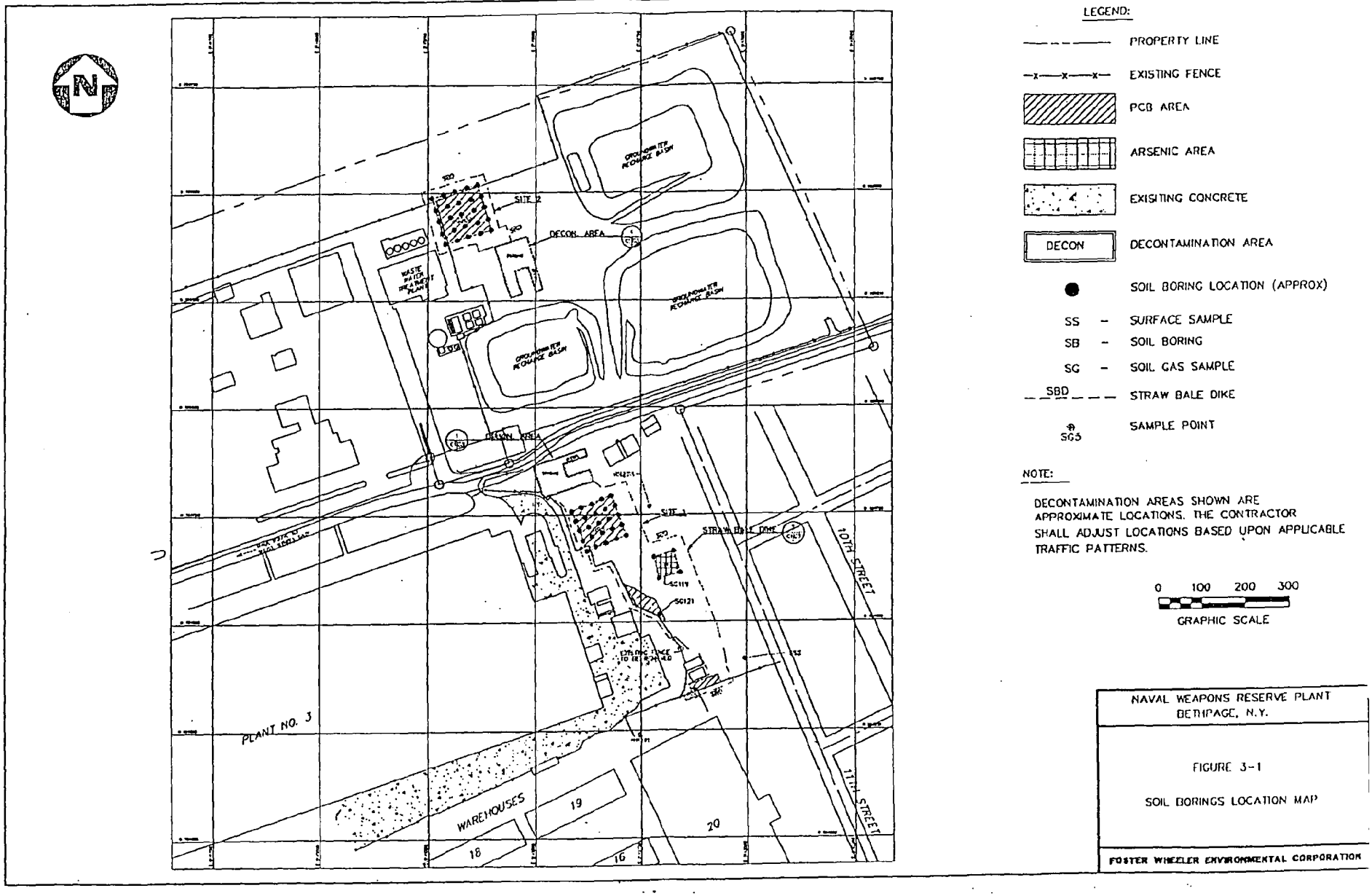
- Removal of approximately 300' of fencing, as shown in Figure 3-2.

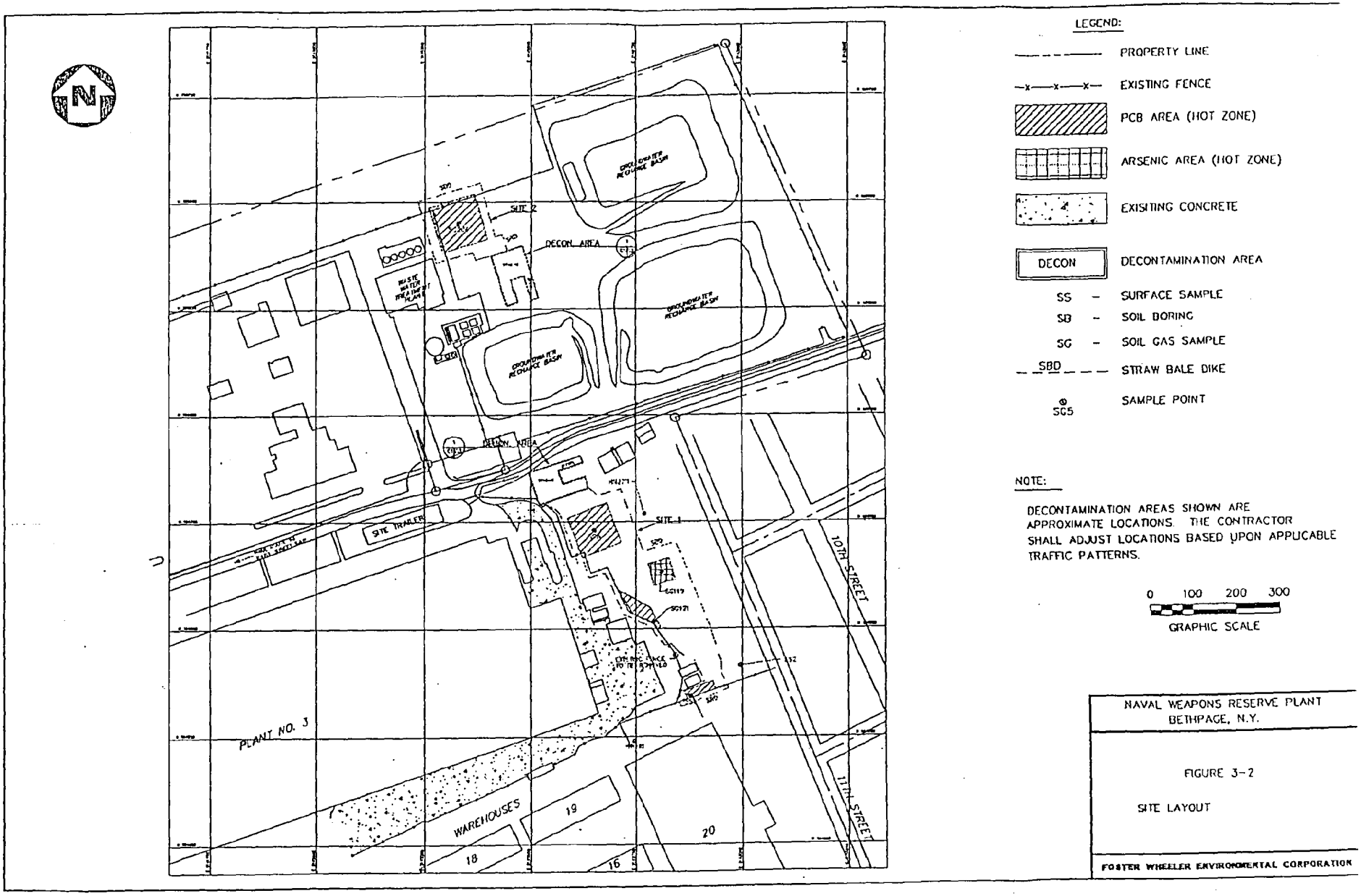
- Placement of air monitoring stations to establish background baseline conditions.

- Installation of necessary security measures, including obtaining the necessary unrestricted access passes and truck passes from the local security contractor.

- Clearing and grubbing of surface debris and vegetation to the extent required.

The construction of a soil staging area, as indicated in the Remedial Design Report, will not be required. The nature and extent of contamination will be established by soil sampling over the grid described in Section 3.2 and the Sampling and Analysis Plan. Excavated soil will be placed directly into roll-off containers/vehicles for transport to the disposal facility.





NAVAL WEAPONS RESERVE PLANT
BETHPAGE, N.Y.

FIGURE 3-2

SITE LAYOUT

FOSTER WHEELER ENVIRONMENTAL CORPORATION

3.5 EXCAVATION AND DISPOSAL OF CONTAMINATED SOILS

The statement of work requires the excavation of approximately 4,000 cubic yards (cy) of PCB-contaminated soils and 600 cy of arsenic-contaminated soils from the following locations:

Site 1 - Former Marshaling Area

Approximately 1,100 cy of PCB-contaminated soil (10 ppm to 500 ppm)
Approximately 300 cy of PCB-contaminated soil (> 500 ppm)
Approximately 600 cy of arsenic-contaminated soil

Site 2 - Recharge Basin Area

Approximately 2,600 cy of PCB-contaminated soil (10 ppm to 500 ppm)

Excavation will be accomplished using a Caterpillar 325 Backhoe and D5 Bulldozer (or equivalent equipment). Excavations in excess of four feet in depth will be cut back to achieve slope stability. Excavated soils will be loaded directly into dump trucks or roll-off containers for transport to the disposal facilities. Sites 1 and 2 will not be excavated concurrently. Arsenic-contaminated soils will be excavated separately from PCB-contaminated soils. Contaminated soils will be loaded directly into containers/vehicles for disposal and transported by licensed haulers to permitted and approved facilities. Haul routes will be directed along main commercial arteries away from residential neighborhoods.

Foster Wheeler will perform all excavations to minimize the migration of fugitive dust to the surrounding area. Water from a standby tanker will be used to suppress dust during periods when dry or conditions are encountered. Water use will be minimized to greatest extent possible.

Four air monitoring stations will be established at the perimeter of the work area to verify that dust emissions remain within acceptable levels. Air monitoring of vapor emissions will also be performed as per the site Health & Safety Plan.

At the completion of excavation, the Navy's oversight contractor (Halliburton NUS) will collect confirmatory samples to determine the effectiveness of the removal operation. Halliburton will require two weeks to receive and analyze chemical data. Once it has been determined that excavation activities have been completed, Foster Wheeler will survey the limits of the excavation.

3.6 SITE RESTORATION AND DEMOBILIZATION

After Foster Wheeler receives confirmation from the Navy that all contaminated soils have been removed, site restoration and demobilization will be initiated. Restoration requires

that all excavated areas will be backfilled with borrow material to match pre-excavation grades. Clean material will be obtained from local suppliers, who will provide analytical data and certification that the material is not contaminated. Fill material will delivered on site by the supplier and spread/compacted using a D-5 bulldozer and Bomag Compactor (or equivalent equipment). Backfill will be compacted to achieve the in-place density of the existing subgrade. Topsoil, seed, and mulch will not be installed over excavated areas.

After site restoration is completed, Foster Wheeler will demobilize from the site. Demobilization includes removal of all temporary facilities and removal of wastes generated during the remediation, including decontamination fluids, drill cuttings, and PPE.

3.7 PERMITS

Foster Wheeler will obtain the following permits identified in the Design Report:

- Form 8700-22 for off-site transport of PCB-contaminated soils.
- Form 8700-22 for off-site transport of arsenic-contaminated soils.
- Notification of Authorization of Disposal
- Certification of Disposal

All permits will be obtained before site mobilization and site preparation can begin.

3.8 PROJECT COMPLETION AND CLOSEOUT

Upon completion of all site activities, Foster Wheeler will prepare a Project Completion Report that includes the following sections:

- Introduction
- Summary of Action
- Summary of Record Documents
- Field Changes and Contract Modifications
- Final Documents
- QC Summary Report.

Project closeout activities include the final project audits and financial and technical closeout.

3.9 PROJECT MANAGEMENT

Project Management addresses the tasks and activities necessary to control project progress and report status to the Navy. Foster Wheeler will provide Project Management support from the Lyndhurst, NJ office. The meetings and reports included under Project Management are discussed in the following paragraphs:

3.9.1 Meetings

Foster Wheeler will conduct all construction meetings required by the contract, daily safety meetings, and weekly progress meetings as necessary.

Construction Meeting: After mobilization and the start of construction, the Project Superintendent will conduct a meeting every two weeks. The Navy will be notified 48 hours in advance of each meeting. Foster Wheeler will prepare and distribute the minutes of these meetings within two working days. The following agenda will be followed:

- Review of minutes from previous meeting
- Review schedule and status of work
- Review submittal status
- Preview two week look ahead
- Resolve problems and issues of concern

Daily Safety Meeting: Prior to starting work, the SHSO will conduct a daily safety meeting. All of the day's planned activities will be reviewed with particular attention focused on PPE and risk. All site personnel are required to attend the meeting. Additional information on the Daily Safety Meeting is provided in the HASP.

3.9.2 Reports

Foster Wheeler will provide an Environmental Conditions Report, Daily Production and Quality Control Reports, and Monthly Status Reports to the Navy. These are discussed in the following paragraphs:

Environmental Conditions Report: Prior to starting work, Foster Wheeler will perform a photographic survey of the individual work sites with the Navy's designated representative. This survey will provide information pertaining to the existing environmental conditions in and around the work areas.

Daily Production and Quality Control Report: The Project Superintendent will prepare a combined Daily Production and Quality Control Report for each day that work

is performed. The original and one copy will be forwarded to the Navy by 10:00 AM the next working day. Information required under Section 6.15 of the contract specifications will be included in this document. A copy of the report format is provided in Figure 3-4.

Monthly Status Report: The Project Manager will submit a Monthly Project Report for each month where significant activity occurs. The report will be prepared and submitted in conjunction with the monthly program report and will include the following items:

- Work Accomplished During the Previous Month
- Work Planned for the Next Month
- Problems and Solutions
- Progress Schedule
- Commitment Status and Forecast Report
- Cost Report
- Noncompliance Report
- Production and QC Report
- Waste Disposal Report

4.0 PROJECT SCHEDULE

The Project Schedule is presented in Figure 4-1. Preexcavation sampling will occur after Navy approval of the Work Plan and Sampling and Analysis Plan. Site mobilization will not occur until all disposal approvals are received.

5.0 PROJECT STAFFING PLAN

The Project Staffing Plan is presented in Figure 5-1. The roles and responsibilities of the key project personnel are described in the paragraphs. Resumes for the Key Personnel are provided in Appendix A.

Project Manager: The Project Manager is responsible for overall execution of the delivery order. He reports directly to the NORDIV RAC Program Manager and is the Navy's principal point of contact. The Project Manager is responsible for preparation of all project plans, making coordination with all host facility personnel, ensuring compliance with project technical specifications, and enforcing budget and schedule compliance.

Field Operations Lead: The Field Operations Lead is responsible for the execution of the pre-excavation sampling. She reports directly to the Project Manager. She ensures compliance with the sampling protocols and chain-of-custody requirements. The Field Operations Lead will maintain a field logbook documenting all sampling activities.

Project Superintendent: The Project Superintendent will be Foster Wheeler's lead on-site during the excavation and disposal activities. The Superintendent will interface with the Navy's Resident Employee In Charge of Construction (REICC). He will coordinate all daily site operations and ensure implementation of the Site-Specific HASP. The Project Superintendent will complete on-site QC responsibilities and will communicate with the Quality Control Manager.

Quality Control Manager: The Quality Control Manager (QCM) is responsible for ensuring that all work is performed with the contract and delivery order specifications. The QCM reviews and approves all submittals before delivery to the Navy and maintains the submittal register (provided as Appendix B).

Site Health and Safety Officer (SHSO): The SHSO will assist the Project Superintendent in the enforcement of the HASP. air monitoring, training, and coordination of medical surveillance for all site personnel. The SHSO has a direct reporting line to the Superintendent and a communication line to the program Health and Safety Manager. The SHSO has "stop work" authority if unsafe conditions arise.

6.0 QUALITY CONTROL/QUALITY ASSURANCE PLAN

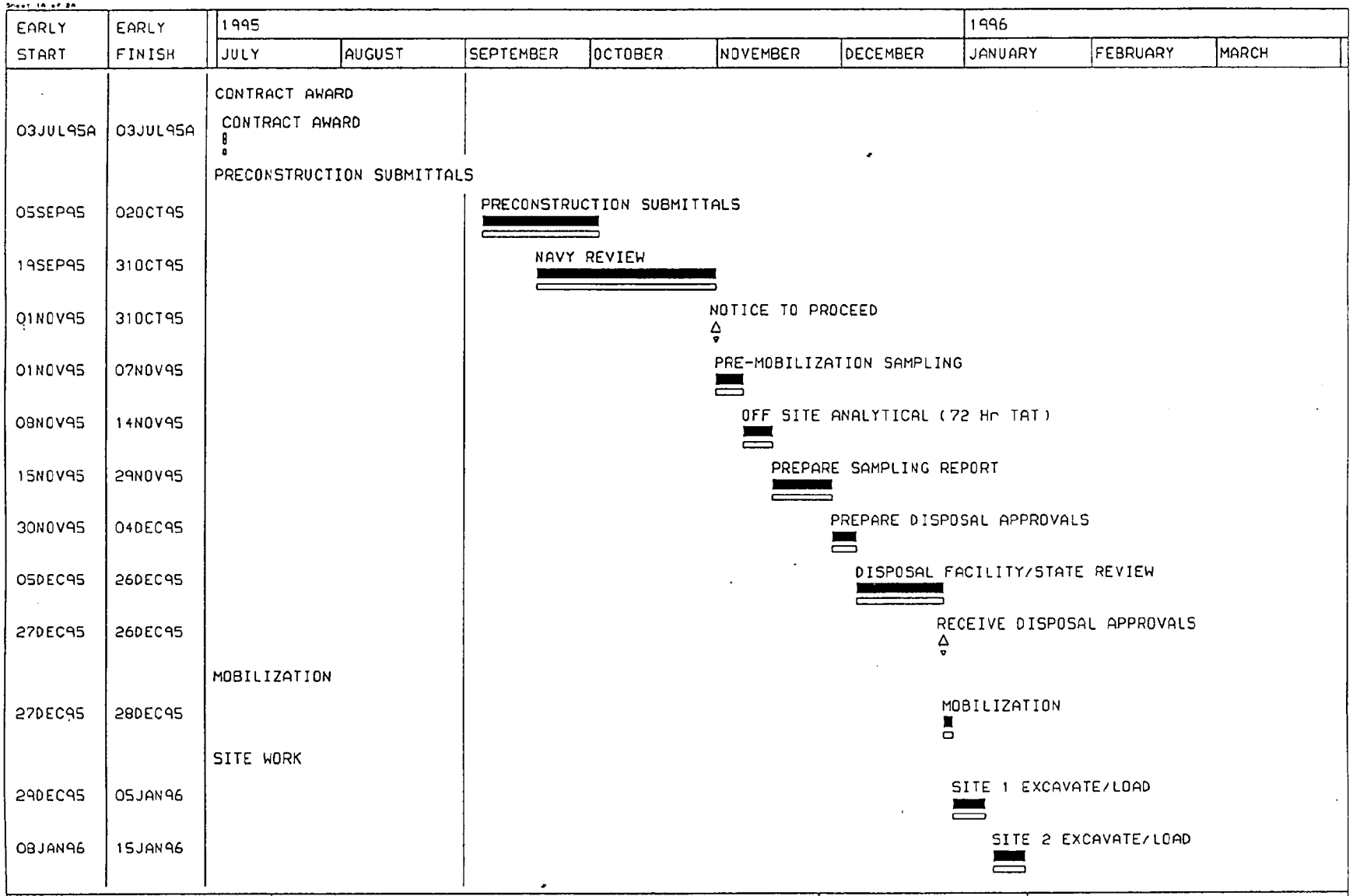
6.1 PURPOSE

This Quality Control/Quality Assurance (QC/QA) section describes the organization, inspections, tests, procedures and documentation necessary to produce a completed project which complies with governing regulations and the work plan applicable to the NWIRP Bethpage remediation project in Long Island, New York.

6.2 ORGANIZATION AND RESPONSIBILITIES

On-site QA/QC duties will be undertaken by the Project Superintendent and Site Health & Safety Officer. They will utilize physical inspections, direct air monitoring and confirmatory laboratory testing to verify that work is being performed in accordance with the project plans. All subcontractors will confirm to, and participate in the program described herein as part of a unified team.

Foster Wheeler Environmental will direct and maintain responsibility for the overall QA/QC program and will manage subcontractors in a manner to maintain project quality assurance and control requirements. It is anticipated that subcontractors will be utilized for excavation, trucking and disposal and laboratory analysis.



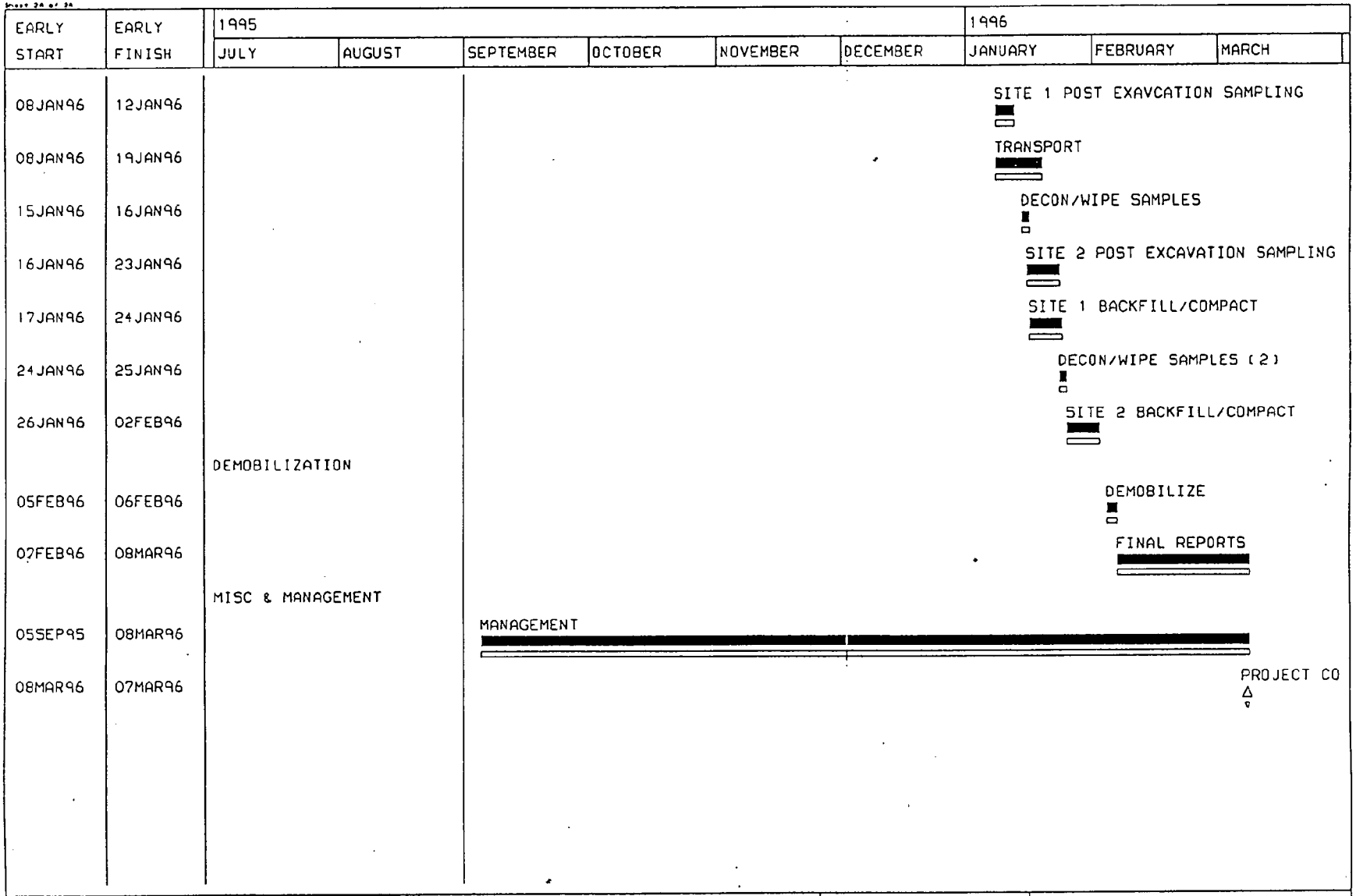
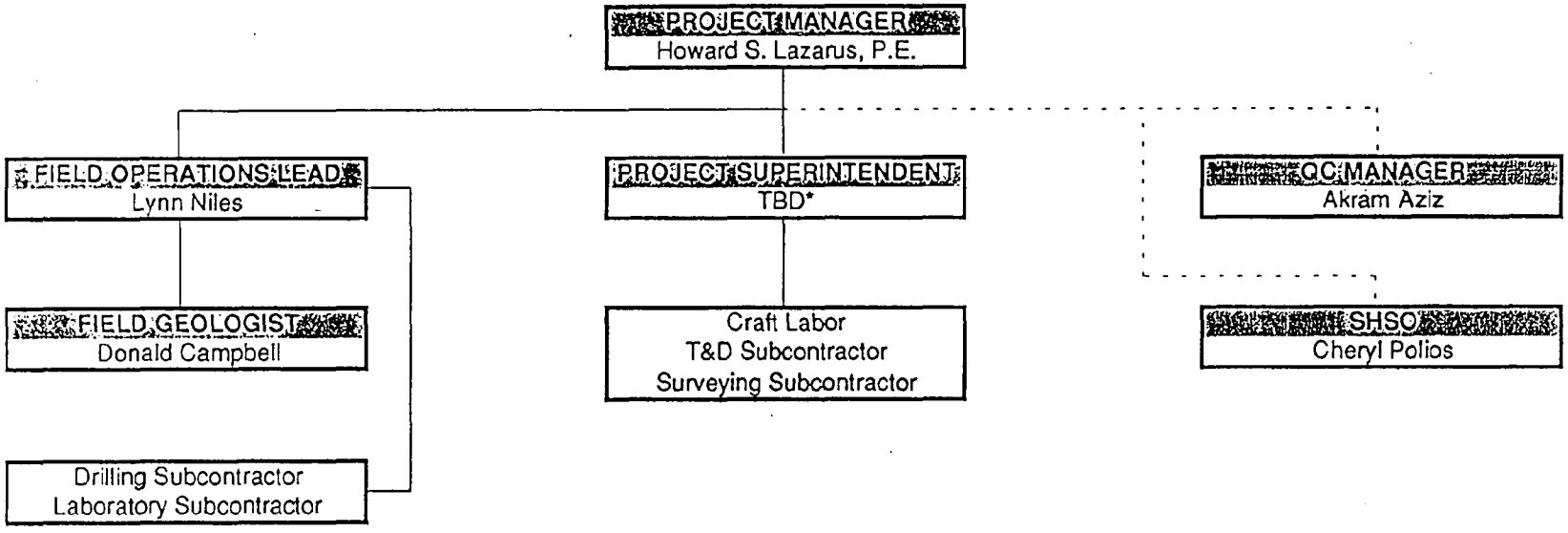


FIGURE 5-1 - PROJECT ORGANIZATION



NOTES: Dashed lines indicate project reporting. The QC Manager and SHSO have independent reporting lines to the Corporate QAO and H&S Manager, respectively.

*The Project Superintendent will be selected from the individuals identified in the contract proposal.

6.3 PROBLEM OR WORK DEFICIENCY MEETINGS

If a major problem or deficiency occur or is likely to occur, a special meting to address related issues will be held. The meeting will be attended by the Project Superintendent, SHSO, Subcontractor's Foreman, a Navy representative and others as required. The purpose of the meeting would be to define and resolve potential problems or work deficiencies in the following manner:

- Define and discuss the problem or deficiency
- Review alternative solutions, including their effects on schedule and budget
- Implement a plan to resolve the problem or deficiency.

The meeting will be documented and minutes transmitted to all participants.

The Quality Control Manager is responsible for maintaining the submittal register and reviewing and certifying that submittals are in compliance with the contract requirements. All submittals will be accompanied by a transmittal form which will identify the submittal and provide a unique tracking number. A copy of the transmittal form is provided as Figure 6-1.

6.4 TESTS AND INSPECTIONS

6.4.1 Production Testing

Compaction testing will be performed to ensure that density equivalent to the existing in - place is achieved. These tests will be conducted under the direction of the Project Superintendent.

6.4.2 Preparatory Inspections

A preparatory inspection will be performed at each major definable stage of the remediation project. They will typically include the following:

- Review of the work plans and Standard Operating Procedure
- Examination of the work area in question to assure that all preliminary work necessary for the next phase of remediation to occur, has been completed
- Verification of all field dimensions
- Physical examination of material (i.e., fill and topsoil) and equipment to verify their presence and sufficient quantity, as well as conformance to submittals and workplans

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on the reverse side prior to initiating this form)*	DATE	TRANSMITTAL NO.

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO:	FROM:	CONTRACT NO.	CHECK ONE:
Commanding Officer Northern Division Naval Facilities, Engineering Command 10 Industrial Highway Lester, PA 19113	Foster Wheeler Environmental 2300 Lincoln Highway East One Oxford Valley, Ste 200 Langhorne, PA 19047-1829	N62472-94-D-0398 D.O. #	☐ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL _____

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED *(Type, size, model number/etc.)* b.	MFG. OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction no. 8)* c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE g.	VARIATION *(See Instruction No. 6)* h.	FOR C E USE CODE i.
				SPEC. PARA. NO. e.	DRAWING SHEET NO. f.			
	Specification Section No.							

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated.

NAME AND SIGNATURE OF CONTRACTOR

Figure 6-1 - Transmittal Form

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

ENG FORM 4025, Aug 89 *(ER 415-1-10)* EDITION OF OCT 84 IS OBSOLETE. SHEET _____ OF _____ (Proponent: CEMP-CE)

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.
3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288 for each entry on this form.
4. Submittals requiring expeditious handling will be submitted on a separate form.
5. Separate transmittal form will be used for submittals under separate sections of the specifications.
6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".
7. Form is self-transmittal, letter of transmittal is not required.
8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A --	Approved as submitted	E --	Disapproved (See attached)
B --	Approved, except as noted on drawings.	F --	Receipt acknowledged
C --	Approved, except as noted on drawings. Refer to attached sheet resubmission required.	FX --	Receipt acknowledged, does not comply as noted with contract requirements
D --	Will be returned by separate correspondence.	G --	Other *(Specify)*

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

☆ U.S.G.P.O.: 1989- 718-222/10290

FIGURE 6-1 - TRANSMITTAL FORM (CONT)

- Verification of proper manifest or bill of lading and acceptance of material disposal or incineration facility

The Project Manager will be advised of inspection results. Deficient work activities may require a more rigorous schedule of reinspection, continuous inspection or stop work order until problems or deficiencies have been resolved. Deficiencies and the results of follow-up inspections will be documented on the appropriate inspection sheet.

6.4.3 Termination Survey on Soil Excavation

Confirmatory sampling will be conducted by the Navy and results reviewed prior to backfilling operations. The final horizontal and vertical excavation limits will be surveyed and will serve as the remediation "as-built" drawings.

6.4.4 Completion Inspections

The Project Superintendent and SHSO will jointly conduct a completion inspection at any increment of work established in the work plans and Standard Operating procedures, as well as at the completion of all work. Any punchlist items will be reviewed to assure that all items have been completed and corrected. The Navy may elect to accompany the inspection team or perform supplemental QA inspections. Any nonconformance noted will be processed by the Project Superintendent and resolved in a timely manner and identified in a final punchlist, as needed. Final inspection items may include compaction testing, material conformance and installation, final grades achieved, receipt of disposal manifests and weight slips.

6.5 CHANGES AND NONCONFORMANCES

6.5.1 Changes

If circumstances develop during the construction process that make it necessary or advisable to revise the work plan in order to accomplish project goals, a Field Change Request (FCR) will be generated by project field staff. Events such as a change in site conditions, use of alternative methods or materials and improvements to permit effective excavation may result in a FCR. A FCR will be processed by the Project Superintendent in accordance with established Foster Wheeler Environmental engineering procedures. FCRs also require review and approval by the Navy. Once approved, the FCR supersedes the pertinent sections of the work plan.

6.5.2 Nonconformances and Resolution

Any activities that occur which may not or do not comply with the project work plan will be addressed as follows:

- The project staff involved is told of potential nonconformance. If necessary, a written Performance Evaluation Report (PER) is given to responsible staff. The PER identifies the possible nonconformance, to be addressed by the Project Superintendent and Project Manager.

- If the PER is determined to be an actual nonconformance, a Nonconformance Report (NCR) will be issued. The QA Officer will be informed and the Project Superintendent and Project Manager will immediately address the NCR. The NCR will be resolved on an expedited schedule to avoid jeopardizing worker and public health & safety.

- If overall project safety or integrity is at risk, the SHSO and higher levels of the Foster Wheeler Environmental chain-of-command, including the QA Officer and Project Sponsor will be brought in to resolve the NCR.

A written response to the NCR must be made within seven days unless otherwise agreed to by all parties. The mechanism for response will be an FCR.

If the proposed corrective action is deemed insufficient by the QA Officer, corrective action cannot be obtained, or results of prior work are indeterminate and significant project environmental or health & safety consequences are anticipated, work may need to be halted by issuing a Stop Work Order. This step should only involve the affected portions of the site work and is invoked only to protect worker safety and overall technical integrity of the project. A Stop Work Order should be issued only after reasonable efforts to resolve the NCR have occurred through the Foster Wheeler Environmental chain-of-command.

6.6 DOCUMENTATION

Documentation of operations recordkeeping, photographic evidence of work performed and as-built drawings will be provided to the Navy in the project Final Report.

6.6.1 Operations Recordkeeping

All inspection and testing activities will be documented with appropriate forms. These will address each work activity inspected by the Project Superintendent according to established acceptance criteria. The Project Superintendent will maintain current records of quality control operations and activities and test performed, including the work of subcontractors and suppliers. These records will include factual evidence of the required quality control activities performed, including:

- Work performed daily, giving location, description and staff

- Results of tests and QC activities with references to specifications/plan requirements. The control phases involved for each definable work feature (i.e., preparatory, completion) will be identified. Any deficiencies and corrective actions will be noted

- Materials received, with statement of its acceptability and storage

- Submittals reviewed with contract reference, including staff and action taken

- Results, instructions and/or corrective actions taken as a result of specific job safety evaluations

- Any instructions given or received, conflicts in plans or specifications and status of resolving these issues.

- Subcontractors' verification statements and certifications

- Completed Field Change Requests

- Project PERs and NCRs

- QC Daily Log

- Photographic Log

Operation records will include a description of trades working on the project, the number of personnel working, weather conditions and any delays. These records will also include both conforming and deficient features of the work.

6.6.2 Photographic Documentation

Still 35 mm color photographs will be taken as needed to record preexcavation, post-excavation and work progress conditions. Pre-excavation photos will capture the entire site and any off-site features that may be susceptible to damage from project activities (i.e., egress roads). Progress photos will be taken at the same locations, if possible to record the same perspective throughout the project. Progress photos will be taken to document milestone events, unique operations or non-conforming situations.

The photo log will include the date the photo was taken, initials of photographer and a description of the view shown in the photo.

6.6.3 As-Built Drawings

During the course of the project, the Project Superintendent will complete as-built mark-ups on site layout drawings. As-built drawings will depict the limits and depth of the

excavated areas. Confirmatory sample locations from the termination survey to be conducted by the Navy will also be indicated on the as-built drawings.

7.0 WASTE REMOVAL PLAN

7.1 PURPOSE

This section addresses how the various materials generated from site removal action activities will be handled. These materials include wastewater, personal protective equipment, non-hazardous and hazardous waste.

7.2 WASTE HANDLING

7.2.1 Wastewater

Wastewater from personal protective and heavy equipment decontamination will be collected, stored and tested for constituents of concern by the subcontractor. The wastewater will be disposed of appropriately, based on the analytical results.

7.2.2 Non-Hazardous Materials

Non-hazardous materials and debris will be directly loaded into containers for disposal at a landfill. Soils, concrete, grubbings, PPE and other miscellaneous waste will be placed in appropriate containers. Container contents will be recorded and records kept at the field office.

7.2.3 Hazardous Materials

Contaminated soils will be excavated and loaded into trucks for eventual disposal or incineration. Soils with PCB concentrations between 10 and 500 mg/kg or with arsenic leachate concentrations exceeding 5.0 mg/l will be excavated and disposed of in a TSCA/RCRA disposal facility. Soils with PCB concentrations greater than 500 mg/kg will be excavated and transported to an off-site TSCA/RCRA-permitted incinerator.

PPE and other miscellaneous debris will be placed in appropriate containers for disposal. Documentation of container contents will be maintained at the field office. All disposal and incinerator facilities must be approved by USEPA and Foster Wheeler Environmental prior to award of the subcontract. Waste profiles and other documentation will be forwarded to the Navy for signature.

Foster Wheeler Environmental will provide completed manifest and transport documentation to the Navy for review and signature. If approved by the Navy, Foster Wheeler may sign the manifests as an agent of the Navy using the Navy's generator number. Copies of certified weight tickets from the disposal facility and all disposal

certification documents will be forwarded to the Foster Wheeler Environmental Project Superintendent within 72 hours of disposal.

Although hazardous waste material will be loaded for off-site transportation immediately after excavation and no staging of hazardous material is anticipated, if staging is necessary it must be in conformance with the following requirements:

- All staged hazardous waste must be removed from the site for treatment and disposal within ninety (90) days of first being accumulated.

- Up to 8,800 gallons of waste can be stored on site for a period not exceeding ninety (90) days if the waste is managed in accordance with the requirements of 6 NYCRR 373-1.1, which include the following:

  - the waste is placed in containers

  - the date on which the accumulation period begins is clearly marked on each container

  - a label or sign stating "Hazardous Waste" must identify all areas and containers where hazardous waste is stored

  - appropriate hazardous waste training is provided to site personnel, contingency plans are available to handle any fire, spill, or emergency, and appropriate emergency response equipment (i.e. spill cleanup material, fire protection equipment, communication devices, alarms to notify workers of an emergency) are present

  - containers used to store hazardous waste are in good condition

  - containers must be made of material compatible with the waste being stored

  - containers must be kept closed except to add or remove waste and must be managed to prevent leaking

  - containers must be inspected every week for leaks and deterioration and inspections documented in a weekly inspection log

8.0 ENVIRONMENTAL PROTECTION AND REGULATORY COMPLIANCE PLAN

8.1 PURPOSE

This section discusses the measures to be taken to protect the environment and ensure compliance with all required laws and regulation during the execution of the delivery order scope of work.

8.2 REGULATORY COMPLIANCE

8.2.1 Permits

Foster Wheeler will obtain the following permits identified in the Design Report:

- Form 8700-22 for off-site transport of PCB-contaminated soils.
- Form 8700-22 for off-site transport of arsenic-contaminated soils.
- Notification of Authorization of Disposal
- Certification of Disposal

All permits will be obtained before site mobilization and site preparation can begin.

8.2.2 USEPA/State Waste Identification Numbers

USEPA/New York State Waste Identification Numbers must be obtained prior to any activities if materials being removed contain EPA or New York State hazardous wastes, or wastes contaminated with regulated levels of PCBs. Therefore, these numbers will be obtained from the Navy and verified prior to the commencement of any activity. Transporter and disposal facility identification numbers will also be verified.

8.2.3 Waste Management

Hazardous Wastes

If not previously accomplished by the Navy, a Notification of Hazardous Waste Activity, as required by 40 CFR 261.41, will be transmitted to the USEPA. Hazardous wastes will be managed in accordance with 6 NYCRR Part 370-373.

Hazardous and toxic waste must be removed from the site within 90 days of it's being accumulated, unless it is stored in an area designated as being contaminated. Each container must be clearly marked with the date that accumulation of waste began.

Waste containers must be in good condition and not leak. The waste accumulation area must be inspected at least weekly to check for leaks or deterioration caused by corrosion or other factors. Inspections must be logged in a field notebook and the weekly inspection checklist completed. Copies of these will be provided to the Navy.

The containers should remain closed at all times, except when adding or removing waste. Containers holding hazardous waste must be located at least 15 meters (50 feet) away from the property line. Each container that is 110 gallons or less must be marked conspicuously with a completed label stating:

"HAZARDOUS WASTE -- Federal law prohibits improper disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency."

Solid Wastes

Waste materials that are determined to be nonhazardous will be managed in accordance with New York State solide waste regulations including New York Rules and Regulations, Title 6, Parts 360 (Solid waste Management Facilities) and 364 (Waste Transport Permit Regulations).

Toxic Wastes

PCB Contaminated Materials: If not already accomplished by the Navy, a Notification of PCB Waste Activity Form will be transmitted to USEPA. Soils from Sites 1 and 2 which contain PCBs in concentrations greater than 10 mg/kg will be managed subject to the provisions of 40 CFR 761, which establishes requirements for storage, marking, manifesting, recordkeeping, and disposal of PCBs and PCB items. Pursuant to 40 CFR 761.65(c), these requirements include:

- Roll-offs containing PCB contaminated wastes will be securely covered to prevent contact with precipitation and must be protected from leaking.

- Containers will be dated as to when contaminated material is first stored.

- Areas where roll-offs/trucks are stored/parked prior ro transport off-site (if applicable) will be marked with 6" lettering in a white or yellow background as referred to in 40 CFR 761.45, Figure 1.

- Roll-offs/trucks will be checked for leaks at least one every 30 days (if applicable).

- The thirty day storage limit will not applyto this site since any storage of roll-offs/trucks will be within the area of contamination.

Removal operations for soil and debris will be conducted under the worker protection provisions of regulations promulgated by the Occupational Safety and Health Administration (OSHA) in 29 CFR Parts 1910 and 1926.

8.3 ENVIRONMENTAL PROTECTION

8.3.1 Air Pollution Control

Fugitive dust emissions may result from project operations. Unpaved areas and excavation activities are the primary sources of fugitive dust that are of concern. Foster Wheeler will take preventive measures to minimize the potential for fugitive dust to become a problem. Engineering controls, including dust suppression (watering), limiting the excavation face, speed reduction, the erection of windbreaks, and covering of exposed excavation areas will be employed as necessary. Any temporary stockpiles of soil will be kept within the excavated area, below ground surface, shielding it form the wind. Dump trucks/containers will be covered when not being actively filled.

Foster Wheeler will also perform real-time dust monitoring during excavation operations and establish upwind and downwind monitoring stations at the perimeter of the work area. When emissions at the site perimeter exceed 5.0 mg/m^3, dust suppression will be accomplished by applying water to the excavation.

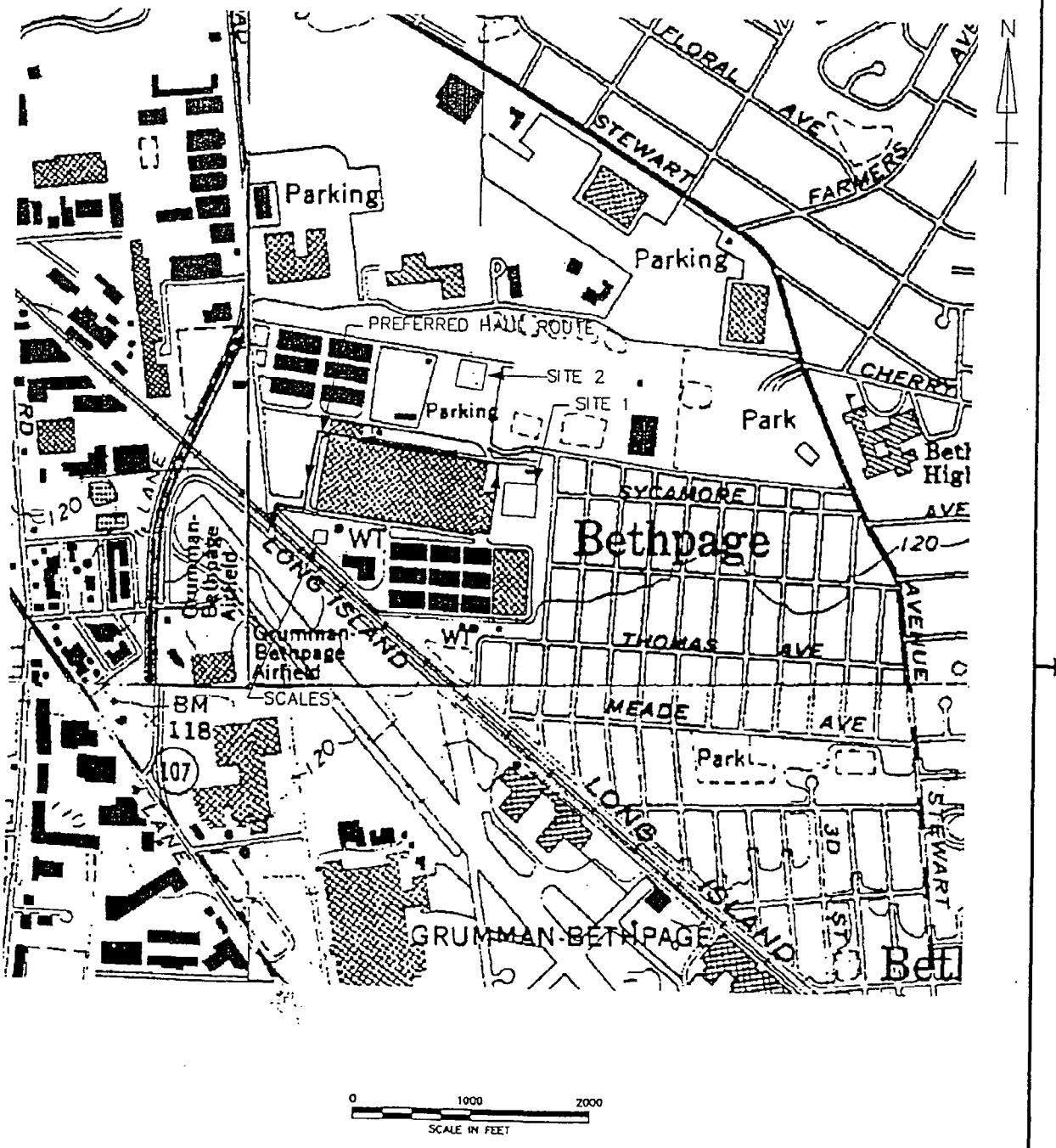
Haul routes will be directed away from the adjacent population and residential areas. Haul routes are depicted in Figure 8-1.

8.3.2 Wastewater and Stormwater Management

All wastewater from equipment decontamination will be collected and disposed of with other contaminated materials being removed from the site. Stormwater will be managed using appropriate engineering controls (i.e., covers, berms, etc.) and any existing on-site systems as necessary to eliminate or reduce the production of stormwater that would need to be disposed of with contaminated materials.

8.3.3 Site Remediation

Hazardous and toxic wastes to be removed from the site must be placed into appropriate U.S. Department of Transportation (DOT) approved containers compatible with the waste. The containers must be clearly marked "HAZARDOUS WASTE" and identify the waste's primary risk(s) (i.e., toxic, flammable) to inform employees emergency response personnel and the public. Commercial hazardous waste labels may be attached to the container, with all information completed prior to transportation off-site. The generator's name and address and manifest document number must also be on the containers.



NAVAL WEAPONS RESERVE PLANT
BETHPAGE, N.Y.

FIGURE 8-1

HALL ROUTES

FOSTER WHEELER ENVIRONMENTAL CORPORATION

8.3.4 Transport

Only transporters who have demonstrated competence and the required permits and license for transporting waste will be used. Foster Wheeler Environmental policies and procedures for subcontracting these services will be followed. Transporter EPA/State I.D. Numbers will be kept in the project and compliance files. Trucks will be covered and lined to prevent fugitive releases of waste during transport. All trucks leaving the site will be inspected by Foster Wheeler Environmental personnel prior to departure to ensure that the hauler displays the appropriate placards.

8.3.4.1 DOT Requirements

Hazardous materials must be properly classified, described, packaged, marked, and labelesd and be in condition for shipment as required by 49 CFR 171.

Waste that does not exhibit one of the nine DOT hazard class characteristics (i.e. explosive, falmmable, poison, combustable, etc.) is not regulated under DOT rules for the transportation of hazardous material. If waste is suspected to be a DOT hazardous material, then it must be shipped under the suspected hazard class. If a particular hazard class is unable to be determined, then the substance may be shipped under either of the following:

Shipping Name	Hazard Class	ID Number	Packing Group	Label
Environmentally hazardous substances, liquid, n.o.s.	9	UN3082	III	CLASS 9
Environmentally hazardous subtances, solid, n.o.s.	9	UN3077	III	CLASS 9

When using one of these "n.o.s." (not otherwise specified) shipping names, at least two technical names must follow (e.g. Environmentally hazardous substances, liquid, n.o.s. [Benzene and Acetone]").

The shipping name, identification number, packing group, instructions, cautions, weights, EPA waste code numbers, and consignee/consignor designations must be marked on the packages for shipment. Labeling provides information regarding the DOT hazard class. Oce the waste is charachterized, reference should be made to the Hazardous Materials Table in 49 CFR 172.101 to determine the appropriate label. The package (or drum) must be marked and labeled as specified in 49 CFR 172.301.

The person offering hazardous material for shipment must offer placards (49 CFR 172.506). Any quantity of material listed in Table 1 of the regulations must be placarded. However, if there is less than 1,000 pounds of a Table 2 material, no placard is required.

No Class 9 placard is required for domestic shipments. If a placard is required, the label referenced above must be affixed on each side and each end of the vehicle(s).

Hazardous material shipping papers must have the following description of the hazardous material, in the following order:

- Proper shipping name
- Hazard class or division
- Identification number
- Packaging group
- Total quantity (must appear either before or after the above information)
- Technical and chemical group names may be entered in parenthesies between the proper shipping name and hazard class of following the basic description (e.g. "Flammable liquids, n.o.s. [contains xylene and benzene], 3 UN1993, PG II").

Other required information includes:

- EPA identification (manifests)
- Emergency Response Guidebook numbers
- 24-hour emergency response number, supplied by the generator and answered by a knowledgeable person
- Signatures

Shipper's certification

8.3.4.2 Transport of PCB Contaminated Materials

TSCA does not require a marking label on PCB-contaminated wastes. However, DOT markings are required. The person offering hazardous material for shipment must offer placards according to 49 CFR 172.506. The label must be at least 6 inches on each side and affixed on each side and each end of the vehicle(s). The placard must be located clear of appurtenances and devices, and must be located so that dirt or water is not directed to it from the wheels of the vehicle. It must also be located away from other markings that could substantially reduce its effectiveness (49 CFR 172.516).

Taxpayer Identification Number: 752512450 Solicitation Number: N62472-94-R-0398

PERSONNEL EXPERIENCE FORM

Name: Howard S. Lazarus, P.E. Job Title: Project Manager

Proposed Project Title Senior Project Engineer/Manager

Years Experience
With This Firm 3 With Other Firms 12

Education (Degrees, year, specialization)
M.S., 1987, Environmental Engineering and Chemistry
B.S., 1978, Civil Engineering

Active Registration (Year First Registered & Discipline)
1982, Professional Engineer

Health & Safety Training, Course(s) & Date(s)
40-Hour OSHA Health and Safety Hazardous Waste Training, 1990
8-Hour OSHA Health and Safety Hazardous Waste Supervisory Training, 1993
8-Hour OSHA Health and Safety Hazardous Waste Refresher, current

Compliance to RFP Requirements	
Requirements	Experience
Degree in engineering, construction management, or geology program	Yes. MS in Environmental Engineering.
Six years construction/project management	Yes. Over ten years construction/project management experience.
Three years managing remedial action projects	Yes. Over eight years managing remedial action projects.
PE or CPG, or equivalent scientific certification	Yes. Professional Engineer since 1982.

Experience and Qualifications: Mr. Lazarus is a registered Professional Engineer with over 15 years of experience in environmental, civil, and facilities engineering and construction as well as project management of hazardous waste remediation projects. His extensive project management experience includes costs and materials estimating; budget preparation and management; development and negotiation of contract modifications; project and resource scheduling; performance of bidability, constructibility, and operability reviews; and interagency liaison. Specific environmental experience has encompassed the design and construction of wastewater treatment plants and groundwater extraction and treatment systems. He has also performed design reviews and managed the construction of thermal treatment systems and asbestos abatement projects. In addition, Mr. Lazarus is experienced in solid waste management, facility planning, sample collection, and environmental assessments.

EPA Region II, ARCS-H, New York and New Jersey, Deputy Program Manager - Responsible for the administration and execution of major hazardous waste remediation contract in EPA Region II with the U.S. Environmental Protection Agency, including the technical review and approval of deliverables, staffing, scheduling, budgeting and subcontracting. The 77 current work assignments include preliminary assessments and site investigations, remedial investigations and feasibility studies, remedial design and remedial actions for CERCLA sites in New York and New Jersey. The engineering and construction scopes of work on these

Howard S. Lazarus, P.E., Experience and Qualifications (continued)

assignments include groundwater treatment systems, excavation, thermal treatment, vapor extraction and biological technologies. He has provided quality control/quality assurance design review, and financial control for remedial actions at the Vestal Wellfield (air stripping), Mattiace Petrochemical (excavation, UST removal, LNAPL remediation), and American Thermostat (low temperature enhanced volatilization) sites. Other activities include review and approval of health and safety plans, community relations, oversight of principal responsible party actions, and technical support to the Environmental Protection Agency.

EPA Region II, Brewster Wellfield, New York, Project Manager - Project Manager for the remedial action of an operable unit at the Brewster Wellfield site. Responsible for completion of the excavation and off-site disposal of VOC contaminated soils and construction of a groundwater treatment system for VOC contaminated groundwater consisting of a series of extraction wells, air stripping columns, and injection wells.

USACE, Rocky Mountain Area, Colorado, Deputy Area Engineer - Responsible for the execution of military and civil works construction and environmental remediation contracts. He was authorized as an Administrative Contracting Officer (ACO). Contract supervision included compliance with the FAR, DFAR, EFAR, and contract specifications; review of contractor invoices; negotiation of contract modifications; and resolution of disputes on fixed price and cost reimbursable contracts. He performed design and construction reviews for major remediation projects at Rocky Mountain Arsenal including incineration, solidification, groundwater pump and treat, and activated carbon adsorption systems. Provided on-site quality assurance of a contractor for a Rapid Response field investigation at Fort Ritchie, MD.

USACE, Fort Carson, Colorado, Director of Operations - Responsible for approval and scheduling facilities construction, renovation, and maintenance for an Army installation with a daytime population over 25,000 and a program budget in excess of $100,000,000. Facilities included family residences, office complexes, commercial and industrial activities, utilities and power plants, roads, airfields, health care facilities, a wastewater treatment plant, and sanitary landfill. Supervised the execution of environmental programs including community-wide recycling and solid waste reduction efforts, hazardous waste minimization, installation master planning, and environmental compliance issues. He directed the efforts of an in-house work force of over 650 and coordinated work with subcontractors. He also designed, reviewed, and estimated structural, geotechnical, and interior finish plans for roads, bridges, foundations, and major earthwork projects.

I am fully committed and available to serve as a Senior Project Engineer/Manager for NORDIV RAC delivery orders when called upon.

By:  Date: 9/29/94

Taxpayer Identification Number: 752512450 Solicitation Number: N62472-94-R-0398

PERSONNEL EXPERIENCE FORM

Name: Cheryl L. Polios **Job Title:** Health & Safety Officer

Proposed Project Title Site Health & Safety Officer

Years Experience

With this Firm 3 **With Other Firms** 2

Education (Degrees, year, specialization)
B.S., 1989, Environmental Science

Active Registration (Year First Registered & Discipline)

Health & Safety Training, Course(s) & Date(s)
40-Hour OSHA Health and Safety Training for Hazardous Waste Operations, 1989
8-Hour OSHA Supervisor Health and Safety Training for Hazardous Waste Site Operations, 1991
8-Hour Health and Safety Hazardous Waste Refresher, current
Radiation Safety Training Course - 1994
CPR certified

Compliance to RFP Requirements	
Requirements	**Experience**
One year as a SHSO at hazardous waste sites where Level C and Level B PPE is required	Yes. Has over one year experience as SHSO in required areas
Specialized training in personal and respiratory protective equipment, program implementation, proper use of air monitoring instruments, air sampling methods, interpretation of results	Yes, Has specialized training in required areas
CPR certification	Yes. CPR certified
Knowledge of federal, state and local occupatinal H&S regulations	Yes. Has knowledge of federal, state and local occupational H&S regulations

Experience and Qualifications: Ms. Polios has over five years experience in health and safety issues at hazardous waste sites. As a Health and Safety Officer she implements site-specific health and safety plans at project sites in accordance with federal, state and local H&S regulations. Implementation of the plans includes employee training (site-specific, hazard communication), real-time monitoring, and recordkeeping. Also participates as an instructor in corporate health and safety training programs.

USACE, Bridgeport Rental and Oil Services Site Remediation, New Jersey, Health and Safety Officer - Conducted real-time monitoring including the use, calibration, and maintenance of organic vapor monitors (OVA, HNu), combustible gas / O_2 meters and particulate meters. Also conducted time-weighted average sampling utilizing personal sampling pumps, which also includes sample collection and data interpretation. Additionally, she conducted daily health and safety briefings, weekly tool box talks, work permit issuance, medical surveillance and health and safety officer's duties. Project has been executed in Level C but future operations may be performed in Level B.

Cheryl L. Polios Experience and Qualifications (continued)

EPRI, Toms River MGP Site, New Jersey, Health and Safety Officer - Implemented health and safety plan during drilling operations for well installation. On-site responsibilities included site-specific training and real-time monitoring for organic vapors, combustible gases and particulates. She also conducted health and safety oversight for pipe installation activities and for operation of an on-site groundwater treatment system.

USEPA, Genzale Plating Site, New York, Health and Safety Officer - Implemented health and safety plan during drilling operations, soil sampling and groundwater monitoring. On-site responsibilities included site-specific training and real-time monitoring for organic vapors and combustible gases.

USAF, Langley Research Center, Health and Safety Officer - Implemented health and safety plan during drilling operations, soil sampling and groundwater monitoring. On-site responsibilities included site-specific training and real-time monitoring for organic vapors, particulates and combustible gases.

I am fully committed and available to serve as a Site Health and Safety Officer for NORDIV RAC delivery orders when called upon.

By: Cheryl L. Polios Date: 9/29/94

Taxpayer Identification Number: 752512450 Solicitation Number: N62472-94-R-0398

PERSONNEL EXPERIENCE FORM

Name: Lynn E. Niles Job Title: Chemist

Proposed Project Title Staff Scientist

Years Experience
With this Firm 2 With Other Firms 2

Education (Degrees, year, specialization)
B.S. 1992, Chemistry

Active Registration (Year First Registered & Discipline)

Health & Safety Training, Course(s) & Date(s)
40-Hour OSHA Health and Safety Training, 1992
8-Hour OSHA Health and Safety Refresher, current

Compliance to RFP Requirements	
Requirements	Experience
Undergraduate degree in geology, hydrogeology, chemistry or biology as appropriate to assignment	Yes. BS in Chemistry
One year in environmental restoration projects	Yes. Over four years in environmental restoration projects.

Experience and Qualifications: Knowledgeable in chemical analysis, field screening headspace analysis, environmental fate and transport analysis and electronic data formatting. Prepared Remedial Investigation/Feasibility Study (RI/FS) reports, including the nature and extent of contamination section. Discussed the contaminants of concern, the ranges of contaminant concentrations with respect to the regulatory guidelines and/or cleanup levels at hazardous wastes for both private sector and federal and state clients.

Atlantic Highlands Manufactured Gas Plant Site - Ms. Niles performed the analysis of sediment chemical result data and prepared a final report summarizing the extent of MGP related contamination. Compared the analytical data to the present sediment criteria and presented her findings in the report. Also involved in the tabulation and validation of the analytical data.

U.S. Environmental Protection Agency - Contract Laboratory Program (CLP) - As coordinator for this CLP project, Ms. Niles is responsible for the management of company project files, analytical service requests, sampling paperwork, and data result acquisition.

U.S. Environmental Protection Agency's ARCS II Program GCL Tie and Treating Site - As Site Chemist, Ms. Niles performed the analysis of soils chemical result data and prepared the section of the Focused Feasibility Study (FFS) report discussing the extent of contamination. Also performed the analysis of all chemical result data and prepared a final RI/FS report summarizing the contaminate fate and transport and the extent of site contamination.

Lynn E. Niles Experience and Qualifications (continued)

U.S. Environmental Protection Agency Fried Industries Site - Ms. Niles performed the analysis of all site chemical result data and prepared a final RI/FS report discussing the contaminate fate and transport and the extent of site contamination.

USEPA Chemical Insecticide Corporation Site - As Site Chemists, Ms. Niles performed the analysis of soils chemical result data and prepared a final RI/FS report documenting the extent of soil contamination.

Kalama Chemical Site - As the Field Chemist, Ms. Niles performed field screening soil gas analysis, utilizing a HNu 321 gas chromatographer.

USEPA Olean Wellfield Site - Ms. Niles performed field screening headspace analysis, utilizing a Photovac gas chromatographer.

USEPA Vestal Wellfield Site - As Field Chemist at the Vestal Wellfield site, Ms. Niles performed field screening headspace analysis, utilizing a HNu 321 gas chromatographer.

Hooker/Ruco Corporation Site - As the Site Chemist, Ms. Niles helped prepare the fate and transport analysis section of the final report.

State University of New York at Oneonta Project Site - As Field Crew Member, performed preliminary site investigation and sampled PCB-contaminated materials through concrete wipe and soil sampling procedures.

Data Entry Operator for the GCL Tie and Treating, Vineland Chemical, Fried Industries and Chevron Chemical Company client projects. Performed electronic formatting and inputting of sampling results into data base files. Also performed statistical function and summary analyses of data for use in risk assessment spreadsheet equations.

I am fully committed and available to serve as a Staff Scientist for NORDIV RAC delivery orders when called upon.

By: Lynn E Niles Date: 9/29/94

Taxpayer Identification Number: 752512450 Solicitation Number: N62472-94-R-0398

PERSONNEL EXPERIENCE FORM

Name: Donald P. Campbell Job Title: Assistant Geologist
Proposed Project Title Staff Scientist
Years Experience
With this Firm 2 With Other Firms 0

Education (Degrees, year, specialization)
B.A., 1992, Geology

Active Registration (Year First Registered & Discipline)

Health & Safety Training, Course(s) & Date(s)
40-Hour OSHA Health and Safety Hazardous Waste Training, 1992
8-Hour Health & Safety Refresher, current
4-Hour Radiation Training, 1994

Compliance to RFP Requirements	
Requirements	Experience
Undergraduate degree in geology, hydrogeology, chemistry or biology as appropriate to assignment	Yes. BA in Geology
One year in environmental restoration projects	Yes. Over two years in environmental restoration projects.

Experience and Qualifications: Experience includes preparation of sampling plans and specifications, field supervision of monitoring well and soil boring installations, and soil and groundwater sampling relating to hazardous waste site investigation and remediation projects. Primary responsibilities have included preparation of field plans, conducting hydrogeologic and soil investigations of hazardous waste sites, and supervision of remediation contractors conducting sampling and construction operations.

Jersey Central Power and Light Co., Boonton Former Manufactured Gas Plant Site, New Jersey, Project Geologist - For this interim remedial action project that required the removal and disposal of coal tar, developed wells for groundwater sampling and performed, sampled, and logged shallow soil borings to delineate coal tar contamination. Logged soils according to USCS. Performed sewer sampling to delineate contaminants.

AlliedSignal Aerospace Co., Sumitomo Site, Teterboro, New Jersey, Project Geologist - For this turnkey remediation project, sampled wells to delineate contamination and performed sand-cone testing to determine fill density for asphalt cap.

EPA ARCS II, Mattiace Petrochemical Site, New York, Project Geologist -Responsible for placement and installation of soilborings, wells, and piezometers. Collected soil samples. Logged soils according to USCS. Determined proper depths for screens based on real-time field data.

Donald P. Campbell Experience and Qualifications (continued)

Times Beach Site, Missouri, Project Geologist - For this remedial action project, performed boundary verification sampling to delineate the vertical and horizontal extent of dioxin contaminated soils. Additional responsibilities included sample shipment and sample management according to DOE regulations for hazardous substances. Based on rapid turnaround analyses, contaminated sections of roadways were identified for excavation and disposal at the thermal treatment unit.

Constellation Energy Site, New Jersey, Project Geologist -For this sensitive and active site mobilized and demobilized field teams and equipment, and was responsible for the development and sampling of wells to verify the presence of transformation products.

Schering-Plough Site, New Jersey, Project Geologist - Responsible for the development and sampling of wells for quarterly monitoring.

JCP&L Co., Larochere Property Site, New Jersey, Project Geologist - Identified soils using the Burmister and Unified Soil Classification Systems (USCS) to determine vertical and areal extent of fill material and sampling to identify potential coal tar contamination.

Chevron Chemical Company, Ortho Pharmaceuticals Site, South Plainfield, New Jersey, Remedial Field Supervisor - For this turnkey remedial action project, supervised union laborers and operators in sampling, construction, decontamination, and continuing site maintenance. Lead daily meetings on site activities and maintained site supplies and inventory.

EPA ARCS II, Vineland Chemical Corporation, Inc. Site, Vineland, New Jersey, Project Geologist - Designed and wrote sampling plan, designed soil storage area, and wrote subcontractor work specification for pilot scale soil washing/separation treatability study. Performed sampling of stream and lake sediments for biossay study. Access to sampling points required navigating the Maurice River and Union Lake in small boats both motor powered and rowed. Sampling was often performed using a Ponar dredge.

Chevron, Refinery Site, Perth Amboy, New Jersey, Project Geologist - Logged soil borings using Burmeister Classification System for geotechnical analyses of existing lagoon boundary dikes for remedial design at an active oil refinery. Geotechnical sampling and testing methods included split spoons, Shelby tubes, and vein shear test. Investigated the condition of existing monitoring wells and recommended repairs for wells to meet NJDEP specifications. Wrote sampling procedures and checklists for refinery-wide field sampling and analysis plan and lagoon remediation plan.

I am fully committed and available to serve as a Staff Scientist for NORDIV RAC delivery orders when called upon.

By: Donald P. Campbell Date: 9/29/94

(PART B) SUBMITTAL REGISTER

Page ____ of ____

Location: | Contractor:

CONTRACTOR ACTION			APPROVING AUTHORITY ACTION				CONTR	
ACT. CODE	DATE OF ACTION	DATE FWD TO APPR AUTH / DATE RECD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RECD FROM OTH REVIEWER	ACT. CODE	DATE OF ACTION	MAILED TO CONTR / RECD FROM APPR AUTH	REMARKS
(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
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ACTION CODES: NR: Not Reviewed AN: Approved as Noted
A: Approved RR: Disapproved; Revise and Resub
(Others may be prescribed by the Transmittal Form)

Contract Number: | Project Title: REMOVAL OF CONTAMINATED SOIL, NWIRP, BETHP

SPEC SECTION NO.	SD NO, AND TYPE OF SUBMITTAL / MATERIAL OR PRODUCT	SPEC PARA NO.	CLASSIF/ APPR BY CO *	GOVT OR A/E REVIEWER	TRANS CONTROL NO.	PLANNED SUBMITTAL DATE
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1) 01010	SD-18, Records	1.2.1				
2)	Work Plan	1.2.1.1	G			
3)	Pre-Excavation Sampling Plan	1.2.2	G			
4)	Investigation Report	1.2.3	G			
5)	Community Air Monitoring Plan	1.2.4	G			
6) 01010	SD-18, Records	1.3.1				
7)	As Built Records	1.3.1.1	G			
8)	Environmental Conditions Report	1.3.1.2	G			
9)	Network Analysis Diagram	1.3.1.3	G			
0)	Status Reports	1.3.1.3	G			
1)	QC Meeting Minutes	1.3.1.4	G			
2)	Test Results Summary Report	1.3.1.5	G			
3)	Contractor Production Report	1.3.1.6	G			
4)	QC Report	1.3.1.7	G			
5)	Rework Items List	1.3.1.8	G			
6)	Permits	1.3.1.9	G			
7)	Permits	3.3.1	G			
8)	Contractor's Closeout Report	1.3.1.10	G			
9) 02076	SD-08, Statements	1.5.1				
0)	Training certification	1.5.1.1				

* Navy Notes:
Approved by:
G: Contracting Officer
Blank: CQC Manager

* NASA Notes:
Approved by:
Blank: Contracting Officer

* Army Notes:
Classification:
GA: Gov't Approval
FIO: For Information Only

Contract Number: | Project Title: REMOVAL OF CONTAMINATED SOIL, NWIRP, BETHP

SPEC SECTION NO.	SD NO, AND TYPE OF SUBMITTAL MATERIAL OR PRODUCT	SPEC PARA NO.	CLASSIF/ APPR BY CO *	GOVT OR A/E REVIEWER	TRANS CONTROL NO.	PLANNED SUBMITTAL DATE
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1)	Qualifications of CIH	1.5.1.2				
2)	PCB removal work plan	1.5.1.3				
3)	PCB disposal plan	1.5.1.4	G			
4)	Notification	1.5.1.5				
5)	Transporter certification	3.6				
6)	Certificate of disposal	3.6.1	G			
7) 02077	SD-18, Records	1.3.1				
8)	Hazardous Waste Plan	1.3.1.1	G			
	Hazardous Waste Permits	1.3.1.2	G			
0)	Regulatory Requirements	1.3.1.3	G			
1)	Shipment Manifest	1.3.1.4	G			
2)	Delivery Manifest	1.3.1.5	G			
3) 02220	SD-12, Field Test Reports	1.3.1				
4)	Fill and backfill	3.9.2.1				
5)	Density tests	3.9.2.2				

* Navy Notes:
Approved by:
G: Contracting Officer
Blank: CQC Manager

* NASA Notes:
Approved by:
Blank: Contracting Officer

* Army Notes:
Classification:
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