

**U.S. NORTHERN DIVISION
REMEDIAL ACTION CONTRACT (RAC)
CONTRACT NO. N62472-94-R-0398
DELIVERY ORDER NO. 013**

FINAL

**NORTHDIV RAC
DELIVERY ORDER 13, NEWPORT, RI
DERECKTOR'S SHIPYARD
BUILDING S42-1 SUMP PIT REMOVAL/PCB SOIL REMOVAL**

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1.0 INTRODUCTION

1.1 Project Background

Derecktor Shipyard was a 42 acre site which occupied the northeast waterfront of the Naval Education Training Center (NETC). Their primary business was ship construction and repair. As part of the Navy clean-up effort, a sump pit, S42-1, located in what was a paint room in Building 42 and soils contaminated with PCBs, will be remediated.

Under Remediation Action Contract N62472-94-R-0398 Delivery Order No. 013 Foster Wheeler Environmental Corporation (FWENC) was selected as the Contractor to complete the removal of S42-1 and the PCB Soils.

1.2 Objectives

The objectives to be met for this Delivery Order are:

Building S42-1 Sump Pit Remediation:

- Remove and containerize, in 55 gallon drums, the water contained within the sump pit, for storage purposes awaiting sampling results.
- Remove the steel plate sump pit and the surrounding concrete as necessary to access soils.
- Remove contaminated soils and sample.
- Properly containerize, sample and dispose of all wastes generated.
- take confirmatory samples of the excavation bottom and side walls.
- Upon notice from NORTHDIV that the post excavation analytical has met the cleanup goals, as defined in the RIDEM Remediation Regulation, the disturbed area is to be backfilled with 3 inch minus backfill material .
- Upon completion of all activities a final report will be generated to summarize all activities.

PCB Soil Removal:

- Field screen and remove PCB contaminated soils, adjacent to Building 6. Place soils generated into roll-off containers, sample, and classify for waste disposal.
- Once the staged soils have been removed, take confirmatory samples from the staged stockpile area.
- Properly dispose of all wastes generated.
- Upon notice from NORTHDIV that the cleanup goals have been met, as defined in the RIDEM Remediation Regulations, the disturbed area will be restored by placing top soil, seeding and mulching.
- Upon completion of all activities a final report will be generated to summarize all activities.

1.3 Overview of Work Plan

This Work Plan presents the proposed implementation of the project. Section 1.0 provides an introduction. Section 2.0 outlines the site conditions and history. Section 3.0 presents the project staffing and organization. Section 4.0 discusses the sequencing of activities for the execution of the project. Section 5.0 summarizes elements of the Project Close-out.

2.0 SITE DESCRIPTION

2.1 Site location and Condition

The site is located at the U.S. Naval Complex, Newport, Naval Education Training Center, (NETC) Newport County, Rhode Island. The sump pit to be removed, is located in Building 42 in a room which was once used as a paint room. The sump pit is approximately 5 feet by 5 feet in width and approximately 5 feet deep. The sump pit is lined with welded steel and has a discharge pipe hole at the bottom which is plugged with cement. Soil samples were taken at the base of the sump pit by accessing a crawl space under the building. The soil analysis indicated the presence of high concentrations of PAH compounds, phthalate compounds, and butyltin compounds. In addition, PCBs were detected (Aroclor 1260, detected at 260 ug/kg), and two pesticide compounds were detected. Metals concentrations in this sample were also elevated, in particular, Zinc (11,900 mg/kg), copper (2,120 mg/kg), lead (1,290 mg/kg), nickel (160 mg/kg), and barium (1,620 mg/kg). In addition, a trace of mercury was detected (0.6 mg/kg). The analysis for total petroleum hydrocarbons indicated a presence of oil in the sample.

Soils, stockpile adjacent to Building 6 of the NETC, were found to have elevated levels of PCBs. Soils to be removed are presently at the northern end of the Building 6 parking area.

3.0 PROJECT PLANNING AND ORGANIZATION

3.1 Project Staffing

3.1.1 Project Manager

Mr. Art Holcomb, P.E. is the Program Manager and will act as the Project Manager for this project. Mr. Holcomb is the primary point of contact for this Delivery Order, and is responsible for the project communications and management of project activities, planning, scheduling site activities, and procurement of labor, materials and subcontracts. Mr. Holcomb develops, tracks and manages the budget and schedule. He recommends and processes change orders, maintains technical quality and ensures safe work practices and regulatory compliance at the site.

3.1.2 Site Superintendent

Jon Cary is the Site Superintendent. The Site Superintendent is responsible for managing and directing all on-site activities. These activities include supervision of subcontractors, direct labor, site procurement of materials and subcontractors; interfacing with the Navy Resident Officer in Charge of Construction (ROICC) and ensuring compliance with contract documents. The Site Superintendent will also ensure that all activities adhere to the letter and intent of the Site Health and Safety Plan (SHSP).

3.1.3 Quality Control System Manager (QCSM)

Roger Beauregard is the Quality Control System Manager (QCSM). Mr. Beauregard will have overall responsibility for Quality Control. The QCSM shall have line responsibility to the QC Program Manager.

- Final Quality Control Plan, dated April 8, 1996.

3.1.4 Site Health and Safety Officer (SHSO)

Mark Gouveia is the Health and Safety Officer. The SHSO will ensure that all activities adhere to the letter and intent of the Site Health and Safety Plan (SHSP) and will monitor operations for routing and unanticipated exposures.

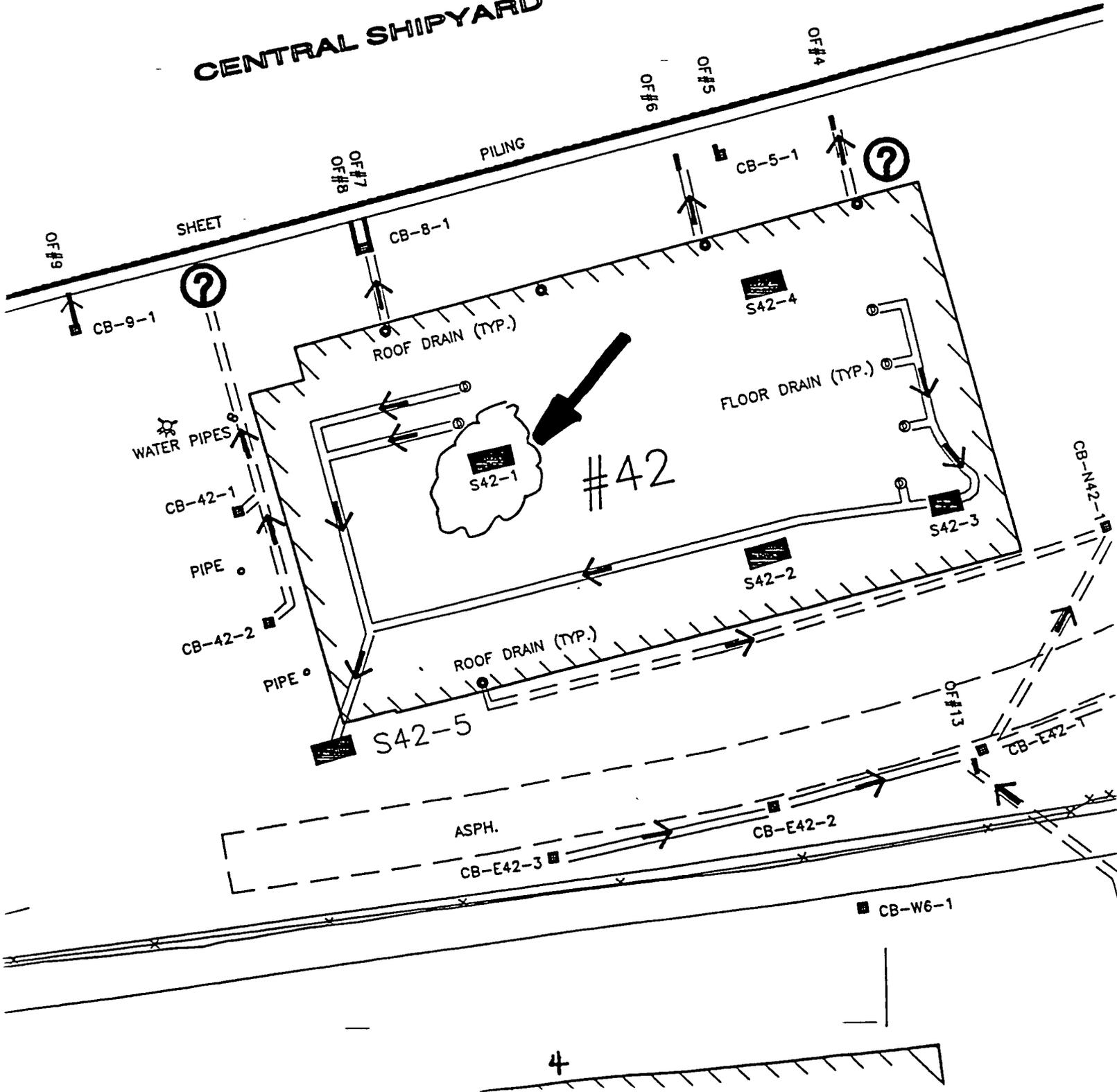
- Site Health and Safety Plan (SHSP), dated May 7, 1996.

NARRAGANSETT BAY



FIGURE # 1

CENTRAL SHIPYARD



3.2 Permitting

Other than Work Plan approval it is assumed that no other permits are required.

3.3 Subcontracting and Procurement

The acquisition of materials and services to support this Delivery Order will be in conformance with the Federal Acquisition Regulations (FARs). The material and subcontract procurements will be initiated in the home office to support initial site activities, and will be managed from the field for the remainder of the project activities.

Engineering Staff will prepare Statements of Work (SOW) for subcontract services. As appropriate, specifications and drawings will accompany the SOWs. SOWs will identify the scope of services required, schedule constraints, interfacing requirements, and submittal requirements, in addition to providing site background summary, and health and safety requirements for site work. Procurement personnel will provide the contractual and administrative portions of the subcontract procurement.

4.0 PROJECT EXECUTION

4.1 Mobilization and Site Preparation

4.1.1 Erosion and Sediment Control

Erosion and sediment controls will be installed for the PCB soils removal. Erosion and sediment control measure will be placed at the existing drainage features and on the down gradient toe of slope prior to any disturbance of the area. Control measures will consist of the installation of silt fence barriers augmented as needed with hay bales. Erosion controls will be inspected regularly and maintained as required.

Erosion control and sediment control measures will not be needed at the Building 42 sump pit removal. The area to be excavated is under a building with surrounding foundation walls.

4.1.2 Dust Control

Potable water will be utilized as a dust control measure. Water will be sprayed, as needed, over the soils during the removal processes. Care will be taken not to over spray and cause excessive moist conditions, such as muddy soils.

4.1.3 Spill and Discharge Control Plan

The Emergency Response Coordinator (ERC) for the site will be the Site Superintendent for the activity. All emergencies will be reported to the ERC, or his designee. The ERC is also the person accountable for spill prevention. The ERC will notify the Project Manager and the Navy in the event of an emergency. In order to mobilize the manpower resources and equipment necessary to cope with fire or other emergency, a clear chain of authority will be established. The ERC will take charge of emergency response activities and dictate the procedures that are to be followed. The ERC will report immediately to the scene of the emergency, assess the seriousness of the situation, and direct whatever efforts are necessary until the emergency response units arrive.

Small hazardous spills/environmental releases will be contained as close to the source as possible. The ERC will determine the best means of containment and cleanup. For small liquid spills, absorbent materials such as sand, sawdust or commercial absorbents will be placed directly onto the substance to contain the spill and aid in recovery. For a larger spill event, berms of earthen or absorbent materials can be used to contain the leading edge of the spill. An exclusion zone of 50 to 100 feet around the spill area will be established depending on the size of the spill. The ERC will contact a cleanup contractor if necessary.

Based on the site condition and the type of fluids to be brought to the site, such as diesel fuel, the spill response kits will consist of absorbent booms, brooms and shovels, drums, and bagged absorbent material. These spill kits will be kept readily available adjacent to the work area.

4.1.4 Security

Site security will be provided via fencing work areas with a 4 foot high (High visibility) fence. Barrier Warning Tape will be placed to identify the outer perimeter of the overall work area. Signs will identify all work areas for their potential hazards.

4.1.5 Regulatory Notification

One week prior to any on-site remedial activities the State of Rhode Island Department of Environmental Management (RIDEM) will be given notification that the field activities are about to commence. This notification will include a weekly schedule for planned activities. A twenty-four hour notification, when possible, will be given in the event that the activities are to be canceled.

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4.1.6 Photo Documentation

During the removal actions key aspects of the project will be photo documented and video taped. The key aspects to be documented in this manner include the following; site conditions prior to removal action, visible evidence of contamination observed during the action, confirmatory sampling, and site close out.

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4.2 **Sump Pit Removal/PCB Soil Remediation**

4.2.1 Sump Pit Contents Removal/Decontamination

The sump pit will have its liquid phase pumped out, sampled and drummed utilizing an air driven double diaphragm pump. Once the liquid phase is removed the sump pit will be entered to manually remove, drum sump pit bottom solids (sludges) if required and sample. The welded steel plate pit will then be steam cleaned utilizing a 3,000 PSI steam cleaner. All wash waters will be collected and drummed.

4.2.2 Sump Pit Structure Removal

Once cleaned, visually inspected, and a burn permit issued, the sump pit will be torch cut and removed. Any surrounding concrete that needs to be removed to facilitate the sump pit removal or access to underlying soils will be removed utilizing pneumatic jack hammers. The concrete will be inspected for visual signs of discoloration and possible contamination. Contaminated concrete will be set aside for proper disposal.

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4.2.3 Sump Pit Soil Removal

The soils under and around the sump pit will be field screened during the removal process utilizing an FID, visual, olfactory, and FID jar head space. The initial soil removal will consist of removing 1 foot of soil directly below the sump pit and radiate outwards from the sump pit sides a distance of three feet. Soils will be manually removed and drummed. The drums will be sampled for waste characterization. Soil removal will continue outside of the initial excavation for soils which indicate elevated FID readings, olfactory evidence, or exhibit discoloration. Once the soils have been removed confirmatory samples will be collected from the sidewalls and the floor of the excavation from those areas which previously exhibited elevated FID readings, olfactory evidence, or discoloration. Soil samples shall be collected within a twelve-inch circle of the sample location using a, decontaminated, stainless steel spoon or trowel. The sample shall be placed in a, decontaminated, stainless steel bowl. Confirmatory samples for VOCs will be collected at a minimum of 3-6 inches below the depth of the excavation and placed in Laboratory provided bottleware which will preserve the sample with methanol. The remaining sample shall be thoroughly mixed, aliquots placed into appropriate bottleware,

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and the sample bottles will be placed in coolers containing ice. The samples shall be delivered to a State of Rhode Island licensed laboratory via overnight express. Confirmatory samples will be analyzed for VOCs (USEPA method 8260), SVOCs (USEPA method 8270), TPH (USEPA method 8015), RCRA 8 Metals, and PCB and Pesticides (USEPA method 8080).

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4.2.4 PCB Soil Remediation

Soils adjacent to Building 6 will be removed utilizing a Case 580 Backhoe or equivalent. Soils will be loaded directly into, lined, 20 cubic yard roll off containers. Soils within each individual waste rolloff container will be sampled for waste characterization. During the soil removal process, soils will be field screened utilizing an FID, visual, olfactory, and FID jar headspace. Soil removal will continue in this area for soils which indicate elevated field readings or discoloration. Once the soils have been removed confirmatory samples will be collected from the sides and floor of the excavation. The surrounding area will be inspected for potential migration pathways, such as down-gradient drainage swales or catch basins. These areas will be identified and confirmatory samples will be collected. All confirmatory samples will be analyzed as stated above for the sump pit confirmatory samples.

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4.3 **Site Restoration and Demobilization**

Building 42 sump pit will have 3 inch minus stone placed within the excavation area. Steel plates will then be placed to cover the sump pit opening.

The PCB Soil removal area will have top soil placed and be seeded and mulched. Appropriate sedimentation and soil erosion controls will be maintained until sufficient vegetation has grown.

5.0 **CLOSE-OUT**

5.1 **Post Project Report**

Upon the completion of the remediation activities, a Post Project Report will be generated summarizing the activities which had taken place. A description of the work accomplished, analytical results, field notes, and summary of wastes generated along with their disposal documentation will be included. FWENC is prepared to meet with the Navy and discuss any additional requirements for project close-out.

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