



**OHM Remediation
Services Corp.**

A Subsidiary of OHM Corporation

Section: 02.02
Site 20903-5640 (White Oak)
Doc. #: 0007

00066

N60921.AR.000213
NSWC WHITE OAK
5090.3a

June 4, 1999

Ms. Krista Grigg
Department of the Navy
EFA Chesapeake
901 M. Street, Building 212
Washington, D.C. 20374-5018

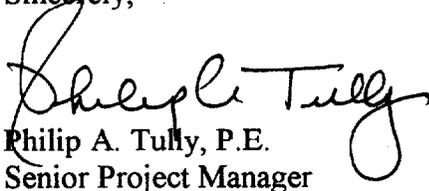
Re: Final Work Plans
Delivery Order No. 028
Site 4 Soil Removal
Former Naval Surface Warfare Center – White Oak
Contract No. N62470-97-D-5000

Dear Ms. Grigg:

Enclosed in the final Work Plan for Site 4, delivery order no. 028. This plan incorporates comments received from the EPA and MDE. Appendix B, Waste Management Plan, has been added. Also, appendix C has been added which provides comments received from EPA and MDE and OHM's response to these comments.

If you have any questions or require additional information please contact me at (609) 588-6348.

Sincerely,


Philip A. Tully, P.E.
Senior Project Manager

Pc: ~~Walter Legg - EFA Chesapeake~~
Frank Nicol – ROICC Bethesda
Dave Leadenham – OHM
Fred Poulin – OHM
Yazmine Yap-Deffler – EPA Region III
Jeff Thornburg - MDE
OHM Project File 777252

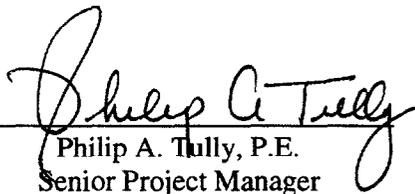
**FINAL
WORK PLAN
FOR
SITE 4 SOIL REMOVAL
FORMER NAVAL SURFACE WARFARE CENTER-WHITE OAK
SILVER SPRING, MARYLAND**

Prepared for:

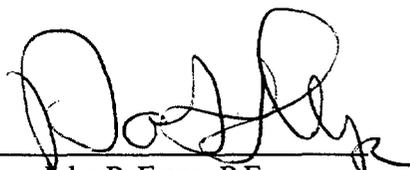
DEPARTMENT OF THE NAVY
EFA Chesapeake
901 M Street SE Building 212
Washington, D.C.
Contract No. N62470-97-D-5000

Prepared by:

OHM Remediation Services Corp.
Trenton, New Jersey


Philip A. Tully, P.E.
Senior Project Manager

Reviewed by:


John P. Franz, P.E.
Program Manager

June 3, 1999
OHM Project 777252
Delivery Order No. 028

TABLE OF CONTENTS

| | | |
|-----|---|-----|
| 1.0 | INTRODUCTION | 1-1 |
| 1.1 | EXISTING CONDITIONS | 1-1 |
| 2.0 | PRE-MOBILIZATION ACTIVITIES | 2-1 |
| 2.1 | PRE-CONSTRUCTION SUBMITTALS..... | 2-1 |
| 2.2 | PRE-CONSTRUCTION MEETING..... | 2-1 |
| 2.3 | PRE-CONSTRUCTION LAYOUT AND STAKEOUT | 2-1 |
| 3.0 | SITE CONSTRUCTION ACTIVITIES | 3-1 |
| 3.1 | MOBILIZATION OF PERSONNEL & EQUIPMENT | 3-1 |
| 3.2 | SITE SET-UP | 3-1 |
| 3.3 | EXCAVATION/BACKFILL/COMPACTION | 3-1 |
| 3.4 | TRANSPORTATION AND DISPOSAL..... | 3-2 |
| 3.5 | POST EXCAVATION CONFIRMATION SAMPLING | 3-2 |
| 3.6 | SITE RESTORATION..... | 3-3 |
| 4.0 | POST CONSTRUCTION SUBMITTALS | 4-1 |
| 4.1 | PROJECT CLOSEOUT REPORT | 4-1 |

FIGURES

- FIGURE 1 SITE PLAN
- FIGURE 2 DECONTAMINATION PLAN

APPENDICES

- APPENDIX A HEALTH AND SAFETY PLAN
- APPENDIX B TRANSPORTATION AND DISPOSAL PLAN
- APPENDIX C REGULATOR COMMENTS/RESPONSES

2.0 PRE-MOBILIZATION ACTIVITIES

2.1 PRE-CONSTRUCTION SUBMITTALS

Included in the appendix to this work plan are the following:

- Sampling & Analysis Plan (Appendix A)
- Transportation and Disposal Plan (Appendix B)
- Regulator Responses/Comments (Appendix C)

The health and safety plan (HASP) was submitted on February 2, 1999. The erosion and sediment control plan (ESCP) was submitted on February 26, 1999.

2.2 PRE-CONSTRUCTION MEETING

Prior to mobilization, the OHM Regional Operations Manager, Senior Project Manager, and Site Superintendent will meet with the EFA Ches RPM and ROICC for the pre-construction and mutual understanding meeting. This one-day meeting will review scope, schedule, and budget for the project, and will be considered the kick-off meeting for the project. Other interested parties such as representatives from the facility and A&E are also encouraged to attend.

2.3 PRE-CONSTRUCTION LAYOUT AND STAKEOUT

Prior to mobilization, OHM will survey the site. Burial areas nos. 1 and 2 will be staked out and marked. The laydown area, decontamination area, and work zones will also be identified and staked.

3.0 SITE CONSTRUCTION ACTIVITIES

3.1 MOBILIZATION OF PERSONNEL & EQUIPMENT

OHM will mobilize personnel and equipment to perform all activities associated with the removal action. Coordination of the delivery of equipment and mobilization of personnel will be performed from OHM's Trenton, New Jersey; Pittsburgh, Pennsylvania; and Richmond, Virginia facilities.

3.2 SITE SET-UP

OHM will set-up the temporary facilities required for the project. Work zones will be established and marked with high-visibility fencing. Signage will be posted around the site, identifying hazards, work areas, and general site rules. Erosion control measures (ie, silt fencing) will also be installed as part of this task in accordance with the ESCP.

OHM has identified existing Building 510 as a suitable location to house temporary facilities. This building is located on Sims Road just south of Site 4. The building has electrical power and telephone lines. OHM will coordinate with the local telephone company to make arrangements for phone hook-up. Building 510 has a chain link fence around its entire perimeter that will be locked to provide a secure area.

OHM will also install a personnel decontamination trailer adjacent to Site 4. This trailer will be powered with a generator.

OHM will construct a truck decontamination pad in the general location shown on Figure 1. The pad will be constructed of reinforced concrete as shown on Figure 2. The pad will be equipped with a sump to collect decontamination water. Decon water will be pumped to an on-site storage tank and sampled. Disposal will be either on-site or off-site depending upon analytical results.

OHM constructed a backfill stockpile area in an open area west of Site 4 as shown on Figure 1. This location was determined at a site walk in November 1998 attended by representatives from the ROICC, OHM and GSA. Geotextile fabric was laid down to provide a barrier between backfill and existing soils. Silt fence was installed around the entire area to provide erosion and sediment control. Excess trench soils (approximately 1,000 cubic yards) from the groundwater collection trench (delivery order no. 019) was transported to this area during the week of February 1, 1999.

OHM proposes constructing a truck loop road as shown on Figure 1. The existing facility roads in this area are too narrow and have insufficient turning radius to accommodate large trucks. In order to construct the loop road a small section of trees will have to be cleared as shown on Figure 1. Once the trees are removed geotextile fabric will be laid out and backfilled with approximately eight to ten inches of stone. The stone base will be compacted to provide a suitable surface to accommodate heavy vehicles. Cleared trees will be chipped on-site and used as cover material where necessary. The existing wetlands will not be disturbed during the construction of the loop road.

OHM proposes constructing a load-out area as shown on Figure 1. The load-out area is where disposal trashes will be positioned during load-out of excavated soil. This area is outside the contaminated zone. The area itself will consist of a layer of geotextile fabric and five to eight inches of compacted stone.

Sims Road and Perimeter Road will be widened with stone in some areas to provide clearance for passing trucks. Also, existing ruts in these roads will be filled with stone.

3.3 EXCAVATION/BACKFILL/COMPACTION

OHM will start excavation in the western part of Site 4 and proceed in an easterly direction. Excavation will be performed with a CAT 320 excavator (or equivalent) to an initial depth of approximately 8 feet bgs.

If debris or obviously contaminated soil (i.e., elevated PID readings >5 ppm above background, stained soil, presence of waste) below a depth of 8 feet bgs is encountered, excavation will continue until this material is removed. Similarly, if debris or obviously contaminated soil is observed on the walls of the excavation, it will be removed. Excavated soils will be stockpiled in the eastern end of Site 4 where a loader will be stationed to load soil into disposal trucks. The excavator will load soil into an end-dump. The end-dump will transport soil to the staging area.

Excavated soil will be stockpiled in the eastern end of Site 4 adjacent to the load-out area but within the boundaries of the contaminated zone. The excavator will also be located inside the contaminated zone and will extend out of the zone with the bucket only to load soil into disposal trucks.

Excavated hazardous soil will be staged inside the contaminated zone separate from non-hazardous soil. Hazardous soil will be stockpiled on 60-mil HDPE liner, covered and bermed with hay bales. Hazardous soil will be staged for few days before it is transported off-site.

Excavated non-hazardous soil will not be placed on a liner or bermed. The quantity of staged material will be limited to what can be loaded out in a day. OHM does not intend on creating a large pile of soil in this area. Staging soils simply makes for a more efficient operation.

The sides of the excavation will be benched or sloped to provide safe working conditions for employees entering the excavation. To the extent possible, OHM will keep employees out of the open excavation.

It is anticipated that excavation will be initially performed in Level C PPE. Downgrade to Level D PPE will depend on site conditions and air monitoring results. As a precaution, OHM will also have Level B PPE on-site.

OHM does not anticipate encountering groundwater during excavation. Water that collects in the excavation during rain events will not be pumped out or removed in any way. It will be allowed to percolate into the ground. Excavation dewatering of any kind will not be performed.

The excavation will be backfilled with clean soil upon receipt of analytical results indicating the clean up criteria has been satisfied (Tetra Tech NUS is performing confirmatory sampling). It will probably be about 10 days after excavation begins before backfilling will occur assuming favorable analytical results. OHM will install high visibility safety fencing around the open excavation and posts safety signs to prevent personnel from entering an open excavation.

OHM will backfill the excavation with a combination of material obtain from an off-site location and excess material from the groundwater collection trench (delivery order no. 019). Topsoil will be used for the top six inches to enhance vegetation.

OHM obtained samples of both the on-site backfill and off-site backfill and sent to an off-site laboratory for the following analysis: TAL metals, TCL VOCs/SVOCs, TPH (GRO, DRO), pesticides, PCBs, and cyanide. Results were reviewed by OHM and the Navy and compared against the site 4 clean-up criteria (industrial RBCs). Analytical results were all below the clean-up criteria and the soils were considered acceptable for backfill.

Backfill will be compacted in one foot lifts. To minimize personnel entering the excavation backfill greater than 4 feet bgs will be compacted with the bucket of the excavator and/or remote control operated compactors.

3.4 TRANSPORTATION AND DISPOSAL

OHM divided site 4 into seven grids prior to obtaining soil samples back on February 9th and 10th. A sample pit was excavated in each area. OHM obtained a sample from each pit (7 samples total) and analyzed each for waste disposal characterization. The sample obtained from pit 4 (about the middle of site 4) had levels of PCBs above 50 ppm and as such is characteristically hazardous. Analytical results from other pits indicate the soil is characteristically non-hazardous. The soil from pit 4 will be disposed of as a hazardous waste. All other soil will be disposed of as a non-hazardous waste.

Additional waste disposal sampling is not anticipated at this time. If additional waste disposal sampling is required, samples will be analyzed for the full waste disposal scan. Types of samples (ie, grab or composite) will depend on type of waste, quantity, etc.

Waste disposal trucks will be loaded out from a single location as shown on Figure 1. This location is outside the excavation limits. After each truck is loaded it will be driven to the decontamination pad. Decontamination will consist of broom sweeping and pressure washing, if necessary. Decontamination water will be transferred to an on-site holding tank. Source of decontamination water will be on-site hydrant water. OHM will coordinate location of hydrant with GSA. Decon water will be sampled (by other personnel) and analyzed for TPH and PCBs. Decon water will be disposed of off-site.

Waste disposal trucks will enter the former NSWC facility off of Cherry Hill Road through Gate 7 (first gate) and Gate 10 (second gate), currently locked. OHM proposes to station a worker at Gate 10 to control access and egress to the site. Gate 7 will remain open. The Floral Drive gate, currently open, will be locked at all times when Gate 7 is open. Gate 10 will be unlocked to allow each truck into the site and locked after each truck passes through.

At the end of each day, Gate 7 and 10 will be locked and the Floral Drive gate opened as currently exists.

Waste disposal trucks will proceed on Dahlgren Drive and make a right onto Sims Road. Trucks will proceed on Sims Road and make a left onto Perimeter Drive off the newly constructed loop road. After decontamination the trucks will again proceed on Sims Drive, make a left onto Dahlgren Road and exit the site. Manifests (or bills of lading) will be collected by OHM personnel in Building 510.

3.5 POST-EXCAVATION CONFIRMATION SAMPLING

Confirmation sampling will be performed by Tetra Tech Nus.

3.6 SITE RESTORATION

All disturbed areas will be restored upon completion of work. Excavated areas will be seeded and fertilized. These areas will need to be watered for several days. OHM will make arrangements to perform this task. Silt fence will remain in place until sufficient vegetation occurs.

The decontamination pad will remain in-place.

The loop road will remain.

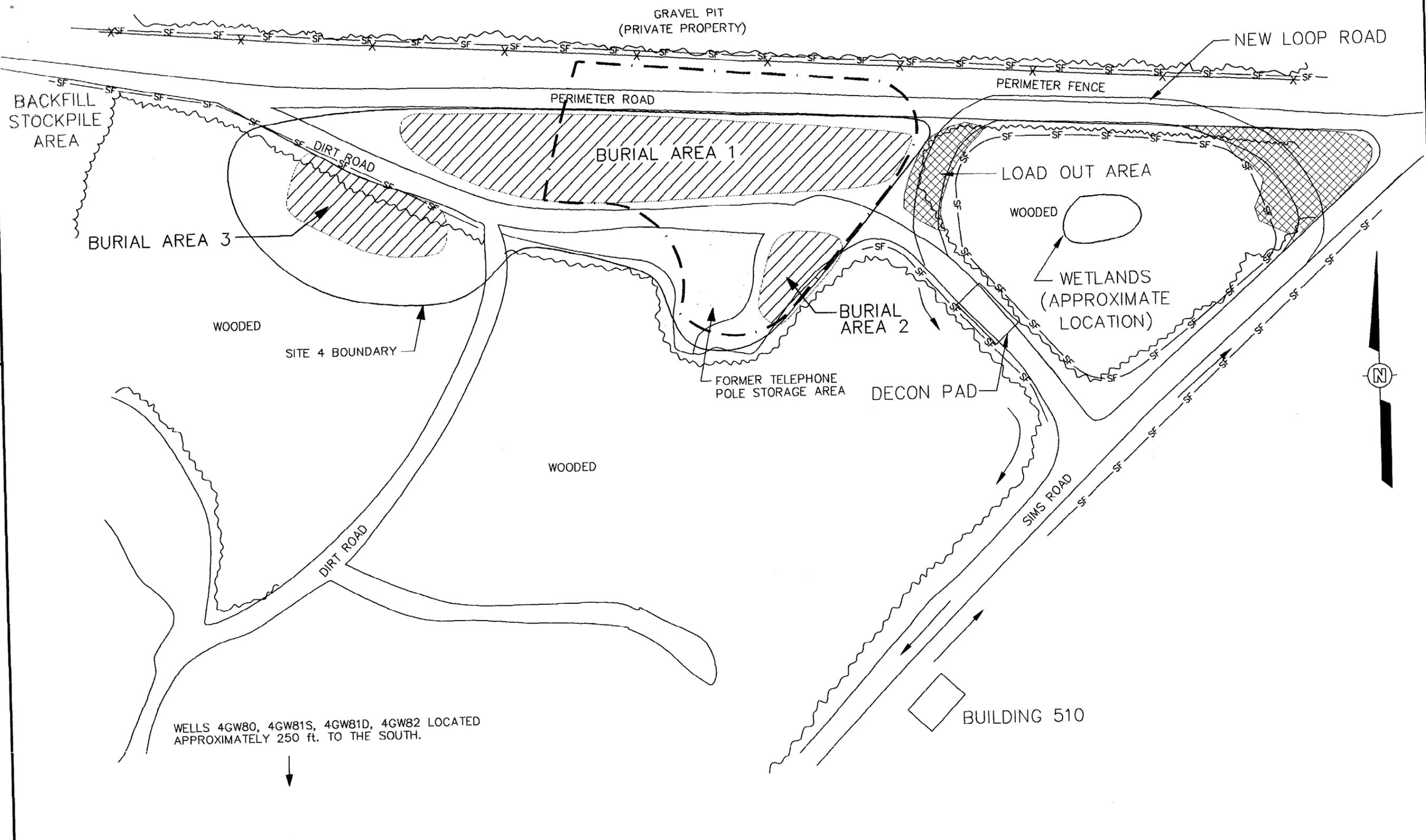


Stone used to repair or widen existing roads will remain.

Utilities to Building 510 will be disconnected.

IMAGE X-REF OFFICE TRN DRAWING NUMBER 777252B1

DATE: 6/7/99
 TIME: 10:29
 FORMAT REVISION 1/27/99



WELLS 4GW80, 4GW81S, 4GW81D, 4GW82 LOCATED APPROXIMATELY 250 ft. TO THE SOUTH.

| LEGEND | |
|--------|----------------------|
| | SILT FENCE |
| | LIMITS OF EXCAVATION |
| | TRUCK ROUTE |
| | CLEARED TREES |

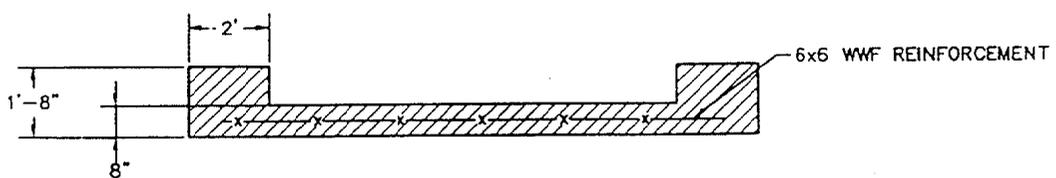
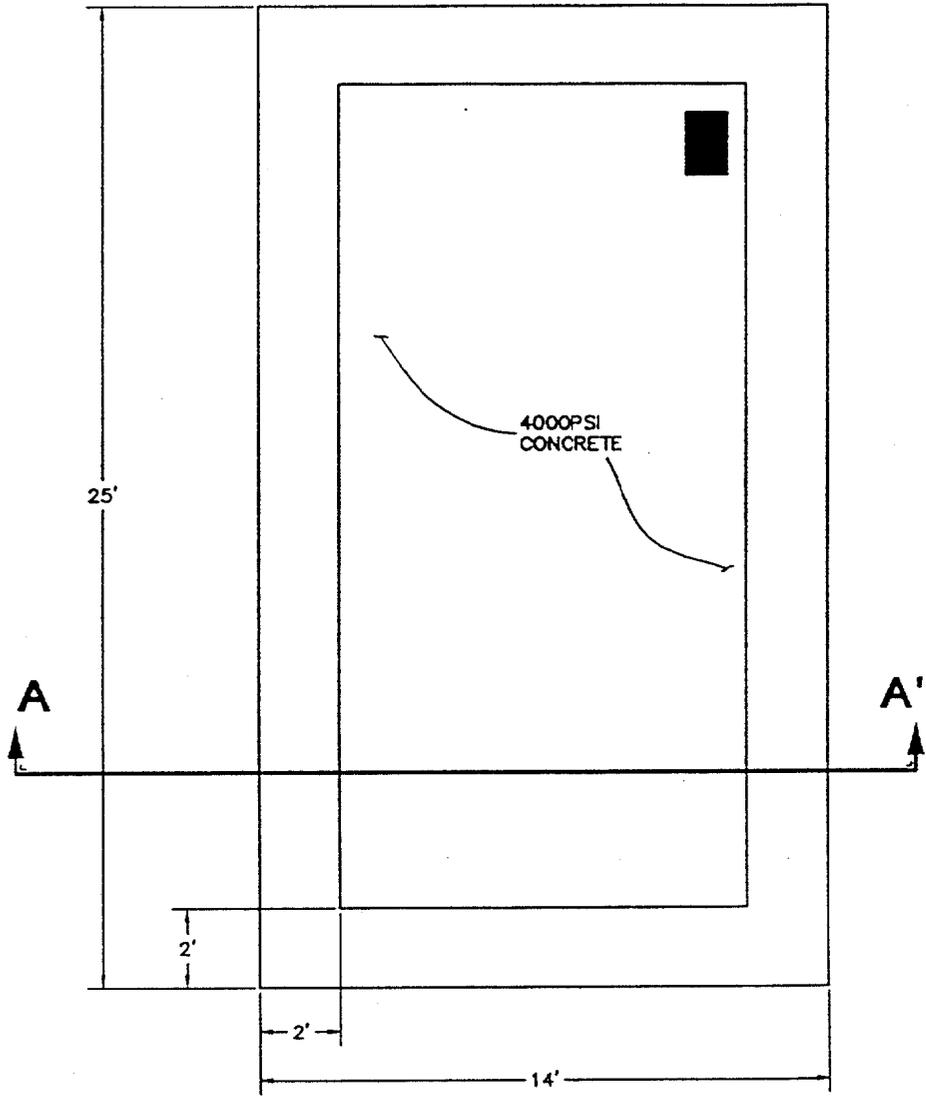


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| OHM Remediation Services Corp. | | | | | |
| DEPARTMENT OF THE NAVY NAVAL STATION NAVAL FLEET & INDUSTRIAL SUPPLY CENTER NAVAL FACILITIES ENGINEERING COMMAND ATLANTIC DIVISION NORFOLK, VIRGINIA YORKTOWN, VIRGINIA SITE 4 - CHEMICAL BURIAL AREA NSWC - WHITE OAK SITE LAYOUT MAP | | | | | |
| SCALE | | AS SHOWN | | SIZE | |
| DELIVERY ORDER NO. | | 28 | | B | |
| CONSTR. CONTRACT NO. | | NG2470-93-D-3032 | | | |
| NAVFAC DRAWING NO. | | | | | |
| SHEET 1.D. | | | | | |
| FIGURE 1 | | | | | |

00066 B012

DATE: 1/2/98
 TIME: 9:27 AM
 FORMAT REVISION 1/27/99

IMAGE X-REF OFFICE TRN DRAWING NUMBER
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SECTION A-A'
 N. T. S.



| | | | | | | | | | | | | | | | |
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| - | | C. Agabiti | | P. Tully | | P. Tully | | | | | | | | | |
| 2/9/99 | | 2/9/99 | | 2/9/99 | | 2/9/99 | | | | | | | | | |

| | |
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| DEPARTMENT OF THE NAVY | NAVAL FACILITIES ENGINEERING COMMAND |
| NAVAL STATION | NORFOLK, VIRGINIA |
| NAVAL FLEET & INDUSTRIAL SUPPLY CENTER | YORKTOWN, VIRGINIA |
| ATLANTIC DIVISION | |
| SITE 4 - CHEMICAL BURIAL AREA | |
| NSWC - WHITE OAK | |
| DECONTAMINATION PAD DETAIL | |

| | | | |
|--------------------|----------|----------------------|-----------------|
| SCALE: | AS SHOWN | SIZE: | A |
| DELIVERY ORDER NO. | 26 | CONSTR. CONTRACT NO. | N62470-93-D-303 |
| NAVFAC DRAWING NO. | | SHEET I.D. | |

FIGURE 2

APPENDIX A
HEALTH AND SAFETY PLAN

PREVIOUSLY SUBMITTED

APPENDIX B
TRANSPORTATION AND DISPOSAL PLAN

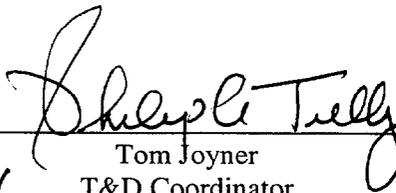
**FINAL
WASTE MANAGEMENT PLAN
FOR
SITE 4 SOIL REMOVAL
FORMER NAVAL SURFACE WARFARE CENTER-WHITE OAK
SILVER SPRING, MARYLAND**

Prepared for:

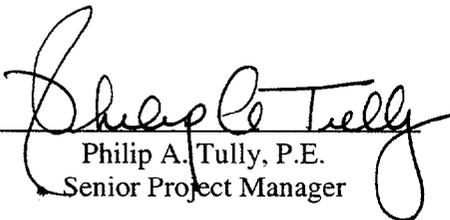
DEPARTMENT OF THE NAVY
EFA Cheasapeake
901 M Street SE Building 212
Washington, D.C.
Contract No. N62470-97-D-5000

Prepared by:

OHM Remediation Services Corp.
Trenton, New Jersey

for 
Tom Joyner
T&D Coordinator

Reviewed by:


Philip A. Tully, P.E.
Senior Project Manager


John P. Franz, P.E.
Program Manager

June 4, 1999
OHM Project 777252
Delivery Order No. 028

WASTE MANAGEMENT PLAN

1.0 WASTE CHARACTERIZATION

Pre-excavation sampling was performed on one thousand yard composites using procedures described in the approved Sampling and Analysis Plan. One sample, W04-4, showed PCB's at 420,000 ug/kg. This area will be regulated under TSCA for PCB's greater than fifty mg/kg. All remaining samples showed no RCRA or TSCA characteristics and will be considered non-hazardous.

2.0 WASTE DISPOSAL

2.1 Determination of Required Treatment Technology

Each waste type generated during this project will require a different disposal method. These include:

| <u>Waste Type</u> | <u>Disposal Method</u> |
|--------------------|------------------------|
| soil/PCB's | TSCA landfill |
| non-hazardous soil | Subtitle D landfill |

Recycling of the non-hazardous soils via thermal treatment or use as cover material was considered. However, due to the large amount of debris expected to be in the waste (thirty to fifty percent), recycling will not be economically feasible.

3.0 DISPOSAL FACILITY SELECTION

OHM has selected the final disposal facility for the waste based on several factors:

- compliance with CERCLA Off-Site Policy
- TSDf capacity to accommodate incoming waste
- solicitation of bids using applicable FAR's
- verification of permits and insurance (at time of award)

Bids for disposal were solicited from the following facilities/vendors for this work:

| | |
|---------------------|--|
| soils/PCB's | Waste Mgmt., Model City, NY EQ Co., Belleville, MI Capitol Environmental, Vienna, VA Elk Environmental. Reading, PA |
| non-hazardous soils | WMX Waste Management., Greencastle, PA BFI, Morgantown, PA Capitol Environmental, Vienna, VA Elk Environmental. Reading, PA |

Based on the bids which were received, the low bidder for the TSCA regulated soils is Waste Mgmt., Model City, NY. Non-hazardous soils will be disposed of at the Waste Mgmt. landfill in Greencastle, PA.

4.0 DISPOSAL ARRANGEMENTS

The OHM Transportation and Disposal Coordinator will complete all necessary paperwork required for approval at the selected disposal facilities for all waste generated at this site. This paperwork includes, but is not limited to, waste profiles, analytical data, and generator certifications. These documents will be forwarded to the proper Navy personnel for review and signature.

5.0 Waste Transportation

5.1 Packaging Requirements

There are no packaging restrictions on the shipment of soils and debris from this project. All soils and debris will be shipped via semi-dump trailers and/or rolloff containers.

5.2 Selection of Transporter

OHM will select waste transporters using applicable FAR's during the solicitation process. OHM will solicit bids from only those vendors who are permitted to haul each particular waste type. Verification of permits will take place at time of solicitation.

5.3 Required Shipping Papers

The OHM T & D Coordinator will complete all necessary paperwork required for shipment of waste off-site. These include bills of lading, non-hazardous waste manifests, and/or hazardous waste manifests and land disposal restriction (LDR) certifications. All disposal shipping documents will be provided to Navy for review and signature as generator.

6.0 DOCUMENTATION AND SUBMITTALS

Formal submittals to the Navy pertaining to waste transportation and disposal will consist of the following:

- waste profiles
- sample bill of lading and hazardous waste manifest and LDR certification
- weight tickets, TSD manifest copy, and certificate of disposal

The OHM project file will contain copies of:

- hazardous waste manifests
- LDR certifications
- certificates of disposal.

APPENDIX C
REGULATOR COMMENTS/RESPONSES



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029**

March 31, 1999

Mr. Walter Legg
Engineering Field Activity Chesapeake
Washington Navy Yard, Building 212
901 M Street, S.E.
Washington, DC 20374-5018

Re: Review of Revised Draft Work Plan for Site 4 Soil Removal for the Former Naval Surface Warfare Center

Dear Mr. Legg:

The United States Environmental Protection Agency Region III has reviewed the above report and has the following comments:

GENERAL COMMENTS

1. The excavations will be backfilled with a combination of material obtained from an off-site location and excess material from the excavation of the groundwater collection trench. It is not clear whether any of the proposed backfill has been tested to confirm if it is suitable backfill material. For instance, the groundwater collection trench was excavated in an area of known contamination. The WP should be revised to detail what testing has or will be performed on the proposed backfill material to verify that contamination does not exist.
2. The WP does not provide any contingencies for dust control. It is expected that some dust generation will occur due to the excavation of soil and waste, the use of heavy equipment, and truck traffic. The WP should be revised to describe dust control procedures that will be implemented at the site.
3. The WP does not provide a schedule for soil removal actions. A primary component of the WP is the schedule. A schedule should be provided for review and reference.
4. The WP does not provide job descriptions or address lines of authority. It is unclear from the text who will be in charge of the work and who has authority for implementing specific procedures identified in the WP and other plans.
5. The WP states that waste excavated from the burial areas will be placed in the eastern end of Site 4 before loading onto trucks for off-site disposal, is this the Load Out Area as shown in Figure 1? If it is, specify in the narrative. Also, specific information about the Load Out Area (which is a soil staging area) is not provided. The report should provide

detailed information about the Load Out Area, including how long waste will remain in this area, whether waste will be covered, the construction of berms around the area, and whether a liner will be used.

SPECIFIC COMMENTS

1. Section 3.3, page 3-2. This section discusses the excavation, backfill, and compaction construction activities. However, more information should be provided in the text to further describe actions that will occur during excavation, backfill, and compaction. The following areas should be addressed:
 - a. The text states that obviously contaminated soil will be further excavated. However, the only identifiers for obviously contaminated soil are elevated PID reading or visual. The text should be revised to state specifically what will be considered obviously contaminated (e.g., stained soil, presence of waste, or PID readings of five (5) ppm above background).
 - b. It is unclear from the discussion provided in the text how material from the excavation will be transported to the Load Out Area. The text should be revised to explain how soil excavated with the CAT 320 excavator will be moved to the Load Out Area for loading onto the disposal trucks.
 - c. The second paragraph states that the sides of the excavation will be benched or sloped. However, it will be very difficult to bench or slope the excavation sidewall that is parallel to Perimeter Road. Additional instruction should be provided in the text that describes how the sidewall along Perimeter Road will be braced, benched, or sloped.
 - d. It is unclear from the text when confirmatory sampling will occur. Will confirmatory sampling occur after each burial area has been entirely excavated, or will excavating and confirmatory sampling occur in stages? The text should be revised to address this issue.
2. Section 3.4, page 3-2. The text states that decontamination water will be sampled and disposed either on-site or off-site depending upon analytical results. However, specific details about decontamination water sampling are not provided. The text should be revised to state who will collect these samples, what specific parameters will be analyzed, and the on-site and off-site disposal location.
3. Section 3.4, page 3-3. The text states that waste will be characterized as either hazardous or nonhazardous, or a combination of the two based upon waste disposal samples collected on February 9 and 10, 1999. However, no information is provided about the

staging of hazardous and nonhazardous waste. For instance, will separate staging areas be constructed for hazardous and nonhazardous waste? The text should provide specific details about the staging of waste in the Load Out Area. The WP should also describe how excavated waste that is a "combination of the two" will be handled. Will such material be handled in the same manner as hazardous waste?

It is also unclear whether waste will be sampled as the excavation progresses or whether the soil will be classified (e.g., hazardous or nonhazardous) based on the previously collected waste disposal samples. The text should be revised to provide additional information about the collection and analysis of waste disposal samples, including the frequency of collection, analysis parameters, and type of samples (e.g., grab or composite).

If you have any questions concerning the above comments, please contact me at (215)814-3369.

Sincerely,

/s/

Yazmine J. Yap-Deffler
Remedial Project Manager
Federal Facilities Branch

cc: Henry Sokolowski, EPA Region III
Jeff Thornburg, MDE
Steven Richard, GSA
Robert Craig, Adelphi Research Laboratory

**SITE 4 WORK PLAN
RESPONSE TO EPA REGION III COMMENTS**

1. OHM will be backfilling the excavation with a combination of on-site and off-site soils. The on-site soils were obtained from the excess excavated soil from the site W swale groundwater collection trench that was constructed in the fall 1998. These soils were sampled in September 1998 for waste disposal characterization. Results of the testing indicated the soils were characteristically non-hazardous. The soils were again sampled in January 1999 and analyzed for TAL metals, TCL VOCs/SVOCs, TPH (GRO, DRO), pesticides, PCBs, and cyanide. Analytical results confirmed the soil was suitable for use as backfill at Site 4.

OHM has selected an off-site borrow source (Percontee). Samples were obtained from Percontee on April 6, 1999 and sent to an off-site laboratory for the following analysis: TAL metals, TCL VOCs/SVOCs, TPH (GRO, DRO), pesticides, PCBs, and cyanide. Results are expected by April 12, 1999. OHM and the Navy will review the analytical results to confirm the off-site soils are suitable for backfill at Site 4.

2. OHM has recently installed a permanent water line to Site 4. This water will be used to control dust as necessary. OHM will also construct a tire scrub area prior to the decontamination pad to rid tires of soil. Trucks will be pressure washed at the decontamination pad to further remove dirt, etc. OHM will also have a Bobcat with sweeper attachment on-site to remove dirt and debris from roads.
3. A schedule is attached.
4. The OHM project manager is Phil Tully. The project manager directs all aspects of the delivery order and monitors project costs and schedule. The project manager delegates day-to-day execution authority to the superintendent.

The OHM superintendent is Fred Poulin. The superintendent is responsible for the construction phase of the project and ensures work is performed in accordance with the work plan and applicable construction standards, codes, etc. Ensures work is performed within budgeted costs and schedule.

The OHM superintendent has primary responsibility for ensuring work is executed in accordance with the work plan. If conditions change requiring a deviation from the work plan the superintendent and/or project manager will notify the ROICC and RPM prior to proceeding with work.

5. The load-out area shown on the drawing will be where disposal trucks are positioned during load-out of excavated soil. The area is outside the contaminated zone. The area itself will consist of a layer of geotextile fabric and six to eight inches of compacted stone. At the completion of the excavation the stone and geotextile will be removed and disposed of off-site.

Excavated soil will be stockpiled in the eastern end of Site 4 adjacent to the load-out area but within the boundaries of the contaminated zone. The excavator will also be located inside the contaminated zone and will extend out of the zone with the bucket only to load soil into disposal trucks.

Excavated hazardous soil will be staged inside the contaminated zone separate from non-hazardous soil. Hazardous soil will be stockpiled on 60-mil HDPE liner, covered and bermed with hay bales. Hazardous soil will be staged for few days before it is transported off-site.

Excavated non-hazardous soil will not be placed on a liner or bermed. The quantity of staged material will be limited to what can be loaded out in a day. OHM does not intend on creating a large pile of soil in this area. Staging soils simply makes for a more efficient operation.

SPECIFIC COMMENTS

1. 1a. The text will be revised to state that obviously contaminated soil will be considered: stained soil, presence of waste, or PID readings of five (5) ppm above background.

 1b. The excavator will load material into an end dump. The end dump will transport soil to the staging area.

 1c. The excavation limits have been revised since the submission of the work plan. The revised boundaries are per figure 1-3 of the Tetra Tech NUS Sampling Plan. The limits of excavation now include the removal of approximately 300 linear feet of Perimeter Road and excavation up to the fence line.

 1d. Tetra Tech NUS is performing confirmation sampling. Questions regarding confirmation sampling should be addressed to Tetra Tech.
2. Decontamination water will be sampled for TPH and PCBs and will be disposed of at a yet to be determined off-site disposal facility. Decontamination water will not be disposed of on-site. OHM personnel will obtain samples.
3. Excavated soil will be stockpiled in the eastern end of Site 4 adjacent to the load-out area but within the boundaries of the contaminated zone. The excavator will also be located inside the contaminated zone and will extend out of the zone with the bucket only to load soil into disposal trucks.

Hazardous soil will be staged inside the contaminated zone separate from non-hazardous soil. Hazardous soil will be stockpiled on 60-mil HDPE liner, covered and bermed with hay bales.

Non-hazardous soil will not be placed on a liner or bermed. The quantity of staged material will be limited to what can be loaded out in a day. OHM does not intend on creating a large pile of soil in this area. Staging soils simply makes for a more efficient operation.

Combination of the two meant that both hazardous and non-hazardous waste is present, which is the case.

OHM obtained samples from Site 4 on February 9 and 10, 1999 and sent to an off-site laboratory for waste disposal characterization. Excavation will proceed per this classification. Additional waste disposal sampling is not anticipated at this time. If additional waste disposal sampling is required, samples will be analyzed for the full waste disposal scan. Types of samples (ie, grab or composite) will depend on type of waste, quantity, etc.

Additional comments from EPA received verbally from Walter Legg.

Comment: What if the backfill analysis is not acceptable?

Response: OHM obtained soil samples from Percontee on April 6th. Analytical results have been reviewed by OHM and the Navy and it has been determined that the soil is not acceptable for backfill. Although below the removal action PRGs, there were hits for a few parameters. OHM has identified an alternate supplier of backfill, Aggtrans. Aggtrans has provided OHM a letter of certification of clean fill. OHM will also obtain a sample for laboratory analysis.

Comment: Ensure OHM coordinates confirmation sampling with TetraTech and EPA.

Response: OHM met with representatives from Tetra Tech NUS on May 5th to discuss confirmation sampling. OHM and Tetra Tech discussed the coordination of confirmation sampling and excavation to ensure an efficient operation. OHM will also keep EPA's sampling contractor aware of schedule and provide them adequate notice to get to the site to obtain samples.

Comment: Provide additional information regarding waste characterization sampling.

Response: OHM divided site 4 into seven grids prior to obtaining soil samples back on February 9th and 10th. A sample pit was excavated in each area. OHM obtained a sample from each pit (7 samples total) and analyzed each for waste disposal characterization. The sample obtained from pit 4 (about the middle of site 4) had levels of PCBs above 50 ppm and as such is characteristically hazardous. Analytical results from other pits indicate the soil is characteristically non-hazardous. The soil from pit 4 will be disposed of as a hazardous waste. All other soil will be disposed of as a non-hazardous waste.



MARYLAND DEPARTMENT OF THE ENVIRONMENT

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Parris N. Glendening
Governor

Jane T. Nishida
Secretary

April 21, 1999

Mr. Walter Legg
Engineering Field Activity, Chesapeake
Washington Navy Yard, Building 212
901 M Street, SE
Washington DC 20374-5018

RE: Revised Draft Work Plan for Site 4 Soil Removal, Naval Surface Warfare Center, White Oak, Silver Spring, Maryland, Dated March 2, 1999

Dear Mr. Legg:

Enclosed are comments from the Maryland Department of the Environment, Waste Management Administration on the above-referenced document.

If you have any questions, please contact me at (410) 631-3440.

Sincerely,

Jeff Thornburg
Remedial Project Manager
Federal/NPL Superfund Division

JT:bjm

Enclosure

cc: Ms. Kim Bellis, EFACHES
Ms. Yazmine Yap-Deffler, EPA Region III
Mr. Richard Collins
Ms. Shari Wilson

**Maryland Department of the Environment
Waste Management Administration
Environmental Restoration and Redevelopment Program**

Comments on:

Revised Draft Work Plan for Site 4 Soil Removal, Naval Surface Warfare Center, White Oak, Silver Spring, Maryland, Dated: March 2, 1999

Specific Comments:

1. Section 3.2, Site set-up, page 3-1, 4th paragraph

a) The screening criteria and analytical methods for decontamination water sampling are not presented in this section. A list of parameters and associated action levels for decontamination water should be discussed. Please include this information in the document as appropriate.

b) Investigatory derived media (IDM) describes the groundwater, surface water, soils and sediments that are collected during field activities to support the remedial investigation / feasibility study (RI/FS). Specifically, IDM may include development and purge water from monitoring wells, drill cuttings, and extra soils removed during sample collections. To evaluate whether the IDM must be managed as hazardous waste, the preliminary inquiry is whether the IDM is a solid waste, as defined in Maryland's Environment Article, § 7-201(t) and COMAR 26.13.02.02. Basically, uncontaminated IDM need not be considered a solid waste, as long as that IDM: 1) will not be abandoned in an environmentally unsound manner; and 2) is not inherently waste-like.

Because the IDM originates from a site being investigated under CERCLA authority, there must be some initial evaluation as to whether the IDM is contaminated or inherently waste-like. As guidance, IDM must be handled as a solid waste when:

- 1) It is visually or grossly contaminated;
- 2) It has activated any field monitoring device indicating the presence of volatile organic compounds (VOC) or metals;
- 3) On previous monitoring/sampling activity, it has exhibited levels of contamination above accepted environmental quality standards;
- 4) Based on historical information, the responsible party or the regulatory agency believes it warrants caution or additional testing.

IDM with contamination should be viewed as inherently waste-like unless or until the media is no longer contaminated, or is treated or recycled. As with any solid waste, the generator must perform a hazardous waste determination. If the waste is a hazardous waste, then it must be disposed of through an appropriate

hazardous waste disposal facility. If the waste is not a hazardous waste, then that IDM may be disposed of through any permitted or authorized waste management facility willing to accept the waste, or recycled or reused in a manner permissible under the law.

Naturally occurring media which does not exhibit any of the characteristics or concerns described above need not be managed as a waste, particularly if the material will be returned to a suitable location on the facility. Unless otherwise specified, the handling or disposition of this material must be performed in such a manner, so that potential impacts to the environment are avoided. The facility must comply with all pertinent sediment and erosion control regulations. Also, seeding and the judicious discharge of non-contaminated water to ensure infiltration will be considered the minimum steps necessary to ensure non-degradation of the environment.

2. Section 3.4, Transportation and Disposal, page 3-3, 3rd paragraph

The Navy is reminded that the Waste Management Administration views contaminated media as solid waste once it has been excavated for disposal or other management. As with all solid waste, it is the generators responsibility to make a hazardous waste determination prior to the disposal or further management of the excavated material. Should the generator determine that the excavated solid waste is in fact a hazardous waste, then it is the responsibility of the generator to comply with all applicable federal and state hazardous waste laws and regulations regarding storage, transportation, treatment and ultimate disposal of the hazardous material.

**SITE 4 WORK PLAN
RESPONSE TO MDE COMMENTS**

1. Decontamination water will be sampled for TPH and PCBs and will be disposed of at a yet to be determined off-site disposal facility. Decontamination water will not be disposed of on-site. The water will be classified as hazardous or non-hazardous per the analytical results and disposed of accordingly.
2. Noted.
3. OHM has sampled the soil from site 4. Analytical results indicate the presence of non-hazardous and hazardous soils. OHM has arranged for proper disposal in accordance with all applicable federal and state hazardous waste laws and regulations.