DEPARTMENT OF THE NAVY
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE, NORTHEAST
4911 SOUTH BROAD STREET
PHILADELPHIA, PA 19112-1303

5090
BPMO NE/DCK
Ser 06-063
September 28, 2006

Ms. Christine A. P. Williams
Federal Facilities Superfund Section
United States Environmental Protection Agency
1 Congress Street, Suite 1100 (HBT)
Boston, MA 02114-2023

Ms. Claudia Sait
Maine Department of Environmental Protection
Bureau of Remediation and Waste Management
State House, Station 17
Augusta, ME 04333-0017

Dear Ms. Williams and Ms. Sait:

SUBJECT: HAZARDOUS WASTE AND LETTER WORK PLAN FOR SITE 9, NAVAL AIR STATION BRUNSWICK, ME

This letter submits the draft Letter Work Plan with Hazardous Waste Standard Operating Procedure (LWP/HW SOP) and Site Management Plan proposed for use by our contractor for the remainder of the work on their contract at Site 9. This was previously transmitted electronically to you by email from Lonnie Monaco on September 26, 2006.

Your immediate attention to reviewing and commenting on this proposed plan is greatly appreciated. The Navy intends to lift the work suspension next week with a conditional notice to proceed based on the contents of the draft LWP/HW SOP. Once the final LWP/HW SOP is approved, a full notice to proceed will follow.

Our shared goal is to have most of the site work involving excavation and offsite disposal of the hazardous waste, waste water, and the ash waste material completed before the end of the 2006 construction season.

Please forward your comments as soon as possible. If you have any questions or comments, please contact Lonnie Monaco at (215) 897-4911 or me at (215) 897-4915.

Sincerely,

Dawn C. Kincaid

DAWN C. KINCAID, P.E.
BRAC Environmental Coordinator
By direction of BRAC PMO

Copy to:
CO, BNAS
BNAS (Lisa Joy, Dale Mosher)
BRAC PMO Distribution
NAVFAC MIDLANT (Lonnie Monaco)
Lepage Environmental (Carolyn Lepage)
ECC (Darren Gainer, Mark Carver)
BACSE (Ed Benedikt)

September 26, 2006

Department of the Navy
Engineering Field Activity Northeast
Naval Facilities Engineering Command
Officer in Charge of Construction
East Pennsylvania Area
Building #78
Naval Air Station Joint Reserve Base
Willow Grove, PA 19090-5001

Attn: William Ganter
Contracting Officer

RE: Proposed Soil Sampling Corrective Action Plan and Letter Work Plan for N62472-01-D-0809, TO #0004, Site 9 Soil Removal Action, Naval Air Station, Brunswick, ME

Attached: Oak SOP – Hazardous Waste Management

Dear Mr. Ganter:

The following represents OAK's revision to the Letter Work Plan (LWP), in an effort to address the quality and reliability of chemical data that has been collected to date on the project. The OAK Group and its on-site subcontractor, RC&D, are committed to strictly conforming to the requirements of the existing Work Plan, this LWP, the QAPP and SOPs approved for the project and for all sampling conducted at the site. RC&D personnel will perform the sampling outlined in this LWP in conformance with these approved plans.

Sample results from a pile of approximately 900 tons* of soils indicated leachability of lead (Pb) and trichloroethylene (TCE) at concentrations above levels considered as hazardous waste under RCRA regulations. This pile will not be re-sampled; however, since the existing Work Plan does not include procedures for handling and disposal of hazardous waste (HW), a draft version is included for your review and comment. Once the HW handling and disposal SOP is approved, the HW pile will be disposed off-site in accordance with the SOP. An excavator will be used to segregate any nearby non-hazardous materials from the HW pile. The poly covering the HW pile will only be removed to initiate disposal activities once nearby non-hazardous materials have been removed to create sufficient work area around the HW soil pile.

There are ten 20,000 gallon frac tanks at the site containing water from the excavation. The water in those tanks will be analyzed in accordance with the containerized fluids characterization as described in Table 1 of the approved Work

Plan to meet the requirements for on-site discharge to the Brunswick Sewer District. Water from the excavation, previously discharged, was tested on six separate occasions, and the Brunswick Sewer District discharge limits were met each time.

* *Material sampling units have been reduced from 500 yd3 to 500 tons in compliance with the disposal facility permit requirements.*

Overview of Soil Sampling.

A summary of soil sampling is presented in the table below. This table shows the types of soil materials sampled, the numbers of samples collected since the inception of the removal action, and the potential for replicate sampling of these materials. Attached Figure 1 shows the approximate locations of materials currently stockpiled at the site. Attached Figure 2 shows the locations of confirmatory soil samples.

Soil Materials and Sampling Performed	**Number of Samples Collected**	**Potential for Replicate Sampling**
Ash has been sampled for waste characterization	34	Three ash piles (P6, P7 and P8) were sampled and are still on-site. True replicate samples cannot be collected of the ash piles since their exact sampling locations were not surveyed. The ash piles will be staged into 500 tons piles and re-sampled for the VOC, SVOC and metal waste stockpile characteristics specified in Table 1 of the approved Work Plan. Ash on-site that has yet to be sampled will be staged into 500 ton piles and sampled in accordance with the waste stockpile characterization specified in Table 1 of the approved Work Plan. Ash material characterized as special waste shall be disposed of according to the approved Work Plan. If any of the ash material is characterized as hazardous waste, it shall be handled and disposed of according to the final approved HW SOP (the draft version of which is attached).
Soils mixed with construction and demolition debris (CDD) have been sampled for potential re-use as backfill and waste characterization.	12	All CDD material are still on-site. The CDD materials shall be divided (using survey and GPS techniques) into 500 ton piles and sampled (or re-sampled) for the waste stockpile characteristics in Table 1 of the existing Work Plan, then disposed of according to the approved Work Plan. Materials re-sampled shall be analyzed for the VOC, SVOC and metal waste stockpile characteristics.
Loam and Overburden soils have been sampled for potential re-use as backfill and for	4	All the loam, overburden and CDD materials are still on-site. True replicate samples cannot be collected of these materials since the piles have been relocated and/or reworked.

waste characterization		The materials will be staged in 500 ton piles. Each pile will be sampled and analyzed for the backfill parameters in Table 1 of the existing Work Plan. Sample results below backfill standards shall be cause to re-use the materials as backfill at the site. Sample results above backfill standards shall be cause to reject these materials for re-use at the site. Should the materials be unacceptable for re-use as backfill, the piles will be re-sampled and analyzed for the waste characteristics analyses in Table 1 of the Work Plan and then disposed of according to the approved Work Plan.
Confirmatory Samples	32	All excavation confirmatory sample locations are grab samples from surveyed locations; thus, the exact location of the original sample can be determined for future sampling. Excavation confirmatory locations not covered by water or material piles shall be used for replicate sampling. See below for a comparison analysis between the existing and future samples.

Replicate Sampling.

Replicate samples will be collected of select, accessible, confirmatory soil sampling locations. These replicate samples will be analyzed as follows:

VOCs via 8260 – 66 analytes.
SVOCs via 8270 – 67 analytes
RCRA metals – 8 analytes

Each replicate sample of a confirmatory soil sample analyzed for VOCs, SVOCs and RCRA metals provides a total of 141 data points for comparison. As a result, the proposed replicate sampling will provide over 1,000 data points for comparison, which will provide a statistically significant number of data points.

Replicate samples will be collected at a frequency at or above the recommended minimum (The *Uniform Federal Policy for Quality Assurance Project Plans: Part 2B Quality Assurance/Quality Control Compendium: Minimum QA/QC Activities* (Intergovernmental Data Quality Task Force, Interim Final, Version 1, July 2004)).

The comparative analysis of the data will be performed in accordance with Section 2.4.1 of the QAPP by calculating the "relative percent difference" (RPD) for the analytes in each pair of original sample and its corresponding replicate sample. The calculation of RPD will be per the formula in Table 2-1 of the QAPP. EPA Region 1 guidance includes acceptable RPD for replicate samples as 50% for soil/sediment and 30% for aqueous environmental samples *(EPA-NE Data Validation Functional Guidelines for Evaluating Environmental Analyses,* EPA Region I, December 1996). The comparative analyses of data will use these same acceptance criteria. If an analyte is non-detected in both the original and replicate sample, the RPD will be considered 0%. Where a non-detected concentration is compared with a detected concentration, the method detection limit will be used as the concentration for the non-detected sample.

For sample pairs with analytes that do NOT meet acceptance criteria, the original and replicate data will be compared against the Data Quality Objectives for the project and the type of sample. For confirmatory soil samples and/or soil materials being evaluated for re-use, the DQOs are represented by Table C-2 in the Project Work Plan, which provides the regulatory guidelines and remediation goals for soils for the project. For materials being characterized for off-site disposal, the DQOs are represented by the RCRA limits for a characteristic hazardous waste and by the disposal facility acceptance limits. The comparative analyses will identify where there are any non-comparable results and where the differences in the original and replicate sample are significant with respect to the DQOs. For example, if the results for the original and replicate do not meet acceptance criteria and are non-comparable, but both are either completely above or below the DQO, then the differences in the samples pairs are considered insignificant.

The table below identifies the replicate samples that will be collected.

Material Type	Original Number of Confirmatory Sample Locations	Replicate Samples to Be Collected	% Replication	Replicate Analyses	Type of Sample
Confirmatory Soils	32	S9-F9-SW8-1 S9-H11-SW8-1 S9-I7-SW4-3 S9-D3-SW4-3 S9-A7-SW6-1 S9-B8-SW6-1 S9-C7-SW6-3	22%	See Table 1 of the approved workplan under excavation confirmatory	Grab

Upon approval from the Navy, Oak will mobilize our subcontractor RC&D, Inc. to collect the replicate samples and perform the stockpile re-sampling. OAK will provide sufficient notice (no less than 48 hours) to the Navy prior to this sampling to allow for coordination with appropriate oversight personnel. In addition, Oak will provide an independent subcontractor to provide third party, QA/QC oversight of the sampling. This QA/QC oversight subcontractor will be dedicated to performing oversight of all replicate sampling and re-sampling, and will confirm and document that all requirements of the QAPP and SOP are adhered to throughout these sampling activities.

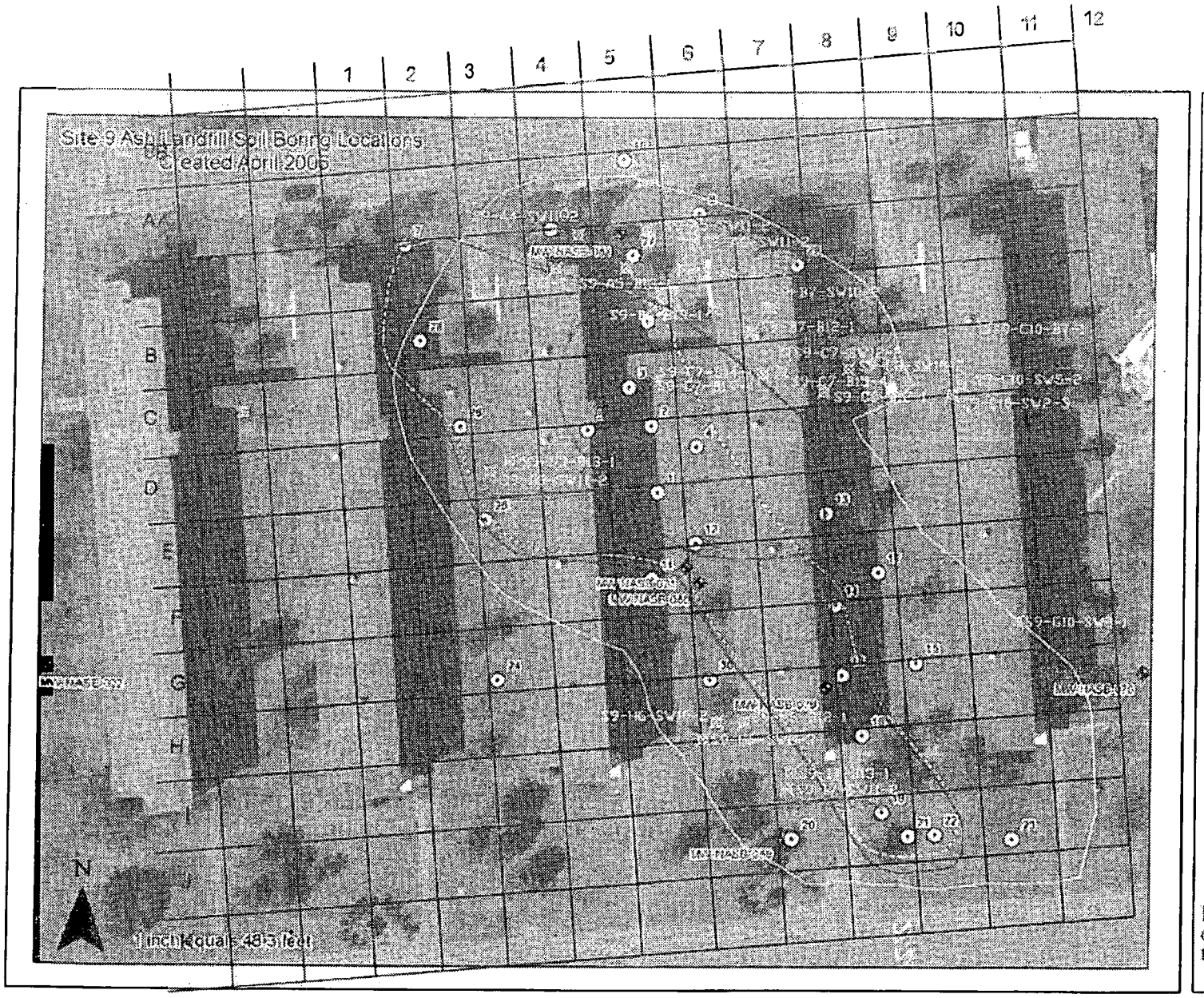
Turnaround time for the replicate sampling will be expedited to 3 to 5 business days, and the analytical results will be provided to the Navy within 4 working hours of receipt by OAK. The results of the comparative analyses will be provided in a written report within two weeks after the final replicate sampling results are available from the laboratory.

Please contact me with any additional information you require or changes that need to be made.

Sincerely,

Bruce Newman

Bruce Newman
Director of Operations



LEGEND

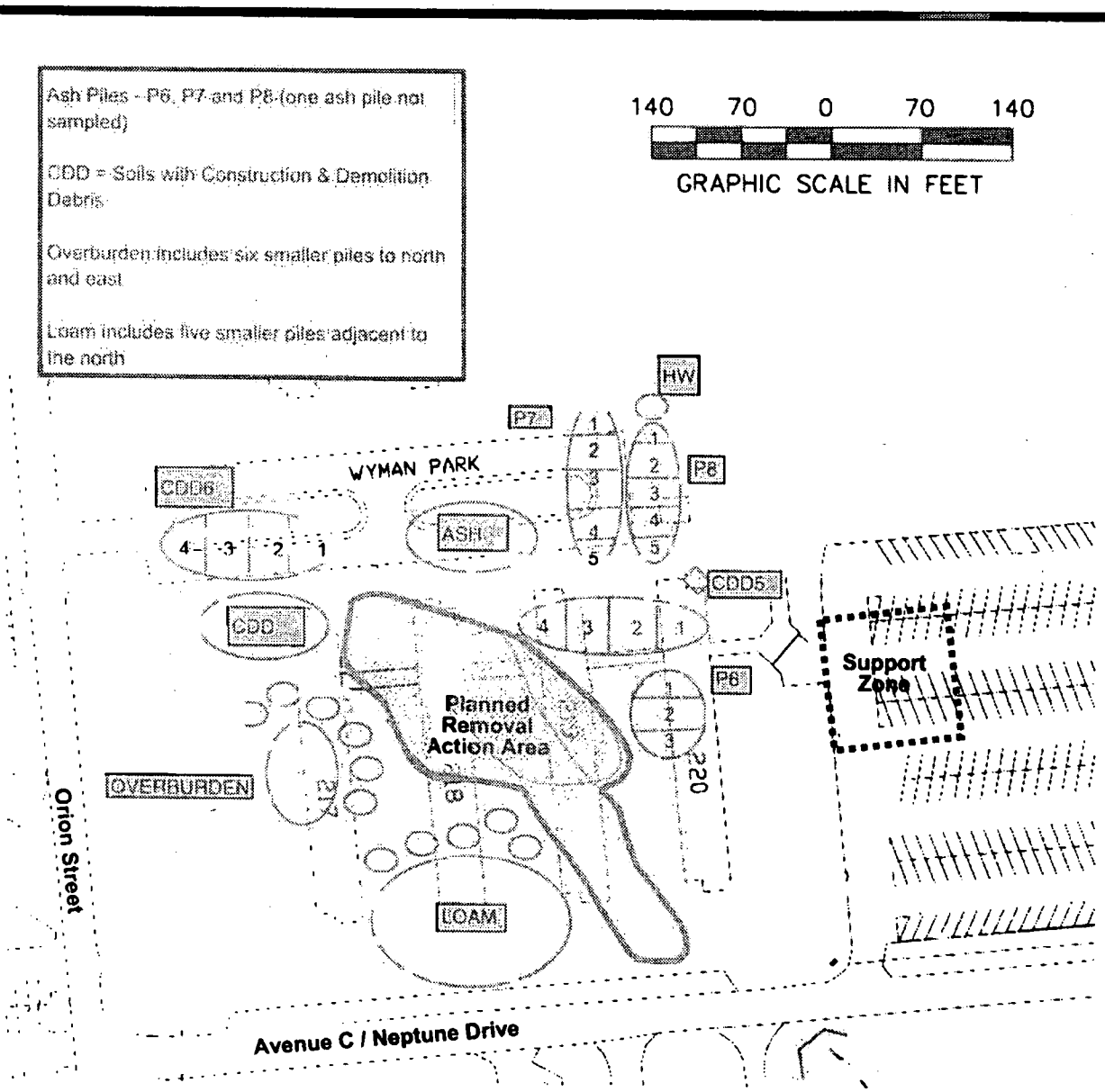
CURRENT EXCAVATION LIMITS

PROPOSED ASH LIMITS

CONFIRMATORY SAMPLE LOCATION

REPLICATE SAMPLE LOCATIONS

FIGURE 2
CONFIRMATORY SAMPLE LOCATIONS, SITE 9, BNAS



NAVAL AIR STATION BRUNSWICK, MAINE	PROJECT DESCRIPTION		
	Figure 1 - Site 9, Materials Stockpiled On-site (August 18, 2006)		
	Source: USGS	LOCUS.ppt	August 2006

SOP - HAZARDOUS WASTE MANAGEMENT

1 PURPOSE AND SCOPE

This procedure addresses the management of hazardous waste, including procedures for identification, labeling, waste documentation, transportation and disposal. This SOP has been adopted specifically to address soils at Site 9, Brunswick Naval Air Station, containing lead and trichloroethene (TCE) above limits for a characteristic hazardous waste under RCRA.

2 REFERENCES

- The Resource Conservation and Recovery Act (RCRA).
- The Transportation Safety Act (TSA).
- Code of Federal Regulations (CFR), Title 49, Parts 171-179, *Transportation*.
- Code of Federal Regulations (CFR), Title 40, Parts 122-124, 260-265, *Protection of Environment*.
- Dangerous Properties of Industrial Materials - 7th Edition, Sax, N. Irving, Van Nostrand Reinhold Co., New York, NY, 1989.
- CMM 19.2, Handling, Disposal, and Control of Hazardous Wastes.

3 TCLP SOIL PROCEDURES

The TCLP soils at Site 9 contain lead and TCE. The hazards posed by these substances and these soils are covered by the Site Safety and Health Plan. No additional hazards are presented by the handling of these soils for loading, transport, and off-site disposal. The following procedures apply to the management, shipping and disposal of the Site 9 TCLP soils:

- Contractor to provide the Navy with Disposal facility and transporter information, including documentation for appropriate permits, licenses and insurance. Additional information will include contact names and addresses for the disposal facility as well as a written approval from the disposal facility to receive this waste.
- The Navy will provide the contractor with the EPA Generator ID number and the Generator Representative information. In addition, the Navy shall designate the person to receive the completed manifest from the disposal facility.

  Generator ID: ME8170022018
  Contact: Dale C. Mosher, x. 1719, or
  Stephen Marquis, x. 2718
  Manifest Address:
  Naval Air Station Brunswick
  Attn: Dale C. Mosher
  437 HueyDrive
  Brunswick, ME 04011

- The contractor will provide the Generator Representative with a completed Hazardous Waste Manifest for review prior to scheduling waste shipments.
- For each shipment:
  - The contractor will confirm that the transporter and its vehicle has appropriate licenses, permit and placard markings on the vehicle consistent with the Manifest.
  - The Generator Representative will sign one manifest for each load, obtain the transporters signature, and retain the copy designated for the Generator.

- The transporter will surrender the manifest at the disposal facility for signature.
- The disposal facility will return the manifest to the designated person.

4 GENERAL PROCEDURES

■ Regulatory Requirements for Sites Generating Hazardous Wastes

This paragraph contains the procedures for those sites generating hazardous wastes and temporarily storing such wastes for 90 days or less, on-site.

- The Uniform Hazardous Waste Manifest

  — The manifest certification must be signed and dated by a representative of the Generator (e.g., U.S. Navy).

  — The Generator Representative must obtain the handwritten signature of the initial transporter and the date of acceptance on the manifest.

  — The Generator will retain the "Generator's Copy" of the manifest; the remaining copies of the manifest must be given to the initial transporter, who must be instructed to obtain the signature and date of acceptance of the next designated transporter or TSDF, retaining one copy for his records. The remaining copies of the manifest are to be given to the accepting transporter or TSDF. The TSDF will return a signed and dated copy of the manifest to the designated project representative within 30 days of delivery by the transporter. Should the transporter encounter any difficulties or be unable to deliver the wastes to the next designated party, he must contact the Oak PM for further directions and revise the manifest according to the PM's instructions.

- Preparation for Shipment Off Site

  The soils will be shipped off-site via truck trailers designed, licensed and permitted for transport of hazardous wastes.

  — Marking

  Each truck containing a hazardous waste for shipment off-site must be marked in accordance with DOT regulations. The markings must be durable, in English, and printed or affixed to the surface of the truck on a tag, or sign.

  — Labeling

  Column 4 of Table 172.101 (49 CFR 172) specifies the labels required on each package of hazardous wastes. Additional labeling requirements are found in 49 CFR 172.402 and must also be reviewed to determine the proper labeling requirements for each shipment. Labels conforming to the DOT specifications are commercially available and must be supplied by the project.

  — Placarding

  Each truck shall have the appropriate commercially

available placards, which meet DOT specifications as required by the regulations. The placards must be affixed to the transport vehicle before the waste manifest is accepted and signed by the transporter.

The appropriate placards are selected from Tables 1 and 2 of 49 CF172, Subpart F. Any quantity of hazardous materials listed in Table 1 must be placarded.

The placards must be affixed to all four sides of the transport vehicle at least 3 in. from other markings, lettering, or graphic displays, except that when multiple placards are required they should be next to each other.

Hazardous waste transporters and disposal facilities will provide the contractor definitive information on general and pollution liability insurance, EPA permit and licenses documentation, and Certificates of Approval prior to commencing any work on the project.

- **Reporting and Recordkeeping**
  - The project shall keep records of waste analyses, test results, or other determinations (as applicable) for a period of 3 years from the date the waste was last sent to an off-site TSDF.
  - The project shall retain copies of the biennial reports, exception reports, and other reports required by the EPA for a period of 3 years from the due date of the report.

September 26, 2006

Department of the Navy
Engineering Field Activity Northeast
Naval Facilities Engineering Command
Officer In Charge Of Construction
East Pennsylvania Area
Building #78
Naval Air Station Joint Reserve Base
Willow Grove, PA 19090-5001
Att: Mr. William Ganter
Supervisory Contract Specialist
Contract Officer

Subj: Suspension of Work Under N62472-01-D-0809, To #0004, Site 9
Soil Removal Action, Naval Air Station Brunswick, ME

Dear Mr. Ganter,

As per our discussion, the following outlines our Site Management Plan for Site 9.

Management Plan

This Site Management Plan is prepared to provide additional information on the methodologies for inspecting and maintaining pile covers and erosion control measures at the site.

When not on-site, OAK will perform periodic (e.g., biweekly) inspections of the site. As necessary, OAK will mobilize personnel to the site to re-secure pile coverings and/or erosion controls. The inspections will include the following:

- Walk perimeter of site to check for any evidence of erosion away from the site as well as the integrity of perimeter markings, fencing, etc.
- Inspect condition of chain link security fencing along eastern parking lot, southwestern construction entrance and northwestern construction entrance.
- Inspect silt fence integrity to prevent erosion of existing material stockpiles beyond the limits of work.
- Inspect orange security fence to determine that it remains in place, as installed.
- Inspect existing soil stockpiles and 6-mil woven polyethylene sheeting to ensure sheeting integrity. Inspections will include: sheet seams, sand bags, stockpile toes, and potential erosion of stockpiled material.

- Inspect open excavations for excessive erosion and/or encroachment on existing stockpile locations.

- Inspect any signage in place at the site for continued legibility and stability.

- Inspect rims and inverts of manholes SM30 and SM31 within the limits of work to confirm proper function of gravity sewer system.

- Inspect condition of equipment, storage boxes, frac tanks and other onsite material for damage, leaks, deterioration, etc.

Site Maintenance.

Corrective measures will be implemented, as necessary, based on our inspections and/or reports from Navy personnel regarding site conditions. OAK will mobilize personnel as soon as possible to address any potential deficiencies in site security and/or erosion controls, including but not limited to the following activities:

- Secure Pile Coverings: Sand bags will be added, relocated and restrung with nylon rope, as needed, to properly secure sheeting. Seams will be retied with plastic tie wraps, as needed, to prevent seams from tearing or pulling apart. New poly sheeting will be added, as needed, to replace missing or damaged sheeting material.

- Excavation Erosion: Regrade and backfill excavation, as needed, to prevent erosion of stockpiled material into excavation areas and/or impact to surrounding areas beyond the limits of work.

- Erosion Controls: Silt fence, hay bales, and/or security fencing will be replaced (as necessary) and re-installed should deficiencies be identified.

- Coordination with Navy: Following any corrective actions, OAK's on-site personnel will coordinate with on-site Navy personnel to confirm that the implemented corrective actions are adequate for site conditions.

Please contact me with any changes you require.

Sincerely,

Bruce Newman

Digitally signed by Bruce Newman
DN: cn=Bruce Newman, c=US, o=OAK, email=bpn@oakgroup.net
Date: 2006.09.26 10:37:10 -04'00'

Bruce Newman
Director of Operations