

N42237.AR.001207
NSB KINGS BAY
5090.3a

LETTER OF TRANSMITTAL FOR THE SAMPLING AND ANALYSIS PLAN RESOURCE
CONSERVATION AND RECOVERY ACT FACILITY INVESTIGATION FOR BUILDING
1039/SOLID WASTE MANAGEMENT UNIT 9 AND U S NAVY RESPONSES TO GEORGIA
DEPARTMENT OF NATURAL RESOURCES COMMENTS NSB KINGS BAY GA
8/14/2013
NSB KINGS BAY



DEPARTMENT OF THE NAVY

NAVAL SUBMARINE BASE
1063 USS TENNESSEE AVENUE
KINGS BAY, GEORGIA 31547-2606

IN REPLY REFER TO:
5090

Ser PRB4/1227

AUG 14 2013

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ms. Amy Potter
Hazardous Waste Management Branch
Georgia Environmental Protection Division
2 Martin Luther King, Jr. Drive, SE
Suite 1162 East
Atlanta, GA 30334

Dear Ms. Potter:

SUBJECT: SAMPLING AND ANALYSIS PLAN FOR BUILDING 1039, SMU#9

Naval Submarine Base (SUBASE), Kings Bay, Georgia (Generator ID Number GA4170090001) respectfully submits enclosures (1) and (2) for your concurrence and records.

In your letter of June 18, 2013, you had requested two (2) copies of the pages that were revised as a result of your comments with "Revision 1" and the Revision date annotated on each of the affected pages. Please note that due to comprehensive changes necessary to update contact information for the designated project chemist due to a change in personnel and because the previous version of the document had to be modified to such an extent in order to incorporate revised Project Action Limits and the resulting screening process, the entire document has been re-issued under a new date of July 25, 2013. Also note that due to contract language between the Government and the Contractor who is conducting this work, revision numbers beyond "0" are only used when changes to the Final document occur. Accordingly, the revision description for this re-issued document remains as "Revision 0".

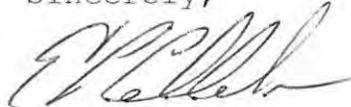
As requested, we are providing two (2) copies of the re-issued document as well as an electronic version in PDF format on a CD which can be found attached to the back binder.

5090
Ser PRB4/1227
AUG 14 2013

SUBJECT: SAMPLING AND ANALYSIS PLAN FOR BUILDING 1039, SMU#9

SUBASE point of contact is Mr. Tom Stofflet, at 912-573-4646. Please address all correspondence to Commanding Officer, 1063 USS Tennessee Avenue, Naval Submarine Base, Kings Bay, GA 31547-2606.

Sincerely,



E. L. CALLAHAN
Commander, U. S. Navy
Commanding Officer
Acting

Enclosures: 1. Sampling and Analysis Plan for Building 1039, SWMU#9 of 25 July 2013 (2 copies)
2. Response to Georgia EPD comments of 18 June 2013 (2 copies)

Copy to:

GAEPD (Mr. William Powell)

NAVFAC SE (Dana Hayworth)-w/o encl 1

Resolution Consultants (Dave Warren)-w/o encl 1

**Response to Comments
Draft Sampling and Analysis Plan; RCRA Facility Investigation Building 1039;
Solid Waste Management Unit 9; dated 8 April 2013
Naval Submarine Base Kings Bay, Georgia**

Responses to Comments, dated 18 June 2013, as provided by Ms. Amy Potter

I. General Comments

Comment 1:

This Draft SAP indicates that soil and groundwater samples will only be analyzed for BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes) and PAHs (Polynuclear aromatic hydrocarbons). The RFI Work Plan for Building 1039 dated June 2011, Section 5.3.2, states that soil and groundwater samples will be analyzed for VOCs (volatile organic chemicals) and SVOCs (semi-volatile organic chemicals). Historical sampling results have not been provided to demonstrate that VOCs and SVOCs are not present at the site. Please either provide historical sampling evident that demonstrates that VOCs/SVOCs are not a concern, or revise this SAP and all associated worksheets to correspond with the June 2011 RFI Work Plan for this site.

Response:

As presented in SAP Worksheet 11, the goal of this investigation is to further evaluate the nature and extent of impacted soil and groundwater related to a historical release of heating oil from a former underground storage tank (UST) system. The proposed analyte list of benzene, toluene, ethylbenzene, and xylene (BTEX) and polynuclear aromatic hydrocarbons (PAHs), as presented in the SAP, was developed based on historical information concerning the source (UST) and nature (heating oil) of the release. Furthermore, the analyte list is consistent with Georgia Environmental Protection Division, Land Protection Branch Guidance for UST Closure, revised January 2011. The Navy believes that the current analyte list, as presented in the SAP, adequately satisfies objectives for this study. The Navy will prepare a brief memo, to be attached to the RFI Work Plan, to document the change to a more appropriate analyte list.

Comment 2:

SAP Worksheet #10: Conceptual Site Model (CSM)

- a. Site Geology: The CSM does not contain a discussion of site or regional geology. Since there are known contaminants in the soil that may leach to the groundwater, please provide a section to discuss the site or regional geology.
- b. Section 10.2, Page 10-2: The section summarizes the soil excavation that took place in 2010. The depth of this excavation is not included. Please provide the excavation depth.
- c. Section 10.4.4, Page 10-5: This section describes the exposure pathways and receptors. Please add a landscaper scenario since this individual may disturb the subsurface soil when planting trees and bushes.

Response:

- a. **Site Geology: Additional discussion on site and regional geology added as Section 10.3. Additional information on regional hydrogeology added to Section 10.4.**
- b. **Section 10.2, Page 10-2: Text has been revised to state that soil was excavated to an approximate depth of 6 feet below ground surface.**
- c. **Section 10.4.4, Page 10-5: Text has been revised to state that risks to landscaping workers will be inferred from site worker and construction worker scenarios based on shallow, subsurface soil (surface to 5 feet bgs). A chemical of concern identified in shallow subsurface soil for either site workers or construction workers will also be considered a chemical of concern for landscaping workers.**

Comment 3:

SAP Worksheet #11: Project Quality Objectives/Systematic Planning Process Statements

- a. Section 11.3, Page 11-3, Project Action Limits (PALs): This bullet states that soil screening will consist of Industrial and Residential Regional Screening Levels (RSLs) as well as "SSL-Risk" (Generic SSLs in the RSL Table), and that actual screening will be based on available receptors. This screening procedure does not follow EPD's *Guidance for Selecting Media Remediation Levels at RCRA Solid Waste Management Units*. All contaminants should be screened against Residential RSLs only.

Given the typical sandy nature of soil in this area and the relatively shallow groundwater table (7' below ground surface), please screen all detected contaminants in the subsurface using the default soil screening levels (SSLs) in the RSL Tables, which use a dilution attenuation factor (DAF) of 1, to evaluate leaching to groundwater. Please revise accordingly.

- b. Section 11.5 Analytical Approach: This section has Decision Rules that state that the extent of contamination is defined by the PALs. However, Subase's Permit HW- 014(S&T)-4, Section I.E.7, defines the extent of contamination as the area where hazardous waste, hazardous constituents, or hazardous waste constituents are above method detections limits or background concentrations. Please revise accordingly.

Response:

- a. **Section 11.3, Page 11-3, Project Action Limits (PALs): Document revised accordingly.**
- b. **Section 11.5 Analytical Approach: Document revised accordingly.**

Comment 4:

SAP Worksheet#14: Summary of Project Tasks

The Waste Handling Section, Page 14-5, references Appendix C, which is the lab accreditation. The correct reference is Appendix B. Please revise accordingly.

Response:

The SAP references Appendix C of CH2M Hill's Final RI Work Plan. The text has been revised to clarify.

Comment 5:

SAP Worksheet #15: Reference Limits and Evaluation Table

- a. Soil: This table references "SSL-Risk" as the project action level for human health. The true project action level will be those contaminants that exceed either the Residential RSL or default SSL value (or both).

Additionally, during the screening process for contaminants of potential concern (CO PCs), if detected contaminants do not have an RSL value, they must be identified as COPCs and carried forward to the Risk Assessment phase since surrogate values should not be used for screening purposes. Please revise accordingly.

- b. Groundwater: This table references the use of tap water RSL surrogates, which should not be used for screening purposes. Detected contaminants that do not have an RSL value must be carried forward to the Risk Assessment phase. Please revise accordingly.

Response:

- a. **Soil: Table revised to show the human health project action level as the most stringent of the Residential RSL or default SSL. For analytes without a Residential RSL, the method detection limit will be used as the project action level. The screening process, as detailed in Section 11.5, has been revised accordingly.**
- b. **Groundwater: Table revised accordingly. The screening process, as detailed in Section 11.5, has also been revised accordingly.**

Comment 6:

Appendix B: Investigation Derived Waste Management and Characterization (Sections and 6.6)

- a. Section 6.5.1 states, "Solid, liquid, and PPE [personal protective equipment] waste will be characterized through the use of client knowledge, laboratory analytical data created from soil or groundwater samples gathered during field activities, and/or composite samples from individual containers." This description of how wastes will be characterized is generic and insufficient. Additionally, please remove any reference to composite samples, as only discrete samples are acceptable per SW-846. Please include a sampling plan for individual 55-gallon drums containing IDW, referencing the requirements of 40 CFR 262.11 (Hazardous Waste Determination).

- b. Section 6.6 contains the regulatory requirements. Please add 40 CFR 262, specifically §262.11 (Hazardous Waste Determination) and §262.34 (Accumulation Time), to this list.

Response:

Standard operating procedure for Investigative Derived Waste (Appendix B) revised accordingly.