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Project Number 7578

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Boston, Massachusetts 02203

Reference: Contract No. N62472-90-D-1298
Contract Task Order (CTO) No. 0288

Subject: Response to EPA Review Comments for Work Plan for Source Removal Evaluation
Old Fire Fighting Training Area, NETC, Newport, Rhode Island

Dear Ms. Keckler,

Enclosed are responses to the EPA's review comments for the Work Plan to perform a limited source removal evaluation. Brown & Root (B&R) Environmental prepared these comments on behalf of the U.S. Navy. Suggestions offered in the comments have been incorporated, and specific highlights include:

- Three borings/monitoring wells would be included in the field program to supplement the existing well network.
- Analysis of shoreline sediment samples for PCBs and TPH have been included.
- Sample summary tables have been revised to reflect these changes and other typographic corrections.

If you should have any questions, please do not hesitate to contact me at (508) 658-7899.

Yours truly,

Liyang Chu
Project Manager

LC/rt

Enclosures

c: J. Shafer/T. Bober - NORTHDIV (w/enc.)
B. Wheeler - NETC (w/enc.)
P. Kulpa - RIDEM (w/enc.)
J. Hayes - Gannet Fleming (w enc.)
J.Trepanowski/M. Turco - B&R Environmental (w/enc)
File 7578 - 3.2 (w/enc.)

RESPONSE TO EPA COMMENTS
LIMITED SOURCE REMOVAL EVALUATION
Old Fire Fighting Training Area, NETC - Newport, RI
CTO 0288
June 26, 1997

Response 1: (RE: Need for further characterization if additional sources are discovered, p.1-1, section 1.1)

The purpose of the evaluation is to identify specific subsurface features (i.e. USTs, piping, etc) from discrete areas and assess whether immediate or actual threats exist to public health or welfare, or the environment. If additional features or sources of potential concern are identified during the field investigation effort, then Navy will a coordinate with EPA and the State to determine the need for further characterization.

Response 2: (RE: Ecological Risk Assessment, pp2-8 & 2-9, Section 2.4)

This field investigation is being conducted independent of the planned marine ecological risk assessment for the area offshore of the OFFTA. It is the Navy's intent to complete the RI, the HHRA, and the ERA, and in conjunction with the information developed as part of the limited source removal evaluation, to determine the need for further remedial action.

Response 3: (RE: Analysis of sediment samples, pp.3-8, Section 4.2)

Sediment samples collected along the northern shoreline will be analyzed for TCL SVOCs, PCBs, and TPH (per request of RIDEM).

Response 4: (RE: Source Blanks, p.3-8, Section 3.4.3)

According to the Navy Installation Restoration Laboratory Quality Assurance Guide, source blanks are not required as quality control samples. Table 3-3 in the work plan inadvertently identifies a "source blank" column for quality control samples to be collected. This column will be changed to "field blanks".

Field blanks represent samples of contaminant free media which are placed directly into the same type of container, preserved and stored in the same manner as all other field samples. Field blanks are required quality control samples

In the past, source blanks were periodically collected to analyze water source(s) used during drilling or decontamination (i.e. samples of water from the hydrant or from a water tank) to determine if contamination exists Unlike field blanks, such water sources may not necessarily represent contaminant free water. Though not required, source blank samples were typically analyzed only for volatile organic compounds.

In accordance with the Navy's current quality assurance guide, source blanks will not be required at the OFFTA.

Response 5: (RE: Soil Borings and Monitoring Wells, pp.3-8 to 3-14, Section 3.4.3)

Three soil borings will be advanced through the overburden to the top of bedrock or refusal. Subsequently, three monitoring wells will be installed in the overburden. As part of this limited source removal evaluation,

no boring is anticipated to be advanced into bedrock because all USTs and ancillary piping were likely to have been installed in overburden materials.

All borings and monitoring wells will be located immediately downgradient of identified subsurface features (i.e. USTs, piping, etc.) based on observations made during test pit activities. If no features are identified, then evidence of stained soils and/or PID/FID readings, will be used to determine the presence or absence of oil-related contamination. The borings would then be installed downgradient of identified zones of highest contamination.

If more than three features or zones of contamination are identified, selection of the three borings/monitoring well locations would be determined based on the features identified, relative contaminant presence (visual or PID/FID readings), and possibly the locations of the current monitoring wells network. The Navy may also consider additional wells.

Response 6: (RE: Backfill material, p.3-10, Section 3.4.3)

All new wells are to be screened across the water table. The use of bentonite grout/slurry as a backfill material beneath the well screen may not be practical for the following reasons:

1. Bentonite grout, most of the time, is made up of three material: i.e. water-cement-bentonite. In the past, EPA Region I hydrogeologists have prohibited the use of cement, which is alkaline, below the water table as it may change the pH and therefore alter the water chemistry.

2. Bentonite slurry, typically made up of bentonite and water, may be difficult to place accurately using a tremie pipe. In backfilling, a precise volume of bentonite slurry requires needs to be placed such that the top of the backfilled interval does not intrude into the desired interval for the well screen. Often, too much slurry is introduced as a backfill material, because of difficulty in pumping a precise volume, and the desired well screen interval is bypassed.

3. Bentonite slurry may also migrate into the formation (making estimating a precise volume difficult), thereby requiring the addition of bentonite chips to the slurry to stop the migration. The use of bentonite slurry may delay the work schedule as the slurry requires 8 to 12 hours (minimum) to set up (i.e. stiffen) prior to introducing materials that will be placed on top of it.

In lieu of bentonite grout or bentonite slurry, it is more practical and less difficult to use bentonite chips and clean sand. Placement is more accurate, and measurement with a weighted tape can provide more accurate backfilling to the desired depths. Bentonite chips expand by absorbing water. The addition of sand to the chips allows water to be more evenly distributed amongst the chips, thereby creating improved hydration and a better seal. In addition, sand with no bentonite is used as a base for the well screen.

Response 7: (RE: Thickness of seal, p.3-12, paragraph 3)

The filter pack shall extend a minimum of 1-foot above the well screen. Where feasible, a bentonite pellet seal with an approximate thickness of 2 0 feet will be installed immediately above the filter pack. If, due to the shallowness of the water table, a bentonite pellet seal is not possible, then the well will be sealed using a bentonite slurry. The remainder of the borehole will be backfilled with the slurry to a depth of approximately 2-feet below ground surface. If possible, a layer of clean silica sand will be added to serve as a drainage layer beneath the protective casing. The monitoring well will be finished with a cement mixture and a flush-mounted roadway box.

Response 8: (RE: Bedrock well construction, p.3-12, paragraph 4)

If a bedrock well screen is required, it will cover the length of the entire bedrock interval. A PVC or teflon ring shall be securely attached to the PVC riser to form a base for the overburden/bedrock seal. This ring shall be placed so that it sits atop the ledge created as a result of the change from a 4-inch diameter borehole to a 3-inch diameter corehole. The bedrock/overburden contact shall be sealed with a minimum 2-foot thick bentonite pellet seal. The annulus above the bedrock/overburden seal will be backfilled consistent with the construction details outlined in Response 7.

Response 9: (RE: Storm Sewer Sampling, p.3-18, Section 3.4.5)

The objective of the storm sewer outfall sampling is to assess the current status of discharge of PAH constituents detected during the RI from the storm sewers. An attempt will then be made to corroborate past data and identify whether the PAH contamination is attributable to the storm sewer or to tidal action.

The sampling will include the collection of storm water samples from a catch basin upstream of the site (per EPA's request) and from an outfall pipe flowing into Narragansett Bay during a period of outflow (low tide). Attempts will be made to collect the upstream catch basin sample several hours after a storm event. No sediment sample is anticipated to be collected at this time.

Response 10: (RE: Metal debris, p. 3-20, paragraph 1)

A dumpster will be available for the disposal of decontaminated metal debris removed from the site as part of excavation activities.

Response 11: (RE: Table 3-1)

Refer to Table 3-3 for the field quality control sample summary per sample analysis.

Response 12: (RE: Table 3-1)

The most recent Statement of Work for Inorganic Analytical Service, CLP SOW ILM04, will be used for this site for Total TAL Metals and TCLP Metals analyses. This change will be made on all applicable tables.

Response 13: (RE: Table 3-1)

The EPA recommends that the CLP SOW for Low Concentration Organic Analytical Service (Water Matrix), OLC02.1, should be used for comparison of groundwater data to drinking water standards. It should be noted that the aquifer underlying the OFFTA is classified as GB, not suitable for a potable water supply without treatment, and would therefore not require OLC02.1 detection limits.

Responses 14-17: (RE: Table 3-2)

The recommendations for containers and necessary volumes are appreciated. Sample containers listed on Table 3-2 represent general requirements. Actual sample containers provided by the laboratories may vary from those listed. Sample volumes will be specified by the laboratory based on the analytical method used. Table 3-2 was prepared before selection and award of the analytical subcontractor.

Table 3-2 has been revised to note that groundwater samples for dissolved TAL metals analysis must be filtered before preservation with nitric acid.

The sample container reported for TPH analysis on aqueous samples is incorrect and will be revised to reflect a 1 - 1 liter amber glass bottle. The selected lab will specify and ship required bottleware prior to commencement of field activities.

Response 18: (RE: Table 3-3)

Field blanks were inadvertently and incorrectly referred to as source blanks on Table 3-2. This column will be changed to "field blanks".

Field blanks represent samples of contaminant-free media which are placed directly into the same type of container, preserved and stored in the same manner as all other field samples. Field blanks are required quality control samples. According to the Navy Installation Restoration Laboratory Quality Assurance Guide, the collection frequency is one per contiguous site per sampling event.

Response 19: (RE: Figure 3-4)

Storm sewer sampling locations will be added to Figure 3-4 or an equivalent figure. Sediment samples, if collected, would be collected in the same vicinity as the aqueous samples. The descriptive symbol on the figure may be applicable to both storm sewer water and sediment sampling locations.

Response 20: (RE: Summaries of QA samples)

Modifications to text and tables will be made to ensure consistency regarding the collection of quality control samples.

Response 21: (RE: Physical Hazards, p. 4-7, Section 4.2)

Fire/explosion potential will be added to the list of physical hazards and will be described in the Health and Safety Plan.

Response 22: (RE: Air Sampling Methods, p.5-2, Section 5.1)

If it is determined that inhalation exposure via potentially contaminant laden particulates (i.e. fugitive dusts from subsurface materials) is a concern, then appropriate measures will be taken to prevent exposure. These measures may include dust control (water mists) or use of respirators.

Response 23: (RE: Site Control Measures, p.7-1, Section 7)

Areas immediately adjacent to proposed excavation sites and other work areas are used frequently for recreational purposes. Control measures will be taken to prevent access by recreational users of adjoining land. During work activities, areas will be physically cordoned off by use of rope, flagging, and/or traffic cones to clearly identify the work area, control pedestrian traffic, and to aid in restricting access of unauthorized personnel.

Response 24: (RE: HASP Attachment D)

The following will be added to text on p. 4-11 of the HASP:

Heat Stress Monitoring:

If needed, heat stress prevention work-rest regimen guidelines are provided in a table in Attachment D to the HASP. This table presents wet bulb globe temperatures (WBGT) in degrees Fahrenheit that relate to prescribed work-rest schedules, and is a guide.