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LETTER AND U S NAVY RESPONSE TO U S EPA REGION I AND RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT COMMENTS REGARDING DRAFT  
WORK PLAN ADDENDUM 1 SITE 19 ON SHORE DERECKTOR SHIPYARD NS NEWPORT  
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12/09/2010  
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## TETRA TECH

C-NAVY-12-10-4033W

December 9, 2010

Project Number 112G02125

Ms. Kymberlee Keckler  
U.S. EPA Region I  
5 Post Office Square, Suite 100  
Mail Code OSRR07-3  
Boston MA, 02109-3912

Mr. Gary Jablonski  
Rhode Island Department of Environmental Management  
235 Promenade St.  
Providence RI 02908-5767

Reference: CLEAN Contract No. N62470-08-D-1001  
Contract Task Order No. WE20

Subject: Transmittal of Response to Comments, Draft Work Plan Addendum 1  
Site 19, On-Shore Derecktor Shipyard  
Naval Station Newport, Newport RI

Dear Ms. Keckler, Mr. Jablonski:

On behalf of Ms. Winoma Johnson, U.S. Navy NAVFAC, I am providing to you enclosed a response to your comments on the Draft Work Plan Addendum 1 for the site referenced above. Comments were received from USEPA dated October 29, 2010 and from RIDEM dated November 22, 2010.

These responses to comments will be incorporated into the Draft Final Work Plan Addendum 1 which will be issued shortly.

If you have any questions regarding this material, please do not hesitate to contact me.

Very truly yours,

Thomas A. Campbell  
Project Manager

TAC/lh

encl.

c: P. Golonka, Gannett Fleming (w/encl.)  
W. Johnson, NAVFAC Mid-Atlantic (w/encl.)  
D. Dorocz, NAVSTA (w/encl.)  
S. Parker TiNUS (w/encl.)  
G. Glenn, TiNUS (w/o encl.)  
AR c/o G. Wagner, TiNUS (w/encl.)  
File G02125-3.2 (w/o encl.) File G02125-8.0 (w/encl.)

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**NAVY RESPONSES TO RHODE ISLAND DEPARTMENT  
OF ENVIRONMENTAL MANAGEMENT (RIDEM)  
COMMENTS DATED NOVEMBER 22, 2010  
ON SHORE DERECKTOR SHIPYARD DRAFT WORK PLAN  
ADDENDUM 1 FOR SASE (OCTOBER 2010)**

Navy responses to the Rhode Island Department of Environmental Management (RIDEM) comments sent by email (November 22, 2010) on the Draft On Shore Derecktor Shipyard Work Plan Addendum 1 (October 2010) are presented below. The RIDEM comments are presented first (in italics) followed by Navy's responses.

**RIDEM Comment 1:** *Page 3-4, Section 3.3.2.1 Investigation of Target Areas; 1<sup>st</sup> and 2<sup>nd</sup> paragraphs. Please be advised that the proposed borings locations, in this area around building 6, should be field adjusted appropriately if any visual field evidence of a release is observed in the nearby areas of these proposed boring locations and a sample for PCBs should be collected at the field adjusted locations. In addition it would seem prudent to conduct composite samples in the 0-1 foot interval on all four sides of the pads. Please include this sampling strategy in this section of the Work Plan.*

**Navy Response:** Proposed sample locations will be field verified prior to sampling. If visual evidence of a release is observed, locations will be shifted to characterize those areas. Navy proposes to collect three individual grab samples to replicate the original SASE sample locations. If analytical results confirm the presence of PCBs, composite samples will be considered during any future sampling discussions.

**RIDEM Comment 2:** *Page 4-3, Section 4.1.1 Data Quality, Objectives, Inputs to the Decision; 3rd paragraph, 2nd sentence. "Comparison criteria to be used for soil analytical results will be the lower of: (1) U.S. EPA RSLs for Residential Soil (EPA, 2010), or (2) the RIDEM Industrial DEC (RIDEM, 2004)."*

*Please change "RIDEM Industrial" to "RIDEM Residential" in the above text in the Work Plan.*

**Navy Response:** Navy will revise the document as noted in the comment.

**RIDEM Comment 3:** *Page 5-1, Section 5.4 SASE Addendum - Additional Investigations; 2nd paragraph, 2nd sentence.*

*"The risk assessment processes to be used will be in accordance with current EPA risk assessment guidance (EPA, 1989), and other applicable general EPA guidance (EPA, 2001b)".*

*Please add the following text to the end of the above sentence in the Work Plan: "as well as meet RIDEM requirements and approvals".*

**Navy Response:** Navy follows EPA guidance in conducting CERCLA human health risk assessments. The NAVSTA Newport FFA already provides for meeting appropriate regulatory requirements and approvals. Therefore, this text will not be revised to include this statement.

**RIDEM Comment 4:** *Revised Figure 3-2A and EPA comments dated 11/22/10 on Figure 3-2A.*

*Please provide second updated figure from EPA comments dated 11/22/10 for RIDEM's review of the proposed locations.*

**Navy Response:** Navy proposes conducting a field verification of these sample locations prior to sampling. Modifications to the proposed locations can be made at that time.

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
PHYSICAL CHEMISTRY  
LABORATORY OF CHEMICAL PHYSICS

REPORT OF THE PHYSICAL CHEMISTRY LABORATORY OF CHEMICAL PHYSICS  
ON THE INVESTIGATION OF THE NATURE OF THE INTERMOLECULAR  
FORCES IN LIQUIDS AND SOLIDS

BY  
ROBERT H. FRANK, JR.  
AND  
JAMES H. DILLIARD

PHYSICAL CHEMISTRY LABORATORY OF CHEMICAL PHYSICS  
UNIVERSITY OF CHICAGO  
CHICAGO, ILLINOIS

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**NAVY RESPONSES TO  
U. S. ENVIRONMENTAL PROTECTION AGENCY (EPA)  
COMMENTS DATED OCTOBER 29, 2010  
DRAFT WORK PLAN ADDENDUM 1 FOR STUDY AREA SCREENING EVALUATION  
ON-SHORE DERECKTOR SHIPYARD, SITE 19  
NAVSTA NEWPORT, RHODE ISLAND**

Navy responses to the U.S. Environmental Protection Agency (EPA) comments on the Draft Work Plan Addendum 1 for Study Area Screening Evaluation, On-Shore Derecktor Shipyard, Site 19, (October 2010) are presented below. The EPA comments are presented first (in italics) followed by Navy's responses.

***EPA Comment 1:*** *Page iii. Since there are many acronyms through the document, a list of acronyms would be helpful.*

***Navy Response:*** Navy concurs with the comment and an acronym list will be added to the document.

***EPA Comment 2:*** *Page 3-4, §3.3.2.2. In the third paragraph the text discusses the advancement of overburden borings and the collection of split spoon samples. Does this protocol also pertain to the two Southern Waterfront borings?*

***Navy Response:*** The text discussing the advancement of overburden borings and the collection of split spoon samples also pertains to the two Southern Waterfront borings. The text in the third paragraph, second sentence will be modified to state the following: "Overburden borings in all target areas identified in Section 3.3.2.1 to be advanced....."

***EPA Comment 3:*** *Page 3-5, §3.3.2.2. In the third sentence in the first full paragraph, please correct Table 3-3 to Table 3-4.*

***Navy Response:*** Navy will make the suggested edit to the document.

***EPA Comment 4:*** *Page 3-5, §3.3.2.3*

- a) *In the last two sentences in the second paragraph please correct Table 3-2 to Table 3-5 and correct Table 3-3 to Table 3-4.*
- b) *Also in the discussion, please reference Table 4-2 that contains the Project Action Limits and PQLs for soil analytes.*

***Navy Response:*** Navy will make the two suggested edits to the document.

***EPA Comment 5:*** *Page 3-11, §3.3.2.8*

- a) *In the third sentence in the second paragraph, please acknowledge that the analytical methods are provided in Table 3-5 and the sample containers, preservatives, and holding times are presented in Table 3-3.*
- b) *In the penultimate sentence in the second paragraph, please correct Table 3-3 to 3-4.*

***Navy Response:*** Navy will make the two suggested revisions to the document.

***EPA Comment 6:*** *Page 3-11, §3.3.2.8: Please describe what is meant by "selected samples" that will be analyzed for PAHs and metals. Are these a subset of the total number of groundwater samples that will be analyzed for VOCs? If so, how many samples will that be?*

**Navy Response:** "Selected samples" means to convey that PAHs and metals analyses will be conducted for samples collected from locations MW08, MW204, MW218, and MW219 as indicated in Table 3-2. The text will be revised to clarify this distinction.

**EPA Comment 7:** Page 3-12, §3.3.2.8 In the second last paragraph, if salinity is determined to potentially cause interference for metals analyses, please consider EPA Method 1640 to prep the samples before analysis to overcome the salinity interference.

**Navy Response:** Comment noted.

**EPA Comment 8:** p. 3-12, §3.3.2.9 It is not appropriate to use four outdoor soil gas samples to evaluate the vapor intrusion pathway. EPA uses a multiple lines of evidence approach (i.e., groundwater data, building construction and current conditions, site geology and history, subslab soil gas data, indoor air data, soil gas data, and internal and external background sources) to evaluate vapor intrusion. Please provide a more comprehensive approach for vapor intrusion evaluation and clarify why only the North Waterfront area will be evaluated for this pathway. If there is no current building existing in this area, more discussion should be provided for any other available data and the rationale of sampling for soil gas only.

**Navy Response:** Navy is approaching the investigation of the vapor intrusion pathway through a multiple lines of evidence approach. Soil gas samples will be co-located with monitoring wells from which groundwater samples are proposed. In addition, site geology will be considered during the data evaluation phase. Currently, there are no buildings located in the Northern Waterfront area. As discussed in the proposed sampling approach meetings with regulators, the Northern Waterfront Area has been targeted for soil gas samples because of the detections of VOCs above criteria in monitoring wells located in this area.

**EPA Comment 9:** p.3-13, §3.3.2. In item #5, please describe how long the SUMMA canister will be run.

**Navy Response:** As stated on page 14, item 8, the time sampling begins and ends will be recorded. The soil gas samples will be collected as grab samples.

**EPA Comment 10:** p. 3-12, §3.3.2.9 In the second sentence in the first paragraph, please correct Table 3-3 to Table 3-4.

**Navy Response:** Navy will revise the document as noted in the comment.

**EPA Comment 11:** p. 3-15, §3.3.3.1 In the third sentence in the second paragraph, please change from to to.

**Navy Response:** Navy will revise the document as noted in the comment.

**EPA Comment 12:** p. 3-16, §3.4.2 In the third sentence in the second paragraph, please change from to and.

**Navy Response:** Navy will revise the document in the indicated section by changing "from" to "and from".

**EPA Comment 13:** p. 4-3, §4.1.1

- a) The text in the second paragraph states that the Navy will compare groundwater data to MCLs and RIDEM GA criteria, but not Regional Screening Levels. While EPA recognizes that a focused human health risk assessment will ultimately determine if further action will be required for groundwater, it should be recognized that MCLs may not in themselves be sufficiently protective if multiple contaminants of concern are present in any well.

b) In the paragraph following the four bullets, the text discusses the comparison criteria for soil samples. It appears that the references should be to RSLs for residential soil and to RIDEM residential DEC's not industrial DEC's. Table 4-2 uses RIDEM residential DEC's.

**Navy Response:**

In response to part a), the comment is noted.

In response to part b), text in Section 4.1.1 will be revised to indicate that the data will be compared to RIDEM residential DEC's.

In addition, in Section 4.1.1, Inputs to the Decision, text will be revised to indicate that the PALS will be based in the federal criteria and that the RIDEM criteria are being provided for comparison purposes only. Footers will be added to Tables 4-1 and 4-2 to specify this, as well.

**EPA Comment 14:** p. 4-8, §4.2 In the last sentence in the second paragraph, please correct Table 3-2 to Table 3-3.

**Navy Response:** Navy will revise the document as noted in the comment.

**EPA Comment 15:** p. 5-1, §5.4 In the third sentence in the second paragraph, please acknowledge that the revised risk assessment will also re-evaluate residential exposure to soil.

**Navy Response:** Navy will revise the sentence referenced in the comment to state: "The revised risk assessment will re-evaluate receptors identified in the original risk assessment and in addition will evaluate two additional receptor scenarios..."

**EPA Comment 16:** Table 3-1 For clarity, please list SB204 and MW204 separately in their appropriate sections: borings and monitoring wells, respectively.

**Navy Response:** Navy will revise the document as noted in the comment.

**EPA Comment 17:** Table 3-2 SB204 and MW204 need to be listed separately in their appropriate sections because GRO/DRO analysis is not proposed for MW204. This table suggests that it is.

**Navy Response:** Navy will revise the document as noted in the comment.

**EPA Comment 18:** Table 3-3

- a) Delete in two places the phrase "None for PCBs." The holding time of up to 14 days until extraction and 40 days to analysis applies to PCBs.
- b) For Groundwater and Aqueous Field QC samples, the metals holding time of 28 days for mercury needs to be added to the last column.
- c) In the table note, please delete PAH and delete lead.

**Navy Response:** Navy will revise the document as noted in the comment.

**EPA Comment 19:** Table 3-4 For Groundwater field samples for PAHs, metals (total), and metals (dissolved), please correct the number of samples from three to four (one for MW-08, two at Building 42, and one at Huts 1&2). Also correct the total number of samples for these line items.

**Navy Response:** Navy will revise the document as noted in the comment.

**EPA Comment 20:** Table 3-5 Please correct the analysis method for PAH in soil and in groundwater to 8270C SIM. Also, as noted above, to overcome salinity interference for metals analyses, if necessary, EPA Method 1640 should be used for sample prep before analysis.

**Navy Response:** Navy will revise the document as noted in the comment. For the soil analysis, an asterisks will be placed next to 8270C and a footnote will be added to indicate that 8270C SIM will be used for benzo(a)pyrene.

**EPA Comment 21:** Table 4-1

- a) Please add the mercury MCL of 2 µg/L.
- b) Note that values listed for copper and lead are action levels not MCLs.
- c) In the table note, GRO and DRO are not pertinent to this table and should be deleted.
- d) There are no MCLs for bromodichloromethane, bromoform, chloroform, and dibromochloromethane. Trihalomethanes are regulated as a group at 80 µg/L by federal and state regulations, but this group should not be relevant for sampling conducted for this work. Please delete.
- e) Methylene chloride and nickel are not listed in the March 2005 RIDEM groundwater quality standards but are regulated by the February 2004 RIDEM Remediation Regulations at the levels indicated in this table.

**Navy Response:** In response to part a), the suggested revision will be made to the document. In response to comment part b), the comment is noted. In response to comment parts c) and d), the suggested revisions will be made to the document. In response to comment part e), the table note will be revised to indicate that the source of the RIDEM standards are the February 2004 Rules and Regulations document.

**EPA Comment 22:** Table 4-1 The Project Action Levels (PALs) for groundwater should be the lowest of MCLs, RSLs, or RIDEM Standards. This is consistent with EPA's practice for selecting PALs and with the approach used in selecting PALs in Table 4-2 for soil. Please revise the PALs in this table and footnote 3 to reflect that the PALs represent the lowest risk-based or regulatory criteria applicable to the project.

**Navy Response:** Navy will select the PAL based on the federal criteria. The RIDEM groundwater objective in Table 4-1 and the soil DEC in Table 4-2 will be for comparison purposes only. A footnote will be added to Tables 4-1 and 4-2 indicating this distinction.

**EPA Comment 23:** Table 4-3 Please explain why residential air RSLs were used as PALs for soil gas. These are two different media. The soil gas screening levels should be used to select PALs for soil gas analysis.

**Navy Response:** Navy concurs with the comment's suggestion to use a soil gas screening level. Table 4-3 will be revised to include EPA soil gas criteria from "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)" (EPA, 2002).

**EPA Comment 24:** Figure 3-2 EPA does not concur with the sample locations shown for the transformer area. To determine if PCBs have migrated from the transformer area to the TP-14 area, two samples should be collected from the eastern pad area (in the vicinity of SB217) such that one sample is located south of SB217 (south side of southern pad) and another sample is located southeast of SB217 (southeast of southern pad). The third sample can be located anywhere in the vicinity of the western pads near SB215/216.

**Navy Response:** Navy will adjust the sample locations in the transformer bank area as suggested in the comment.

**EPA Comment 25:** *Table 4-3 Please include the LOQs in the final version of the Work Plan Addendum.*

**Navy Response:** Table 4-3 will be updated to include the LOQs once the laboratory is assigned to this project.

**EPA Comment 26:** *Tables 4-5, 4-6, 4-7, and 4-10 - Please include the acceptance criteria for surrogates, LCSs, and MS/MSDs in the final version of the Work Plan Addendum. If this information is included in the lab SOPs in Appendix E, the please include a reference or a footnote to appendix E in these tables.*

**Navy Response:** Tables 4-5, 4-6, 4-7, and 4-10 will be updated once the laboratory is assigned to this project. Note that the document will be revised to change "Appendix E" to "Appendix D".