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TRANSMITTAL LETTER AND U S NAVY REPSONSES TO U S EPA REGION I COMMENTS
ON DRAFT DATA GAPS ASSESSMENT REPORT FOR SITE 7 TANK FARM 1 NS NEWPORT

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Project Number 112G03073

Ms. Kymberlee Keckler, Remedial Project Manager
U.S. EPA Region I
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912

Reference: CLEAN Contract No. N62470-08-D-1001
Contract Task Order No. WE68

Subject: Transmittal of Response to EPA Comments, Draft Data Gaps Assessment Report
Tank Farm 1, Category 1 AOCs
Site 7: Tank Farm 1, NAVSTA Newport, Rhode Island

Dear Ms. Keckler:

On behalf of Mr. Roberto Pagtalunan, U.S. Navy NAVFAC, Tetra Tech is providing to you the Navy's response to EPAs second set of comments on the Draft Data Gaps Assessment Report for the document referenced above. Comments were received from the USEPA dated August 12, 2013.

These responses to comments will be incorporated into the Draft Final Data Gaps Assessment Report which will be issued following the collection and analysis of the additional soil samples.

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

Very truly yours,

Dabra I. Seiken, CG
Project Manager

DIS/lh

Encl.

cc: R. Pagtalunan, NAVFAC (w/encl.)
D. Ward, NAVSTA (w/encl.)
G. Glenn, Tetra Tech (w/o encl.)
NIRIS – RDM File (w/encl - 1)
File G03073-3.2 (w/o encl.) File G03073-8.0 (w/encl.)

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**NAVY RESPONSES TO
U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
COMMENTS DATED AUGUST 12, 2013
ON THE NAVYS RESPONSE TO EPAs COMMENTS (DATED JULY 11, 2013)
ON THE DRAFT DATA GAPS ASSESSMENT REPORT (MARCH 2013)
FOR TANK FARM 1, SITE 7
NAVAL STATION NEWPORT
NEWPORT, RHODE ISLAND**

Navy responses to U.S. Environmental Protection Agency (EPA) comments, dated August 12, 2013, on the Navy's Responses to Comments (RTCs), dated July 11, 2013, on the EPAs Comments on the Draft Data Gaps Assessment for Category 1 AOCs at Tank Farm 1, Site 7 are presented below. The EPA comments are presented first (in regular font) followed by the Navy's response (in **bold**).

General Comments

GC1: The data gap sampling has not adequately characterized the soil in the vicinity of transformer vaults 2 and 3. As Navy states, the Sampling and Analysis Plan figures are schematic and the Navy should relocate samples in the field at appropriate downgradient locations. At transformer vault 2, the location of the Shaw sample that had a PCB concentration of 24 milligrams per kilogram (mg/kg) was located on the east side of vault 2 where only one data gap soil sample was collected and that was located upgradient of the Shaw sample. The Navy has not established the extent of PCB contamination and the maximum concentration is not defined. In addition, the original sample locations were supposed to be resampled but was not. At transformer vault 3, sample 1026 was relocated to an upgradient location because of utility clearance issues rather than to a more appropriate downgradient location. Both sample 1027 and 1026 are upgradient of the transformer and not in locations where detection of a release from the transformer would be expected. Only sample 1031 is located appropriately to characterize a release from the transformer. There is a gap downgradient of the transformer in the vicinity of the northeast corner of the vault.

Navy's Response: On August 28, 2013, a team conference call was held and this item was discussed. Agreements were reached with respect to the needed additional sampling and analysis that will be performed at transformer vault 2 (TV2) and transformer vault 3 (TV3). The agreements are as follows.

TV2: The door for the building is on the east side and adjacent to the hot spot (24 ppm) surface soil sample (EV2-E). Ground surface slopes (moderately) to the northwest. In light of this information and the sampling to date the EPA believes that five surface soil samples will be sufficient to eliminate data gaps at TV2. Navy agrees to EPAs request for five more surface soil samples. Assuming utilities are not an issue, one will be located adjacent to each of the transformers on the outside (north wall) of the building, one will be located about 10-feet northwest of EV2-E, one will be located about 10-feet northeast of EV2-E and one will be located about 10-feet east of EV2-E. Subsurface soil sampling at EV2-E was considered but was determined not necessary as long as confirmatory sampling in the vertical was performed in the event that a dig and haul was performed as remediation.

TV3: The door for this building is on the east side of the building, adjacent to the hot spot (4.3 ppm) surface soil sample (SB1026). Ground surface slopes (moderately) to the northwest. In light of this information and the sampling results to date, the EPA believes that two surface soil samples will be adequate to eliminate data gaps at TV3. One surface soil sample should be taken immediately adjacent to the outside transformer. The second sample should be taken about 10 feet downslope (northwest) from the outside transformer. The second sample can be held by the lab and only analyzed if the first sample contains PCBs. The Navy agrees to these two additional soil samples requested by the USEPA.

The Navy will make a SAP amendment (including figures showing these locations) and the regulators will be invited to a site walk to look at proposed sampling locations prior to sampling.

GC2: EPA does not accept compromising the integrity of the Site investigation owing to utility clearance restrictions. The Navy needs to make the Sites accessible for an appropriate investigation.

Navy Response: The investigation appropriate and the Site was accessible. It is not safe to collect samples on top of utilities and it may not be possible to turn off electrical at the tank farms. It is also illegal to dig on top of utilities. Please refer to Rhode Island General Law 39-1.2-1a. Procedures at work site:

“Any person or public agency excavating, tunneling, or discharging explosives shall exercise reasonable care when working in close proximity to the underground public utility facilities of any public utility.”

Reasonable care was taken and will continue to be taken at all Navy facilities where digging is necessary. OSHA requirements, Navy policy, Navy’s subcontractor policy and state law will be used when determining safe distances and working conditions.

GC3: The additional information to be added to the Data Gaps Report per the response is appropriate. Please also refer to EPA’s comment on the response to GC1.

Navy Response: Comment noted. Please also see Navy’s response to EPA’s comment on GC1.

Specific Comments

2. p. 1-1, §1.1 EPA does not concur that Step 3A should be presented in the DGA. Since additional data will be collected, the exposure calculations are incomplete and an evaluation of risk using a refinement of assumptions is not appropriate. The response states that conducting Step 3A will help determine if further investigation is necessary. However, since there were exceedances of screening levels, the guidance already requires further evaluation. If the Navy includes Step 3A in this DGA, please make sure that throughout the document risk evaluation is referred to as "Preliminary."

Navy Response: The outcome of Step 2 of the screening level ecological risk assessment (SLERA) indicated that screening results indicate a potential for ecological risk and a more

thorough assessment is warranted. The next step in this case is to implement a baseline ecological risk assessment (BERA). In accordance with EPA guidance: the Ecological Risk Assessment Guidance for Superfund (ERAGS) (EPA, 1997), Step 3A is the first part of the BERA. Since EPA guidance clearly states that Step 3A the next step to take in evaluation of the site for ecologic risk, it does not make sense to eliminate Step 3A. However, as agreed upon during the August 28, 2013 team conference call, the Navy will call Step 3A “preliminary”, as requested by the EPA.

3. p. 1-2, §1.2, ¶2 EPA understands that the areas are small, and requests a description of the habitat type (and its size) as a basic part of a risk characterization.

Navy Response: This section is not a risk characterization section. However, the size of the areas around the TVs and a description of the grass around the TVs and the EBP that is in the risk characterization section will be repeated in this section.

5. p. 2-8, §2.3.2.2, ¶3 Relocating samples to locations that compromise the integrity of the investigation is not acceptable. The Navy needs to make the Sites accessible for an appropriate investigation (the electricity should be temporarily turned off if necessary). Furthermore, the general topography at the site indicates that SB-1026 was moved to an upgradient location. Therefore, the detected contamination indicates that further investigation will be necessary to adequately determine the extent of soil contamination as it may be related to disposal activities.

Navy Response: The integrity of the investigation is not compromised. The investigation was appropriate and the Site was accessible. It is not safe to dig on top of utilities and it may not be possible to turn off electrical power at the tank farms. It is also illegal to dig on top of utilities. Please refer to Rhode Island General Law 39-1.2-1a. Procedures at work site:

“Any person or public agency excavating, tunneling, or discharging explosives shall exercise reasonable care when working in close proximity to the underground public utility facilities of any public utility.”

Reasonable care was taken and will continue to be taken at all Navy facilities where digging is necessary. OSHA requirements, Navy policy, Navy’s subcontractor policy and state law will be used when determining safe distances and working conditions.

See Navy’s response to GC1 for the agreement that was made regarding additional investigation at TV3, where SB-1026 is located.

6. p. 2-8, §2.3.2.2, ¶4 As the response acknowledges, the general topography at the Site indicates that SB-1027 was placed in an upgradient location and therefore, was not located appropriately to detect a release from the transformer. Further investigation will be necessary to adequately determine the extent of soil contamination downgradient of the transformer. SB-1027 aids in delineating the contamination detected at SB-1026.

Navy Response: See Navy’s response to GC1 for the agreement that was made regarding additional investigation at TV3, where SB-1026 and SB-1027 are located.

7. p. 3-4, §3.1.4, ¶1 Please use the following language: “Groundwater at the Site is classified as

potable under federal drinking water standards. State groundwater classification maps identify the groundwater within the Site as GB, but the State's groundwater standards are not applicable to the CERCLA remedy."

Navy Response: Navy will incorporate this language into the report.

13. p. 5-11, §5.3.2 The revised risk values quoted in the response were derived using several samples that were inappropriately relocated and not reflective of the contaminant concentration in the area of the release. See also EPA's comments on the responses to GC1 and SC14. The magnitude and extent of the PCB contamination related to the transformer vaults has not been adequately defined.

Navy Response: Navy has agreed to perform additional sampling and include the results in the risk assessments, see Navy's response to GC#1.

14. p. 5-11, §5.3.3 ProUCL indicates that at least 10 to 15 samples should be used for calculations (see ProUCL output for transformer vault 3; the output for vault 2 was not provided in the Data Gaps Report) and only when resource restrictions prevent the collection of more samples. EPA acknowledges the risk values presented based on the maximum detected concentration, but because the Site has not been adequately investigated, it is unlikely that the maximum detected concentration is the maximum existing concentration. Further investigation will be needed to define the magnitude and extent of the PCB contamination with reasonable reliability.

Navy Response: All parties have agreed that two additional samples at TV3 will fill the data gap. At that point there will be nine shallow soil samples to be used in the ProUCL calculation.

All parties have agreed that 5 additional samples will fill the data gap at TV2. Following the collection of the 5 additional soil samples, there will be 12 shallow soil samples to be used in the ProUCL calculation.

15. p. 6-1, §6.1, ¶1 Please refer to EPA's comment on the response to SC2.

Navy Response: The outcome of Step 2 of the screening level ecological risk assessment (SLERA) indicated that screening results indicate a potential for ecological risk and a more thorough assessment is warranted. The next step in this case is to implement a baseline ecological risk assessment (BERA). In accordance with EPA guidance: the Ecological Risk Assessment Guidance for Superfund (ERAGS) (EPA, 1997), Step 3A is the first part of the BERA. Since EPA guidance clearly states that Step 3A the next step to take in evaluation of the site for ecologic risk, it does not make sense to eliminate Step 3A. However, as agreed upon during the August 28, 2013 team conference call, the Navy will call Step 3A "preliminary", as requested by the EPA.

16. p. 6-1, §6.1, ¶2 Please refer to EPA's comment on the response to SC2.

Navy Response: The outcome of Step 2 of the screening level ecological risk assessment (SLERA) indicated that screening results indicate a potential for ecological risk and a more thorough assessment is warranted. The next step in this case is to implement a baseline

ecological risk assessment (BERA). In accordance with EPA guidance: the Ecological Risk Assessment Guidance for Superfund (ERAGS) (EPA, 1997), Step 3A is the first part of the BERA. Since EPA guidance clearly states that Step 3A the next step to take in evaluation of the site for ecologic risk, it does not make sense to eliminate Step 3A. However, as agreed upon during the August 28, 2013 team conference call, the Navy will call Step 3A “preliminary”, as requested by the EPA.

18. p. 6-6, §6.3.2, ¶2 The proposed sentence does not clarify how the data will be used to calculate exposure concentrations. Please clarify how the data are to be used. If two samples were collected at one location (0.5 and 1-2 feet), are these treated as separate samples, or are the two samples averaged to be one value from that location for exposure purposes? If there are no cases where multiple samples were taken from a single location, then please state that.

Navy Response: In the case where more than one sample was collected in the surface soil interval, analytical results from each sample are included in the surface soil dataset for risk assessment. This will be clarified in the report.

20. p. 6-10, §6.4 Please remove the discussion of COPC refinement. See response to SC2.

Navy Response: The outcome of Step 2 of the screening level ecological risk assessment (SLERA) indicated that screening results indicate a potential for ecological risk and a more thorough assessment is warranted. The next step in this case is to implement a baseline ecological risk assessment (BERA). In accordance with EPA guidance: the Ecological Risk Assessment Guidance for Superfund (ERAGS) (EPA, 1997), Step 3A is the first part of the BERA. Since EPA guidance clearly states that Step 3A the next step to take in evaluation of the site for ecologic risk, it does not make sense to eliminate Step 3A. However, as agreed upon during the August 28, 2013 team conference call, the Navy will call Step 3A “preliminary”, as requested by the EPA.

21. p. 7-7, §7.5, ¶2 Please refer to EPA’s comment on the response to SC2.

Navy Response: The outcome of Step 2 of the screening level ecological risk assessment (SLERA) indicated that screening results indicate a potential for ecological risk and a more thorough assessment is warranted. The next step in this case is to implement a baseline ecological risk assessment (BERA). In accordance with EPA guidance: the Ecological Risk Assessment Guidance for Superfund (ERAGS) (EPA, 1997), Step 3A is the first part of the BERA. Since EPA guidance clearly states that Step 3A the next step to take in evaluation of the site for ecologic risk, it does not make sense to eliminate Step 3A. However, as agreed upon during the August 28, 2013 team conference call, the Navy will call Step 3A “preliminary”, as requested by the EPA.

22. p. 7-8, §7.6, ¶2 Many of the existing wells associated with the Tank Farm 2 tanks are located northwest of the tanks which is a topographically downgradient direction, so impacts to Tank Farm 1 from Tank Farm 2 cannot be dismissed. Furthermore, Figure 3-1 of the Tank Farm 1 Data Gaps Report indicates that groundwater flows to the northwest at the ethyl blending plant. A northwest component of groundwater flow may also exist from Tank Farm 2 to the ethyl blending plant.

Navy Response: Comment noted.

23. p. 7-8, §7.6, ¶3 Please refer to GC1 and to EPA's original comment. The data gaps investigation has not adequately characterized the transformer vault Sites and additional sampling will be necessary to fill the remaining gaps.

Navy Response: Additional sampling has been agreed upon. See Navy's response to GC#1.

24. p. 7-8, §7.6, ¶4 The manganese and iron concentrations in wells MW-1000 and MW-1001 suggests that a release occurred upgradient of the ethyl blending plant, perhaps at the pumping station or at Tank Farm 2. Since manganese and iron concentrations were not consistently elevated in all wells, it seems that the elevated concentrations are not background. The magnitude, extent, and source of the manganese and iron contamination have not been adequately characterized.

The limited groundwater investigation near of the ethyl blending plant is not sufficient to reasonably conclude that no impacts have occurred. As EPA previously commented, the bedrock fractures will determine the migration pathway for contamination, which may not mimic the groundwater flow direction. Additional groundwater investigation is warranted.

Navy Response: During the August 28, 2013 team meeting, the following was agreed upon by all parties with respect to the groundwater at the ethyl blending plant (EBP). The upgradient well at the EBP has higher concentrations of metals (Mn and Fe) than the downgradient wells. Because RIDEM had asked the Navy to treat the upgradient well as a background well, Tetra Tech re-ran the groundwater risk assessment without the upgradient well. The results were that without the upgradient groundwater data point there is no risk from groundwater. After a discussion of the EBP groundwater issue, the EPA agreed that the data do not indicate that groundwater has been impacted by activities at the EBP. No further groundwater sampling is needed.

26. Table 4-3 The original location has not been resampled as was required by the SAP.

Navy Response: Additional sampling has been agreed upon, and the EPA no longer requires resampling of the original location. See Navy's response to GC#1.

27. Table 4-5 The original location has not been resampled as was required by the SAP.

Navy Response: Additional sampling has been agreed upon, and the EPA no longer requires resampling of the original location. See Navy's response to GC#1.

28. Table 5-23 Please refer to EPA's comments on the responses to GC1 and SC13.

Navy Response: Navy has agreed to perform additional sampling and include the results in the risk assessments, see Navy's response to GC#1.

29. Table 5-25 Please refer to EPA's comments on the responses to GC1 and SC14.

Navy Response: Navy has agreed to perform additional sampling and include the results in the risk assessments, see Navy's response to GC#1.

30. Figure 2-2. Please show the correct location of the two transformers, which justifies the locations of samples SB-1020, SB-1021, and SB-1025 on the north side of the vault. SB-1020 was supposed to be located immediately adjacent to the transformers but was not.

The northing and easting coordinates of the sample that had a PCB concentration of 24 mg/kg and the Shaw sample name indicate that this sample was collected east of the vault. Since the transformers are on the north side of the vault, a data gap exists regarding the magnitude and extent of contamination at transformer vault 2. Additional characterization is necessary.

A further concern is the location of the samples at the sides of the vault. Experience indicates that elevated concentrations are typically found outside doors. Please discuss the location of samples SB-1022, SB-1023, and SB-1024 relative to the door locations and explain why SB-1023 was collected so far from the vault in an upgradient location. Please provide a similar discussion for transformer vault 3.

Navy Response: **The figure will be updated with the requested information and a discussion about the door locations will be added to the report. Navy has agreed to perform additional sampling, see Navy's response to GC#1.**

31. Figure 2-3. The location of sample SB-1026 was intended to be immediately adjacent to the transformer in a downgradient location, but was relocated to an upgradient location and not adjacent to the transformer. Based on the northing and easting coordinates provided for sample SB-1027, it is not in a downgradient location. It should have been field adjusted to a more appropriate location and confirmed with EPA and RIDEM. Additional sampling downgradient of the transformer is required to properly characterize the Site.

Navy Response: **Navy has agreed to perform additional sampling and include the results in the risk assessments, see Navy's response to GC#1.**

34. Appendix H Please refer to EPA's comment on the response to GC1.

Navy Response: **See Navy's response to GC#1.**