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NWS YORKTOWN
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EMAIL AND U S NAVY RESPONSE TO U S EPA COMMENTS ON SAMPLING AND
ANALYSIS PLAN SITES 9 AND 19 NWS YORKTOWN VA
03/19/2014
CH2M HILL

Hunt, Renee/MKE

From: Friedmann, William/VBO
Sent: Wednesday, March 19, 2014 7:56 AM
To: Oduwole, Moshood
Cc: Smith,Wade; Gravette, James CIV NAVFAC; Anderson, Mary/VBO; Hunt, Renee/MKE; Brickman, Kristin/RAL
Subject: Site 9/19 RTC Table
Attachments: Site 9_19 RTC_Cover Letter 031914.pdf; Response to USEPA Comments_Sites 9_19_draft.xlsx

Moshood,

Good morning. Following our partnering meeting, I indicated that I would send out the formal Navy RTC to the Site 9/19 UFP-SAP comments. These are attached as an Excel table (along with a cover letter). Please distribute to either Peter or John as they both seemed to have questions during the discussion so I'm not sure who is the lead on this document.

Once we resolve the comments, we will produce a red-line version of the UFP-SAP for the team to review and accept prior to going to final. Please review and provide any input by April 2, 2014.

Thanks,
Bill



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Reviewer: USEPA

Draft Sampling and Analysis Plan, Loading Plant No. 1 (including Site 9 and Site 19) Remedial

Document: Investigation, NWS Yorktown, VA

Date: 14-Jan-14

Comment Number	Worksheet and/or Section	Comment	Response
1	Worksheet #10	Worksheet #10 on Page 43 states that soil was excavated to a depth of 2 feet under the trinitrotoluene (TNT) conveyor belt. Approximately 60 cubic yards of soil containing elevated aluminum was excavated around Building 527 and placed in the conveyor belt trench at a depth of approximately 2 feet, covered with clean fill, and revegetated. A minimum of 2 feet of clean fill would be needed over the aluminum contaminated soil to be protective of ecological receptors. Based on this description, it is unclear that sufficient cover is present to be protective. This issue should be clarified; ideally information on the pH of the soil should be provided as that has direct bearing on the toxicity of aluminum.	Site documentation from the conveyor belt removal indicates that the depth of the soil cover is between 2 and 4 feet. No documentation is available on where the aluminum-impacted soil was placed within the conveyor nor is there confirmation indicating that two feet of clean fill was placed over the aluminum impacted soil. To resolve this issue, the UFP-SAP will be modified to include six additional soil sampling locations within the former TNT conveyor belt trench. Samples will be collected at depths of 12-18 inches and 18-24 inches at each location and will be analyzed for aluminum and pH to verify that two feet of fill are present throughout the trench area. Worksheet 10 has been modified to state, "The pH of Site 19 soil samples collected during previous RI activities ranged from 5.6 to 7.1, which does not exceed the pH-based ecological screening value (pH <5.5)."
2	Worksheet #11	Worksheet #11 on Page 51 states that the soil data from the TNT conveyor belt samples will be compared to the remedial goal developed during the previous removal action of 15,000 micrograms per kilogram. If data from the current investigation will be compared to this remedial goal from the 1998 ROD, the basis for this value must be provided to ensure it is based on current scientific information and still protective of ecological receptors.	Human health and ecological risk calculations were performed to evaluate the current protectiveness of the 15,000 micrograms per kilogram remedial goal. The results of the human health calculations based on the scenarios and exposure factors used in the RI indicated that a proposed remedial goal of 16,600 µg/kg would be protective of future residential receptors, and the results of the ecological calculations indicated that a proposed remedial goal of 17,300 µg/kg would be protective of ecological receptors. Based on these calculations, the 15,000 µg/kg remedial goal remains protective for human health and ecological receptors.
3	Worksheet #11	Worksheet #11 on Page 53 states that co-located surface water and sediment samples will be collected within the site drainage channels to evaluate the nature and extent of contamination. The surface water/sediment sample locations are shown in Figure 6. The hydrology of surface water within these drainages should be described since there may only be surface water flow during certain times of the year (seasonally or after rain events). Sampling should be timed to occur when surface water is present.	Worksheet #10 on Page 42 has been modified to include the following text describing the hydrology of these drainage ditches, "Surface water flow within these drainage ditches is primarily influenced by rainwater runoff; and these drainage ditches are dry throughout much of the year. " It is recommended that the investigation effort not be planned to coincide with rain events, as samples consisting primarily of rainwater runoff will be very turbid and may not be representative of site contamination. It is recommended that surface water samples be collected several days following a rain event and only if pooled water is present.
4	Worksheet #11	Worksheet #11 on Page 55 states that soil samples will be collected at 44 locations within the former site building footprints as shown in Figure 5. Sub-slab soil samples are proposed for Buildings 10 and 98. However, according to Figure 5, no sub-slab samples are proposed for Buildings 527 and 528. An explanation for this approach should be provided.	On Figure 5, the floor drain samples at Buildings 527 and 528 are subslab samples collected in the vicinity of the former floor drains. These were the only site buildings with floor drains; therefore the subslab samples are focused in these areas of most likely contaminant impacts.

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5	Worksheet #11	Worksheet #11 on Page 55 states that eight additional soil samples will be collected in the vicinity of the former TNT conveyor belt and Building 98 (as shown on Figure 7) to confirm that residual TNT concentrations in this area are below the site cleanup goals. Figure 7 shows that soil samples are proposed at both ends of the former conveyor belt but not in the middle. An explanation for this approach should be provided.	A new conceptual site model (Figure 4) for the Former TNT conveyor belt has been added to the UFP-SAP to provide additional explanation for the sampling approach. Additionally Worksheet #11 has also been updated to provide the following clarification, "The six subsurface soil samples within the eastern and western portion of the excavated area will be collected at depths of 24 to 36 inches bgs, because this depth interval corresponds with the floor of the previous excavation and at locations where residual contamination exceeding the site cleanup goal may be present." Worksheet #10 on Page 43 of the SAP also includes detailed rationale of the TNT Conveyor belt sampling approach.
6	Worksheet #11	Worksheet #11 on Page 55 states that co-located surface water and sediment samples will be collected at 17 locations as shown in Figure 6. Figure 6 shows that sample location YS19SWSD04 is proposed to be collected in a small unlined drainage ditch just prior to discharge into a small wetland. Because the small downstream wetland is likely a depositional area, sample location YS19SWSD04 should be located downstream into the head of this wetland. All other sediment samples should also be collected in depositional areas of the drainages.	Sampling location YS19SWSD04 have been moved into the "wetland area" as requested. The following text has been added to Worksheet #11 to allow for the location of surface water and sediment samples within observed depositional areas. "The sample locations may be adjusted during the field sampling effort to place the sample locations in observed depositions areas within the surface water and sediment sampling investigation area." It should be noted that previous site observations have identified limited depositional areas within the investigation area. The downstream portion of the drainage area (Site 9) is not included in this investigation as soil, sediment, and surface water media in that area received a No Further Action determination in the ROD. The omission of the Site 9 area from the current investigation was agreed to by the Partnering Team and documented in Worksheet #9d. The historical Site 9 boundary included in the ROD has been added to Figure 2 for reference.