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RESPONSE TO THE U S EPA REGION III COMMENTS ON THE DRAFT SAMPLING AND ANALYSIS PLAN SITE INSPECTION SITE 33 FORMER BUILDING 530 PAINT SHOP AND SAND BLASTING OPERATIONS NWS YORKTOWN VA

03/10/2014

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Reviewer: USEPA

Document: Draft Sampling and Analysis Plan, Site Inspection Site 33, Former Building 530 Paint Shop and Sand Blasting Operations, NWS Yorktown, VA

Date: 10-Mar-14

Comment Number	Worksheet and/or Section	Comment	Response
1	Worksheet #10	Worksheet 10 on Page 37 states that during a 2011 site visit, a 10-inch diameter, open-ended black pipe was observed in the woods just north of former Building 530. The worksheet further states that it is unknown whether this pipe previously conveyed discharge from former Building 530 or is a piece of partially buried debris. A goal of this plan should be to determine if this pipe conveyed discharged from Building 530 and if so, soil should be sampled downgradient of the pipe.	After additional field observations, it has been determined that the piece of piping observed in the woods is partially buried debris and is not a piping extending from former Building 530. This portion of the site will be addressed during the planned test pitting activities.
2	Worksheet #10	Page 38, SAP Worksheet 10: The text identifies a reference as Navy, 1995. This reference is not on the list of references on page 183. Please confirm that all necessary references are contained in the text and the list of references.	The Navy, 1995 reference is currently defined in the references section as "Department of the Navy (Navy). 1995. Navy's Final Determination/Evaluation for Areas of Concern at WPNSTA Yorktown. 27 June."
3	Worksheet #11	Page 46, SAP Worksheet 11: The text states "In those cases where this specific constituent is not detected above the LOD, the analyte will be considered not present." In those cases where the limit of detection (LOD) is greater than the project action limit (PAL), the approach noted may not be appropriate and would need to be adequately addressed in the uncertainly section. This would be particularly true when the PAL is the appropriate ecological criterion.	Non-detected constituents that exceed ESVs (PALs) will be addressed in the uncertainty section. The sentence indicating that the analyte will be considered not present will be deleted from the text.
4	Worksheet #11	Worksheet 11 on Page 45 states that an ecological risk screening will be performed to identify ecological contaminants of potential concern (COPCs). The worksheet further states that based on the results of the risk screening, the Parterning Team will evaluate the need for a quantitative ecological risk assessment for all identified ecological COPCs. It is unclear what is meant by an "ecological risk screening" and whether it would include all relevant exposure pathways and assessment endpoints to make an informed decision regarding the potential for ecological risk. At a minimum a screening level ecological risk assessment, or the equivalent, should be performed as part of this site inspection.	The ecological risk screening will be a streamlined version of a standard Step 3A ERA and will evaluate all relevant complete exposure pathways.
5	Worksheet #11	It is stated here that "Thirteen permanent shallow groundwater monitoring wells and one permanent deep groundwater monitoring well will initially be installed and sampled…If the groundwater analytical results from initial sampling indicate that the contaminant nature and extent have been sufficiently delineated, no additional wells will be installed." However, only one deep monitoring wells will not be sufficient to determine the presence of contamination in the deep equifer, to determine the nature and extent of contamination, or to delineate a potential plume. A minimum of three (3) deep monitoring wells is required to evaluate the groundwater flow direction and to assess any potential impact of site related contaminants into the deep aquifer.	As only one shallow groundwater sample has been previously collected, it's not known whether the deeper Yorktown-Eastover aquifer has been impacted by site contamination. Additionally, the extent of shallow groundwater contamination is not known. Delineation of shallow groundwater contamination needs to be performed prior to the installation of multiple deep groundwater wells to determine where those deep wells may be located should they be necessary.

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6	General	Analysis of 1,4-dioxane is proposed for the SI due to the historical presence of TCE in groundwater at this site. This analysis was likely offered by the Navy as a consequence of past EPA comments regarding an association between 1,4-dioxane and TCE. However, recent studies in the literature indicate that 1,4-dioxane was not historically used to stabilize TCE. Consequently, whether or not to analyze for 1,4-dioxane should be based on the presence of absense of 1,1-DCE, a breakdown product of 1,1,1-TCE and, therefore, a good indicator for 1,4-dioxane. If 1,1-DCE has not been observed in groundwater at this site during prior sampling events, there's probably no need to analyze for 1,4-dioxane.	As 1,1-DCE is not a primary contaminant at this site, 1,4-dioxane analysis will be eliminated at Site 33.
7	General	A 10,000 gallon fuel oil UST was removed from this site in 1996. According to page 30 of the report, "no evidence of releases from the tank was documented during the tank removal." It would be prudent to collect subsurface soil samples from the perimeter of the former UST to confirm the absence of contamination.	At the time of the tank removal, soil confirmation and groundwater sampling was performed within the former UST tank pit and the surrounding area. Soil exceeding cleanup standards was removed for off-site disposal, and TPH detections in groundwater were less than Virginia cleanup standards. The Commonwealth of Virginia determined that the UST site did not warrant further corrective action, documented in a letter dated December 5, 1996. The SAP text will be modified to provide additional detail regarding the sampling performed for the former UST.
8	Worksheet #10	Per page 38 of the report, soil was excavated at this site in 1999 and 2000 to remove sandblasting grit and lead contamination. Give this, care should be given to ensure that surface (0 - 6") and subsurface (6 - 24") samples are collected from original soil, not fill material.	Three of the surface soil sample locations are within the former 0 - 6" removal area. However the site was regraded during the demolition of Building 530 which occurred after the surface removal; therefore there is some potential for impacted soil to be present within the former removal area. It is proposed that the soil sample locations remain as planned to confirm that no contamination is present within the surface soil interval at these locations.