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NAS OCEANA
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RESPONSE TO VIRGINIA DEPARTMENT ENVIRONMENTAL QUALITY COMMENTS ON THE WORK PLAN FOR ADDITIONAL DELINEATION SAMPLING AT THE MACHINE GUN BORESIGHT RANGES AT NAS OCEANA VA

09/04/2014

CH2M HILL

Reviewer: Kyle Newman, VDEQ

Responding Firm: CH2M HILL

Document: Work Plan for Additional Delineation Sampling at the Machine Gun Boresight Ranges at Naval Air Station Oceana (UXO-5) in Virginia Beach, Virginia and Naval Auxiliary Landing Field Fentress (UXO-10) in Chesapeake,

Date: 8/28/14

Date: 9/4/2014

Comment Number	Worksheet and/or Section	Comment	Response
1	General	Please include the relevant QA thresholds for XRF value laboratory confirmation samples in the Laboratory Analysis section of the main document. They are currently listed in the attached SOPs, but deserve special attention in the primary text.	The primary text of the technical memorandum will be modified to add the desired XRF detection levels for each contaminant of potential concern (COPC).
2	SOP A.01	The residential screening level for antimony is 3.1 mg/kg (EPA R3 RSL, HQ = 0.1). The desired detection levels do not appear to reach this threshold. Can the XRF adequately reach this detection limit?	The human health COPCs identified during the Site Inspection are antimony, copper, and lead. Because the noncarcinogenic COPCs (antimony and copper) do not affect the same target organ, an HQ = 1.0 is being used for these compounds. Based on this rationale and the updated EPA RSL table, the screening level for antimony is 31 mg/kg. The work plan text will be updated to reflect this value. A screening value for antimony of 26 mg/kg is currently shown in the work plan. The XRF equipment is being used as a screening tool, and the the XRF equipment may not be capable of reaching the desired detection limit of 15 mg/kg for antimony. At NAS Oceana, antimony exceeds the screening criteria at a limited number of sample locations (5 of 32). Additionally, the primary COPC lead also exceeds its screening criteria at every location with an antimony exceedance. For these reasons, the XRF screening technology is considered acceptable for meeting the project objective of further delineating the extent of soil contamination at NAS Oceana. Additionally, laboratory confirmation samples will be collected at a subset of the XRF screening locations to confirm the COPC concentrations.