DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, MID-ATLANTIC
9742 MARYLAND AVENUE
NORFOLK, VA 23511-3095

IN REPLY REFER TO:

5090
OPHE3/16/024
JAN 8 2009

Mr. Thomas Bass
West Virginia Department of Environmental Protection
Division of Land Restoration
Office of Environmental Remediation
601 57th Street, SE
Charleston, WV 25304-2345

Dear Mr. Bass,

The Naval Facilities Engineering Command (NAVFAC) is in receipt of your December 15, 2008 letter on behalf of the West Virginia Department of Environmental Protection (WVDEP). The letter transmits WVDEP comments on the Long-Term Monitoring Optimization Strategy, Sites 1, 5, and 10, Allegany Ballistics Laboratory, Rocket Center, West Virginia, CH2M HILL, October 31, 2008. Enclosed you will find the Navy's responses to these comments.

It is the Navy's intention to follow through with the resolution agreed upon during the November 2008 ABL Remedial Project Managers (RPM) meeting. We remain convinced that the measurement of appropriate groundwater and surface water elevations is the most direct, accurate and unambiguous method of assessing capture.

Should you require any additional information please contact Michael Helbling (757)444-4125.

Sincerely,

TIMOTHY A. REISCH, P.E.
Head
Hampton Roads Environmental
Restoration Branch
By direction of the Commanding Officer

Copy to:
NAVSEA (Mr. John Aubert)
U.S. EPA, Region III Hazardous Site Cleanup Division (Ms. Ji-Sun Yi)
NAVFAC Atlantic (Ms. Bonnie Capito)
CH2MHILL, WDC (Mr. Steve Glennie)

Navy Response to WVDEP Comments on
Long-Term Monitoring Optimization Strategy, Sites 1, 5, and 10, Allegany Ballistics Laboratory, Rocket Center, West Virginia, CH2M HILL, October 31, 2008

Comments received via letter from Tom Bass, dated December 15, 2008

Comment 1: The date of the Technical Memorandum should correlate with the date of submittal, 19 November 2008.

Response: Noted with Comment. The date on the document corresponds to the date the document was finalized by CH2M Hill; it is Navy practice not to alter dates placed on documents by the consultant. Depending on the document and the method transmittal, which may require signatures within the Navy / NAVFAC or authorization to the consultant to transmitted, the dates may vary.

Comment 2: As stated in the 18 September 2008 email WVDEP cannot concur with elimination of field QA/QC monitoring.

Response: The purpose of the technical memorandum is to develop a strategy to optimize the ABL Site 1, 5, and 10 LTM, and increase efficiencies in sampling and analytical requirements. Following the guidance of the UFP-SAP, specific data quality objectives are developed to determine how "good" the data needs to be to support the environmental decisions being made. The Navy requests an explanation for the agencies rejection of this proposal.

Comment 3: The agency cannot concur with reducing the analytical VOC parameters to (PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride) for long-term monitoring at this time.

Response: The purpose of the technical memorandum is to develop a strategy to optimize the ABL Site 1, 5, and 10 LTM, and increase efficiencies in sampling and analytical requirements. Following the guidance of the UFP-SAP, specific project action limits are developed, in this case based on the vast amounts of data collected over the years of LTM already preformed. The Navy requests an explanation for the agencies rejection of this proposal.

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Long-Term Monitoring Optimization Strategy, Sites 1, 5, and 10, Allegany Ballistics Laboratory, Rocket Center, West Virginia, CH2M HILL, October 31, 2008

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Comment 4: Since new source areas have been recently discovered between the North Branch Potomac River and the current groundwater containment system, it is the agency's recommendation that a temperature profile be conducted adjacent to Site 1 to verify that a groundwater surface water interface does not exist. This can be conducted with utilization of temperature probes/thermocouples inserted into the sediments of the river. This procedure should identify areas that may show a temperature differential thereby confirming the interface of groundwater to surface water or verify lack of interconnectivity. During the summer months surface water should be warmer than groundwater and the inverse during the winter months.

Response: The Navy does not agree with WVDEP assertion that a new source area has been discovered between the North Branch Potomac River and the groundwater treatment system. Although the Site 1 test pitting identified an area of contaminated soils, these soils have been in the current location for some period of time; hence, the influence to groundwater and any potential impact to the groundwater surface water interface would have been identified in previous LTM events.

It is acknowledged that a groundwater/surface water interface would exist at the boundary of the river. What is important is whether, at this boundary, the groundwater discharges to the river or the river discharges to the groundwater (aquifer). In this area of Site 1, physical measurements made of the river level and water levels in wells adjacent to the river show the river discharges to the aquifer under the influence of the groundwater extraction system, resulting in the hydraulic containment that has been documented since the pump and treat system became operational in 1998. To address concerns raised the ABL Project Management Team (PMT), the Navy will verify the capture of the groundwater impacted in this area by the existing remediation system's extraction wells. The ABL PMT has agreed to install additional groundwater monitoring wells and collect sediment and surface water samples from locations adjacent to the area of concern; this sampling is in addition to the LTM sampling. The Navy is developing a proposal regarding number and location of these additional monitoring wells and sampling locations for review and approval by the ABL PMT. The ABL PMT will develop a decision matrix to evaluate the data and determine potential actions, if required.