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NAS SOUTH WEYMOUTH  
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LETTER AND COMMENTS FROM U S EPA REGION I ON RESPONSE TO COMMENTS  
REGARDING DRAFT FINAL AND FINAL VERSIONS OF REMEDIAL INVESTIGATION WORK  
PLAN ADDENDUM FOR SOLVENT RELEASE AREA NAS SOUTH WEYMOUTH MA  
12/07/2009  
U S EPA REGION I



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION I  
5 Post Office Square, Suite 100  
Boston, MA 02109-3912

December 7, 2009

Brian J. Helland, P.E.  
BRAC Program Management Office NE  
4911 South Broad Street  
Philadelphia, PA 19112-1303

Re: Responses to Comments on the Draft Final Remedial Investigation Work Plan Addendum and Final Remedial Investigation Work Plan Addendum for the Solvent Release Area

Dear Mr. Helland:

Thank you for the opportunity to review the *Responses to Comments – Draft Final Remedial Investigation Work Plan Addendum* and the *Final Remedial Investigation Work Plan Addendum, Solvent Release Area*, Naval Air Station South Weymouth, Weymouth, Massachusetts, dated October 29, 2009. The responses were provided to address EPA's June 26, 2009 comments on the June 2009 Remedial Investigation (RI) Work Plan (WP) Addendum. Detailed comments are provided in Attachment A.

*Letter Comment 1*; While EPA accepts the response and the actions outlined in the *Draft Final Remedial Investigation Work Plan Addendum* for the purposes of the RI, the adequacy of the spatial resolution of the soil characterization depends on subsequent steps. While the soil sampling results from MW20-316, MW20-502D and PZ-10 will provide additional useful soil data, these points are at least 100 feet from the existing data. Additional data may be needed if soil excavation is a component of the remedy. Therefore, additional soil delineation (e.g., to the west and southwest of the MW10-405 area) may be necessary during the FS or subsequent phases (e.g., PDI or post-excavation confirmatory sampling).

*Letter Comment 2* (Items 1 and 2): While EPA accepts the response for the purposes of finalizing the RI and the *Draft Final Remedial Investigation Work Plan Addendum*, EPA's originally indicated that subsurface soil contamination identified at SB10-504 (106 ug/kg total chlorinated VOCs at 10-12 ft bgs) was not constrained to the east. While it is true that this location is below the PRG, soil data east of this location are not available to robustly delineate soil contamination to the east, (e.g., to below background levels). Further, EPA's indicated that groundwater data near the eastern ditch (~ 200 ft to the east) remains contaminated (33 ug/l PCE at MW-339). Low-level soil contamination in the areas eastward from SB10-504 to the vicinity of MW-339 and the eastern ditch could be present. While groundwater transport of contaminants plays a role in the detections noted at MW-339 and elsewhere near the eastern ditch, it should be noted that area up-gradient to MW-339, from a ground water flow perspective, is consistently shown to be the area east and north of SB10-504 where available soil data do not preclude the presence of additional small source(s).

*Letter Comment 3*: During the conference call of November 17, 2009, the team agreed that a

technical meeting would be held to address the adequacy of the current well network in light of the results from MW-502D. EPA expects that we will reach consensus on whether a data gap remains given the apparent lack of fracturing encountered at MW-502D. Please clarify whether the response intended to indicate that MW-502D has been located approximately 100 feet west of CH-GW-108-03. In preparation for the upcoming meeting, EPA requests an updated map with an accurate 'as-built' location for new well MW-502D and other supporting information that has not yet been provided (e.g., chemistry). We plan to provide interpretive maps and/or cross-sections that may be useful to understand the fracture network and contaminant distribution in this area. EPA will also discuss whether borehole radar or other geophysical techniques may be useful in assessing whether a data gap remains. *See also* Specific Comment 1, p.1-2, §1.0, (D., Bullet 1).

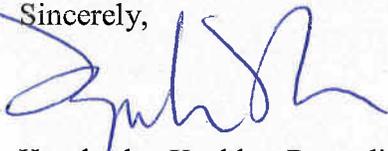
*Letter Comment 9:* EPA expects to reach consensus regarding the potential for a flow pathway to the southwest from the MW10-405 area in fractured bedrock at an upcoming meeting. Please update the cross-sections mentioned in the original comment with information collected from the recently installed wells.

With regard to Letter Comment 13 (see EPA's email dated August 6, 2009) for soil vapor sampling, "you want to be below about 3-5 ft BG to avoid any potential error caused by atmospheric pumping, plant respiration, etc., so generally, you want to be close to the GW table." The Final RI WP Addendum notes (page 3-1) that the "slotted section of the vapor probes will be installed within 1 to 3 feet of the water table." The Work Plan does not specifically state that the probes will be 3 to 5 feet deep.

EPA recognizes that the site hydrology may not leave much room to be both above the water table and deep enough to avoid the potential problems aforementioned. The average depth to water, as presented in the Draft RI, was less than one foot to 6 or 7 feet. If the water table is less than 6 feet BGS at the soil vapor sample locations, the vapor probes should be installed a little closer to groundwater than if it is 6 feet or deeper BGS.

I look forward working with you and the Massachusetts Department of Environmental Protection on the investigation and remediation of the remaining areas of the base. Please contact me at (617) 918-1385 to arrange a meeting or if you would like to discuss anything before this meeting.

Sincerely,



Kimberlee Keckler, Remedial Project Manager  
Federal Facilities Superfund Section

Attachment

cc: Dave Barney, USN, South Weymouth, MA  
Dave Chaffin, MADEP, Boston, MA  
Kevin Donovan, SSTTDC, South Weymouth, MA  
Phoebe Call, TTNUS, Wilmington, MA

## ATTACHMENT A

<u>Page</u>	<u>Comment</u>
p. 1-1, §1.0	The fourth bullet should refer to the northeast rather than the northwest to be consistent with Figure 2-1.
§3.6	<p>a) There is an inconsistency between the discussion in the first paragraph and in paragraph 2. Paragraph 2 states that the purging pump will be calibrated to match the sample collection rate for the SUMMA canister. However, the first paragraph states that the purging flow rate will not exceed 0.2 liters per minute. At 0.2 liters per minute the SUMMA canister would be full in five minutes, not two hours as required. Please correct.</p> <p>b) The figure of the soil gas probe provided does not show the three-way valve and the associated equipment connections so the description in paragraph #4 on page 3-2 is not clear. As written, the proposed test method would not result in a satisfactory leak test. EPA presumes that the well head would be flooded with the locking cap closed to surround the well cap tubing penetration with helium. However, unless the purging pump was operating during the helium flooding, the leak test would not simulate soil gas collection operation. A static test has little value. Presumably the helium gas monitor would not be connected to the tee as described in paragraph 3, but connected to the discharge of the purging pump, which would be connected to the tee and operating by discharging to the helium gas monitor during the test. Please edit the test description to clarify the intent and provide a viable leak detection test.</p>
p. 1-2, §1.0, ¶1 & Section C	Please refer to response for letter comment 1, above regarding soil delineation at MW20-316, MW20-412, and PZ-10.
p. 1-2, §1.0, Section D, 3 <sup>rd</sup> bullet	Please clarify whether the final location for MW20-504D is on the East Mat.
p. 2-0, §2.0	Please add the following objective: "Refine the extent of the high-concentration source area to the north and east of the identified source area."
pp. 3-1 & 3-2, §§3.5 & 3.6	Given the complications to the vapor probe sampling effort owing to the high water table conditions, future consideration of vapor sampling approaches should consider alternative methodologies such as GoreSorber® or other methods that may be preferable in high water table conditions. It may be informative to test one or more of the proposed soil vapor testing locations listed on Table 3-4 with GoreSorber® or another method for comparison.
p. 5-2, §§5.1, 5.2, & 5.3	Please see previous comment concerning additional suggestions for vapor assessment/sampling.