

HAFB 07

  
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RESPONSIVENESS - INTEGRITY - TEAMWORK

January 23, 2007

New Mexico Environment Department  
Hazardous Waste Bureau  
Permits Management Program  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303



Attention: Mr. John E. Kieling  
Program Manager

Subject: Response to Notice of Deficiency: Monitored Natural Attenuation for SS-61, June 2005, Holloman Air Force Base, EPA ID# NM6572124422, HWB-HAFB-05-007.

Dear Mr. Kieling,

Enclosed please find tabulated responses to the subject Notice of Deficiency (HWB-HAFB-05-007). Upon verbal or written concurrence from NMED, Bhate will submit the changed pages to NMED.

If you have any questions, please feel free to call me at 303-815-1762.

Sincerely,  
Bhate Environmental Associates, Inc.



Frank Gardner, PG  
Program Manager

cc w/ encl: <sup>NO</sup> ~~XXXXXXXXXXXX~~  
D. Strasser, NMED HWB  
G. Fish, HAFB



Response to Comments  
 Monitored Natural Attenuation Report  
 For SS-61 (AOC 1001), June 2005  
 Holloman AFB, NM

Comment No.	Section	Page	Comment	Response
Author	David Strasser		Date of Comments: January 27, 2006, Notice of Deficiency HWB-HAFB-05-007	Date of Response: December 20, 2006
1	General		<p>Analytical results obtained during the 2004/5 quarterly sampling events for total dissolved solids, conductivity, alkalinity and chloride are very different between sampling points. Therefore, it appears that monitoring wells MW-04 and MW-08 may be in a hydrogeologic zone that is different from monitoring wells MW-01, MW-03 and MW-06.</p> <p>The Permittee is required to submit a discussion on this possibility and, if this scenario is possible it's ramifications.</p>	<p>Although lower concentrations of total dissolved solids (TDS), conductivity, alkalinity and chloride were detected in wells MW-04 and MW-08, it is not believed that these wells are screened in a different hydrogeological zone than wells MW-01, MW-03 and MW-06. Unfortunately, monitoring well construction diagrams for MW-01, MW-03, MW-04, and MW-08 were not included in the historical SS-61 reports (RCRA Facility Investigation and/or Remedial Investigation). However, based on the similar groundwater elevations obtained for these five wells during the 2004/5 quarterly sampling events (Table 2 Groundwater Elevations MNA Report for SS-61); these wells appear to be screened within the same hydrogeologic zone. In addition, Figure 3-2 (Geologic Cross-Section) presented in the Phase II RI Report shows that wells MW-04 and MW-06 are screened within the same hydrogeologic zone.</p> <p>It is likely that monitoring wells MW-04 and MW-08 have artificially lower TDS, conductivity, alkalinity and chloride concentrations than what was detected in wells MW-01, MW-03 and MW-06 due to the dilution of natural groundwater from a leaking underground water line that runs east-west under DeZonia Rd to the water tower.</p>
2	General		<p>Analytical results obtained during the 2004/5 quarterly sampling events indicate that concentrations of volatile organic compounds (VOCs) in monitoring well MW-03 had increased substantially between the April 2004 and January 2005 sampling events.</p> <p>This increase in concentrations may indicate that a source of VOCs is still present at the subject site. Various documents submitted for this site refer to the possible presence of an oil and water separator at the southeast</p>	<p>The concentrations of VOCs in monitoring well MW-03 did increase between the April 2004 and January 2005 sampling events. As a result the <i>Voluntary Corrective Measures Work Plan Site SS61 Soil Remediation, Holloman AFB, NM, August 2006</i> was developed to further investigate potential source areas associated with the underground fuel pipeline that connected the two concrete vaults with a former aboveground storage tank and/or an adjacent debris pile that are located upgradient of SS61-MW03 in the vicinity of B1072.</p> <p>The <i>Phase II Remedial Investigation Report for SS-61, Holloman AFB.</i></p>

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			<p>corner of Building 1079 and a concrete sump located at the northwest corner of Building 1079. None of the documents submitted indicate that these locations were ever investigated as a possible source nor was the operational status of either structure provided.</p> <p>The Permittee is required to submit a discussion regarding the status of these structures and their potential to act as a continuing source of VOC contamination at this site. This discussion must include a figure depicting the locations of these structures. Depending on the response, NMED may require additional soil investigation at these two locations.</p>	<p><i>NM</i>, Foster Wheeler, 2000, references a concrete sump located outside the northwest entrance of the hangar (B1079) and a oil/water separator located near the southeast corner of Building 1079. A site visit was conducted on December 14, 2006 to investigate the concrete sump and the oil/water separator associated with B1079. The locations of the two structures are shown in Figure 1 (attached). The metal lids covering each structure were removed so that the interior could be inspected and photographed.</p> <p>As shown in attached Photographs 1 and 2 it was determined that the oil water separator described in the Phase II RI Report is actually a valve box for the buried underground pipeline that traverses Site SS-61 from the north to south (Figure 1). Based on the location of the pipeline valve box (located 94 ft from the southeast corner of B1097), the southern extent of the buried pipeline is located approximately 50 feet southeast from what is depicted on Figure 3-1 (SS-61 Voluntary Corrective Measures Work Plan, Bhate, 2006). As a result, Figures 1-3 and 3-1 in the Work Plan, (attached) have been revised to show the actual location of the buried north-south trending pipeline.</p> <p>The concrete sump (attached Photographs 3 and 4) is located approximately 20 feet from the northwest entrance of B1079 (Figure 1). Based on interviews with current B1079 personnel, 6 to 8 floor drains located throughout B1079 were connected to the concrete sump. The sump, gravity drained into the sanitary sewer system. It was reported during the site visit that the B1079 floor drains were sealed with cement approximately two years ago.</p> <p>During the Phase II RI (Foster Wheeler, 2000) a total of 40 soil samples were collected from 20 direct push technology (DPT) borings drilled within the southern portion of SS-61 (south of Dezonja Rd). As shown in the attached Figure 1, four DPT soil borings were drilled adjacent to</p>

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				<p>the northwest and southeast corners of Building 1079. DPT borings DP44 and DP45 were advanced along the northwest corner of B1079 down and cross gradient from the concrete sump. Additionally, DPT borings DP39 and DP46 were drilled adjacent to the southeast corner of Building 1079 downgradient of the pipeline valve box. These borings were advanced to approximately 20 ft below ground surface and three soil samples were collected from each borehole for vertical characterization.</p> <p>TRPH was detected in the DP-39 in the 1- to 2-ft interval at a concentration of 260 mg/kg. TRPH was also detected at DP-44 in the 11- to 12-ft interval with a concentration of 46 mg/kg. Both of these detections are below the NMED SSLs for TRPH. Additionally, TRPH and VOCs were not detected in any of the other soil samples collected from these soil borings. Therefore, based on the analytical results from the Phase II RI, there does not appear to be a source area associated with either the concrete sump or the pipeline valve box.</p>
			End of Comments	