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DAIM-ODB

July 9, 2018

Mr. John Kieling  
Chief, Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303

RE: Final Groundwater Supplemental RCRA Facility Investigation Work Plan, Revision 4, Approval with Modifications Army's Response to Comments, Fort Wingate Depot Activity, McKinley County, New Mexico

Dear Mr. Kieling:

This letter is in reply to the New Mexico Environment Department (NMED) Approval with Modifications letter dated April 18, 2018, reference number HWB-FWDA-15-0001, regarding the Final Groundwater Supplemental RCRA Facility Investigation Work Plan, Revision 4. Below are the Army's responses to NMED's comments. The following responses are based upon Mark Patterson's conversation with Dave Cobrain of your staff on 29<sup>th</sup> June 2018.

### Comments

#### 1. Figure 9-1, Proposed Replacement Alluvial Well MW34

**NMED Comment:** Although the Permittee's Response to NMED's Comment 1 of the December 21, 2017 Disapproval letter for Final Groundwater Supplemental RCRA Facility Investigation Work Plan Revision 3 is satisfactory, Figure 9-1, Proposed Replacement Alluvial Well MW34 still depicts the location of the well more than 80 feet west of the area where petroleum contamination was discovered. Revise Figure 9-1 to be consistent with the proposed well location shown in Figure 2-1, Alluvial Contaminant Plumes and Proposed Alluvial Well Locations. Provide replacement page for Figure 9-1.

**Army Response:** Figure 9-1 was provided to NMED in our previous responses. The Army revised Figure 9-1 per NMED recommendations.

#### 2. Section 9.2, Background Monitoring Well Installation, lines 21-22, page 9-2

**Permittee Statement:** "BGMW11 is upgradient of sentinel wells MW23 and MW24, which have been unaffected by site activities."

**NMED Comment:** Some organic contaminants related to site activities have been detected in samples obtained from well MW23 sporadically while no organic contaminants have been detected from well MW24 in recent years. Well MW23 is screened from 64 to 134 feet below ground surface (bgs) while well MW24 is screened

from 16 to 66 feet bgs according to Appendix B in the 2011 and 2012 Monitoring Well Installation and Abandonment Report Version 1, dated December 2012. The groundwater quality monitored in wells MW23 and MW24 has not been consistent according to Table 5-1 in Groundwater Periodic Monitoring Reports. The saturated zones were reportedly encountered at 43 and 17.6 feet bgs in wells MW23 and MW24, respectively. Two different aquifers may be present in the vicinity of the proposed well BGMW11. An abandoned well (Wingate91) was installed in a similar location to where well BGMW11 is proposed according to Figure 5 in the Interim Facility- Wide Groundwater Monitoring Plan Version 2, dated March 28, 2008. Well Wingate91 was installed to a depth of 113.12 feet bgs in 1963; however, the well was not likely to be screened as a monitoring well because it was installed as a water supply well. Accordingly, construction data for well Wingate91 will not likely provide data on the presence or absence of separate aquifers. Propose to investigate whether separate aquifers are present in the response letter. If both shallow and deep aquifers are distinctly present in the vicinity of proposed well BGMW11, two separate background monitoring wells must be installed.

**Army Response:** Concur. The Army will investigate whether separate aquifers are present in the vicinity of MW23 and MW24. The Army will install additional wells to not only determine the existence or non-existence of multiple alluvial aquifers in this vicinity, but to also delineate the downgradient end of MW23. If it is determined that two separate alluvial aquifers exist, the Army will install a background monitoring well within each identified water-bearing zone near the proposed location of BGMW11. Please note that Wingate well # 91 has been abandoned and is no longer in service.

If you have questions or require further information, please call me at (505) 721-9770.

Sincerely,

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