DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF, G-9
600 ARMY PENTAGON
WASHINGTON, DC 20310-0600

December 11, 2019

Base Realignment and Closure Division

Mr. John E. Kieling
Chief Hazardous Waste Bureau
New Mexico Environmental Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6313

SUBJECT: *Letter Work Plan, Downgradient Alluvial Aquifer Investigation & Installation of One Additional Well, Fort Wingate Depot Activity, McKinley County, NM EPA ID# NM6213820974, HWB-FWDA-18-009*

Dear Mr. Kieling,

This letter is in reply to the New Mexico Environment Department (NMED) Approval with Modifications (AWM) letter dated September 3, 2019 reference number HWB-FWDA-18-009, regarding the document titled, *Letter Work Plan for Downgradient Alluvial Aquifer Investigation & Installation of One Additional Well, Fort Wingate Depot Activity, McKinley County, NM*. The following are the Army's responses with cross-referencing to the numbered NMED comments. This letter also transmits the revised Work Plan and the red-line strike-out copy of the edits.

1. Permittee Statement: "If soil cores collected from the boring visually indicate the presence of a confining layer between two saturated zones, the proposed method of investigation that is installation of wells and observation in differences in hydrostatic head and groundwater chemistry will be followed."

   NMED COMMENT: The Permittee's response is appropriate; however, there is a deficiency in the proposed method. Section 5.0, Field Methodology, lines 17-20, page 5, states, "[t]he Army will install a shallow alluvial well in the vicinity of MW23 to determine if shallow water bearing zone exists at this location and investigate the nature and extent of detected constituents in monitoring well MW23. This well will be designated as MW36 (Figure 2)." Proposed well MW36 will be installed when the presence of two alluvial aquifers is confirmed through exploratory boring EB01. In order to investigate the lateral and vertical extent of contamination detected in well MW23, well MW36 must be nested to screen both shallow and deep alluvial aquifers. Such wells may be designated as MW36S and MW36D. Similarly, Section 5.0,Field Methodology, lines 13-16, page 5, states, "[i]f both shallow and deep alluvial aquifers are distinctly present in the boring near well BWMW11,the Army will install a deeper alluvial well in the boring designated as BGMW13 (Figure 2)." A shallow alluvial well is also necessary. Accordingly, well BGMW13 must also be nested and designated as BGMW13S and BGMW13D. Revise the Work Plan to include the provision and provide a replacement page.

   Army Response: Concur. The Army will install both shallow and deep wells at current proposed locations of BGMW13 and MW36. For the current BGMW13 location, the wells will now be designated at BGMW13S and BGMW13D. Similarly, a shallow and a deep well will be installed at the current proposed location of MW36 and will be designated as MW36S and MW36D. The paired wells will be installed at depths comparable to MW-23 and below but near the static

water table, even if no aquitard is observed between those depths. The EB01 location will be moved closer to MW36S and upon completion, will be converted into MW36D. Please note that the Army will install paired wells that will be side-by-side instead two wells in one hole as clarified by Benjamin Wear in his email dated 8/28/2019.

2. Red Line Strikeout Version of the Work Plan, Section 5.0, Field Methodology, Monitoring Well Installation, Lines 34-36, Page 4:

NMED Comment: The Permittee's Response to NMED's Disapproval Comment 4 states, "[l]ines 13-16 [sic] will be revised to include if the first step of the investigation indicates that only one aquifer exists in the vicinity, conduct original investigations as outlined in the Final Groundwater Supplemental RCRA Facility Investigation Work Plan, Revision 4, dated March 23, 2018." The referenced revision is identified in Section 5.0, Field Methodology, lines 5-8, page 5 in the Work Plan. However, the revision is not marked in the Redline Strikeout (RLSO) version of the Work Plan. All revisions must be marked on the RLSO version of all future revised submittals. This problem has been frequently identified by NMED and is ongoing. Failure to follow NMED direction constitutes non-compliance and may result in an enforcement action.

Army Response: Concur. The Army will make sure all revisions are marked properly in the revised documents.

Should you have any questions, or require any further information, please contact me at 505-721-9700 or at mark.c.patterson.civ@mail.mil.

Sincerely,

PATTERSON.MARK.C.1229214493 Digitally signed by PATTERSON.MARK.C.1229214493 Date: 2019.12.11 09:23:54 -05'00'

Mark Patterson
BRAC Environmental Coordinator
Fort Wingate Depot Activity

Enclosures

CF:	Media
John Kieling, NMED, HWB	2 hard copies, 2 Disks
Dave Cobrain	with Kieling
Ben Wear NMED, HWB	with Kieling
Michiya Suzuki, NMED, HWB	with Kieling
Chuck Hendrickson, U.S. EPA Region 6	1 Disk
Ian Thomas, BRACD	1 Disk
Steven Smith, USACE	1 Disk
Saqib Khan, USACE	1 Hard Copy, 1 Disk
Clayton Seoutewa, SW BIA	1 Hard Copy, 1 Disk
George Padilla, BIA, NRO	1 Hard Copy, 2 Disks
Sharlene Begay-Platero, Navajo Nation	1 Hard Copy, 7 Disks
Mark Harrington, Pueblo of Zuni	1 Hard Copy, 8 Disks
David Becker, USACE	1 Disk
Admin Record, NM/OH	2 Hard Copy, 2 Disk