



DEPARTMENT OF THE ARMY  
FORT WINGATE DEPOT ACTIVITY  
P.O. BOX 268  
FORT WINGATE, NM 87316



March 21, 2018

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

Subject: Final Groundwater Supplemental RCRA Facility Investigation Work Plan Revision 3,  
Fort Wingate Depot Activity, McKinley County, NM

Dear Mr. Kieling:

This letter is in reply to the NMED disapproval letter dated December 21, 2017, reference number HWB-FWDA-15-001, regarding the Final Groundwater Supplemental RCRA Facility Investigation Work Plan Revision 3. The following are the Army's response to comments received from NMED in the letter detailing where each comment was addressed and cross-referencing the numbered NMED comments. This letter also transmits the revised work plan, and a red-line strike-out electronic copy of the edits.

### Comments

#### 1. The Permittee's Response to Comment 1. b of the Disapproval

**Permittee Statement:** "Figure 2-1 has been revised to include new proposed well MW34 to replace abandoned well FW26."

**NMED Comment:** The location of the proposed well MW34 is depicted downgradient of SWMU9, the Petroleum, Oil and Lubricant (POL) Waste Discharge Area in Figure 2-1. The 2014 visual delineation and soil investigation identified that the actual area of POL disposal was located southeast of the original SWMU 9 boundaries according to *Final RCRA Facility Investigation Report Parcel 7*, dated March 30, 2017. The proposed location of well MW34 in Figure 2-1, *Alluvial Contaminant Plumes and Proposed Alluvial Well Locations*, does not address the contamination discovered during the 2014 investigation. Propose to install well MW34 downgradient of the actual POL disposal area. Since the Permittee plans to remove the impacted soils from the actual POL area, the proposed location of well MW34 must be placed outside the anticipated excavation boundary. Revise the Work Plan to depict an appropriate location of the proposed well MW34.

**Army Response, Figures 2-1 and 9-1; Section 9.1, page 9-1, lines 14 through 18;** Concur. Figure 2-1 and Figure 9-1 have been revised to move the proposed location for MW34 slightly south. The new location is downgradient of the contamination discovered during the 2014 investigation. The well will be located within 30 feet of the extent of the anticipated excavation boundary, however that boundary has not yet been determined. Monitoring Well MW34 will be adjusted in the field to NMED's satisfaction prior to installation

to ensure the well location is within the 30 foot requirement. The following language has been added to Section 9.1, page 9-1, lines 14 through 18: "MW34 will be located downgradient of SWMU 9 as depicted on Figure 9-1, and within 30 feet to the west of future SWMU 9 soil excavations. No extent of future excavations has been determined yet; thus, the location of MW34 will be adjusted before installation to ensure the location is within 30 feet of the excavation extent."

## 2. The Permittee's Response to Comment 1. d of the Disapproval

**Permittee Statement:** "Fort Wingate Depot Activity Groundwater Monitoring Northern Area Background Well Installation Letter Work Plan," submitted to NMED on October 31, 2017, outlines the rationale and installation of four additional bedrock background monitoring wells."

**NMED Comment:** The referenced Letter Work Plan only addresses background wells for the bedrock aquifers. Since anthropogenic constituents (e.g. perchlorate, nitrate) have been detected in alluvial background monitoring wells BGMW02 and BGMW03, the wells may not provide accurate background data for alluvial groundwater conditions; these wells have been serving as sentinel wells rather than background wells. The Permittee must propose to install a minimum of two additional alluvial background wells to replace wells BGMW02 and BGMW03. In the revised Work Plan, propose to install and also provide a justification for the selected locations of proposed alluvial background wells.

**Army Response, Table 3-1, Section 9-2, and Figure 9-3: Concur:** Proposed background wells BGMW11 and BGMW12 have been added to Table 3-1. BGMW03 and BGMW02 will remain in the monitoring program but will not be utilized in the northern alluvial background evaluation. Proposed wells BGMW11 and BGMW12 will be utilized as data points for background analysis instead of BGMW02 and BGMW03. New Figure 9-3 was created to depict the locations of the proposed alluvial background wells. The justification for the selected locations is discussed in Section 9-2. The locations of the proposed alluvial background wells are strategically placed upgradient of known clean background groundwater locations that are also upgradient of wells that have had sporadic detections of organics and/or CoPC detections.

## 3. Table 3-1, New Groundwater Monitoring Well Rationale and Sampling Matrix

**NMED Comment:** During a conference call between Army and NMED on November 17, 2017, soil sampling results in SWMU 2 (Acid Pond) were discussed. During the discussion, it was concluded that chromium may be leaching into groundwater; therefore, further investigation was warranted. Although the original purpose of proposed alluvial well TMW57 is described to determine the southeastern boundary of perchlorate contamination within the alluvial water-bearing zone according to Table 3-1, the well must also address the concern of potential leaching of chromium from SWMU 2 (Acid Pond), since the location of the well is depicted closest from the SWMU 2 boundary in Figure 2-1. Revise the Work Plan to state the additional purpose of proposed well TMW57 in Table 3-1. In addition, the Permittee must revise the location of the well TMW57 slightly south (near the Building 515); propose to install well TMW57 inside of the SWMU 2 boundary, where the highest chromium concentrations were detected. Revise Figure 2-1 to depict an appropriate location of the proposed well TMW57.

**Army Response, Figures 2-1 and 6-1 and Table 3-1:** Concur. The proposed location of TMW57 has been revised on Figure 2-1 and Figure 6-1. The well will be installed in the center of the Acid Pond and samples will be collected for chromium. The purpose of TMW57 within Table 3-1 has been revised to read "Determine the extent of perchlorate and chromium within the alluvial water-bearing zone underneath the former Acid Pond.

If you have questions or require further information, please call me at (330) 358-7312.

Sincerely,

**PATTERSON.MAR**  
**K.C.1229214493**

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Mark Patterson  
BRAC Environmental Coordinator

Enclosures

CF:

Media

D Cobrain, NMED HWB  
B Wear, NMED HWB  
M Suzuki, NMED HWB  
M Patterson, FWDA BEC  
Saqib Khan, USACE SWT