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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

December 30, 2017

Mark Patterson
BRAC Environmental Coordinator
Fort Wingate Depot Activity
13497 Elton Road
North Lima, OH 44452

Steve Smith
USACE
CESWF-PER-DD
819 Taylor Street, Room 3B06
Fort Worth, TX 76102

**RE: APPROVAL WITH MODIFICATIONS
FINAL FORT WINGATE DEPOT ACTIVITY GROUNDWATER MONITORING
NORTHERN AREA BACKGROUND WELL INSTALLATION LETTER WORK
PLAN
FORT WINGATE DEPOT ACTIVITY
MCKINLEY COUNTY, NEW MEXICO
EPA ID# NM6213820974
HWB-FWDA-17-008**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) is in receipt of the Fort Wingate Depot Activity (Permittee) *Final Fort Wingate Depot Activity Groundwater Monitoring Northern Area Background Well Installation Letter Work Plan* (Work Plan), dated September 18, 2017. NMED has reviewed the Work Plan and hereby issues this Approval with Modifications. The Permittee must address the following comments.

1. Section 5.0, Field Methodology, lines 15-16, page 5

Permittee Statement: "Field personnel will install screen throughout the thickness of the target bedrock unit."

NMED Comment: There are two water-bearing zones (first and second bedrock water-bearing zones) in the target bedrock unit underneath the facility. Each bedrock background

groundwater monitoring well must be screened across one water-bearing zone only, not both. If, while installing screen for the bedrock aquifer, the water-bearing zones cannot be isolated, groundwater samples collected from the two-combined water-bearing zones will not represent actual background conditions. In a response letter, propose to isolate each water-bearing zone.

2. Section 5.0, Field Methodology, lines 17-18, page 5

Permittee Statement: "Field personnel will install 2-inch diameter schedule 40 polyvinyl chloride (PVC) groundwater monitoring wells with a 2-inch annulus."

NMED Comment: Detection of common plastic additives such as bis(2-ethylhexyl) phthalate is a recurring issue during the groundwater monitoring events at the facility. In addition, PVC is less desirable for monitoring wells where organic constituents are analyzed due to its potential for sorption and leaching of contaminants. NMED recommends using stainless steel as a well screen material for bedrock background monitoring wells. In addition, the Permittee must make an effort to minimize such contamination while purging and sampling (e.g., equipment (pumps, tubing and bailers) must be selected accordingly). No revisions are necessary.

3. Figure 3, Schematic of Proposed Well Construction

NMED Comment: The schematic of proposed well construction in Figure 3 does not depict separate outer and inner casings. The Permittee must propose to install the wells with an appropriate seal or telescoped well casing in order to prevent cross-contamination between the alluvial and bedrock aquifers. Include the revised figure in a response letter.

4. Section 5.0, Field Methodology, lines 37-38, page 5

Permittee Statement: "The well monument will be coated with protective orange paint as required by FWDA."

NMED Comment: The Permittee must make sure that the paint does not contain compounds that may interfere with the contaminants of potential concern at the facility. No revisions are necessary.

5. Section 5.0, Field Methodology, lines 6-9, page 6

Permittee Statement: "Groundwater samples will be collected from the four new bedrock background groundwater monitoring wells in accordance with the approved Interim Groundwater Monitoring Plan and will be consistent with the same analytical suite as the sentinel wells, MW23 and MW24."

NMED Comment: The analytical suite for sentinel wells, MW23 and MW24 includes nitrate/nitrite, explosives, perchlorate, TAL metals, VOC, SVOC, TPH-DRO and TPH-GRO.

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Although the proposed analytical suite may be sufficient for future monitoring purposes at the facility, PCBs, pesticides, and herbicides analyses must be conducted by EPA Methods 8082A, 8081A and 8151A, respectively, during the initial sampling events. If these analytes are not detected in the groundwater samples collected from the proposed background groundwater monitoring wells during the first two monitoring events, the analysis may be discontinued for subsequent groundwater sampling events. In the response letter, propose to include analysis for PCBs, pesticides, and herbicides during the initial two sampling events in addition to the proposed analytical suite for the groundwater samples collected from the proposed background groundwater monitoring wells.

The Permittee must address all comments contained in this Approval with Modifications in the future reports and work plans. A response letter addressing Comments 1, 3, and 5 must be submitted no later than **May 30, 2018**.

Should you have any questions, please contact Michiya Suzuki of my staff at (505) 476-6059.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
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File: FWDA 2017 and Reading, Groundwater, FWDA-17-008