January 29, 2018

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 ARMY RESPONSE TO COMMENTS, NEW MEXICO ENVIRONMENT
DEPARTMENT APPROVAL WITH MODIFICATIONS LETTER DATED
DECEMBER 30, 2017 (HWB-FWDA-17-008)
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 Army Response to Comments, New Mexico Environment Department Approval with Modification Letter dated December 30, 2017 (HWB-FWDA-17-008) (Response Letter), dated January 8, 2018. NMED has reviewed the Response Letter and hereby issues this Approval with Modifications. The Permittee must address the following comments.
1. The Permittee’s Responses to Comments 1 and 2 of the Approval with Modifications

**Permittee Statements:** “Steel casing will be advanced continuously to total depth during drilling operations to seal off each water-bearing zone as encountered. The pull-back installation method will be used to set the well.”

“Rigid PVC will be used in the well construction for groundwater monitoring wells at FWDA.”

**NMED Comment:** In the Permittee’s response to Comment 1, steel casing is proposed. In the Permittee’s response to Comment 2, rigid PVC is proposed as a well construction material. It is not clear whether the “pull-back” installation method here refers to the telescoping method and steel casing will be retracted and PVC casing is installed afterwards. Clarify whether steel or rigid PVC is used as a well construction material and provide more detail on the proposed “pull-back” installation method in a response letter.

2. The Permittee’s Response to Comment 2 of the Approval with Modifications

**Permittee Statement:** “Rigid PVC does not contain this additive [bis(2-ethylhexyl) phthalate].”

**NMED Comment:** If the Permittee elects to use rigid PVC as a well construction material, provide a Material Safety Data Sheet (MSDS) indicating that the PVC material contains no bis(2-ethylhexyl) phthalate or any plasticizers with the response letter. The proposed rigid PVC material must meet National Sanitary Foundation (NSF) Standard 14 type Well Casing.

3. The Permittee’s Response to Comment 2 of the Approval with Modifications

**Permittee Statement:** “The detection of bis (2-ethylhexyl) phthalate in groundwater monitoring water samples is potentially due to flexible clear tube used to collect groundwater via low flow sampling, or as a laboratory contaminant.”

**NMED Comment:** Flexible tubing manufactured without bis (2-ethylhexyl) phthalate is commercially available. In the response letter, propose to use materials that contain no bis (2-ethylhexyl) phthalate. In addition, if the source of bis (2-ethylhexyl) phthalate is attributed to laboratory contamination, reference the appropriate laboratory blank detections. The Permittee must direct the laboratory to take steps to eliminate such laboratory contamination. The Permittee may need to switch laboratories if their laboratory is unable to adequately control the contamination. Provide a measure to control laboratory contamination in the response letter.

4. Figure 3, Schematic of Proposed Well Construction

**NMED Comment:** Double-cased wells should be constructed for bedrock groundwater monitoring since interconnection of two or more aquifers exists and well construction may cause cross-contamination. The proposed construction in Figure 3 depicts a single-cased
well. Revise Figure 3 as necessary. If the Permittee does not believe that single-cased wells would be susceptible to cross-contamination, provide a justification in the response letter. Even though sand filter pack is segregated from the upper aquifer by bentonite seal, the aquitard that separates the saturated zones in some areas may not have sufficient thickness to prevent cross-contamination.

5. The Permittee’s Response to Comment 5 of the Approval with Modifications

NMED Comment: NMED hereby approves the proposed analytical suite for the new bedrock background groundwater monitoring wells. Incorporate the approved sampling matrix in all future plans and reports.

The Permittee must address all comments contained in this Approval with Modifications in the future reports and work plans. A response letter 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
B. Wear, NMED HWB
M. Suzuki, NMED HWB
C. Hendrickson, U.S. EPA Region 6
L. Rodgers, Navajo Nation
S. Begay-Platero, Navajo Nation
M. Harrington, Pueblo of Zuni
C. Seoutewa, Southwest Region BIA
R. Duwyenie, Navajo BIA
J. Wilson, BIA
B. Howerton, BIA
R. White, BIA
C. Esler, Sundance Consulting, Inc.