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**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

October 28, 2016

Mark Patterson  
FWDA, BRAC Coordinator  
P.O. Box 93  
Ravenna, OH 44266

Steve Smith  
USACE FWDA Program Manager  
CESWF-PEC-EF  
819 Taylor Street, Room 3A12  
Fort Worth, TX 76102

**RE: DISAPPROVAL  
FINAL RCRA FACILITY INVESTIGATION PARCEL 6  
FORT WINGATE DEPOT ACTIVITY  
MCKINLEY COUNTY, NEW MEXICO  
EPA ID# NM6213820974  
HWB-FWDA-12-008**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) received the *Final RCRA Facility Investigation Parcel 6* (Report), dated September 30, 2012, on September 25, 2012 for Fort Wingate Depot Activity (Permittee). NMED has reviewed the Report and hereby issues this Disapproval with the following comments.

**1. Groundwater**

**NMED Comment:** While there is a short discussion of groundwater in the background section, the issue of groundwater contamination at each of the solid waste management units (SWMUs) and Areas of Concern (AOCs) is not addressed in 12 of the 14 sections related to specific sites. While there may be no requirement to conduct further work to characterize groundwater at specific SWMUs/AOCs, the subject of potential groundwater contamination must be discussed for each site. Revise the Report to provide a discussion of groundwater issues for each SWMU and AOC.

In addition, the Permittees recommend in various locations within the Report that groundwater issues be detached from the SWMU or AOC and no further action be required. In cases where the Permittee can demonstrate that the SWMU or AOC did not contribute to groundwater contamination, the Permittee may request a Corrective Action Complete with Controls status, with the controls being long-term monitoring of contaminated groundwater and restrictions on use of the groundwater. NMED is unable to issue Corrective Action Complete without Controls status for any SWMU or AOC where groundwater contamination is present below the site.

**2. Section 3, SWMU 4 - Building 600 (Former Building 539)**

**NMED Comment:** Results from analyses of collected soil samples indicate no exceedances of soil screening levels (SSLs) for the residential scenario for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), explosives, or metals with the exception of arsenic, at SWMU 4, Building 600 (Former Building 539). Eight soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 8.8 mg/kg. Per NMED's December 18, 2013 letter titled *Evaluation of Background Levels for Arsenic in Soil, Fort Wingate Depot Activity, New Mexico* (Arsenic Background Letter), the arsenic level exceeds the background reference for arsenic of 5.6 mg/kg; however, it is within the range of background (0.2 to 11.2 mg/kg). Include a discussion regarding the potential for the site being a source of arsenic.

**3. Section 4, SWMU 8 - Building 537**

**NMED Comment:** Previous sampling events indicated that large areas within SWMU 8 had PCB and pesticide contamination. Although some contaminated soil was removed, elevated PCB and pesticide contaminated soils remain. Soil samples collected in 2011 at former discharge areas (drain or septic lines) did not exceed SSLs for VOCs, SVOCs, pesticides, perchlorate, PCBs, explosives, or metals with the exception of arsenic. Five soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 4.7 mg/kg. Per the Arsenic Background Letter, the arsenic levels do not exceed the background reference for arsenic of 5.6 mg/kg and are within the range of background data (0.2 to 11.2 mg/kg). Additional soil sampling for PCBs and PAHs following soil excavation per the NMED approved *Final Permittee-Initiated Interim Measures Work Plan Parcel 6 Revision 1.0* (IMWP), dated May 4, 2015, is required.

**4. Section 5, SWMU 11 - Buildings 541 and 542**

**NMED Comment:** A previous sampling event in 2000 indicated that one sample contained PAHs (benzo(a)pyrene and benzo(a)anthracene) above their respective 2012 SSLs. During the 2011 sampling event, soil samples collected from a location approximately 5 feet away from the previous sample had no detections of benzo(a)pyrene and benzo(a)anthracene. All soil samples in the 2011 sampling event did not exceed SSLs for VOCs, SVOCs, perchlorate, explosives, or metals with the exception of arsenic. Eight soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 9.0 mg/kg. Per the

Arsenic Background Letter, the arsenic level exceeds the background reference for arsenic of 5.6 mg/kg; however, it is within the range of background data (0.2 to 11.2 mg/kg). Include a discussion regarding the potential for the site being a source of arsenic.

**5. Figure 6-5, Airborne Geophysical Survey of SWMU 20, p 6-40**

**NMED Comment:** Figure 6-5 shows the airborne geophysical survey of SWMU 20, which serves as a proxy for location of metallic debris on the land surface. The IMWP indicates two areas of debris removal in Feature 4, leaving large areas of debris untouched. Provide an explanation for why the remaining debris evident in Feature 4 will not be removed.

**6. Section 7, AOC 28 - Igloo Block B, p 7-1**

**NMED Comment:** The wipe sample analysis was reviewed by the Agency for Toxic Substance and Disease Registry (ATSDR), Health Consultation for FWDA. The review recommended additional sampling in the igloo interiors after concluding that the existing data appeared inadequate to characterize the extent of contamination. ATSDR issued a report on April 1, 2009 detailing their concerns regarding the inadequacy of the wipe sampling data, along with a suggested sampling approach to resolve the issue. NMED also clarified its position with regard to the igloo interiors in letters dated July 22, 2009 and October 1, 2010. This issue may be addressed with a proposal for an alternative approach (e.g., encapsulation of the igloo interiors) that may be applied facility-wide.

**7. Section 7, AOC 28 - Igloo Block B, p 7-14**

**NMED Comment:** Soil samples did not exceed SSLs for explosives or metals, with the exception of arsenic and lead. In the igloo aprons, three soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 4.5 mg/kg; in the igloo revetments, fifteen soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 5.0 mg/kg; and in the igloo drains, nineteen soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 8.7 mg/kg. Per the Arsenic Background Letter, the arsenic level exceeds the background reference for arsenic of 5.6 mg/kg; however, it is within the range of background data (0.2 to 11.2 mg/kg). Four soil samples contained lead exceeding the SSL of 400 mg/kg in the igloo drains, with the highest concentration of 540 mg/kg. Additional soil sampling for lead following soil excavation per the IMWP is required. Igloo Block B is currently operational and munitions are being stored within some of the igloos.

**8. AOC 80, Feature 9**

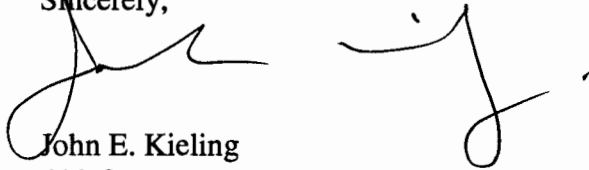
**NMED Comment:** Soil samples did not exceed SSLs for explosives or metals, with the exception of arsenic, in AOC 80, Feature 9. Nine soil samples contained arsenic exceeding the SSL of 3.90 mg/kg, with the highest concentration of 4.9 mg/kg. Per the Arsenic Background Letter, the arsenic levels do not exceed the background reference for arsenic of 5.6 mg/kg and are within the range of background data (0.2 to 11.2 mg/kg).

Messrs. Patterson and Smith  
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The Permittee must submit a revised Work Plan that addresses all comments contained in this Disapproval. In addition, the Permittee must include a response letter that cross-references where NMEDs numbered comments were addressed. The Permittee must also submit an electronic redline-strikeout version of the revised Work Plan showing where all changes have been made to the Work Plan. The revised Work Plan must be submitted on or before **March 31, 2017**.

If you have any questions regarding this matter, please contact Ben Wear of my staff at (505) 476-6041.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED, HWB  
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File: FWDA 2016 and Reading, Parcel 6, FWDA-12-008