



**Certified Mail - Return Receipt Requested**

October 19, 2023

George H. Cushman  
Headquarters, Department of the Army  
Office of the DCS, G-9  
Army Environmental Office, Room 5C140  
600 Army Pentagon  
Washington, DC 20310-0600

**RE: DISAPPROVAL  
FINAL HAZARDOUS WASTE MANAGEMENT UNIT PROGRESS STATUS REPORT, 2022  
HWMU PARCEL 3  
FORT WINGATE DEPOT ACTIVITY  
MCKINLEY COUNTY, NEW MEXICO  
EPA ID# NM6213820974  
HWB-FWDA-23-005**

Dear Mr. Cushman:

The New Mexico Environment Department (NMED) is in receipt of the Fort Wingate Depot Activity (Permittee) *Final Hazardous Waste Management Unit Progress Status Report, 2022 HWMU, Parcel 3* (Report), dated June 30, 2023. NMED has reviewed the Report and hereby issues this Disapproval with the following comments.

**COMMENTS**

**1. Section 1.4.2, HWMU, lines 4-5, page 1-4, and Section 4, Summary, lines 25-27, page 4-1**

**Permittee Statements:** "Stockpiles segregated in 2017 through 2021 were transported offsite for disposal." and, "At the conclusion of the removal activities, the Army will hold discussions with the NMED to investigate the area around the stockpile management area resulting from potential erosion."

**NMED Comment:** The former statement seems to contradict the 2012 – 2018 HWMU Status Report, dated May 19, 2020 that states, “[a]ll exceedances were detected in stockpile soil samples and were properly disposed of at a nearby landfill.” According to the 2012 – 2018 HWMU Status Report, the stockpiles segregated in 2012 through 2018 appear to have been already disposed. Provide the stockpile identification numbers that were transported offsite for disposal in 2022 for verification purposes in the revised Report.

In addition, Comment 3 in the NMED’s April 3, 2023 Approval with Modifications states, “[p]rovide a figure that depicts the location of the entire stockpile area and the area(s) where contaminated stockpiles are located in the 2022 HWMU Progress Status Report. Also, include a provision to investigate potential surface soil contamination surrounding the stockpile areas that may be caused by erosion and wind dispersion upon completion of the removal activities in the 2022 HWMU Progress Status Report.” The Permittee partially addressed the NMED’s Approval with Modifications Comment 3. Figure 4-1, *Stockpile Management Area* depicts the location of the entire stockpile area; however, it does not identify the area(s) where contaminated stockpiles were segregated and stored. Revise Figure 4-1 to identify the location(s) of the contaminated stockpiles. Include the revised figure in the revised Report.

Furthermore, the Permittee acknowledges that an investigation of the area around the stockpile management area resulting from potential erosion is warranted; therefore, it is unnecessary to hold further discussion with NMED regarding the issue. Rather, propose to submit a work plan to investigate potential surface soil contamination within the footprint of the entire stockpile area and the outer perimeter of the stockpile management area that may have been caused by erosion and wind dispersion upon completion of removal activities in the revised Report.

## 2. Section 1.4.2, HWMU, lines 5-6, page 1-4

**Permittee Statement:** “The segregated soil analytical results were compared to the waste disposal criteria (see Table 1-1) prior to shipment off-site.”

**NMED Comment:** Table 1-1, *Hazardous Waste Disposal Analyte List*, depicts analytes with respective Toxicity Characteristic Leaching Procedure (TCLP) regulatory levels. According to Appendix A.1, *Stockpile Soil Sampling Results*, analyte concentrations are reported as total concentrations and the results of TCLP analyses are not included. If TCLP analyses were conducted, provide the results of TCLP analyses and a discussion associated with the analytical results in the revised Report; otherwise, provide an explanation how total concentrations were compared to the respective TCLP regulatory levels in the revised Report.

**3. Section 2.2.2, Confirmation Soil Sampling, lines 4-5, page 2-4**

**Permittee Statement:** "Table 3-1, located after Section 3, provides a summary of soil sample screening level exceedances during the 2022 removal activities."

**NMED Comment:** The discussion included in Section 2.2.2 pertains to confirmation soil sampling, while Table 3-1 lists stockpile soil samples instead of confirmation soil samples. Reference the relevant table(s) that pertains to the results of confirmation soil sampling in the revised Report; otherwise, remove the statement from the revised Report for consistency.

**4. Section 3.1, Soil Sampling Results, lines 14-15, page 3-1**

**Permittee Statement:** "In October 2021, the Army additionally began analyzing N-nitrosodimethylamine (NMDA [sic]) separately using Method 8270D-SIM."

**NMED Comment:** NMED notes that Table 3-2, *Laboratory Limits Greater Than SSLs*, which was included in the 2021 HWMU Progress Status Report, was removed from the 2022 Report. According to Appendix A.1, page 40 of 1471, the LOQ values for NDMA are recorded as 0.025 mg/kg, which still exceeds the SSL for NDMA (i.e., 0.0234 mg/kg). Accordingly, the table that lists analytes with LOQs that exceed the SSLs must not be removed. Include the table and provide a discussion in the revised Report.

**5. Section 3.1.1, Stockpile Soil Sampling Results, lines 8-9, page 3-3**

**Permittee Statement:** "Chromium was detected at a concentration [1,280 mg/kg] exceeding the residential cancer screening levels (96.6 mg/kg) in one of the 297 soil samples analyzed."

**NMED Comment:** Although total chromium concentrations in the confirmation samples did not exceed the respective screening level of 96.6 mg/kg, hexavalent chromium may remain and its concentration may potentially exceed the respective screening level of 3.05 mg/kg based on the observed levels of total chromium in the stockpile sample (i.e., 1,280 mg/kg) and in the confirmation samples ranging from 4.4 mg/kg to 15.9 mg/kg. Note that the total chromium concentrations in all of the confirmation soil samples collected in 2022 exceeded the SSL of hexavalent chromium. Therefore, it is necessary to assess the presence or absence of hexavalent chromium in the confirmation soil samples. Include hexavalent chromium analysis for all future confirmation soil sampling. Acknowledge this provision in the response letter.



**6. Section 3.1.1, Stockpile Soil Sampling Results, lines 20-22, page 3-3**

**Permittee Statement:** "The manner in which the excavation and processing is executed and stockpiles are built and sampled prevents correlation of a specific stockpile exceedance to a specific grid location."

**NMED Comment:** NMED understands that a specific stockpile exceedance cannot be correlated with a specific grid location. However, Comment 2 in the NMED's April 3, 2023 Approval with Modifications must still be addressed. One way to address the comment is to assume that all stockpile soils where the concentrations of the contaminants exceeded the respective SSLs originated from the grids adjacent to the HWMU boundary. Based on this assumption, the soil contamination observed in the stockpile soil samples may have spread beyond the HWMU boundary, even though the confirmation sampling results within the grids indicate that the contamination has been removed. Propose to submit a work plan to investigate potential surface soil contamination outside the HWMU boundary upon completion of the removal activities in the revised Report.

**7. Section 3.2.1.6, Risk Refinement, lines 9-12, page 3-6**

**Permittee Statement:** "A target organ/system assessment was completed on each sample to determine if the cumulative hazard index for a sample exceeded 1.0. None of the samples had a target organ or system hazard index that exceeded 1."

**NMED Comment:** Appendix B, *Cumulative Risk Tables*, failed to include the table(s) that present the target organ/system assessment, and the text of the Report did not provide any explanation regarding the assessment. Demonstrate that the samples with a cumulative hazard index exceeding one (1) do not pose any risk in the revised Report.

**8. Section 3.2.1.7, Evaluation of Lead Concentrations, lines 32-35, page 3-6**

**Permittee Statement:** "Based on the screening comparison, one lead concentration exceeded site-specific background or the NMED residential SSL; therefore, the IEUBK model was run and the results indicated that the concentration would result in an unacceptable level of blood lead in children."

**NMED Comment:** Lead is not identified as a chemical in exceedance in Table 3-1. Identify the soil sample for which an unacceptable concentration of lead was detected and provide a reference to the table(s) which presents those analytical results in the revised Report. Revise all section(s) and tables of the Report, where applicable.

**9. Section 3.2.1.8, Summary of Human Health Risk Screening, lines 39-41, page 3-6**

**Permittee Statement:** "Table 3-2 identifies the samples that exceeded the target cancer risk and target hazard quotient values during the reporting period."

**NMED Comment:** Table 3-2, *Summary of Risk Screening Exceedances* lists seven sample locations (i.e., SKPL 2473, 2474, 2499, 2574, 2645, 2649, and 2724). However, Section 3.2.1.6 states that "[t]here were five stockpile samples (2605, 2675, 2681, 2689, and 2720) and one grid sample (E14) that had no individual exceedances of a single analyte, however the cumulative hazard exceeded 1.0." Provide a clarification for why these five stockpile samples and one grid sample are not listed in Table 3-2; otherwise, include all of these soil samples where cumulative hazard exceeded one (1) in Table 3-2 of the revised Report (see also Comment 7). Unless the samples with cumulative hazard that exceeds one (1) are demonstrated to be safe, these five stockpiles must not be used as backfill material and the grid (i.e., E14) must be further excavated to remove potential risk. Revise the Report accordingly.

**10. Section 4, Summary, lines 17-19, page 4-1**

**Permittee Statement:** "Stockpiles that exceeded screening criteria and risk screening were segregated for later disposal at a licensed, off-site landfill."

**NMED Comment:** Although the segregated stockpiles were transported offsite for disposal, the stockpiles generated in 2022 appear to remain in the stockpile storage area. Provide a separate figure that depicts the locations of the remaining stockpiles that will be used as backfill material, as well as those that are segregated for later disposal, and include the respective identification numbers (e.g., SKPL 2473) in the revised Report.

The Permittee must submit a revised Report that addresses all comments contained in this letter. Two hard copies and two copies of the electronic version of the revised Report must be submitted to the NMED. The Permittee must also include a redline-strikeout version in electronic format showing where all revisions to the Report have been made. The revised Report must be accompanied with a response letter that details where all revisions have been made to the Report, cross-referencing NMED's numbered comments. The revised Report must be submitted to NMED no later than **December 22, 2023**. In addition, the Permittee must submit the 2023 HWMU Progress Status Report that addresses the comments included in this letter, where applicable, no later than **June 30, 2024**.

Mr. Cushman  
October 19, 2023  
Page 6

Should you have any questions, please contact Michiya Suzuki of my staff at (505) 690-6930.

Sincerely,

**Ricardo Maestas**

Digitally signed by Ricardo  
Maestas  
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Ricardo Maestas  
Acting Chief  
Hazardous Waste Bureau

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