



MICHELLE LUJAN GRISHAM  
GOVERNOR



**ENTERED**  
JAMES C. KENNEY  
CABINET SECRETARY

**Certified Mail - Return Receipt Requested**

February 6, 2023

Colonel Jason F. Vattioni  
Base Commander  
377 ABW/CC  
2000 Wyoming Blvd SE  
Kirtland AFB, NM 87117

Ms. Melissa Clark  
Civil Engineer Office  
377 MSG/CEIE  
2050 Wyoming Blvd SE  
Kirtland AFB, NM 87117

**RE: DISAPPROVAL  
COMPLETION REPORT FOR DATA GAP MONITORING WELLS KAFB-106240, KAFB-106241, KAFB-106242, KAFB-106243, KAFB-106244, KAFB-106245, and KAFB-106246  
BULK FUELS FACILITY SOLID WASTE MANAGEMENT UNITS ST-106 AND SS-111  
KIRTLAND AIR FORCE BASE, NEW MEXICO  
EPA ID# NM6213820974  
HWB-KAFB-20-007**

Dear Colonel Vattioni and Ms. Clark:

The New Mexico Environment Department (NMED) received the U.S. Air Force (Permittee) Kirtland Air Force Base (Facility) *Completion Report for Data Gap Monitoring Wells KAFB-106240, KAFB-106241, KAFB-106242, KAFB-106243, KAFB-106244, KAFB-106245, AND KAFB-106246*, dated September 2020 and received October 1, 2020. NMED has reviewed the Report and hereby issues this Disapproval.

Upon examination of the Report, NMED discovered issues with missing records and incorrect survey data presentation. Document quality issues which should have been corrected through a basic document review process before submittal to NMED were present throughout the Report. On September 2, 2020, NMED provided the Permittee a letter titled *Reporting Requirements for All Document Submittals* (Reporting Requirements Letter) at the Permittee's request in order to clarify requirements for all documents submitted to NMED by the Permittee. That letter states, "[i]n general, many KAFB submittals to NMED consistently contain a substantial number of errors that should be identified during quality assurance and quality control reviews prior to submittal. In discussions with KAFB staff, NMED staff was assured that steps are being taken to review and enhance document quality control and address these recurring issues to assist NMED in expediting document reviews and to assist the public in better understanding the documents that are submitted by the Permittee." Specific comment numbers from the Reporting Requirements Letter have been referenced in the attached comments. The Permittee is advised to refer to the Reporting Requirements Letter when preparing the revised Report and all other document submittals to NMED.

SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE

Hazardous Waste Bureau - 2905 Rodeo Park Drive East, Building 1, Santa Fe, New Mexico  
Telephone (505) 476-6000 - [www.env.nm.gov](http://www.env.nm.gov)

KAFB5264



## GENERAL COMMENT

### 1. Appendices pages are not numbered or organized

**NMED Comment:** Appendices F, Soil Disposal, and G, Liquid Disposal, are poorly organized and the pages are not numbered. Correlating the information in Table 3-1 (Investigation-Derived Waste Quantities) with the information in these appendices is difficult and time consuming. Omissions were noted; waste profiles and disposal manifests for some wastes are not present. It is not apparent that all KAFB C&D Landfill acceptance letters are present, and it appears that the laboratory results for all liquid waste disposed of through the groundwater treatment system (GTWS) may not be included. Presentation of the information in these appendices must be logically organized in a readily apparent manner, with separate sections, and all pages must be numbered. Specific comments are listed below. Refer to the Reporting Requirements Letter Comments 2 and 9.

## SPECIFIC COMMENTS

### 2. Section 2.1, Monitoring Well Installation, page 2-1

**Permittee Statement:** “During the construction of the contingency well in KAFB-106240, it was found that bentonite grout had entered the well through a breach in the well casing. The cause of the breach was not definitively identified. The contingency well in KAFB-106240 was plugged and abandoned in September 2018 and replaced by KAFB-106246.”

**NMED Comment:** Additional information regarding the depth of the breach and the plugging and abandonment procedure must be included in the revised Report. Refer to the Reporting Requirements Letter’s General Reporting Requirements, Section 3.7.4.

### 3. Section 2.2, Monitoring Well Development, page 2-2, and Section 3.0, Investigation-Derived Waste Management, page 3-1

**Permittee Statement:** “Development water was contained in 55-gallon steel drums with water-tight lids and transferred to the EA investigation derived waste (IDW) yard located on Kirtland AFB for waste characterization.”

and “[t]he IDW produced during the GWM well installation consisted of soil cuttings, drilling liquids, decontamination water, and well development water. Solid and liquid IDW was segregated and placed in roll-off bins or 55-gallon drums pending characterization.”

**NMED Comment:** According to information provided to NMED in both Appendix B of the Quarterly Report – July-September 2018, dated December 2018, and Appendix B-1 of the Quarterly Report – October - December 2018 and Annual Report for 2018, dated March 2019, development water was either entirely stored, or also stored, in 65-gallon polyethylene drums with water-tight lids. This contradicts the statement in Section 2.2 of this Report. The Permittee must accurately describe the actual IDW collection, storage, and disposal procedures used in the field in the revised Report. Refer to the Reporting Requirements Letter - General Reporting Requirements, Section 3.6.

**4. Section 3.0, Investigation-Derived Waste Management, page 3-1**

**Permittee Statement:** "Quantities of IDW are listed in Table 3-1."

**NMED Comment:** Table 3-1 (Investigation-Derived Waste Quantities) was not complete in the hard copy of the Report and omitted from the electronic copy of the Report. A complete copy of the table as replacement pages and electronic files were obtained from the Permittee. The Permittee must review documents for accuracy and completeness prior to submittal to NMED for review. Refer to the Reporting Requirements Letter Comments 2 and 8k.

**5. Section 3.3, Decontamination Wastes, page 3-1**

**Permittee Statement:** "Drilling equipment was decontaminated prior to the drilling and construction of each nested well. The equipment was decontaminated in a mobile decontamination pad using a high-pressure steam cleaner. The wastewater generated by the equipment decontamination process was placed in roll-off bins located at the laydown yard."

**NMED Comment:** This statement is not accurate. Per eyewitness account, the wastewater generated by the equipment decontamination process was mainly kept in a large fractionation (frac) tank. The wastewater was periodically emptied from the frac tank, sampled, and disposed of accordingly. The Permittee must accurately describe the collection, storage, transfer, sampling, and disposal of the both the liquid and solid portion of the decontamination IDW and provide relevant waste profiles and/or waste manifests in the revised Report. Refer to the Reporting Requirements Letter's General Reporting Requirements Sections 3.6 and 3.14.1.

**6. Section 3.3, Decontamination Wastes, page 3-2**

**Permittee Statement:** "The remaining non-hazardous high solids, water, mud, and sand were transported by Advanced Chemical Transport, Inc. to the Twin Enviro Services Penrose, Colorado disposal facility."

**NMED Comment:** Waste profiles and manifests for the disposal of IDW at this facility are not included in either Appendix F (solids) or Appendix G (liquid). The Permittee must provide the waste profiles and manifest(s) for this IDW in the revised Report. Refer to the Reporting Requirements Letter's General Reporting Requirements Section 3.14.1.

**7. Table 2-2 (Survey Coordinates and Elevations for Data Gap Monitoring Wells)**

**NMED Comment:** Numerous errors were found on Table 2-2. For example, according to information provided by the surveyor in Appendix E (Well Survey Information), the Northing and Easting coordinates for the shallow and deep wells KAFB-106241, KAFB-106242, KAFB-106243, and KAFB-106245 are transposed, assigning incorrect information to the wells. Another example is that the Easting coordinate for the deep well in KAFB-106245 is incorrect when compared to the information provided by the surveyor in Appendix E (Well Survey Information). These errors must be corrected on Table 2-2 in the revised Report. Refer to the Reporting Requirements Letter Comments 2 and 8k.

**8. Appendix F (Investigation-Derived Soil Waste Disposal)**

**NMED Comment:** It is difficult to locate information in this appendix; there is no table of contents, pages are not numbered, and it is not apparent if all KAFB C&D landfill acceptance letters are included. The appendix contains no waste profiles or manifests for solids disposed at the Twin Enviro Services Penrose, Colorado disposal facility, as indicated on Table 3-1 (Investigation-Derived Waste Quantities). The Permittee must provide all waste profiles and manifests showing the final disposition of all waste generated at the site and provide required IDW information in Appendix F of the revised Report in an organized manner. Refer to the Reporting Requirements Letter Comment 9 and General Reporting Requirements Sections 3.6 and 3.14.1.

**9. Appendix G (Investigation-Derived Liquid Waste Disposal)**

**NMED Comment:** Appendix G contains only laboratory reports for analyses of liquid IDW; it does not contain information on waste disposal. It is extremely difficult to correlate information in Table 3-1 (Investigation-Derived Waste Quantities) with Appendix G. It appears that the laboratory results for all liquid waste disposed of through the groundwater treatment system (GTWS) may not be included. Waste profiles and manifests for any liquids that may have been sent to Twin Enviro are not included in Appendix G. The Permittee must provide all waste profiles and manifests showing the final disposition of all waste generated at the site and provide required IDW information in Appendix G of the revised Report in an organized manner. Refer to the Reporting Requirements Letter Comment 9 and General Reporting Requirements Sections 3.6 and 3.14.1.

The Permittee must submit a revised Report that corrects the deficiencies noted in this Disapproval. The revised Report must be accompanied by a response letter (also included as a separate appendix) that details where the comments were addressed and cross-references NMED's numbered comments. The Permittee must submit a complete electronic redline-strikeout version of the revised Report that shows where all changes were made to the Report. The revised Report must be submitted no later than **June 15, 2023**.

If you have any questions regarding this letter, please contact me at (505) 629-6494.

Sincerely,

**Rick Shean**

Digitally signed by Rick  
Shean  
Date: 2023.02.06  
08:11:51 -07'00'

Rick Shean,  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
B. Wear, NMED HWB  
L. Andress, NMED HWB  
L. King, EPA Region 6 (6LCRRC)  
S. Kottkamp, KAFB  
R. Wortman, KAFB

Col. Vattioni and Ms. Clark  
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K. Bicknell, ABCWUA  
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File: KAFB 2023 and Reading