



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

State of New Mexico 
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6313
Phone (505) 476-6000 Fax (505) 476-6030
www.env.nm.gov



BUTCH TONGATE
Cabinet Secretary

J. C. BORREGO
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

December 5, 2017

Colonel Stewart A. Hammons
Commander, 27th Special Operations Wing
110 E. Alison Avenue, Suite 1098
Cannon Air Force Base
New Mexico 88103

**RE: APPROVAL WITH MODIFICATIONS
2016 BIENNIAL GROUNDWATER MONITORING AND ANNUAL
LANDFILL INSPECTION REPORT
CANNON AIR FORCE BASE, NEW MEXICO
EPA ID #NM7572124454
HWB-CAFB-17-005**

Dear Col. Hammons:

The New Mexico Environment Department (NMED) received the Cannon Air Force Base (Permittee) *2016 Biennial Groundwater Monitoring and Annual Landfill Inspection Report* (Report), dated March 7, 2017 and received March 13, 2017. NMED has reviewed the Report and hereby issues this Approval with the following modifications.

MODIFICATIONS

1. Section 3.2.5, Investigation-Derived Waste, Page 3-5

Permittee Statement: "Monitoring well analytical results from the May 2016 sampling event were compared to the Toxicity Characteristic Leaching Procedure (TCLP) regulatory limits (40 Code of Federal Regulations [CFR] §261.24) and the "20 Times Rule" (40 CFR §261.24) was compared to the analytical results as specified in the approved work plan."

NMED Comment: NMED understands that use of the “20 times Rule” was approved in the June 2014 *Final Work Plan Addendum for Landfills and Institutional Control Inspection Sites*. However, it must be noted that use of the “20 Times Rule” for evaluation of the RCRA toxicity characteristic for hazardous waste only applies to evaluation of analytical results for solids. Comparison of analytical results pertaining to investigation derived waste purge water generated during sampling activities must be screened directly with the established 40 CFR 261.24 Table 1, Maximum Concentrations of Contaminants for Toxicity Characteristic screening levels. Adjusting the established screening levels by a factor of 20 is not appropriate for evaluation of potentially hazardous waste for the toxicity characteristic. NMED’s review of the groundwater sample analysis concentration information provided in the Report indicates chemical of concern (COC) concentrations are below the 40 CFR 261.24 screening levels for the toxicity characteristic where applicable. However, remove the column titled “Twenty Times TCLP Regulatory Limit” from Table 3-3, TCLP Comparison of Analytical Results-May 2016, provide the appropriate replacement pages for the table, and revise Report Section 3.2.5, Investigation Derived Waste, accordingly.

2. Section 3.3, Analytical Results, Hexavalent Chromium Screening Level, Page 3-6

Permittee Statement: “No MCL [Maximum Contaminant Level] or NMGWQS [New Mexico Groundwater Quality Standard] has been established for hexavalent chromium. Hexavalent chromium exceeded its New Mexico Tap Water screening level of 2.52E-01 micrograms per liter ($\mu\text{g/L}$) in all wells sampled.”

NMED Comment: Hexavalent chromium concentrations detected in facility monitoring well groundwater samples must be evaluated with the established NMGWQS for chromium (50 $\mu\text{g/L}$). NMED’s review of the hexavalent chromium concentration data for the sampled monitoring wells indicates the COC does not exceed the NMGWQS, but does exceed the 2017 New Mexico Tap Water cancer screening level of 5.01E-01 micrograms per liter. Revise all affected table information and Report conclusions accordingly and provide the appropriate replacement pages.

3. Appendix C, Groundwater Sample Field Sheets, Groundwater Level Gauging Field Data

NMED Comment: Provide the field notes which document groundwater level gauging measurements at all facility groundwater monitoring wells collected in May 2015 and April 2016 in Appendix C or as an additional appendix to the Report. The field notes must match the documented groundwater level measurements presented in Table 3-1, Water Levels-May 2015 and April 2016. All field notes which support the documented groundwater monitoring event field measurements and sampling activities must be included in the Biennial Groundwater Monitoring and Annual Landfill Inspection Report submittals.

4. Appendix D, Analytical Data Reports

NMED Comment: The following issues were identified during NMED's review of information provided in Appendix D, Section D.1, Summary of Analytical Results, Dump Table, Summary of Analytical Results (table) and must be addressed as follows:

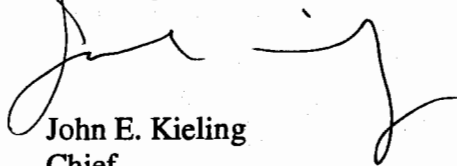
- a. As defined by the table note, shading of various arsenic groundwater concentration results indicate an exceedance of the NMGWQS and/or the United States Environmental Protection Agency (USEPA) Maximum Contaminant Level (MCL). NMED's review of the data indicates arsenic concentrations have not exceeded the NMGWQS or the USEPA MCL. Clarify the information provided in the table or correct the discrepancy and revise all affected sections of the Report. Provide replacement pages for any revisions.
- b. Table Note No. 1 indicates 2009 USEPA MCLs were utilized for screening groundwater sample analysis result data where a NMGWQS was not established for a chemical of concern. At the time of the Report submittal, the May 2016 USEPA MCLs were the current screening levels and should have been applied during groundwater concentration data evaluation. Although the conclusions of the Report do not appear to have been affected by the use of the 2009 MCLs, the table and Table 3-4; Summary of Analytical Results-May 2016 must be revised to reflect use of the May 2016 USEPA MCLs. Screening levels utilized for evaluation of COC concentration data must be the most current federal and state regulatory cleanup standards. Review and revise the table accordingly. Provide replacement pages for any revisions.
- c. The NMED tap water screening level for 1,4-dichlorobenzene has been cited incorrectly (4.00 µg/L). The listed July 2015 NMED Risk Assessment Guidance for Site Investigations and Remediation tap water screening level is 4.81 µg/L. Revise the table to include the correct screening level. Provide replacement pages for any revisions.
- d. A NMED tap water screening level for 2,2-dichloropropane has been listed in the table (4.81 µg/L). However, NMED has not currently established a tap water screening level for 2,2-dichloropropane. Clarify the source of the cited tap water screening level for the COC or revise the table accordingly. Provide replacement pages for any revisions.
- e. The NMED tap water screening level for trivalent chromium (1.36E+04 µg/L) has been cited as the tap water screening level for total chromium. Use of the trivalent chromium tap water screening level is not appropriate unless speciation analysis has been conducted for trivalent chromium in the collected groundwater samples. The revised table must cite NMED's 2017 total chromium tap water cancer screening level (5.70 µg/L). Provide appropriate replacement pages for any table revisions.

Col. Hammons
December 5, 2017
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A response letter that cross-references where NMED's modifications were addressed, as well as the necessary replacement page and the corresponding electronic redline-strikeout pages indicating where the changes were made, must be provided to NMED by **February 28, 2018**.

If you have any questions regarding this letter, please contact Gabriel Acevedo at (505) 476-6043.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED
B. Wear, NMED HWB
G. Acevedo, NMED HWB
L. King, EPA Region 6 (6MM-RC)
A. Lafuente, CAFB
R. Lancaster, CAFB
S. Kottkamp, CAFB
S. Palmer, CAFB
D. Gentry, CAFB

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