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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

May 5, 2017

Colonel Douglas W. Gilpin
Commander, 27th Special Operations
Mission Support Group
110 E. Alison Avenue, Suite 1098
Cannon Air Force Base

**RE: DISAPPROVAL
RCRA FACILITY INVESTIGATION AT SS501
CANNON AIR FORCE BASE, NEW MEXICO
EPA ID #NM7572124454
HWB-CAFB-16-011**

Dear Colonel Gilpin:

The New Mexico Environment Department (NMED) has received the Cannon Air Force Base (Permittee) *RCRA Facility Investigation at SS501* (Report), dated November 9, 2016. NMED has completed review of the Report and hereby issues this Disapproval. The Permittee must address the following comments.

COMMENTS

1. Section 3.5.4, Comparison of Site Metals Concentrations to Background Levels, Pg. 3-4

Permittee's Statement: "Step 2: Compare the range of detected site concentrations to the range of detected background concentrations. If the site range was within the range of detected background concentrations, then the site concentrations were considered to be background and no additional action was required."

NMED Comment: The NMED Risk Assessment Guidance for Site Investigations and Remediation (RA Guidance) does not allow for comparison of site data to the range of background. As indicated in the RA Guidance, if the maximum site concentration is greater than the background reference value, a two-sample hypothesis test must be used to compare the data distributions. Under certain circumstances, comparison of site data to the background range may be applicable. NMED will allow the data comparison to the background dataset range for the identification of chemicals of potential concern (COPCs), if nature and extent has been defined and sufficient samples are not available to conduct a statistical analysis. The comparison must be coupled with multiple lines of evidence to include the number of detections versus the total number of samples, history of the site, and sample location. If there is evidence that indicates the chemical is present due to site activities, then it would be possible that the constituent could be present as low level detections (i.e., on the upper end of the background range). In these cases, the constituent must be carried forward as a COPC and retained in the risk assessment. The Permittee has compared site arsenic data to the revised background reference value followed by a statistical evaluation to eliminate arsenic from further evaluation in the risk assessment. Since no COPCs (arsenic, chromium, and lead) were eliminated using the Permittee's "Step 2" process, and a statistical comparison of site data to background was conducted, the site attribution analyses is acceptable. However, remove the "Step 2" statement from the Report to better reflect NMEDs guidance for COPC retention and evaluation.

2. Section 5.4.5, Evaluation of Petroleum Hydrocarbons, Pg. 5-4

NMED Comment: Only a qualitative discussion and comparison of total petroleum hydrocarbons detections at the site to the applicable NMED TPH soil screening levels (SSLs) is necessary. Remove Table E-10, Human Health Quantitative TPH Screening Evaluation Results for SS501 and the discussion of the quantitative risk screening results from the Report.

3. Appendix E, Table E-4, Comparison of Maximum Detected Surface Soil Metal Concentrations at SS501 to Background Data, Pg. 1 of 1

NMED Comment: A discrepancy was noted in Table E-4 for the Maximum Soil Concentration and Soil Background column headers. Change the column headers to reflect surface soil concentrations as indicated by the Table E-4 title.

4. Appendix E, Use of the 2-Methylnaphthalene Screening Level

NMED Comment: The Permittee has calculated an SSL for 2-methylnaphthalene based on the review of the risk assessment data tables; however, May 2016 Environmental Protection Agency Regional Screening Levels (RSL) are available for 2-methylnaphthalene. The applicable residential RSL is 240 milligrams per kilogram (mg/kg) and the industrial RSL is 3,000 mg/kg. The Permittee must use the May 2016 RSL for 2-methylnaphthalene as the SSL. Revise all relevant Appendix E risk assessment tables to reflect the use of the RSL for 2-methylnaphthalene.

5. Appendix E, Human Health Risk Assessment, Total Chromium Soil Screening Level

NMED Comment: The total chromium data were compared to the trivalent chromium screening level. The trivalent chromium SSLs may only be utilized when speciation of chromium has been conducted. Therefore, site concentrations of chromium must be compared to the NMED SSLs for total chromium. Although the use of the total chromium SSLs will not change the conclusions of the Report, the Permittee must revise all report and risk assessment tables to reflect screening of chromium concentrations against the total chromium SSLs.

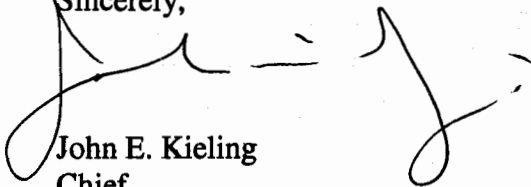
6. Appendix E, Cumulative Human Health Risk Assessment

NMED Comment: Although the calculated risk for industrial/occupational and construction worker receptors were below target risk and hazard indices, the cumulative risk for the residential receptor was slightly above the target risk level of 1E-05. However, comparison of the maximum detection of arsenic to the updated March 2017 NMED SSLs would result in an acceptable level of human health risk for arsenic at the site. The SSLs applied for arsenic (July 2015 NMED SSLs) in the Report are based on outdated toxicity information. The March 2017 NMED SSLs for arsenic incorporate a relative bioavailability factor resulting in arsenic SSLs for the residential, industrial/occupational, and construction worker receptors of 7.07 milligrams per kilogram (mg/kg), 35.9 mg/kg, and 216 mg/kg, respectively. As an additional line of evidence to support the Report conclusions, the Permittee may note that the use of the updated arsenic SSLs would result in an acceptable level of human health risk.

The Permittee must submit a revised Report that address all comments contained in this Disapproval. In addition, the Permittee must include a response letter that cross-references where NMED's numbered comments were addressed. The Permittee must also submit an electronic redline-strikeout version of the revised Report showing where all changes have been made to the Report. The revised Report must be submitted on or before **September 29, 2017**.

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

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

Colonel Gilpin

May 5, 2017

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