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**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

August 14, 2015

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

**RE: DISAPPROVAL  
2014 BIENNIAL GROUNDWATER MONITORING AND ANNUAL LANDFILL  
INSPECTION REPORT, CANNON AIR FORCE BASE, MAY 2015  
EPA ID# NM7572124454  
HWB-CAFB-15-002**

Dear Col. Gilpin:

The New Mexico Environment Department (NMED) received the *2014 Biennial Groundwater Monitoring and Annual Landfill Inspection Report, Cannon Air Force Base* (Report), dated May 26, 2015. NMED has reviewed the Report and hereby issues this Disapproval with the following comments.

**Comments:**

**1. Section 4, Table 4-1 Water Levels-June and July 2014**

**NMED'S Comment:** A review of the historical top of casing (TOC) elevation data and the September 2014 TOC data indicates significant differences in elevation for many of the wells beyond those altered during well repairs conducted during the biennial period. For instance, while the historical TOC data indicate a 1.1 foot difference in elevation between MW-B and MW-C, the September 2014 TOC data indicate a 2.1 foot difference. Neither of these wells was altered during well maintenance activities following the June 2014 measurements. Provide a detailed description of both survey events and conduct a survey spot checks to determine which survey is accurate. Review all past data to determine which data is reliable.

## 2. Section 4.1, Water Level Measurements, Paragraph Six

**Permittee's Statement:** "The potentiometric surface for June is presented in Figure 4-1. Groundwater elevations for Figure 4-1 were calculated using the June water level data and monitoring well TOC elevations from the 2012 Biennial Groundwater report (Bhate 2013)."

**NMED's Comment:** Review of Figure 4-1 indicates the reported groundwater elevations in the figure are from the data collected during the July 2014 gauging event utilizing September 2014 TOC elevation data. Resolve this discrepancy. Generate a potentiometric surface map for each reported groundwater elevation data set using accurate survey data for the biennial reporting period in order to aid in the development of a conceptual model of groundwater elevation trends.

## 3. Section 4., Analytical Results Figure

**NMED's Comment:** Provide a figure which depicts concentrations of chemicals of concern (COCs) that are greater than the applicable federal or State of New Mexico groundwater quality or tap water quality standards. The presentation of COCs in exceedance of applicable standards will better aid NMED in developing a conceptual site model related to concentration trends over time. Refer to the NMED's position paper *General Reporting Requirements for Routine Groundwater Monitoring at RCRA Sites* dated February 14, 2003 available on the NMED Hazardous Waste Bureau's guidance web page for reporting requirements for future submissions.

## 4. URS Response to NMED Comment No. 4

**NMED's Comment:** NMED's Comment 4 requirement for additional appendix information in the March 25, 2015 Disapproval Letter has not been fulfilled. Provide, as a separate appendix of the report or as a separate submittal, boring and well construction logs for all site monitoring wells. Also, amend Table 4-1 to include well diameter, screen length, and well depth information as separate data columns. Additionally, adjust screen interval information to read from left to right (i.e. top of screened interval to bottom of screened interval). This information must be included in all future reports with the exception of well construction and boring logs, if submitted as a separate document.

## 5. Section 4.3, Analytical Results, Hexavalent Chromium Sampling

**NMED's Comment:** Although the Permittee has demonstrated data concurrence between samples submitted for hexavalent chromium analysis for preserved and unpreserved groundwater samples collected during the July 2014 sampling event, holding time exceedances may require resampling of groundwater where these data quality exceptions occurred. Care should be taken in future events to properly meet all holding times and sample preservation criteria for proper sample analysis. It should also be noted

that although historical data does indicate the occurrence of hexavalent chromium in various site wells, it has never been detected at the frequency reported during this reporting period. This could possibly be attributed to the exceedances of hold times.

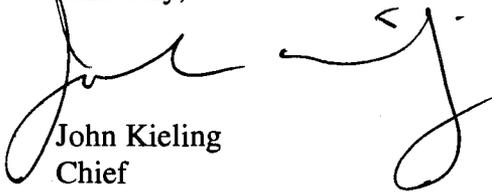
**6. URS Response to NMED Comment No. 6**

**NMED's Comment:** Based on a review of Section 4.1 of the approved *Work Plan Addendum for Landfills and Institutional Controls Inspection Sites* dated June 16, 2015, the sampling program has been downsized from the sampling of 18 monitor wells to 11 monitor wells for the coming biennial period. This includes MW-C, MW-F and MW-G which have static groundwater levels above the screened interval. In keeping with the objective of the *Facility-Wide Long Term Groundwater Monitoring Plan* dated January 2011, monitor wells MW-C, MW-F, and MW-G should be replaced. Past data from these wells are unreliable due to the fully submerged well screen interval and do not provide useful data for chemicals of concern (COCs) related to potential leaching from the associated SWMUs. Monitor wells MW-A, MW-B, MW-E and MW-H also have measured water levels above their screened interval and should also be replaced as they appear to be key up-gradient or perimeter wells which may provide additional information on site conditions should concentrations of COCs be detected during future sampling events. Replaced wells and those deemed not necessary for long term monitoring by NMED may be abandoned in accordance with the requirement of the New Mexico Office of the State Engineer (NMOSE) and NMAC §19.27.4.36 (C).

The Permittee must submit a revised Report to address all of the comments contained in this Disapproval. The revised Report must be accompanied by a response letter that details where each comment was addressed that cross-references NMED's numbered comments. The Permittee must also submit an electronic redline-strikeout version of the Report that shows where all changes were made to the report. The revised Report must be submitted no later than **October 20, 2015**.

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

Sincerely,



John Kieling  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
G. Acevedo, NMED HWB  
B. Wear, NMED HWB

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N. Dhawan, NMED HWB  
B. Chavez, CAFB  
R. Lancaster, CAFB  
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Report