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**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

May 20, 2015

Heather L. Buono, Colonel  
Commander, 27th Special Operations Mission Support Group  
27 SOMSG/CC  
110 E. Alison Avenue, Suite 1098  
Cannon AFB, NM 88103

**RE: DISAPPROVAL  
WORK PLAN RCRA FACILITY INVESTIGATION AT TWELVE SITES  
CANNON AIR FORCE BASE, NEW MEXICO  
EPA ID # NM7572124454  
HWB-CAFB-14-007**

Dear Col. Buono:

The New Mexico Environment Department (NMED) has received Cannon Air Force Base's (Permittee) *Work Plan RCRA Facility Investigation at Twelve Sites* (Work Plan), dated October 2014. NMED has reviewed the plan and hereby issues this Disapproval. The Permittee must address the following comments.

**General Comments:**

**1. Polycyclic Aromatic Hydrocarbons**

Many of the sites contain concentrations of polycyclic aromatic hydrocarbons (PAHs) in soil that are greater than the industrial and/or residential land use NMED Soil Screening Levels (SSLs). Total petroleum hydrocarbon (TPH) contamination is also present at many of these sites and as such, there is not sufficient evidence to conclude that PAH concentrations are solely related to asphalt paving. If the PAH concentrations in soils are indeed related to asphalt paving, then the Permittee may propose to develop site-specific background comparison values for PAHs in soil where sources of PAHs have not been identified. In addition, PAH concentrations must be carried forward through the risk assessment.

**Specific Comments:**

**2. Section 1.2, page 1-3**

**NMED's Comment:** Boring locations and sampling intervals must be specified in the Work Plan and approved by NMED. Locations and sampling intervals not approved by NMED are sampled at risk.

**3. Section 4.1, Site Description and Background, page 4-1**

**NMED's Comment:** Provide a description of when the tank was installed and a detailed description of the abandonment process.

**4. Section 4.2.4, RFA at Eight Sites, page 4-2**

**NMED's Comment:** It is unclear whether samples were collected from the entire five foot interval or if samples were collected every five feet. Clarify the sampling intervals and methods used during the 2013 sampling event.

**5. Section 4.2.4, RFA at Eight Sites, page 4-3**

**Permittee's Statement:** "A two-foot layer of cemented sandstone encountered at 213 feet bgs appears to be restricting vertical migration of TPH-DRO at TU504."

**NMED's Comment:** It is unclear whether this geologic feature is continuous in all directions or if there are fractures or variation in this feature that would allow migration to groundwater in the future. Describe this feature and any pertinent geologic studies in order to show if the feature would likely prevent or allow migration of contaminants to groundwater or remove statements regarding this feature from the Work Plan.

**6. Section 4.3, Sampling Objectives, p. 4-4**

**Permittee's Statement:** "The results of the sampling completed at TU504 will be utilized in a vapor intrusion model (Johnson-Ettinger) to determine if a vapor intrusion risk is present..."

**NMED's Comment:** NMED's current (2014) *Risk Assessment Guidance for Site Investigations and Remediation* recommends the use of Vapor Intrusion Screening Levels (VISLs), lines of evidence, and additional data collection. Review the most current NMED guidance and revise the statement as necessary.

**7. Section 4.3, Sampling Objectives, page 4-4**

**Permittee's Statement:** "Vadose zone modeling (VLEACH) will be completed using the current data to determine if there is a potential for groundwater to be impacted at the site in the future."

**NMED's Comment:** As there is contamination in subsurface soil and migration in the vadose zone has occurred, a soil-to-groundwater investigation must be completed, as described in NMED's *Risk Assessment Guidance for Site Investigations and Remediation (2014)*.

**8. Section 4.4, Sampling Locations, Frequencies and Analysis, page 4-4**

**Permittee's Statement:** "All three soil gas samples will be collected at 5 feet bgs and analyzed for VOCs by US EPA Method TO-15 and TPH-GRO by US EPA Method TO-3."

**NMED's Comment:** Active soil gas samples must be collected at 5 and 10 feet bgs. Describe the vapor sampling procedure within the section or state where in the Work Plan the vapor sampling procedure is provided.

**9. Section 4, Table 4-1d, Summary of RFA Analytical Data Screening Results, p. 45**

**NMED's Comment:** Table 4-1d is missing analytical results for samples CA504-SB12 through CA504-SB16. Revise the table to include all data.

**10. Section 4, Figure 4-1, Site Map with Previous Investigation Locations at TU504**

**NMED's Comment:** The figure depicts all previous sample locations, but concentrations are not shown. Add figures that include detected concentrations of total petroleum hydrocarbons diesel range organics (TPH-DRO) and depths for samples collected during the RCRA Facility Assessment (RFA).

**11. Section 5, Table 5-1b, Summary of Previous Analytical Data Screening Results, Flightline Generator USTs Site (TU505), page 6**

**NMED's Comment:** Table 5-1b is missing data for sample CAFB-FAC3060-07. Revise the table to include all data.

**12. Section 5, Figure 5-1, Site Map with Previous Investigation Locations at TU505**

**NMED's Comment:** There are two locations identified as CAFB-FAC3060-02 on Figure 5-1, and none identified as CAFB-FAC3060-01. Correct the figure as necessary.

**13. Section 11.2.1.1, Vapor Monitoring Point, page 11-3, and Section 11.2.2, Sampling Port Installation, page 11-4**

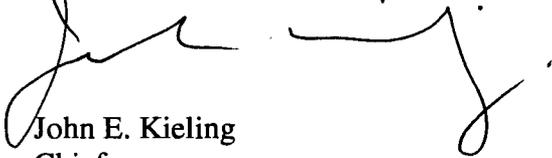
**NMED's Comment:** The sections that describe installation and sampling of vapor monitoring points detail a shallow sub-slab monitoring point. Provide a detailed description for the 5 foot bgs and 10 foot bgs installation and sampling protocol.

Col. Buono  
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A revised Work Plan that corrects all of the deficiencies noted in this Disapproval must be submitted no later than **July 17, 2015**. The revised Work Plan must be accompanied by a response letter that details where the Disapproval comments were addressed that cross-references NMED's numbered comments. The Permittee must also submit an electronic redline-strikeout version of the Work Plan that shows where all changes were made to the work plan.

If you have any questions regarding this letter, please contact Naomi Davidson at (505) 476-6022.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: N. Davidson, NMED HWB  
N. Dhawan, NMED HWB  
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File: CAFB 2015 and Reading, RFI WP for 12 Sites at CAFB