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Mr. David Cobrain  
New Mexico Environment Department (NMED)  
Hazardous Waste Bureau  
2905 Rodeo Park Dr. E/Bldg 1  
Santa Fe, NM 87505

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NMED  
Hazardous Waste Bureau

RE: Technical Review of the *RCRA Facility Investigation at SS507*, Cannon Air Force Base (CAFB), dated December 2016.

Dear Mr. Cobrain:

Attached, please find technical review comments on the risk assessments conducted as part of CAFB's, *RCRA Facility Investigation at SS507*, dated December 2016.

If you have any questions, please contact me at (801) 451-2864 or via email at [pwalton@aqsnnet.com](mailto:pwalton@aqsnnet.com).

Thank you,

Paige Walton  
AQS Senior Scientist and Program Manager

cc: Gabriel Acevedo, NMED (electronic)  
Joel Workman, AQS (electronic)

## **Technical Review of the RCRA Facility Investigation at SS507, Cannon Air Force Base (CAFB), dated December 2016**

### **Comments**

1. **General**: It is noted that the 2015 NMED screening levels were used in the risk assessment. Since that time, there have been significant changes to toxicity data, especially for polycyclic aromatic hydrocarbons (PAHs). Given that PAHs drive risk at this site, it is recommended that the risk assessments be updated using the 2017 screening levels. As an example, the residential screening level for benzo(a)pyrene has been changed from 1.53E-01 to 1.12. Although a soil removal action has been proposed, use of the 2017 data may alter the conclusions of the risk assessments and the possibly allow for smaller areas requiring remediation/removal.
2. **General**: Section 3.4 states that a preliminary human health screening evaluation was conducted by comparing chemical concentrations found at the site with NMED Vapor Intrusion Screening Levels (VISLs) for residential exposure. Section 3.4.1 states that inhalation of vapors was not considered to represent a complete exposure pathway because the primary contaminants (PAHs) are not considered volatile. However, several of the PAHs detected in site soils are considered volatile. The vapor intrusion pathway is only considered incomplete if 100% of the volatile data are non-detect. Since the volatiles were detected, the pathway is potentially complete, and a qualitative discussion is required (per Section 2.5.2 of the NMED Soil Screening Guidance, SSG). Revise the report to include a discussion of the vapor intrusion pathway. If any of the criteria listed in Section 2.5.2.2 of the NMED SSG are not met, then a qualitative assessment (in accordance with Section 2.5.2.3 of the NMED SSG) must be provided.
3. **Appendix E**. A refined risk assessment was conducted using the 95% upper confidence level of the mean (95UCL) as the exposure point concentration (EPC). However, the results of the ProUCL outputs for determining the 95UCL and the 95UCL listed in Table E-9 through E-11 do not match. For example, the 95UCL for 2-methylnaphthalene on Table E-9 is listed as 8.11E-03 mg/kg; this value is not consistent with the recommended UCLs are determined for the 0-10 foot interval. Include a discussion of the rationale used to select which 95UCL was used as the EPC. In addition, review the tables to ensure the results of ProUCL match the EPCs in the tables.
4. **Appendix F**. A refined risk assessment was conducted using the 95UCL as the EPC. It is not clear what rationale was used to select which output should be used for the EPC. For example, the 95UCL for benzo(a)pyrene as listed on Table F-3 was chosen as the 95% KM (Chebyshev) UCL, although ProUCL recommended the use of the 97.5% KM (Chebyshev) UCL. Include a discussion of the rationale used to select which 95UCL was used as the EPC.