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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

December 15, 2017

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

**RE: DISAPPROVAL
RCRA FACILITY INVESTIGATION AT TU505, DA508, SD022, and TA129
CANNON AIR FORCE BASE, NEW MEXICO
EPA ID #NM7572124454
HWB-CAFB-16-012**

Dear Colonel Hammons:

The New Mexico Environment Department (NMED) has received the Cannon Air Force Base (Permittee) *RCRA Facility Investigation [RFI] at TU505, DA508, SD022, and TA129* (Report), dated November 10, 2016. NMED has completed review of the Report and hereby issues this Disapproval. The Permittee must address the following comments.

GENERAL COMMENTS

1. Use of Trivalent Chromium Screening Levels

NMED Comment: The RFI does not clearly address how chromium speciation supporting the use of trivalent chromium SSLs in the risk-based screening level analysis is handled. The risk screen evaluation performed for DA508 (Surface Disposal Area), SD022 (Storm Water Drainage Pond), and TA129 (Waste Oil Storage Facility) evaluate total chromium concentrations reported in collected soil samples as trivalent chromium. Use of trivalent chromium SSLs for evaluation of total chromium concentrations must always be supported

by documentation (i.e., chemical analyses) to justify the use of species-specific chromium SSLs. NMED's Risk Assessment Guidance for Site Investigations and Remediation (RA Guidance) Section 2.1, Human Health Basis and Section 5.1, Use of Chromium Screening Levels, provide the recommended approach for addressing chromium in the screening level risk analysis. In the absence of information supporting use of trivalent chromium SSLs (i.e., speciation analysis), chromium concentrations must be compared to NMED's total chromium SSLs for all site receptors.

2. Use of Calculated Risk Based Screening Levels

NMED Comment: Issues associated with Permittee-calculated risk based screening levels must be addressed in the Report as follows:

- a. United States Environmental Protection Agency (EPA) Regional Screening Levels (RSLs) were utilized in the risk screen evaluation for polynuclear aromatic hydrocarbons (PAH's) for SD022 as stated in Report Section 5.2.3.1, Comparison to Residential Soil Screening Levels. During review of SD022 data and risk screen evaluation information, it was noted that in addition to PAH's, several other constituents were compared to EPA RSLs. However, the RSLs were not adjusted from the EPA carcinogenic target risk level of $1.0E-06$ to the NMED target risk level of $1.0E-05$. This was noted for the carcinogenic constituents 4-nitroaniline and butylbenzylphthalate (Appendix C 3.3-SD022 Data Summary Table). NMED understands that 4-nitroaniline and butylbenzylphthalate were not detected in soil samples collected at SD022; however, for conformance with NMED's RA Guidance, EPA RSLs for carcinogens must always be adjusted to reflect the NMED carcinogenic target risk level of $1.0E-05$. Reevaluate all data presented in the Report, as necessary, adjust the EPA RSLs for carcinogenic chemicals of concern (COCs) to reflect the NMED established target risk level.
- b. The 2004 EPA Region IX Preliminary Remediation Goal (PRG) was utilized to evaluate carbazole concentrations for the risk screen evaluation performed for site DA508. The derivation of the PRG is based on data contained in the 1997 EPA Health Effects Assessment Summary Tables (HEAST). While the HEAST is not currently considered an EPA priority source for toxicity data, use of this data is acceptable to assess uncertainty associated with potential risk when other toxicity data are not available. However, it must be noted that the 2004 PRGs are based on out-of-date exposure assumptions. In lieu of using 2004 EPA PRGs, the HEAST data must be used along with current exposure parameters to calculate the screening level.

As part of the Report evaluation, NMED calculated an alternative SSL for carbazole in accordance with NMED's RA Guidance for comparison to the carbazole PRG. NMED's evaluation of the screening levels indicated a general conformance between the two values for all three receptors. Therefore, use of the PRG for the DA508 risk screen for carbazole is acceptable. However, address the uncertainty introduced into

the risk screen evaluation due to the use of the PRG in the uncertainties section of the Report.

- c. NMED noted that the RSL for 2-methylnaphthalene (240 milligrams per kilogram (mg/kg)) was applied during the evaluation of concentration data at TU505, SD022, DA508, and TA129 throughout the Report. Additionally, the Permittee calculated SSL of 232 mg/kg was utilized for evaluation of concentration data and risk evaluation throughout the Report. NMED's updated March 2017 SSLs includes a screening level of 232 mg/kg for 2-methylnaphthalene; therefore, use of the Permittee calculated screening level utilized for the risk screen evaluation documented in the Report is appropriate. NMED's updated March 2017 SSLs also provide screening levels for 1-methylnaphthalene, which may be applied for initial screening and risk evaluation in the revised Report.

3. Exceedance of the Residential Cancer Risk

NMED Comment: Results of the risk screen evaluation performed for DA508, SD022, and AT129 indicate residential cancer risk exceeded the NMED target risk level of 1.0E-05 for carcinogens. PAHs and arsenic appear to be the primary risk drivers at each site. Maximum concentrations for primary risk drivers may be reevaluated with NMED's updated March 2017 SSLs and the conclusions of the Report revised accordingly.

4. Organization of Report Information Included as Figures and Tables

NMED Comment: Tables which do not have a specific table number designation were incorporated into the narrative portions of the Report. The revised Report must be restructured to include all tables at the end of each Report section. The tables must be clearly labeled and numbered and include respective page numbers, which must be referenced in each corresponding Report section.

SPECIFIC COMMENTS

5. Section 3.5.1, Preliminary Site Conceptual Exposure Models (Vapor intrusion Pathway), Page 3-3

Permittee Statement: "Volatile compounds were not considered the primary contaminants at TU505 [Flight Generator UST Site], DA508, SD022, and TA129; therefore, volatile emissions and vapor intrusion were considered incomplete exposure pathways."

NMED Comment: Various volatile organic compounds (VOCs) were detected in soil samples collected at TU505, DA508, SD022, and TA129 and therefore, represent a complete exposure pathway for vapor intrusion (VI) at each site. NMED's RA Guidance, Section 2.5.2.1, Incomplete Pathway; No Action Required, addressing VI exposure allows for the pathway to be considered incomplete only if VOCs were not detected during site sampling activities; therefore, further qualitative evaluation is required.

The qualitative evaluation of the VI pathway at each site must include multiple lines of evidence to support the assertion that receptor exposure does not result in adverse risk. The qualitative evaluation must include an evaluation of COC detections with respect to established screening levels, supporting evidence for source removal, evidence of vertical delineation of site contaminant impacts, and the absence of or lack of potential for sinking vapors. If such information cannot be provided, the VI pathway must be retained in the preliminary site conceptual exposure model (SCEM) and must be addressed in the evaluation of the final SCEM for each site.

6. Section 3.5.1, Preliminary Site Conceptual Exposure Models (Soil-to-Groundwater Pathway), Page 3-4

NMED Comment: The Permittee has provided lines of evidence to support an incomplete soil-to-groundwater pathway in Section 3.5.1. However, Report Section 5, Investigation Results, includes an evaluation of the soil-to-groundwater pathway for Constituents of Potential Concern (COPCs) based on NMED's risk based groundwater protection SSLs for a dilution attenuation factor of 20 for DA508, SD022, and TA129. The soil-to-groundwater exposure pathway was not addressed for TU505. Additionally, prior site assessment information pertaining to TU505, SD022, and TA129 indicated that liquid source(s) were/are present at each site that could potentially result in the downward migration of contaminants. Revise the Report to specifically discuss the soil-to-groundwater pathway evaluation for each site. The discussion must include information pertaining to vertical delineation of contamination, any evidence of decreasing COPC concentration gradients, any physical or chemical soil properties which may inhibit contaminant migration, and any additional lines of evidence that support an incomplete soil-to-groundwater exposure pathway.

7. Section 3.5.3, Soil Exposure Intervals, Page 3-4

NMED Comment: The Report indicates that no surface soil (0 to 1 foot below ground surface (bgs)) sampling data was collected for TU505; therefore, the industrial/commercial worker exposure scenario was evaluated with soil sample analysis data collected from the 0 to 5 foot bgs sample interval. NMED's RA Guidance defines the industrial worker exposure interval as 0 to 1 foot bgs. Use of data from the 0 to 5 feet bgs sample interval for evaluation of the industrial exposure scenario introduces uncertainty into the risk analysis which must be addressed in Section 3.5.3 and Section 5.6, Uncertainties.

8. Section 3.5.5, Comparison with Background, Page 3-5

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. If the site range exceeded the background range, the metal was considered to exceed background."

NMED Comment: The Permittee's COC background comparison evaluation does not conform with the established background evaluation requirements outlined in NMED RA Guidance Section 2.7.3, Identification of COPCs. The RA Guidance, requires any exceedance of the established background upper tolerance limit (UTL) for a COPC must be followed by two-sample hypothesis testing that compares the distribution of site soil sample concentration data to the distribution of the established facility background data to determine if the data sets are statistically different. Two-sample hypothesis testing must be performed for all COPC's in exceedance of their established UTLs. The RA Guidance does not allow for a comparison of COPC concentrations to a background concentration range. However, to support the background range evaluation provided in the Report, provide additional lines of evidence that support the comparison of detected site concentrations to a background range as a means of determining that inorganic COPC concentrations are indicative of background. The lines of evidence must demonstrate that the variability in site and background conditions that are accounted for by two-sample hypothesis testing do not exist at each site and a simple comparison of COPC concentrations to the background range is a scientifically valid and technically defensible approach for COPC evaluation. Otherwise, the background evaluation must be conducted in accordance with the requirements of NMED's RA Guidance.

9. Section 4.1.4, TA 129, Page 4-1

NMED Comment: Based on the information provided in the Report, resampling at previously completed soil sampling and boring locations was performed by the Permittee which was not approved by NMED for the TA129 scope of work. Approved sampling at TA129 was only designed to delineate the outstanding exceedances of NMED residential SSLs for total petroleum hydrocarbons (TPH) diesel range organics (DRO), PAHs, and arsenic at previously completed boring locations CA129-SB04 and CA129-SB05. In addition to the approved eight step-out delineation borings, eight provisional step-out borings were also proposed and approved by NMED to address any further outstanding issues at boring locations CA129-SB04 and CA129-SB05 associated with the results of the initial step-out borings. However, resampling was completed at boring locations CA129-SB04 and CA129-SB05 and previously sampled locations 244SS0-01 through 244SS0-08 in addition to the approved scope of work. Results of the resampling indicated concentrations of arsenic were still in exceedance of NMED's July 2015 residential SSL for arsenic (4.25 mg/kg) at various sampling locations. Additionally, the exceedance of the residential arsenic SSL previously documented at boring location CA129-SB09 (4.32 mg/kg at 0 to 4 feet bgs sample interval) was not addressed by resampling activities. All outstanding arsenic issues at TA129 must be addressed in the revised Report.

NMED must always be informed of additional sampling to be conducted during investigation beyond the NMED approved scope of work. The Work Plan must then be revised, or an additional work plan submitted, after the initial NMED-approved investigation has been completed and a report documenting the investigation has been submitted and reviewed by NMED. Any work completed outside the scope of an NMED-approved work plan, or without an NMED approved work plan is performed at the Permittee's own risk and may

result in a disapproval of the submitted document, sample invalidation, requirements to resample or conduct additional sampling, and additional evaluation.

10. Section 5.4.1, TU505, Page 5-4

Permittee Statement: "Historical soil samples were collected from the 0 to 5-foot interval. As there was no available data from the 0 to 1 foot interval, the site worker exposures were evaluated using data from the 0 to 5-foot interval."

NMED Comment: NMED's RA Guidance recommends an exposure interval of 0 to 1 feet bgs for the industrial/commercial worker exposure scenario during evaluation of risk. Use of soil sample analysis data for samples collected within the 0 to 5 foot bgs sample interval at TU505 is a source of uncertainty in the risk-based screening analysis and must be addressed in Report Section 5.4.1 and Section 5.6, Uncertainties.

11. Section 5.4.1.2, Quantitative Risk Screening Evaluation (TU505), Page 5-5

Permittee Statement: "The site-specific excess cancer risk for all evaluated receptors were below 1E-06 (National Oil and Hazardous Substances Pollution Contingency Plan [NCP] 40 Code of Federal Regulations [CFR] 300.430) and below the NMED target risk level of 1E-05; therefore, soils at TU505 are unlikely to pose unacceptable cancer risks to any of the evaluated populations."

NMED Comment: The Permittee's statement indicates that cumulative risk for all receptors falls below the risk screening criteria of 1.0E-06. However, the cumulative risk information indicates an exceedance of the NCP target risk level of 1.0E-06 for the residential receptor. Revise the statement to indicate that cumulative cancer risk is below the NMED target risk level of 1.0E-05 for all human health receptors and below the cited NCP target risk level of 1.0E-06 for construction and industrial/occupational workers only.

12. Section 5.4.2.3, Comparison of Site Data to Screening Criteria (DA508), Page 5-7

NMED Comment: In the revised Report, include a discussion of the uncertainty associated with the use of the HEAST-based 2004 PRG screening level for carbazole utilized in the risk screening evaluation for DA508. Report Section 5.6, Uncertainties, must also be referenced for additional details regarding the use of the PRG.

13. Section 5.4.2.6, Evaluation of Petroleum Hydrocarbons (DA508), Page 5-9

Permittee Statement: "The maximum detected concentrations of TPH DRO, TPH-GRO [Gasoline Range Organics], and TPH-ORO [Oil Range Organics] equated to a HI [hazard index] of 0.2 for the resident and 0.1 for the construction worker."

NMED Comment: A discrepancy was noted in the Permittee's statement with respect to the information presented in the risk screen documented in supporting information Table E-21,

Human Health Quantitative TPH Screening Evaluation Results for DA508 All Exposure Scenarios. The table indicates that the total residential HI for TPH is 0.3. The statement must be revised accordingly.

14. Section 5.4.2.7, Refined Quantitative Risk Screening Evaluation for Soil (DA508), Page 5-11

Permittee Statement: “The detailed refined risk screening evaluation is provided in Appendix E, Tables E-22 and F-23 for the resident and site worker, respectively.”

NMED Comment: Revise the statement to provide the correct reference to Table E-23, Human Health Quantitative Screening Evaluation Results for DA508 Commercial/Industrial Worker Scenario-95% UCL.

Additionally, the information utilized to calculate cumulative risk in Tables E-22, Human Health Quantitative Screening Evaluation Results for DA508 Residential Scenario-95% UCL, and Table E-23 indicate chromium concentrations in soil were evaluated as trivalent chromium during the risk evaluation. The UCL concentration for chromium must be evaluated as total chromium. Revise all affected sections of the Report accordingly.

15. Section 5.4.3.3, Quantitative Risk Screening Evaluation (SD022), Page 5-16

Permittee Statement: “A target organ/critical effect analysis was completed to determine if the effects for each COPC act on the same organ system, making their HQs [hazard quotients] additive. The results of the analysis showed each of these metals acts on a different organ system. Therefore, their effects are not additive and soil at SD022 is unlikely to pose any unacceptable adverse health effects under a residential land use scenario.”

NMED Comment: The results of the target organ/critical effects analysis were not provided in the Report. Include all analysis information and results in Appendix E.3-SD022 of the revised Report. Pertinent analysis information must also be referenced and discussed in Report Section 5.4.3.3.

16. Section 5.4.3.5, Evaluation of Petroleum Hydrocarbons (SD022), Page 5-17

Permittee Statement: “NMED has not established SSL’s for TPH-GRO; therefore, the TPH-DRO SSLs were used for the TPH-GRO risk screen.”

NMED Comment: Provide additional information that adequately supports the use of TPH-DRO SSLs as suitable surrogates for evaluation of reported TPH-GRO concentrations at SD022 in the Report section. Any uncertainty introduced into evaluation must also be referenced and addressed in Report Section 5.6, Uncertainties.

17. Section 5.4.3.6, Refined Quantitative Risk Screening Evaluation for Soil (SD022), Page 5-17 through 5-19

NMED Comment: The following issues pertaining to the information, conclusions, and associated data evaluation presented in Sections 5.4.3.6 of the Report must be addressed as follows:

- a. Zinc has been omitted from the bulleted list of calculated 95% UCLs presented in Section 5.4.3.6. Revise the Report to include the 95% UCL value for zinc (60.05 milligrams per kilogram (mg/kg)).
- b. Supporting information provided in Appendix E, Table E-35, Human Health Quantitative Screening Evaluation Results for SD022 Residential Scenario-95%UCL and Table E-36, Human Health Quantitative Screening Evaluation Results for SD022 Construction Worker Scenario-95% UCL, indicates chromium was evaluated as total chromium for the residential exposure scenario and as trivalent chromium for the construction worker exposure scenario. Based on the provided Report information, collected soil samples have been analyzed for total chromium; therefore, chromium concentration data must be discussed and evaluated as total chromium in the Report. During reevaluation of chromium data, residential and industrial/occupational exposure for total chromium must be evaluated as carcinogens. Revise all affected sections of the Report accordingly.
- c. Reference and discuss the supporting information for the cited target organ assessment completed for the SD022 assessment in the Report section. In the revised Report, provide additional discussion, supporting information, and references to justify any conclusion of the target organ assessment. Ensure that the nervous system sensitivity to aluminum and manganese is addressed in the analysis.

18. Section 5.4.4.3, Quantitative Risk Screening Evaluation (TA129), Page 5-21

Permittee Statement: “Based on these results, site-related arsenic concentrations exceeding the residential SSL are limited to the 4 to 5-foot bgs range and the lateral and vertical extent has been defined.”

NMED Comment: The lateral extent of arsenic impacts in excess of the residential SSL at TA129 have not been adequately addressed. Additionally, delineation of the reported arsenic concentration above NMED’s July 2015 residential SSL for arsenic at CA129-SB09 (4.32 mg/kg at 0 to 4 feet bgs) is incomplete. Complete delineation of arsenic may be substantiated by supporting information gathered at other TA129 sampling locations and any data evaluation conclusions documented elsewhere in the Report. As deemed necessary, reevaluation of arsenic concentrations with respect to NMED’s updated March 2017 SSLs also may be conducted.

19. Section 5.4.4.5, Evaluation of Petroleum Hydrocarbons (TA129), Page 5-22

NMED Comment: The following discrepancies must be addressed:

- a. The TPH-ORO screening level has been incorrectly cited for residential exposure as 1.00E+00 mg/kg. Revise the Report to reflect the correct TPH-ORO residential SSL of 1.00E+03 mg/kg.
- b. The Report section includes an incorrectly cited reference to Table E-47, Human Health Screening Evaluation Results for TA129 Residential Scenario-95% UCL for the TPH risk evaluation. The correct table reference is Table E-46, Human Health Quantitative TPH Screening Evaluation Results for TA129 All Exposure Scenarios. Correct the table reference.

20. Section 5.4.4.6, Refined Quantitative Risk Evaluation for Soil (TA129), Page 5-24

NMED Comment: Supporting risk evaluation information provided in Table E-47, Human Health Quantitative Screening Evaluation Results for TA129 Residential Scenario-95% UCL, indicated that the chromium 95% UCL was evaluated as trivalent chromium. The chromium UCL must be evaluated as total chromium. Revise the results of the refined risk screening evaluation and conclusions of the Report accordingly.

21. Section 5.5.2.2, Tier 1 SLERA [Screening Level Ecological Risk Assessment]-DA508, Page 5-33

Permittee Statement: "The Total HI exceeds one for deer mice (20), horned larks (28), and vegetation (39), indicating that further evaluation of these receptors is warranted."

NMED Comment: The SLERA HI values cited in the statement do not match the HI values presented in Appendix F, Ecological Site Exclusion Checklists, Decision Trees, and Ecological Risk Tables, Table F-3, Comparison of Soil Concentrations (0-10 FT) with Ecological Screening Levels DA508. The correct table HI totals are 8.1 for the deer mouse, 31 for the horned lark, and 7.5 for plants. Resolve the discrepancy or provide clarification for the values cited in the Report.

22. Section 5.5.3.2, Tier 1 SLERA-SD022, Page 5-40

Permittee Statement: "Background data specific to sediment were not available. It was assumed that sediment was similar to soil with regards to background concentrations. Chemicals identified as comparable with background for soil were also considered background for sediment."

NMED Comment: Background concentration data specific to sediment are not available; therefore, the Permittee has assumed that all metals determined to be representative of background concentrations in soil (e.g., antimony, barium, mercury, silver, and thallium)

were also representative of background concentrations in sediment samples collected at SD022. However, no additional information to validate this assumption has been provided, introducing uncertainty into the SLERA. Provide additional information which supports the use of soil background information for evaluation of sediment during the SLERA in the revised Report and discuss the uncertainty introduced into the risk evaluation in the Tier 1 uncertainty analysis for SD022. Potential impacts of the approach on ecological risk estimates at SD022 must also be addressed.

23. Section 5.5.3.2, Tier 1 SLERA-SD022, Page 5-41

NMED Comment: A discrepancy was also noted in the reference to the screening level hazard quotient (SLHQ) for sediment invertebrates for VOCs, which was cited in the Section 5.5.3.2 as 7.1. Supporting information provided in Table F-19, Comparison of Sediment Concentrations with Ecological Screening Levels SD-022-Stormwater and Retention Pond, indicates the calculated total VOCs HI is 7.8 for sediment invertebrates. Correct the discrepancy accordingly.

24. Section 5.5.3.3, Tier 2 SLERA-SD022, Page 5-43

NMED Comment: The Permittee has presented four sources of toxicity reference values (TRVs) for sediment invertebrate populations based on no-observed adverse effect level-based (Tier 1 SLERA) and lowest observed adverse effect level-based TRVs (Tier 2 SLERA). However, no explanation for why the identified sources (e.g., MacDonald, et al., Los Alamos National Laboratory EcoRisk Database, NOAA Screening Quick Reference Tables) are preferred for the SD022 risk evaluation over other potential sources. In the revised Report, discuss the rationale for the use of alternative risk criteria for evaluating ecological risk at SD022.

25. Section 5.5.3.3, Tier 2 Uncertainty Analysis (SD022), Page 5-44

NMED Comment: Use of the maximum detected concentration as the exposure point concentration (EPC) for evaluation of Tier 2 ecological risk for the aquatic component at SD022 was not addressed in the uncertainty analysis. The revised Report must discuss the uncertainty introduced by use of a maximum concentration as the EPC, which results in an overestimation of ecological risk at SD022.

26. Section 5.5.3.3, Tier 2 Uncertainty Analysis (SD022), Page 5-45

NMED Comment: A discrepancy was noted for the referenced document Heath et al. The document has been referenced as having a publication year of 1969 and 1996 in the Report. Report Section 7, References, cites 1969 as the year of publication for the document. Resolve the apparent discrepancy and correct all affected sections of the Report.

27. Section 5.5.4.2, Tier 1 SLERA-TA129, Page 5-47

Permittee Statement: “All SLHQs are less than one with the exception of selenium (38) for plants; PAHs (9.9), cadmium (1.2), lead (1.7), and selenium (15) for horned lark; and PAHs (2.1) and selenium (15) for deer mouse.”

NMED Comment: A discrepancy was noted for the cadmium SLHQ for the horned lark. Supporting information Table F-11, Comparison of Soil Concentrations (0-10 FT) with Ecological Screening Levels indicates 0.3 is the correct cadmium SLHQ for the horned lark. Based on the Table F-11 information, the calculated chromium SLHQ is 1.2 for horned lark. Revise the statement accordingly.

28. Section 5.5.4.3, Tier 1 SLERA-TA129, Page 5-49

Permittee Statement: “As noted in the Tier 1 SLERA, there are two outliers in the data set for selenium (20 mg/kg and 17 mg/kg). Outlier tests were conducted using ProUCL 5.0; outputs are available in Appendix E.”

NMED Comment: The selenium outlier test results were not provided in Appendix E as stated. Include the outlier test result information in the revised Report.

29. Section 5.6, Uncertainties, Page 5-49 through Page 5-50

NMED Comment: The Report uncertainties discussion does not address the use of soil data from the 0 to 5 feet bgs exposure interval for estimating risk to commercial/industrial workers (exposure interval of 0 to 1 foot bgs) at TU505 where surface soil sampling was not conducted. The uncertainties section of the Report must be revised to address the use of the 0 to 5 feet bgs exposure interval as a conservative approach for evaluation of risk for the commercial/industrial exposure interval. The uncertainty discussion must also reference the location (depth) of the soil sampling data that confirms the conservative nature of the approach.

30. Table E-35, Human Health Quantitative Screening Evaluation Results for SD022 Residential Scenario-95% UCL, Page 2 of 2

NMED Comment: Table E-35, Human Health Quantitative Screening Evaluation Results for SD022 Residential Scenario-95% UCL, lists a total risk value of 0E+00 for carcinogens. Revise the table to list the actual total estimated cancer risk for the residential scenario for the refined quantitative risk screening evaluation performed for SD022. Revise all affected sections of the Report.

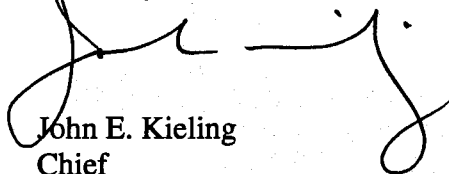
31. Table F-6, Calculation and Selection of Exposure Point Concentrations in Soil 0-5ft DA508, Pages 1 of 1 and 1of 2

NMED Comment: Concentration units for maximum detected concentrations, UCLs, and EPCs for the chemicals addressed in the Tier 2 Screening Level Ecological Risk Assessment for DA508 have not been provided in Table F-6, Calculation and Selection of Exposure Point Concentrations in Soil 0-5ft DA508. Include concentration units for all data in a revised table. Review all report information and ensure that corresponding concentration units are included with the provided table information. Revise all affected Report sections accordingly.

The Permittee must submit a revised Report that addresses 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 **June 29, 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 HWB
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