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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 9, 2020

Mr. Adam Kusmak
Chief, Installation Management Flight
49th CES/CEI
550 Tabosa Avenue
Holloman AFB, NM 88330

**RE: DISAPPROVAL
FINAL LONG-TERM MONITORING REPORT 2019, T-38 TEST CELL FUEL SPILL SITE,
SS059/SS524 (SWMU 229), APRIL 2020
HOLLOMAN AIR FORCE BASE
EPA ID # NM6572124422
HWB-HAFB-20-004**

Dear Mr. Kusmak:

The New Mexico Environment Department (NMED) received the U.S. Air Force (Permittee) Holloman Air Force Base (Facility) *Final Long-Term Monitoring Report 2019, T-38 Test Cell Fuel Spill Site, SS059/SS524 (SWMU 229), April 2020*, (Report) on April 6, 2020. NMED has reviewed the Report and hereby issues this Disapproval with the following comments:

1. Section 4.2, Groundwater Analytical Results

Permittee’s Statement: “The groundwater analytical results from April and October 2019 as compared to NMWQCC standards and USEPA MCLs, are summarized in Table 4-1, and an evaluation of groundwater vapor intrusion as compared to NMED VISLs is summarized in Table 4-2.”

NMED Comment: Tables 4-1 and 4-2 have a column for the standard but do not include any tap water screening levels. In addition, a number of the exceedances in the tables are listed as less than, which indicates that the detection limit is above the screening level. The

Permittee is required to use analytical laboratories and methods that can achieve LOQs and MDLs at or below the screening levels and VISLs for all constituents of concern. The Permittee cannot demonstrate that a site requires no further action based on data with LOQs that exceed the screening levels. The Permittee must make a demonstrated effort to find a laboratory and analytical method that can achieve an LOQ below the VISL.

2. Risk Assessment

NMED's Comment: The Report recommends that Site SS059 be considered for Corrective Action Complete with the inclusion of administrative controls; the administrative control is that no future residential occupation be allowed within the boundaries of the site until VOC concentrations in soil and groundwater are demonstrated to be protective of a resident exposed to indoor air via vapor intrusion from groundwater. While residential use would not be allowed at the site due to its designation as an Airfield, the Permittee must address concerns about the qualitative risk evaluation for industrial use as indicated below. If quantified risk assessments are provided in lieu of additional administrative controls, the Permittee must ensure that the assessments are cumulative and that risks across all exposure pathways are summed to evaluate total site risk.

3. Risk Assessment – On-Site Workers

NMED's Comment: Petroleum hydrocarbon-impacted soil remains in a few locations along boundaries of previous excavations. In addition, small amounts of light non-aqueous phase liquids remain in areas where excavation was not viable. The assessment indicates that these areas are not in use on most days, and when workers are present, they do not perform duties in the non-paved areas. As such, the soil pathway was deemed incomplete for the on-site worker. As the administrative control only limits residential use, the Permittee must add additional controls preventing exposure to current and future on-site workers from the areas where contamination is still present or conduct a quantitative risk assessment to show that exposure to the contaminated soil would not result in adverse risk to a future worker.

4. Risk Assessment – Construction Workers Soil

NMED's Comment: The assessment states that while construction workers could be exposed to potentially contaminated soil, because the site is currently capped or has pavement/foundations, this exposure pathway is incomplete. The assessment further states that the 2017 evaluation concluded that there were no analytes above the industrial/occupational screening levels. However, the 2017 assessment did not include cumulative risk, so no conclusions can be made whether the site is protective to the construction worker from total risk. As the administrative control only limits residential

use, the Permittee must add additional controls preventing current and future construction in areas where contamination is still present, or conduct a quantitative risk assessment to show that exposure to the contaminated soil would not result in adverse risk to a future construction worker.

5. Risk Assessment – Construction Workers - Groundwater

NMED's Comment: The assessment states that direct contact with groundwater is a potentially complete pathway for the construction worker, as groundwater is present at levels less than 10 feet below ground surface. Further, Figure 5-1 indicates that construction worker may be exposed to groundwater via dermal contact or incidental ingestion during future excavation activities. The assessment excludes direct contact with groundwater but does not include any justification for exclusion of the evaluation of this pathway. As the administrative control only limits residential use, the Permittee must add additional controls preventing any construction work in which there could be contact with groundwater or conduct a quantitative risk assessment to show that exposure to potentially contaminated groundwater would not result in adverse risk to a construction worker.

6. Risk Assessment – Vapor Intrusion

NMED's Comment: The vapor intrusion pathway discussion indicates that there are exceedances of vapor intrusion screening levels (VISLs) for several constituents, though cumulative risks were not quantified. The rationale for not assessing this pathway was that fuel and exhaust vapors from jet engine testing would exceed indoor air risks from vapor intrusion. While external factors may be present, closure without specific administrative controls requires demonstrating that there is acceptable risk. As indoor air risks have not been quantified, additional controls such as venting and monitoring are needed to address indoor air. Provide cumulative risks for the indoor air pathway or revise the administrative controls to include protections for exposure to all contaminants in indoor air.

The Permittee must submit a revised Report (two hard copies and two electronic copies) that corrects all the deficiencies noted in this Disapproval. The revised report must be accompanied by a response letter (also included as an appendix) that details where the NMED's comments were addressed and cross-references the numbered comments. In addition, the Permittee must submit an electronic redline-strikeout version of the revised report that shows where all changes were made to the Report. The revised Report must be submitted no later than **March 1, 2021**.

Mr. Adam Kusmak
Final LTM Rpt 2019 T-38 Test Cell Fuel Spill Site (SWMU 229) April 2020
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If you have any questions regarding this letter, please contact Naomi Davidson at (505) 222-9504.

Sincerely,

**Kevin
Pierard**

Digitally signed by
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Kevin M. Pierard, Chief
Hazardous Waste Bureau

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