August 14, 2019

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

RE: DISAPPROVAL
FINAL FISCAL YEAR 2018 GROUNDWATER MONITORING REPORT, SS017 – BASE EXCHANGE GAS STATION FUEL SPILL (AOC-Q), JANUARY 2019
HOLLOMAN AIR FORCE BASE, EPA ID # NM6572124422
HWB-HAFB-19-009

Dear Mr. Kusmak:

The New Mexico Environment Department (NMED) has reviewed the above referenced Groundwater Monitoring Report (Report) received from Holloman Air Force Base (Permittee) on March 19, 2019. The NMED hereby issues this Disapproval of the Report. The Permittee must address the following comments.

1. **Section 5.0, Groundwater Monitoring Analytical Results and Figure 8-1:** Section 5.0 provides discussions regarding the analytical results exceeding groundwater screening levels for benzene, 1,2-dichloroethane, ethylbenzene, total xylenes, polyaromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH) and inorganics. No discussion of the exceedances for 1,1,2-trichloroethane (1,1,2-TCA) was provided. In addition, Figure 8-1, Sample Results Exceeding Groundwater Standards, does not show the September 2018 exceedance for 1,1,2-TCA in monitoring well SS17-MW06, as it did for SS17-MW14.
Revise the Report to provide a discussion of the results for 1,1,2-TCA and revise Figure 8-1 to show the September 2018 exceedance in SS17-MW06. This shall include revising the location of the dashed line “delineating the extent of petroleum chemical exceeding standards” to include the exceedances of 1,1,2-TCA. In addition, although ethylene dibromide was not detected in any monitoring wells, provide a statement in Section 5.0 that it was not detected and that it will not be included in future sampling events as per the approved Groundwater Monitoring Plan (June 2016).

2. **Sections 5.0 and 9.0, References:** These Sections refer to the governing Hazardous Waste Facility Permit (Permit) as being dated February 2006. It is actually dated February 2004. Revise these Sections accordingly.

3. **Section 8.0, Data Evaluation and Recommendations:** There are two issues related to this Section:

   a) No recommendations were presented. Permit Part 4, Section IV.E.3.d.viii. requires that Progress Reports, which NMED considers this Report to be, include a statement of projected work for the next reporting period.

   Regarding projected work, on September 28, 2017 NMED issued an Approval with Modification letter for the July 2017 Interim Measures (IM) Work Plan (WP) for the site. Approved work includes additional soil, groundwater and soil vapor investigations including an indoor vapor intrusion risk assessment for nearby residences, media sampling for in-situ chemical oxidation (ISCO) bench scale testing, treatability testing, and injection design verification testing. The IM WP included a remediation plan that involved ISCO, soil excavation, or a combination thereof as determined by an evaluation of the additional site investigation results.

   NMED approved the IM WP almost two years ago and has not received any reports on the progress of IM activities. Permit Part 4, Section IV.F.3.a. requires that if the time for the completion of IM activities is greater than one year the Permittee shall submit semi-annual Progress Reports.

   Revise this Section to include a statement regarding the progress of IM activities to date and a schedule of projected activities. The Permittee shall submit the required IM Progress Report to NMED by **October 11, 2019**.

   b) The third paragraph of Section 8.0 states “The groundwater gradient is primarily in the southwest direction; however, constructed features of the area (i.e., roadway subgrade, utility corridors, and previously excavated and backfilled areas) could produce anisotropic
conditions in the subsurface, which result in a flow direction to the southeast along the road”. Again, regarding projected work, the IM WP proposed a new soil boring with groundwater sampling east of 1st Street approximately 100 feet southeast of monitoring well SS17-W-4 to further delineate the eastern extent of groundwater contamination. Given the newly understood exceedance of 1,1,2-TCA in SS17-MW14 during the September 2018 sampling event, the placement of this proposed well shall be moved to a point 100 to 125 feet northeast of SS17-MW14.

4. **Table 4:** This Table shows the limits of detection (LOD) for the groundwater samples collected from monitoring wells SS17-MW05 and SS17-MW08 for benzene, 1,2-dichloroethane and 1,1,2-TCA are several orders of magnitude above their respective standards. These data do not provide useful information. In the future, the Permittee must ensure that LODs for sample analyses are lower than their respective standards.

   Revise the Report to explain the high LODs and to explain why so many groundwater samples required dilution during analysis.

5. **Figures:** The only groundwater contamination isoconcentration contour maps provided were for benzene and naphthalene.

   Revise the Report to provide isoconcentration contour maps for all constituents exceeding standards.

The Permittee must submit a revised Groundwater Monitoring 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 and the first Progress Report must be submitted by no later than **October 11, 2019**.

If you have any questions regarding this letter, please contact Mr. David Strasser of my staff at (505) 222-9526.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau
cc:  D. Cobrain, NMED HWB
     C. Amindyas, NMED HWB
     D. Strasser, NMED HWB
     C. Schick, HAFB
     S. Dorton, HAFB
     C. Hendrickson, EPA, Region 6 (6LCRRC)
     L. King, EPA, Region 6 (6LCRRC)

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