February 25, 2019

Colonel Richard W. Gibbs
Base Commander
377 ABW/CC
2000 Wyoming Blvd SE
Kirtland AFB, NM 87117-5606

Mr. Chris Segura
Chief, Installation Support Section
AFCEC/CZOW
2050 Wyoming Blvd SE, Suite 124
Kirtland AFB, NM 87117-5270

RE: BULK FUELS FACILITY SPILL;
SOLID WASTE MANAGEMENT UNIT ST-106/SS-111
KIRTLAND AIR FORCE BASE
HWB-KAFB-19-MISC

Dear Colonel Gibbs and Mr. Segura:

The New Mexico Environment Department (NMED) provides this letter to address several projects that Kirtland Air Force Base (Permittee) is undertaking as investigative or interim corrective measures related to the implementation of the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Treatment Facility Operating Permit EPA ID No. NM9570024423 dated July 2010.

Item 1

NMED received the Permittee’s Work Plan for Vadose Zone Coring, Vapor Monitoring, and Water Supply Sampling Bulk Fuels Facility, Solid Waste Management Unit (SWMU) ST-106/SS-111, Kirtland Air Force Base, New Mexico, Revision R1 dated December 15, 2017. The Work Plan proposed additional vadose zone and groundwater investigation and monitoring, and was approved by NMED on February 23, 2018. Well drilling and vadose zone coring activities are ongoing since 2018 and expected to be complete within several weeks. The Permittee shall submit a report to NMED summarizing the LNAPL investigation findings by November 1, 2019.
Item 2

The Permittee’s Risk Assessment Report, Bulk Fuels Facility Spill; Solid Waste Management Unit ST-106/SS-111 (Report), dated July 15, 2017 was received by NMED on July 21, 2017. The Report concluded that contaminant exposure via vapor intrusion into indoor air in buildings located off-Base was an incomplete pathway. However, off-Base soil vapor data are limited to nested vapor probes, the shallowest of which are approximately 25 feet below ground surface, and none of which are located in the residential area north of Ridgecrest or amid buildings on the Veteran Affairs (VA) hospital campus. The Permittee must confirm this conclusion by collecting additional data to demonstrate that there is no risk to off-site receptors located north of the Base. The Permittee shall send a work plan to NMED no later than May 30, 2019 that proposes to collect shallow soil vapor samples to evaluate for the presence of benzene, ethylene dibromide (EDB), and other volatile organic compounds (if present) in the residential area north of Ridgecrest, and on the campus of the VA Hospital.

The work plan shall select analytical methods for soil vapor analysis that comply with the requirements of Permit Section 6.5.18. (Laboratory Analyses Requirements for all Environmental Media). The work plan also shall include a schedule for at least two soil vapor sampling events, one in the summer and one in the winter, that shall be timed to verify that bioventing pilot testing is not causing an increase in shallow soil vapor contaminant levels in the residential and VA hospital areas.

Item 3

The Permittee has been conducting an EDB in-situ biodegradation pilot test in accordance with the work plan dated October 26, 2016, as most recently amended with NMED’s August 7, 2018 approval letter. The Permittee shall submit a report summarizing the results of the in-situ biodegradation pilot test by May 1, 2019.

Item 4

The Permittee submitted a work plan for a bioventing pilot test that NMED approved by letter dated April 6, 2018. The Permittee submitted proposed bioventing respiration pilot testing procedures by letter dated September 7, 2018. The Permittee’s proposed bioventing respiration pilot testing procedures are hereby approved subject to the following condition. Prior to the initiation of the dry and wet short-term pilot tests, the Permittee shall measure relative humidity (water activity) in the soil vapor probes that will be used for pilot testing in order to determine whether underlying groundwater caused relative humidity to increase following the 2015 shutdown of the soil vapor extraction system and subsequent biorespiration monitoring. Since the approved bioventing work plan involves delivering moisture to soil bacteria that were desiccated by 12 years of soil vapor extraction, the Permittee shall measure relative humidity prior to
The Permittee shall submit the results of the bioventing pilot tests by January 31, 2020.

Pursuant to the RCRA corrective action permit, the Permittee shall submit to NMED by certified mail or hand delivery all reports, notifications, or other submittals. The Permittee shall submit two hard (paper) copies and one electronic copy of such reports to:

John Kieling, Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

The Permittee shall also submit one hard (paper) copy and one electronic copy of such reports to:

Jennifer J. Pruett, Deputy Secretary
New Mexico Environment Department
1190 St. Francis Drive, Room N-4050
Santa Fe, New Mexico 87505-6303

Pursuant to 40 C.F.R. § 270.11(d)(1), all corrective action documents, including those outlined in this letter, shall include a certification, signed by a responsible official, stating:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Failure to submit any of the work plans, schedules, reports, and other deliverable documents described in this letter may be deemed a violation of the permit and subject the Permittee to enforcement action under § 74-4-10 of the Hazardous Waste Act (HWA), or other applicable provisions of law, which may include fines, civil penalties, or suspension or revocation of the Permit.

Any noncompliance with approved plans and schedules shall be noncompliance with this Permit. The Department may grant extensions of written requests for due dates for submittals of reports and other deliverables, provided that the Permittee includes a written justification showing good
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cause and a proposed schedule for submittal.

If you have any questions regarding this letter, please contact me at 505-476-6035.

Sincerely,

[Signature]
John Kieling  
Bureau Chief

JP:DM

cc: J. Kenney, NMED Cabinet Secretary  
    J. Pruett, NMED Deputy Secretary  
    Col. J. Alvarez, KAFB  
    K. Lynnes, KAFB  
    B. Renaghan, AFCEC  
    S. Clark, KAFB-AFCEC  
    B. Faris, AEHD  
    F. Shean, ABCWUA  
    L. King, EPA-Region 6 (6PD-N)  
    A. Romero, NMED-GWQB  
    M. Hunter, NMED-GWQB  
    D. McQuillan, NMED-OOTS

File: KAFB 2019 Bulk Fuels Facility Spill and Reading