NEW MEXICO
ENVIRONMENT DEPARTMENT

Harold Runnels Building
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, New Mexico 87502-5469
Phone (505) 827-2900 Fax (505) 827-2965
www.env.nm.gov

SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

BUTCH TONGATE
Cabinet Secretary

J.C. BORREGO
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

March 14, 2017

Dr. Adria Bodour
Program Manager, Air Force Civil Engineering Center
2000 Wyoming Blvd SE
Kirtland AFB NM 87117-5600

RE: Approval with Conditions, Request for Temporary Permission to Discharge to UIC Well KAFB-7, Kirtland Air Force Base, Bulk Fuels Facility, DP-1839

Dear Dr. Bodour:

The New Mexico Environment Department (NMED) received Kirtland Air Force Base's (KAFB or Permittee) *Request for Temporary Permission to Discharge to Underground Injection Control Well KAFB-7*, dated March 10, 2017 (Request). The Request pertains to the discharge, *i.e.*, injection, of treated groundwater to groundwater injection well KAFB-7. NMED has reviewed the Request and hereby issues an associated approval pursuant to Subsection B of 20.6.2.3106 NMAC of the New Mexico Water Quality Control Commission Regulations, with the conditions specified below.

The Request is associated with the Permittee's groundwater discharge permit application titled *Class V Underground Injection Control (UIC) Permit* (Application), received by NMED on December 4, 2015, and a revised application submitted September 28, 2016, proposing up to five UIC wells to support the ethylene dibromide (EDB) plume Interim Measure (IM) for the historical fuel leak from the former Bulk Fuels Facility (BFF) at KAFB. The NMED deemed the Class V UIC permit application administratively complete on December 17, 2015, and issued associated public notices for a draft discharge permit (DP-1839) on November 7, 2016, and March 3, 2017.

NMED understands this temporary permission is necessary to maintain hydraulic capture of the dissolved phase plume pending approval of DP-1839. Class V groundwater remediation UIC wells (as defined in 20.6.2.5002.B(5)(d)(i) NMAC) are used to inject groundwater from a remediation project that has been treated to meet applicable groundwater quality standards. All UIC wells must

operate in conformance with appropriate and applicable ground and surface water protection requirements as required by 20.6.2.5003.B NMAC.

The water to be injected is treated groundwater from extraction wells KAFB-106228, KAFB-106233, and KAFB-106234 that has been impacted with EDB and other possible contaminants of concern (COCs). An additional extraction well (KAFB-106239) may be added during the term of this temporary permission. The extraction wells are intended to collapse the downgradient portion of the dissolved phase contaminant plume, with extracted groundwater treated prior to injection using granular activated carbon to remove all organic constituents to below the COC standards specified below. The scope of this approval for temporary discharge is limited to the authorization of the injection of sufficiently treated groundwater to KAFB-7 and is not intended to define, limit, or approve the design of the GWTS. The proposed discharge location is within the boundaries of KAFB, south of Southgate Avenue and Ordnance Street SE, in Township T9N, Range R4E, Section S6, (35° 2' 31.819" N, 106° 34' 11.447" W) Albuquerque, Bernalillo County.

Temporary permission to discharge is hereby granted for 120 days from the date of this letter, or until July 11, 2017, pursuant to Subsection B of 20.6.2.3106 NMAC. NMED considers the Permittee to have shown the good cause necessary for a temporary permission to discharge.

This approval is contingent on the Permittee discharging and reporting as described in the Request and upon the following conditions:

1. Anthropogenic chemicals in injected water shall not, upon discharge, exceed the more stringent value of either New Mexico Water Quality Control Commission standards (Section 20.6.2.3103 NMAC) or the Safe Drinking Water Act maximum contaminant levels (MCLs) for drinking water. For NMWQCC listed Toxic Pollutants without 3103 standards or MCLs, injected water shall not exceed the most current Tap Water Limits in Table A-1 of the NMED Risk Assessment Guidance.

2. The COCs associated with the EDB plume and their applicable standard are as follows:
    a. Benzene: 5 µg/L
    b. Ethylene dibromide (EDB): 0.05 µg/L
    c. Ethylbenzene 700 µg/L
    d. Iron: 1 mg/L
    e. Manganese: 0.2 mg/L
    f. Toluene: 750 µg/L
    g. Total xylenes: 620 µg/L

    The Permittee shall sample the treated discharge for the COCs on a monthly basis and provide the results and analytical reports in the final report (Condition 11).

3. If a new extraction well is brought on-line, the effluent from the groundwater treatment system shall be sampled daily for the first week of operation for the COCs with 24-hour analytical turnaround times. After the first week of operation, weekly samples shall be collected for the first month of operation with 5-day analytical turnaround times. After one month, and once it

is determined that that constituents in effluent samples are not exceeding the COC standards specified in Condition #3 herein, the sampling frequency may be reduced to monthly in accordance with the Permittee's Application.

4. Should any COCs be detected above applicable standards in the effluent of the GWTS, the pumping shall cease immediately and the Permittee shall implement the response and notification procedures specified in the contingency plan procedures in most recent Operations and Maintenance Plan. Should the concentrations of iron or manganese exceed applicable standards, the Permittee shall propose to NMED additional appropriate treatment methods for installation to the GWTS.

5. Injected water shall not overtop the KAFB-7 well casing liner.

6. Water levels will be monitored with transducers in associated monitoring wells as well as downhole in KAFB-7. System controls shall ensure shutdown of all associated components should conditions warrant.

7. The injection flow-rate monitoring, inspection, and calibration shall be performed in accordance with Application and other applicable work plans.

8. No chemicals shall be placed into KAFB-7 without the prior approval of NMED.

9. Access of unauthorized personnel to both the GWTS and KAFB-7 shall be restricted.

10. NMED representatives shall be allowed to inspect any treatment and monitoring equipment, and to sample any associated effluent (See 20.6.2.3107.D).

11. A final report associated with the temporary discharge shall be submitted to NMED in the subsequent KAFB Bulk Fuels Facility (BFF) Quarterly Report. The report shall include the following information:
    i. Total effluent volumes from the GWTS and injection volumes to KAFB-7, with any discrepancy explained.
    ii. Monthly total injection volumes.
    iii. Effluent sampling analytical results.
    iv. Any operations and maintenance activities performed during the period.
    v. A comparison of injection flow rates and associated changes to hydraulic head.
    vi. Groundwater elevation contour maps illustrating the aquifer's response to injection.

This approval does not relieve the Permittee of the responsibility to comply with any other applicable federal, state, and/or local laws, regulations, zoning requirements, and nuisance ordinances. Also, this approval does not relieve the Permittee of liability should its operation result in actual pollution of ground or surface waters.

NMED will send an invoice for a Temporary Permission Fee of $150 under separate cover; NMED must receive payment of this Fee within 30 days.

If you have any questions, please contact Steve Pullen of the Ground Water Pollution Prevention Section at 505-827-2962.

Sincerely,

Michelle Hunter, Chief
Ground Water Quality Bureau

MH:sp

cc: (e-copies)
John Kieling, NMED-HWB
William Chavez, NMED-DI
Diane Agnew, NMED
Steve Pullen, NMED-GWQB
Kathryn Lynnes, USAF-SAF-IEE
Adria Bodour, USAF-AFCEC-CZRX

files: Reading
DP-1839