NEW MEXICO
ENVIRONMENT DEPARTMENT

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Cabinet Secretary
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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

November 23, 2015

Colonel Eric H. Froehlich
Base Commander
377 ABW/CC
2000 Wyoming Blvd.SE
Kirtland AFB, NM 87117-5606

John Pike
Director, Environmental Management Services
377 MSG
2050 Wyoming Blvd. SE, Suite 116
Kirtland AFB, NM 87117-5270

Re: GROUNDWATER EXTRACTION WELLS KAFB-106233 AND KAFB-106234 AQUIFER TESTING LETTER WORK PLAN, BULK FUELS FACILITY SPILL SOLID WASTE MANAGEMENT UNITS ST-106 AND SS-111 KIRTLAND AIR FORCE BASE EPA ID#NM9570024423, HWB-KAFB-13-MISC

Dear Colonel Froehlich and Mr. Pike:

The New Mexico Environment Department (NMED) is in receipt of the Kirtland Air Force Base (AFB) (the Permittee) *Groundwater Extraction Wells KAFB-106233 and KAFB-106234 Aquifer Testing Letter Work Plan*, dated November 3, 2015. The work plan proposes performing aquifer testing of two extraction wells (KAFB-106233 and KAFB-106234) in accordance with the previous work plan *Groundwater Extraction Well KAFB-106228 Aquifer Pilot-Test Work Plan*, dated February 26, 2015 with the following variances:

- Revised observation well networks specific to the two extraction wells being tested.
- Installation of a single barometric pressure sensor at groundwater monitoring well KAFB-106203 instead of the three in the original work plan.
- Definition of step-drawdown pumping rates as 50 percent (%), 100%, and 150% of the maximum pumping rate instead of the 50, 100, and 150 gallons per minute.
- Recorded water-level measurements from transducers installed in observation wells at 5-minute intervals instead of the 1-minute intervals.

- Data analysis methods will be selected based on water-table response to pumping and on the observation aquifer conditions.

The variances in the Permittee's Groundwater Extraction Wells KAFB-106233 and KAFB-106234 Aquifer Testing Letter Work Plan are hereby approved with the following conditions:

1. The Permittee shall conduct aquifer testing using the methodology described in the Permittee's February 26, 2015 Groundwater Extraction Well KAFB-106228 Work Plan, as approved by the NMED's letter dated March 10, 2015.
2. The Permittee shall follow U.S. EPA suggested operating procedures and industry standard practice for recording water-level measurements in observation wells during aquifer testing:

Time since start of pumping	Time Interval
0 to 3 minutes	Every 30 seconds
3 to 15 minutes	Every 1 minute
15 to 60 minutes	Every 5 minutes
60 to 120 minutes	Every 10 minutes
120 minutes to 10 hours	Every 30 minutes
10 hours to 48 hours	Every 4 hours
48 hours to shutdown	Every 24 hours

   The time intervals in the table above are the maximum recommended time intervals. If the Permittee desires to record more frequent water-level measurements, that is acceptable to the NMED.
3. Depth to water prior to the start of the aquifer tests is required from the pumping wells and the observation well network. Additionally, manual water level measurements must be collected at a minimum of 2 hour intervals in wells equipped with transducers for the duration of the tests, including the pumping well.

Should you have any questions regarding this letter please contact Ms. Diane Agnew at (505) 222-9555.

Sincerely,

Kathryn Roberts
Director
Resource Protection Division

KR/DM

cc: Col. T. Haught, KAFB
M.L. Leonard, AEHD
F. Shean, ABCWUA
L. King, EPA-Region 6 (6PD-N)
K. Kieling, NMED-HWB
D. McQuillan, NMED KAFB Fuel Spill Cleanup Team Leader

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