NEW MEXICO
ENVIRONMENT DEPARTMENT

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Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

**CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

December 16, 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: KIRTLAND AIR FORCE BASE BULK FUEL FACILITY MID-PLUME PUMP AND TREAT SYSTEM BASIS OF DESIGN – ADDENDUM #1**
**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) has received the Kirtland Air Force Base (AFB) (Permittee) *Kirtland Air Force Base Bulk Fuel Facility Mid-Plume Pump and Treat System Basis of Design – Addendum #1* dated December 13, 2015. The Mid-Plume Pump and Treat Basis of Design Addendum #1 proposes:

- The addition of a pH adjustment system to the groundwater treatment system (GWTS) in order to control the pH of treated water.
- The pH adjustment system will include the addition of National Sanitary Foundation (NSF) certified 20° Baume hydrochloric acid (32% HCl) solution to the effluent water at a rate of 2 gallons per day (or 306 milliliters per hour).
- Twice daily measurement of effluent pH, or more frequently if required, in order to monitor and adjust the HCl addition rate.

The acid addition pump will only operate if the discharge pumps are running. The GWTS has been designed to automatically shut down the discharge pump, and therefore the pH adjustment

system, if any part of the treatment system shuts down. This provides a safe-guard against the addition of acid when any part of the GWTS is not operational. The Permittee anticipates the need to adjust pH because new GAC units typically increase the pH of treated water by about 1 unit for a temporary period after system startup. The Permittee estimates that the pH adjustment system will not be required after two weeks of operation at 100 gallons per minute (gpm). It is noted that additional pH adjustment may be required when operational extraction rates increase above 100 gpm.

The Mid-Plume Pump and Treat System Basis of Design – Addendum #1 is hereby approved.

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

Sincerely,

Kathryn Roberts
Director
Resource Protection Division

KR/DA

Cc: Col. T. Haught, KAFB
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File: KAFB 2015 Bulk Fuels Facility Spill