NEW MEXICO
ENVIRONMENT DEPARTMENT

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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 28, 2012

Colonel John Kubinec
Base Commander
377 ABW/CC
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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: ENHANCED WELL DEVELOPMENT, SECTION 5.1.3 OF LIGHT NON-AQUEOUS PHASE LIQUID (LNAPL) CONTAINMENT INTERIM MEASURE WORK PLAN, PART 1 – CHARACTERIZATION PLAN
BULK FUELS FACILITY SPILL, SOLID WASTE MANAGEMENT UNITS ST-106 AND SS-111, MAY, 2012
KIRTLAND AIR FORCE BASE, EPA ID# NM9570024423
HWB-KAFB-10-037

Dear Colonel Kubinec and Mr. Pike:

The New Mexico Environment Department (NMED) is reviewing the U.S. Air Force's submittal: *Light Non-Aqueous Phase Liquid (LNAPL) Containment Interim Measure Work Plan Part 1 – Characterization Plan, Bulk Fuels Facility Spill, Solid Waste Management Units ST-106 and SS-111,* dated May 2012, transmitted under letter dated May 23, 2012. This document contains information on the proposed enhanced well development method in Section 5.1.3 of the plan. NMED is responding to Section 5.1.3 without commenting now on the rest of the submittal in order to expedite enhanced well development of extraction well KAFB-106157. The plan for enhanced well development in Section 5.1.3 will be referred to hereafter in this letter as the May 2012 Plan. NMED will respond to rest of the document aside from Section 5.1.3 at a later date.

In the previous version of the plan for enhanced well development submitted on February 7, 2012, the Permittee proposed treating groundwater using a portable granulated activated carbon (GAC) treatment system before storing the water in tanks for later discharge to the ground

surface. This procedure, approved by the NMED via the agency's letter of February 24, 2012, would require an emergency hazardous waste permit for treatment of the water (issued under 20.4.1.900 NMAC incorporating 40 CFR § 270.61)) in the event that the concentration of benzene in the groundwater exceeds 0.5 mg/L. This plan for enhanced well development will be referred hereafter in this letter as the February 2012 Plan.

In contrast to the February 2012 Plan, the Permittee proposes in the May 2012 Plan a new strategy that, if implemented, would place untreated groundwater in storage in tanks prior to discharge to the ground. Based on analysis of the stored water, if the groundwater was determined to contain hazardous waste, the Permittee would request an emergency permit to treat the water prior to disposal to the ground.

In the February 2012 Plan, an emergency hazardous waste permit must be obtained to conduct the enhanced well development, as the Permittee cannot treat the groundwater using a GAC system without a permit. Additionally, it is more protective of human health and the environment to store and discharge to the ground treated groundwater rather than untreated groundwater. In contrast, issuance of an emergency permit to implement the May 2012 Plan is unnecessary. If the stored water contains hazardous waste, then the Permittee could simply manage the wastewater as it does for any other hazardous waste generated by the Facility. Thus, an emergency permit will not be issued to accomplish enhanced well development under the May 2012 Plan.

NMED Hazardous Waste Bureau hereby approves implementation of the Enhanced Well Development method explained in accordance with Section 5.1.3 of the May 2012 Plan, subject to four conditions:

1. The Permittee receive from the NMED Ground Water Quality Bureau in advance of conducting the enhanced well development written permission to temporarily discharge the water to the ground surface;
2. The Permittee collect groundwater samples prior to placement of the water into the storage tanks at a frequency of at least one grab sample per 5,000 gallons of water, or at least 4 samples, whichever is greater. The samples are to be analyzed for VOCs, EDB (by SW-846 method 8011) and SVOCs. The determination of whether the groundwater contains hazardous waste shall be based on the lower confidence limit (LCL) of the mean concentration of benzene, based on a 95% confidence level. If the LCL equals or exceeds 0.5 mg/L, then the water contains hazardous waste;
3. Discharge to the ground surface, if this occurs, meets the requirements imposed by the NMED Ground Water Quality Bureau for temporary discharge for all contaminants in the groundwater; and
4. The fate of the extracted groundwater (details on treatment, if any, and disposal) is reported to the NMED as part of reporting the results for enhanced well development. The results for enhanced well development are to be

reported in the quarterly report to be submitted for the quarterly reporting period in which enhanced well development was conducted.

Because the groundwater is to be pumped directly into storage tanks without treatment, and for later waste determination, NMED requires that the wastewater be managed as if it contains hazardous waste unless and until such time that it is determined otherwise based on laboratory analytical results. As such, the Permittee must meet the applicable generator requirements of 20.4.1.300 NMAC incorporating 40 CFR Part 262, including but not limited to, the provisions for storage of hazardous waste in tanks at 20.4.1.300 NMAC incorporating 40 CFR § 262.34(a)(1)(ii) and the applicable provisions of 20.4.1.600 NMAC incorporating 40 CFR Part 265, subpart J. The Permittee must also provide security for the tanks to prevent unknowing entry to the area where the tanks are located and access to the tanks pursuant to Permit Section 6.1.4 the Permittee's Hazardous Waste Operating Permit. The security provided shall at a minimum meet the requirements for a facility at 20.4.1.600 NMAC incorporating 40 CFR § 265.14 (a-c).

Pursuant to Permit Section 1.22 of the Permittee's Hazardous Waste Operating Permit, management of wastewater generated from the enhanced well development is subject to inspection by the NMED, including the taking of split water samples for analysis.

Additionally, NMED is concerned by the first sentence in Section 5.1.3 which states "Per the NMED approved January 2012 LNAPL Containment Well Development Letter Addendum, rather than performing a standard pump test, enhanced well development will be conducted at KAFB-106157 in order to determine the well specific capacity needed to complete the design of the full containment system (Shaw, 2012b)." Contrary to this statement, NMED reserves the right to require additional pumping tests for any aspect of the Bulk Fuels Facility Spill project and reminds the Permittee of direction concerning pumping tests provided to the Permittee in NMED's letter of March 31, 2011.

The Permittee may implement either the February 2012 Plan or the May 2012 Plan so long as the conditions specified in NMED's letter of February 24, 2012, or this letter are met, respectively, for each plan. As a reminder, an emergency permit is required before implementing the February 2012 Plan.

Should you have any questions, please contact Mr. William Moats of my staff at (505) 222-9551.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc: J. Davis, NMED Director RPD
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