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July 10, 2014

Colonel Tom D. Miller  
Base Commander  
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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: INTERIM TREATMENT OF DISSOLVED PHASE,  
BULK FUELS FACILITY SPILL  
SOLID WASTE MANAGEMENT UNITS ST-106 AND SS-111  
KIRTLAND AIR FORCE BASE  
EPA ID# NM9570024423, HWB-KAFB-14-MISC**

Dear Colonel Miller and Mr. Pike:

The New Mexico Environment Department (NMED) has evaluated your conceptual suggestion, as presented at our June 18, 2014 meeting, of using well KAFB-106157 in a pilot project to test the feasibility of containing and capturing the high concentrations of dissolved phase contaminants including EDB that are migrating away from the LNAPL area. Your proposal is to utilize well KAFB-106157 for its original intended purpose, as an extraction well for hydraulic containment, and to treat the contaminated water for beneficial use. If successful, this will be the first measure in the history of the site to directly address groundwater contamination. It will also demonstrate the feasibility of preventing the migration of high concentrations of contaminants from the LNAPL area towards the water supply wells to the northeast. NMED strongly supports your efforts to move forward with this interim measure.

Well KAFB-106157 is located in an area where intrinsic hydrocarbon oxidation has likely caused biomass to accumulate around the well screen and will have to be aggressively redeveloped. It is strongly recommended that physical treatment such as aggressive jetting be evaluated and tested prior to any chemical treatment applied at well KAFB-106157. There also will be complex challenges in designing and obtaining rights of way for the infrastructure of this project. The deadline for submission of a written work plan for this Task 3 interim measure is hereby extended to August 1, 2014 for good cause shown. This work plan shall describe in detail the method(s) to be used in developing the well.

KAFB4282



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NMED granted permission to install well KAFB-106157 by letter of December 1, 2011. As stated in that approval letter, NMED reserves the right to require the installation of additional wells if necessary to accomplish hydraulic containment.

As we discussed on June 18, 2014, the contaminant levels in well KAFB-106157 are expected to increase over time as the well is pumped. The work plan must include proposed sampling and analysis for ongoing monitoring of contaminant concentrations and other appropriate water quality parameters in the extracted groundwater including the frequency of sample collection. It is likely that benzene concentrations will eventually exceed 500 µg/L and, if so, the extraction groundwater will be considered hazardous waste and the pump and treat system will need a RCRA permit for continued operation. In order to avoid the need to discontinue pumping because of the need to treat characteristic hazardous waste, the necessary permits must be secured in anticipation of exceeding the 500 µg/L threshold. Your work plan should include a schedule that establishes the process for obtaining all necessary permits.

NMED also strongly supports your commitment and the reassurance by Colonel Lanning during the recent KNME news feature, to stop contaminant migration and never allow contaminants to reach any of the Albuquerque Bernalillo County Water Utility Authority supply wells. Towards this end, please submit a conceptual work plan, by October 1, 2014, to contain the leading edge of the dissolved phase plume. The conceptual plan should utilize recent modeling efforts and should be specific enough to indicate the number and general locations of hydrodynamic containment wells, and a proposed schedule for installing the containment system.

NMED technical staff will assist you and your contractor in any way possible to achieve the deadlines set forth in this letter.

If you have any questions, please contact me at 505-827-2855.

Sincerely,



Tom Blaine, P.E.  
Director  
Environmental Health Division

TB/DM

cc: Col. J. Lanning, KAFB  
D. Wilson, KAFB  
B. Gallegos, AEHD  
F. Shean, ABCWUA  
L. King, EPA-Region 6 (6PD-N)

File: KAFB 2014 Bulk Fuels Facility Spill and Reading