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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

January 20, 2016

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: REQUESTED OPTIMIZATION OF MONITORING AND REPORTING, SECOND PHASE, 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) *Technical Memorandum: Requested Optimization of Monitoring and Reporting, Second Phase, Bulk Fuels Facility Spill Site*, dated December 9, 2015. The Memorandum proposed further optimization to the groundwater monitoring program and quarterly reports including:

- Removal of five analyses from the site groundwater analytical program. These five analyses were evaluated by the optimization subgroup of the Hydrogeology Working Group as not being necessary to inform risk, monitor site conditions, or use in support of site decisions:
    - Total petroleum hydrocarbons-diesel range organics (EPA Method 8015C)
    - Total petroleum hydrocarbons-gasoline range organics (EPA Method 8015C)
    - Semivolatile organic compounds (EPA Method 8270D)
    - Polynuclear aromatic hydrocarbons (EPA Method 8270D Mod)

  - Field analysis for alkalinity
- Reduced frequency of sampling of groundwater monitoring wells within the benzene plume footprint. These wells are defined as "Source Area Wells" and are proposed for semi-annual sampling for benzene, toluene, ethylbenzene, and xylene (BTEX), ethylene dibromide (EDB), metals, anions, alkalinity, and field parameters.
- Reduced frequency of sampling of groundwater monitoring wells located outside of the downgradient portion of the benzene plume that could indicate migration of the BTEX constituents. These wells are defined as "Signal Wells" and are proposed for semi-annual sampling for BTEX plus naphthalene, EDB, metals, anions, alkalinity, and field parameters. The signal wells would indicate migration of BTEX constituents and concentration data trends from these wells could prompt a re-evaluation of sampling frequency of BTEX or naphthalene.
- Revised frequency of sampling for metals, anions, and alkalinity at groundwater monitoring wells located between the dissolved-phase plume and the VA Medical Center drinking water supply wells. These wells are defined as "VA Proximal Wells" and are proposed for quarterly sampling of BTEX, EDB, and field parameters and semi-annual sampling for metals, anions, and alkalinity. This well category is inclusive of the VA sentinel wells.
- Revised frequency of sampling for metals, anions, and alkalinity at groundwater monitoring wells located between the leading edge of the EDB plume and drinking water supply wells KAFB-3, Ridgecrest-3, and Burton-5. These wells are defined as "Downgradient Proximal Wells" and are proposed for quarterly sampling for EDB and field parameters and semi-annual sampling for metals, anions, and alkalinity. Additionally, the Permittee proposes no longer monitoring these wells for BTEX. This category is inclusive of downgradient sentinel wells.
- Revised frequency of sampling for metals, anions, and alkalinity at the groundwater monitoring wells installed in the calendar year 2015. These wells are defined as "Newly Installed Wells" and are proposed for quarterly monitoring for EDB and field parameters and semi-annual monitoring for metals, anions, and alkalinity. Additionally, the Permittee proposes not sampling for BTEX at these wells.
- Revised frequency of sampling and reduction in analysis at 139 groundwater monitoring wells. These wells are defined as "Extended Well Network" and are proposed for semi-annual monitoring for EDB, metals, anions, alkalinity, and field parameters.
- Revisions to the quarterly reporting format to include the compilation of a robust annual report with the annual sampling event in the Fourth Quarter and non-cumulative data reports for each of the First, Second, and Third Quarter sampling events.

The proposed optimizations in the analytical program, sampling frequency, and reporting in the Permittee's Technical Memorandum: Requested Optimization of Monitoring and Reporting are hereby approved with the following conditions:

1. The Permittee shall continue quarterly sampling for EDB, metals, anions, alkalinity, and field parameters at the "Newly Installed Wells" until each well has four consecutive quarters. At the end of the fourth consecutive quarter, the Permittee may change to a

semi-annual sampling program for metals, anions, and alkalinity and continue with quarterly sampling for EDB and field parameters.

2. The Permittee shall continue quarterly sampling for BTEX, EDB, metals, anions, alkalinity, and field parameters in the groundwater monitoring wells with observed increasing trends in nitrate, chloride, and sulfate, as discussed at the December 8, 2015 Hydrogeology Working Group. At a minimum, this includes wells KAFB-1065, KAFB-1069, and KAFB-10612R.
3. Sampling frequency of metals and alkalinity for the VA and downgradient proximal wells may be revised based on recommendations of the Hydrogeology Working Group for indicator parameters.

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

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