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NEW MEXICO ENVIRONMENT DEPARTMENT

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## **CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

January 7, 2016

Wayne L. Bitner Chief, Environmental Restoration 2000 Wyoming Blvd SE Kirtland AFB NM 87117-5600

## RE: Corrective Action Approval, Unauthorized Discharge at Kirtland Air Force Base Temporary Treatment Facility, DP-1770

· Dear Mr. Bitner:

The New Mexico Environment Department (NMED) has received Kirtland Air Force Base's (KAFB) Corrective Action Report for Unauthorized Discharge at the Bulk Fuel Facility Temporary Groundwater Treatment Facility, Kirtland AFB, NM, (Report) dated December 13, 2015. NMED hereafter refers to KAFB as the "Permittee." The Report provides a description of an unauthorized discharge of groundwater from a groundwater remediation system and actions taken to mitigate any damage associated with the discharge.

The information submitted satisfies the reporting requirements of Condition 17 of Discharge Permit DP-1770 and Subsection A of 20.6.2.1203 NMAC of the Water Quality Control Commission Regulations (20.6.2 NMAC).

### Spill Description

The unauthorized discharge occurred overnight between November 12 and 13, 2015, with an estimated duration of approximately 17 hours. Untreated groundwater from extraction well KAFB-106228 was stored in an influent tank at the Temporary Treatment Facility (TTF). The water was inadvertently siphoned through a hose into the TTF's secondary containment system. An estimated 50 to 200 gallons of untreated groundwater were discharged from the secondary containment of the TTF through a hole in the secondary containment liner. This estimated discharge volume is based on size of the wetted area outside the secondary containment system,



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the measured depth of wetted soils within the area, estimated soil porosity, and estimated soil saturations. The water discharge flowed northward along a drainage path to a point outside the TTF fencing within Zia Park. It infiltrated in an approximate 15 foot by 11 foot area just beyond the TTF fence line, and some flowed approximately 20 feet eastward along a narrow drainage.

#### Corrective Actions

The Permittee collected an influent tank water sample to validate the concentration of ethylene dibromide (EDB) in the groundwater that had been discharged into the secondary containment, and collected two discrete surface soil samples from the discharge area footprint. The Permittee then excavated wet or moist soil within the flagged discharge area footprint to a depth of 6 to 12 inches. The excavation was performed in 6 inch lifts, with the need for additional lifts determined by the presence of wet or moist soil at the bottom of the excavation. Where dry soil was encountered, the excavation did not go deeper. The Permittee collected two discrete confirmation samples from the bottom of the excavated area. The excavated soil was containerized in a lined roll-off bin and was later of disposed at an on-base landfill based on analytical results.

All confirmation samples were sent to a U.S. Department of Defense Environmental Laboratory Accreditation Program (ELAP) certified laboratory for analysis. Laboratory analysis confirms that EDB was not present in confirmation soil samples at concentrations above the Limit of Detection (LOD) for that sample, *i.e.*, 2.25 mg/kg, and therefore does not present an unacceptable risk. No other fuel-related volatile organic compounds were detected.

NMED understands that the TTF has been replaced by a full-scale groundwater treatment system (GWTS) with a concrete secondary containment system and permanent piping. NMED will assume this transformation will significantly prevent any future similar unauthorized discharges.

# The corrective actions taken by the Facility are hereby approved pursuant to Subsection A(7) of 20.6.2.1203 NMAC.

Additional corrective actions may be required if information becomes available indicating that the corrective actions taken are inadequate and/or groundwater contamination occurs as a result of the described discharge. The Facility may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC if the corrective action plan will not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC within 180 days of confirmation of groundwater contamination.

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If you have any questions, please contact Steve Pullen of the Ground Water Pollution Prevention Section at 505-827-2962.

Sincerely,

Michelle Hunter, Chief Ground Water Quality Bureau

MH:sp

cc: (e-copies)

John Kieling, NMED-HWB William Chavez, NMED-DI Dennis McQuillan, NMED Diane Agnew, NMED Steve Huddleson, NMED-GWQB Steve Pullen, NMED-GWQB Caitlin LaChance, CB&IR

files: Read DP-1770