



SUSANA MARTINEZ
Governor
JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT



2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.env.nm.gov

RYAN FLYNN
Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

September 25, 2015

Eric H. Froehlich, Colonel
Base Commander
377 ABW/CC
2000 Wyoming Blvd SE
Kirtland AFB, NM 87117-5606

John Pike
Director, Environmental Management Services
377 MSG
2000 Wyoming Blvd SE
Kirtland AFB, NM 87117-5270

**RE: 2011 RESOURCE CONSERVATION AND RECOVERY ACT FACILITY
INVESTIGATION REPORT FOR GROUNDWATER BENEATH SOLID WASTE
MANAGEMENT UNIT WP-26, SEWAGE LAGOONS, APRIL 2012
KIRTLAND AIR FORCE BASE, NEW MEXICO
EPA ID # NM9570024423
HWB-KAFB-12-007**

Dear Colonel Froehlich and Mr. Pike:

The New Mexico Environment Department (NMED) received the U.S. Air Force (Permittee) Kirtland Air Force Base's (Facility) *2011 Resource Conservation and Recovery Act Facility Investigation Report For Groundwater Beneath Solid Waste Management Unit WP-26, Sewage Lagoons* (Report), dated April 2012. NMED has reviewed the Report and hereby issues this Disapproval with the following comments.

1. Section 2.2.4.3, Geophysical Survey

NMED's Comment: Geophysical logs (dual induction, gamma ray, and neutron logs) for monitoring wells KAFB-2630, KAFB-0506, KAFB-0505, KAFB-0507, KAFB-0512, KAFB-0522, and KAFB-0525 were not provided in Appendix C. If geophysical logs exist for these wells, include them in the appendix; otherwise, provide an explanation why geophysical logs were not recorded for each well where logs were not obtained.

2. Figure 2-9, Perched Zone Groundwater Saturation



NMED's Comment: Provide a description in the text of how the top of the clay layer was located in each perched aquifer monitoring well (e.g., use of lithologic logs, geophysical logs, etc.). Provide a table that includes the depths and elevations for top of screen, bottom of screen, depth to water, and top of confining clay layer for each perched aquifer well associated with the former sewage lagoons.

3. Section 4.2, Recommendations

Permittee's Statement: "It is recommended that the corrective measures proposed in the *Corrective Measures Study Report for Solid Waste Management Unit WP-26, Sewage Lagoons and Golf Course Main Pond* (USAF, 2010) be implemented."

NMED's Comment: The corrective measures proposed in the cited report have not been approved by NMED; the report is addressed in other NMED correspondence to the Permittee. Also, the first paragraph of Section 2.6.5, Nature and Extent of Contamination, states "VOCs are present in soil vapor and perched groundwater beneath the former sewage lagoons, are the most mobile form of contamination, and the only form likely to present human health or ecological concerns at the site." The proposed corrective measure, soil vapor extraction, is not appropriate to remediate TCE in groundwater. Prior to determining whether or not enhanced reductive dechlorination treatment, groundwater extraction with ex-situ treatment, or dual phase SVE is feasible, the Permittee must determine the hydraulic properties of the perched aquifer. Therefore, the Permittee must propose a constant discharge aquifer test in order to determine the perched aquifer's hydrologic characteristics prior to evaluating potential remedies.

A revised Report that corrects all of the deficiencies noted in this letter must be submitted to NMED no later than **December 30, 2015**. The revised Report must be accompanied by a response letter that details where the NMED's comments were addressed and cross-references the numbered comments. In addition, the Permittee must submit an electronic redline-strikeout version of the revised Report that shows where all changes were made to the Report.

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If you have any questions regarding this matter, please contact Naomi Davidson of my staff at (505) 222-9504.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: N. Davidson, NMED HWB
W. Moats, NMED HWB
W. McDonald, NMED HWB
B. Wear, NMED HWB
D. Cobrain, NMED HWB
L. King, EPA 6PD-N
C. Crosgrove, KAFB

File: KAFB 2015 and Reading, WP-026

