



SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

***Hazardous Waste Bureau***

**2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
Phone (505) 476-6000 Fax (505) 476-6030  
[www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)**



DAVE MARTIN  
Secretary

BUTCH TONGATE  
Deputy Secretary

JAMES H. DAVIS, Ph.D.  
Director  
Resource Protection Division

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

December 10, 2012

Mark Patterson  
BRAC Coordinator  
Ravenna Army Ammunition Plan  
Building 1037  
8451 State Route 5

Steve Smith  
USACE  
CESWF-PER-DD  
819 Taylor Street, Room 3B06  
PO Box 17300

**RE: DISAPPROVAL  
INVESTIGATION AND REMEDIATION WORK PLAN  
PARCEL 18, EASTERN LANDFILL  
FORT WINGATE DEPOT ACTIVITY  
EPA ID# NM6213820974  
FWDA-12-003**

Dear Messrs. Patterson and Smith:

The New Mexico Environment Department (NMED) received the Department of the Army's (the Permittee) *Investigation and Remediation Work Plan Parcel 18, Eastern Landfill*, dated May 10, 2012 and submitted pursuant to Section VII.H of the Fort Wingate Hazardous Waste Facility Permit. NMED has reviewed the Work Plan and hereby issues this Disapproval. The Permittee must address the following comments in a revised Work Plan.

**Comment 1**

The Permittee must separate all tables and figures from the text and include the tables and figures as separate sections or appendices to the Work Plan. In the revised Work Plan and future work plans and reports, include the tables and figures and separate sections.

**Comment 2**

In Section 2.3.6 (Groundwater Investigation), page 2-6, lines 6-11, the Permittee states, "[o]ne SVOC [bis(2-ethylhexyl)phthalate], two pesticides (dieldrin and heptachlor epoxide), one

**RECEIVED**  
12/12

explosive [Royal Demolition Explosive (RDX)], and three metals (arsenic, chromium, and vanadium) were reportedly detected in at least one sample from at least one well above the U.S. Environmental Protection Agency (EPA) Region 6 Human Health Medium-Specific Screening Levels (HHMSSLs) for Tap Water (Version 6, November 2003).” Revise the Work Plan to describe which groundwater wells and samples contained the constituents listed. Although below standards, groundwater samples also contained VOCs, SVOCs, pesticides, explosives, PCBs and metals; revise the Work Plan to discuss the presence of these constituents. In general, discuss groundwater conditions and quality in more detail.

**Comment 3**

In Section 2.3.7 (Groundwater Monitoring), page 2-6, lines 18-24, the Permittee states, “Table 2-2 summarizes the detected analytical results from semi-annual monitoring for the last two years at the four Parcel 18 monitoring wells, and compares results to permitted regulatory levels. Bold values in the table indicate that regulatory levels were exceeded. Only total metals results which exceeded regulatory levels are shown. Although some constituents have been detected slightly above regulatory levels, there do not appear to be any consistent analyte detections that would be indicative of groundwater impacts at the Eastern Landfill.” Discuss the groundwater monitoring results in more detail. Include all constituent exceedences in addition to metals. Discuss the presence or absence of constituents found in the first round of sampling (e.g. SVOC, pesticides, RDX, and three metals mentioned in Comment 2). Also discuss constituents that have been found in the groundwater, but that are not above regulatory limits, such as: dioxins/furans, mercury, and perchlorate. In addition, revise the Work Plan to expand the discussion of site hydrology to include, but not be limited to groundwater flow direction at the site.

**Comment 4**

Section 3.1 (Contaminants of Potential Concern), page 3-1, lines 7-10, states, “[p]revious investigations have provided adequate information regarding the general nature and approximate lateral extent of landfill trenches and areas of surface debris. However, chemical characterization of surface and subsurface soils has been minimal and is not sufficient for waste characterization or evaluation of environmental impact.” The section lists analytes and methods to be sampled for during the investigation and cleanup. Revise the Work Plan to propose soil sampling for dioxins/furans, since there is evidence of burning at the site, and perchlorate since it has been detected in groundwater (though below regulatory standards).

**Comment 5**

In Section 3.2 (Remediation Goals), page 3-2, the Permittee discusses the remediation goals based on NMED’s Technical Background Document for Development of Soil Screening Levels and NMED’s Position Paper Risk-Based Remediation of Polychlorinated Biphenyls at RCRA Corrective Action Sites (March 2000 as updated). Both of those documents have been combined into one document titled *Risk Assessment Guidance for Site Investigations and Remediation* which is available online at [http://www.nmenv.state.nm.us/HWB/documents/NMED\\_RA\\_Guidance\\_for\\_SI\\_and\\_Remediation\\_6-14-2012.pdf](http://www.nmenv.state.nm.us/HWB/documents/NMED_RA_Guidance_for_SI_and_Remediation_6-14-2012.pdf). Ensure that the remediation goals and Table 3-1 (Summary of Soil Remediation Goals) is up to date. Revise the Work Plan accordingly.

112-030

**Comment 6**

In Section 4.3 (Pre-Excavation Grading and Waste Profile Sampling), page 4-10, lines 31-34, the Permittee states, “[a]dditional trench excavation may be conducted at this time to determine the depth of debris in each of the identified landfill trenches.” Since the depth of the debris in the trenches is unknown, the Permittee must sample to at least native soil or rock. Revise the Work Plan to sample waste through the trenches and into the underlying native soil or rock. Also, revise the Work Plan to include discussion of the materials and methods to be used in the sample collection (e.g., trenching or boreholes, split barrel sampler, direct push, directly from backhoe bucket).

**Comment 7**

In Section 4.4 (Excavation, Transportation, and Disposal) the Permittee discusses excavation of the landfill pits. It is not clear whether or not the Permittee will sample the material from the excavations to characterize for hazardous waste (other than the initial sampling discussed in Section 4.3) and whether or not samples collected from the waste stockpiles. Describe the sampling during excavation. Additionally, it is not clear where the waste will be sorted or where the stockpiles will be located. Describe how the waste will be segregated and where it will be stockpiled. Revise the Work Plan to describe sampling during the excavation and provide a more detailed description of the excavation plan.

**Comment 8**

In Section 4.4 (Excavation, Transportation, and Disposal), page 4-11, lines 3-4, the Permittee states, “[o]verburden will be scraped from the surface of the landfill trenches and stockpiled for re-use during backfill operations.” Because there was surface debris located around the trenches, there is potential for the overburden to be impacted. Revise the Work Plan to propose to collect samples from all material intended for use as backfill to determine whether or not the soils were impacted.

**Comment 9**

In Section (Excavation, Transportation, and Disposal), page 4-11, lines 8-10, the Permittee states, “[l]andfill material is anticipated to be transported and disposed as non-regulated solid waste at Waste Management’s San Juan Regional Landfill in Aztec, New Mexico, following waste profile acceptance.” Discuss the protocol for handling waste if any of it is found to be hazardous waste. Revise the Work Plan to discuss the potential need for the disposition of hazardous waste.

**Comment 10**

In Section 4.5 (Confirmation Sampling), page 4-11, lines 29-31, the Permittee states, “[a]s described in Section 4.4, excavations will continue until visual observations indicate that all landfill debris has been removed. Following the removal of all debris, confirmation sampling will be conducted on the floor of the excavation.” The Permittee must also propose to sample the excavation sidewalls. The Permittee must show that both the lateral and vertical extent of contamination has been removed by excavation. Revise the Work Plan to propose confirmation samples along the excavation sidewalls.

**Comment 11**

In Section 4.5 (Confirmation Sampling), page 4-11, lines 37-38, the Permittee states, “[c]onfirmation samples will be analyzed for all COPCs as listed in Section 3.2. Analytical data will be compared to the remediation goals established in Section 3.3.” Revise the Work Plan to reference the correct sections: Sections 3.1 and 3.2. Throughout the Work Plan, ensure that the correct sections are referenced.

**Comment 12**

In Section 4.9 (Monitoring Well Plugging and Abandonment), page 4-13, the Permittee states, “[g]roundwater monitoring is on-going. However, based on details presented in Section 2.3.7, the Army is proposing under this Work Plan to plug the four monitoring wells at the Eastern Landfill. This proposal is based on the assumption that all landfill material will be removed under this work plan and the confirmation samples will be less than the Permit SSLs.” The Permittee must not abandon the wells until after the excavation is completed in order to collect a final round of groundwater sampling to demonstrate that the groundwater cleanup standards have not been exceeded. If a groundwater monitoring well is damaged during excavation (e.g., EMW04 is close to proposed excavation area A-8), the Permittee may abandon the well as proposed. The results of the final round of sampling must be submitted with the Investigation Report.

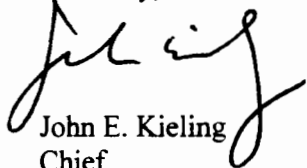


Messrs. Patterson and Smith  
December 10, 2012  
Page 5

The Permittee must address all comments contained in this letter and submit a revised Work Plan. The Permittee must include a cover page with the revised document; the cover page must indicate that the submittal is a revision prepared for NMED. The revised document must be accompanied with a response letter that details where all revisions have been made, cross-referencing NMED's numbered comments. The Permittee must also submit an electronic copy of the revised document with all edits and modifications shown in redline-strikeout format. The revised Work Plan must be submitted to NMED no later than **February 20, 2013**.

If you have any questions regarding this letter, please contact Kristen Van Horn at (505)-476-6046.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
S. Duran, NMED HWB  
Christy Esler, USACE  
Laurie King, U.S EPA Region 6  
Chuck Hendrickson, U.S. EPA Region 6  
Tony Perry, Navajo Nation  
Franklin Jishie, Navajo Nation  
Jason John, Navajo Nation  
Eugenia Quintana, Navajo Nation  
Steve Beran, Zuni Pueblo  
Darrell Tsabetsaye, Zuni Pueblo  
Kirk Bemis, Zuni Pueblo  
Clayton Seoutewa, Southwest Region BIA  
Rose Duwyenie, Navajo BIA  
Judith Wilson, BIA  
Eldine Stevens, BIA  
Ben Burshia, BIA

File: FWDA 2012 & Reading File  
FWDA-12-003

