

CAFB



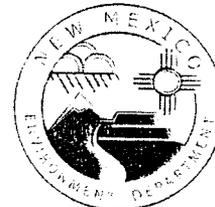
BILL RICHARDSON
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Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

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RON CURRY
Secretary

JON GOLDSTEIN
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

December 17, 2009

Colonel Stephen Clark
27th Special Operations Wing
100 South D.L. Ingram Boulevard
Cannon Air Force Base, New Mexico 88103-5214

**RE: NOTICE OF DISAPPROVAL
FINAL RCRA FACILITY INVESTIGATION FOR SWMUS 34, 78, 85, 91,
95, AND 107 ADDENDUM REPORT, JUNE 2009
CANNON AIR FORCE BASE, NEW MEXICO
EPA ID #NM7572124454
HWB-CAFB-06-007**

Dear Col. Clark:

The New Mexico Environment Department (NMED) has received Cannon Air Force Base's (Permittee) *Final RCRA Facility Investigation for SWMUs 34, 78, 85, 91, 95, and 107 Addendum Report* dated June 2009 (Report). NMED has reviewed the RFI Addendum Report and hereby issues this Notice of Disapproval (NOD). The Permittee must revise the RFI Addendum Report based on the comments presented below.

General Comment:

The Report contains several typographical errors. On all seven pages of Table 6-1 values for maximum concentrations of diesel range organics and lead are not reported. "#REF!" is reported instead of concentrations. Section 10.2.1 contains discussion of results and conclusions of previous investigations at SWMU 95, but refers to SWMU 85 the last sentence on page 10-1. NMED is sometimes typed NDEM. The Permittee must correct these typographical errors

The Permittee should be aware that, in order to determine whether a site is eligible for Corrective Action Complete with or without Controls status, NMED requires that the Permittee conduct human health and ecological risk screening to determine if the contaminants potentially pose an unacceptable risk to human health and the environment. Cumulative risk must be evaluated at sites where multiple contaminants are present.

Specific Comments:

Comment 1. Sections 6.3.1 Previous Investigation Results and 6.3.2 RFI Addendum Results for SWMU 34, Page 6-3:

The Permittee indicated that the industrial and construction worker Soil Screening Levels (SSLs) for lead are both 750 mg/kg. The Permittee must correct the statements to indicate the correct SSL for lead in industrial and construction worker soil as 800 mg/kg.

Comment 2. Section 6.3.4, Conceptual Site Model for SWMU 34, Page 6-4:

The Permittee indicates that exposure to human receptors to lead identified in the 6-12 inch interval as unlikely because exposure to humans would most likely occur at the surface interval (0-6 inch). The Permittee is referred to the NMED *Technical Background Document for Development of Soil Screening Levels, Revision 5.0*. Industrial/Occupational SSLs are based on exposure to surface and shallow subsurface soils (0 – 24 inch interval) that is expected to occur in the commercial or industrial scenario. Residential and construction Worker SSLs are based on exposure to soils in the 0-10 feet interval. The Permittee must follow NMED's guidance to determine whether or not an exposure pathway is complete.

Comment 3. Section 6.4, Summary for SWMU 34, Page 6-4:

The Permittee recommended Corrective Action Complete with Controls status for SWMU 34 due to the presence of lead in soil samples collected in October 2008. It appears to NMED that higher concentrations of lead in surface soil are limited to a small area. NMED recommends that the Permittee conduct limited soil removal in the area around samples identified as C34-SS01 and C34-SS02 in the October 2008 Addendum RFI. The Permittee should collect confirmatory soil samples and analyze them for lead. Limited removal of surface soil around these two sample sites may result in residual lead concentrations well below residential soil SSLs and eliminate the need for controls and annual fees for maintaining the SWMU. The Permittee must submit a brief addendum work plan for review and approval by NMED prior to beginning the soil removal.

Comment 4. Section 7.3.2, RIF Addendum Results for SWMU 78, Page 7-3:

In NMED's Notice of Disapproval (NOD) dated July 27, 2007, the Permittee was directed to compare detected TPA concentrations at SWMU 78 (Fire Department Training Area No. 1) to the unknown oil values listed in Table 2a of NMED's TPH Guidance. The values for residential

and industrial direct exposures to unknown oil are 200 mg/kg. The maximum TPH-DRO concentration in near surface soils at SWMU 78 was 410 mg/kg. In addition, the maximum lead concentration exceeds both industrial and construction worker SSLs. Therefore, SWMU 78 does not qualify for Corrective Action Complete status. The Permittee must conduct further corrective action to achieve applicable cleanup levels for TPH and lead at SWMU 78 to ensure that it does not pose any unacceptable risk to human health or environment.

To qualify for corrective action complete status the Permittee must remove TPH- and lead-contaminated soils to a minimum depth of 2 feet. The Permittee must collect confirmatory soil samples and analyze them for TPH (as DRO extended) and Target Analyte List (TAL) metals. Results of the RFI conducted in 1991 indicated that, in addition to lead, several metals (aluminum, cadmium, calcium, chromium, copper, iron, vanadium and zinc) were detected above CAFB background levels. Cumulative risk screening indicates noncarcinogenic risk greater than a hazard index (HI) of 1 due to the presence of metals in surface soils at SWMU 78. Removal of surface soils at SMWU 78 may reduce residual TPH concentrations to levels below residential soil SSLs as well as lead and other metal concentrations to levels below a cumulative HI of 1, which would eliminate the need for institutional controls. The Permittee must submit a work plan for review and approval by NMED no less than 90 days prior to beginning any soil removal.

Comment 5. Section 8.4, Conceptual Site Model and Section 8.3.4, Summary for SWMU 85, Pages 8-3 and 8-4.

The purpose of the additional investigation conducted at SWMU 85, a nine-acre playa lake, was to refute high arsenic concentrations (reported in a previous investigation) that may have been due to inter-element interference that was not properly accounted for during laboratory analysis. The Permittee sampled three locations within the boundaries of SWMU 85 in October 2008. Arsenic was detected above NMED residential soil SSLs in one surface (0-6 inch) soil sample. That sample was collected with a stainless steel hand auger, under 10 to 12 inches of standing water, near a large pile of concrete rubble. The Permittee indicated that arsenic in that sample may be attributed to soil that was adhered to and fell off of concrete rubble near the sample boring and that it may not be representative of SWMU 85. The Permittee subsequently recommended Corrective Action Complete with Controls status for SWMU 85.

The site does not qualify for Corrective Action Complete with Controls status because it is not adequately characterized. The Permittee must conduct additional investigation to determine arsenic concentrations in surface soils within the boundary of SWMU 85. The Permittee must sample surface soils during dry conditions (i.e., not under standing water) at locations that are representative of storm water accumulation in the playa lake (i.e., not near the concrete rubble pile).

Col. Stephen Clark
December 17, 2009
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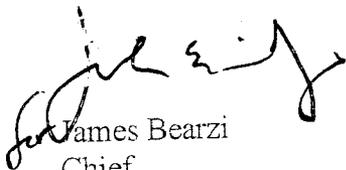
Comment 6, Section 9.2.2, RFI Addendum Activities, Pages 9-1 and 9-2.

The Permittee advanced three soil borings in the vicinity of the former above ground storage tank (AST) at SWMU 91. The Report indicates that, at the time the field work was conducted, "a portion of the area was under approximately 8- to 10-inches of water... [and] in the process of being re-graded with approximately 12 inches of fill material." It is not clear if the soil borings were advanced in the area that was under water or if the soil borings were advanced through 12 inches of fill material resulting in the 0-6 inch surface soil sample being composed of fill material. The Permittee must provide a figure depicting the location of the former AST, the area that was under water during the field work, the area that was re-graded with fill material and the locations of the three soil borings.

The Permittee must address all comments and submit a response by February 28, 2010. All submittals may be in the form of two paper copies of replacement pages and one complete electronic copy. The Permittee must also provide an electronic red-line strike out version of the revised RFI Addendum Report that shows all revisions made to the report.

Please contact Pat Stewart at (505) 476-6059, should you have any questions.

Sincerely,



James Bearzi
Chief
Hazardous Waste Bureau

cc: J. Kieling, NMED HWB
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