



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous & Radioactive Materials Bureau
2044 Galisteo Street
P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-1557
Fax (505) 827-1544



PETER MAGGIORE
SECRETARY

Certified Mail
Return Receipt Requested

March 26, 1999

David E. Clary, Colonel, USAF
Commander
100 S DL Ingram Blvd., Suite 100
Cannon Air Force Base, NM 88103-5714

Subject: Request for Supplemental Information: Cannon Air Force Base Phase I RCRA Facility Investigation Report (Report) for Melrose Air Force Range (SWMU's 114, 115, 117 and AOC's MAO1, MAO2, MAO3, MAO4) EPA ID No. NM5572124456-1

Dear Colonel Clary:

The RCRA Permits Management Program (RPMP) of the Hazardous and Radioactive Materials Bureau (HRMB) of the New Mexico Environment Department (NMED) has reviewed the above-referenced Report, as required under the New Mexico Hazardous Waste Management Regulations.

RPMP has comments on the Report which must be addressed before RPMP can complete its review of the Report. The comments are described in the enclosed Attachment A.

CAFB must submit a schedule for revising the Report within sixty (60) days of receipt of this letter. Failure to respond within this designated time will result in issuance of a Notice of Deficiency for the Report.

Colonel Clary
March 26, 1999
Page 2

If you have any questions please contact Carl Will of my staff at 505-827-1561, ex. 1031.

Sincerely,



Robert S. ("Stu") Dinwiddie, Ph.D., Program Manager
RCRA Permits Management Program

Attachment

cc: Col. James A. Thomas, III, CAFB
Daniel A. Barnett, CAFB
David Neleigh, EPA Region 6
Carl Will, HRMB

file: HSWA/CAFM
track: CAFM/3-26-99/Clary/Dinwiddie/RSI Melrose RFI

ATTACHMENT A

REQUEST FOR SUPPLEMENTAL INFORMATION:

PHASE I RCRA FACILITY INVESTIGATION REPORT FOR MELROSE AIR FORCE RANGE, SUBMITTED BY CANNON AIR FORCE BASE, NEW MEXICO

March 26, 1999

General Comments

Add the word "Report" to the title of the document.

Several NFA recommendations are based on industrial risk based concentrations (RBC's). For sites with contaminants above residential RBC's, adequate institutional controls, for example base operating and closure procedures, must provide notice to current and future property owners and users and other protections to ensure that these sites are used for industrial or lower risk uses only.

Submit an explanation of why 182 feet was the maximum drilling depth. The Report states, at page 5-10, that that was the maximum depth possible with available drilling rods. Because contaminants were detected at depths of up to approximately 145 feet, and the Report states, at page 2-8, that Hart & McAda (1985) indicates that the sites may be underlain by saturated Ogallala Aquifer materials, should drilling to a greater depth have been attempted in an effort to reach the underlying regional aquifer?

Include an ecological risk assessment. A generic short grass or grazing land ecosystem can be used.

I. Executive Summary

No organic analytes were detected at concentrations above practical quantitation limits (PQL's) in the groundwater. Include a table of PQL's.

4.0. Evaluation of Background Geochemistry 4.1.1. Development of the Background Data Set

Indicate how many or what percentage of the upper extreme statistical outliers were identified and removed from the data set.

5.0. RFI Results 5.1. SWMU 114 5.1.1. SWMU Description Site Conceptual Model

Include information about what is known about when hazardous waste was last disposed of at this site.

5.1.3. Conclusions

Because liquid hazardous wastes may have been disposed of at the site, contamination at the site cannot be fully delineated due to the possible presence of UXO, and there are detections of contaminants at depth, HRMB cannot approve a No Further Action determination for this site. Include a plan for ongoing monitoring of either the immediate site area or a regional aquifer downgradient of more than one site that will provide detection of releases from the site to groundwater in the future.

5.3. SWMU 117

5.3.1. SWMU Description Site Conceptual Model

Include information about what is known about when hazardous waste was last disposed of at this site.

5.3.2.4. Groundwater Sampling

If sufficient groundwater can be recovered from the four monitor wells to be sampled, the low flow purging method used at SWMU 114 wells should be used to minimize turbidity in unfiltered samples.

5.3.3. Conclusions

Because liquid hazardous wastes may have been disposed of at the site, contamination at the site cannot be fully delineated due to the possible presence of UXO, and there are detections of contaminants at depth, HRMB cannot approve a No Further Action determination for this site. Include a plan for ongoing monitoring of either the immediate site area or a regional aquifer downgradient of more than one site that will provide detection of releases from the site to groundwater in the future.

5.4. MA01: World War II Cantonment Disposal Site

5.4.1. AOC Description Site Conceptual Model

Include information about what is known about when hazardous waste was last disposed of at this site.

5.4.3. Conclusions

Because liquid hazardous wastes may have been disposed of at the site, contamination at the site cannot be fully delineated due to the possible presence of UXO, and there are detections of contaminants at depth, HRMB cannot approve a No Further Action determination for this site. Include a plan for ongoing monitoring of either the immediate site area or a regional aquifer downgradient of more than one

site that will provide detection of releases from the site to groundwater in the future.

5.5. MA02: Domestic Waste Burial Site

5.5.1. AOC Description

Include information about what is known about when hazardous waste was last disposed of at this site.

5.5.3. Conclusions

Because liquid hazardous wastes may have been disposed of at the site, contamination at the site cannot be fully delineated due to the possible presence of UXO, and there are detections of contaminants at depth, HRMB cannot approve a No Further Action determination for this site. Include a plan for ongoing monitoring of either the immediate site area or a regional aquifer downgradient of more than one site that will provide detection of releases from the site to groundwater in the future.

5.6. MA03: Disposal/Burn Site

5.6.3. Conclusions

Because liquid hazardous wastes may have been disposed of at the site, contamination at the site cannot be fully delineated due to the possible presence of UXO, and there are detections of contaminants at depth, HRMB cannot approve a No Further Action determination for this site. Include a plan for ongoing monitoring of either the immediate site area or a regional aquifer downgradient of more than one site that will provide detection of releases from the site to groundwater in the future.

5.7. MA04: Northwest Munitions Disposal Site

5.7.2.3. Groundwater Sampling

Explain the analysis of 0% matrix spike recovery. Lead was detected in all three groundwater samples, with one detection at 0.72 mg/L, which is above the WQCC standard of 0.05 mg/L. The report states that these lead detections were rejected because of 0% recovery of matrix spike samples. 0% recovery of matrix spike samples indicates low bias, because the laboratory did not detect the matrix spike known to be present. In other words, 0% recovery indicates the possibility that there was more lead present than was detected rather than less, and therefore the detections should not have been rejected.

5.7.3. Conclusions

The analysis is inadequate to determine whether or not groundwater is impacted by the site. Beryllium, chromium, lead, and nickel were detected above MCL's in groundwater.

The report states, at page 5-54, "Beryllium, nickel, and potassium occur at elevated concentrations in unconsolidated subsurface soils at the site." However, according to table 5.7-1, the only detections of these constituents above background were one detection of nickel and one detection of potassium. Both constituents were only slightly above background, with nickel at 15 mg/kg, compared with a background level of 14 mg/kg, and potassium at 4000 mg/kg, compared to a background level of 3500 mg/kg.

6.0. Screening-Level Risk Assessment

6.1. Identification of Potential Chemicals of Concern

6.3. Toxicity Assessment

Paragraph one, line three, replace "(RfC)" with "(CSF)."

6.6. Summary

The Summary states that "concentrations of organic and inorganic chemicals in surficial soils and sediment neither exceeded the background values, nor the residential or industrial RBC screening criteria." However, beryllium was detected at SWMU 115, SS001, zero to 0.5 feet, at 0.91 mg/kg, which exceeds the residential RBC for beryllium of 0.14 mg/kg. There were also many detections above background. Include in the narrative portion of Section 5.0, Results, for each SWMU and AOC, a statement of each inorganic analyte that exceeds residential RBC's or background levels, and a statement of the levels detected.