

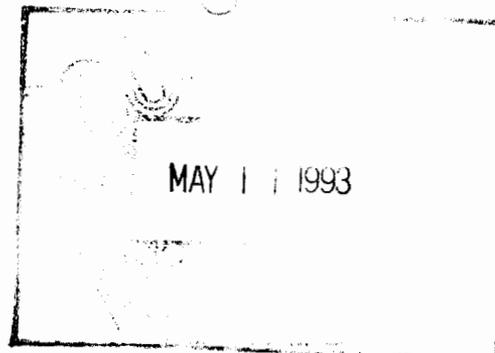


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

Slide
KAFB Rec 93

ENTERED



MAY 11 1993

MAY 7 1993

Thomas A. Norris, Colonel, USAF
Director
Environmental Management Division
377 ABW/EM
Kirtland AFB, NM 87117-5659

Re: RFI Stage 2A Soils
Preliminary Report
Kirtland Air Force Base
NM9570024423

XIII

Dear Colonel Norris:

The Environmental Protection Agency (EPA) has reviewed the RCRA Facility Investigation Stage 2A preliminary report, and offers the attached comments. Upon submittal of the complete report, the EPA will conduct a final review.

Please contact Nancy Morlock at (214) 655-6650 with any questions or comments.

Sincerely yours,

Guanita Reiter, Acting Chief
RCRA Permits Branch

Enclosure

cc: Benito Garcia, NMED ✓



General Comments

1. Kirtland should provide more detailed information concerning background determination in this section and in the individual site discussions. The discussions should indicate where background samples were taken and include a figure depicting those locations. The depth(s) at which background samples were taken should be clearly specified. Additionally, the criteria used to determine which boreholes were representative of "background" conditions should be defined.
2. Using the single largest value of an analyte detected at a background borehole as the background concentration is unacceptable. Kirtland may instead choose to use a statistical analysis to evaluate background. The statistical analysis should compare concentrations of analytes from compliance data with concentrations of background data to determine if the concentrations of the analytes exceed, in a statistically significant fashion, the background data. One method used is that of the construction of a tolerance interval and the use of the resulting upper tolerance limit. The use of a statistical analysis to determine levels is particularly important for analytes with low action levels, such as beryllium.
3. It appears that only one background concentration was determined for each constituent, regardless of sampling depth. A background sample should be collected and evaluated at the same stratigraphic layer as the study area sample.
4. Kirtland may want to include a brief discussion of other future site investigation activities, such as soil gas surveys, groundwater sampling or magnetometer surveys. This information could be included in the "Site Investigation" section for each unit.
5. The detailed sampling procedures should be specified in each section titled "Site Investigation", or the location of the sampling information in the report should be referenced.
6. Kirtland should include a discussion concerning the thirteen (13) samples that exceeded holding times.

Technical Comments:

1. **Page 4-9, Section 4.2.4 "Analytical Results and Comparison to Action Levels"**

The first sentence of this section reads "...at concentrations

from 0.24 to 1.3 mg/kg (table 4.2)." According to table 4.2, the concentrations ranged from 0.23 to 1.3 mg/kg.

2. Page 4-18, Section 4.3.2 "Review of Previously Collected Data"

Kirtland should indicate where the 100 ft. exploratory borehole was installed in relation to Landfill No. 2.

3. Page 4-37, Section 4.5.2 "Review of previously collected data"

Kirtland should indicate the range of concentrations detected for organic chloride, organic iodide and TOX in the ten (10) shallow boreholes installed during the Phase II, Stage 1 IRP. It would also be helpful to list the range of background values for these analytes.

4. Page 4-39, Section 4.5.4 "Analytical results and comparison to action levels"

A. According to table 4.8, the beryllium concentrations ranged from 0.21 to 0.96 mg/kg.

B. There is no mention of background levels in this section, nor are background values given in corresponding table 4.8.

5. Page 4-46, Section 4.6 "Site 8 - Explosive Ordnance Disposal Range"

The text states that this site has "been used since about 1972". Is this an active site for which a permit from the State is being sought? Are there any plans to close the site? Or is the site inactive? Please clarify. If the site is active Kirtland may not need to investigate this site as part of the RFI.

6. Page 4-50, Table 4.11 "Concentrations of Organic Analytes Above Project Detection Limit in Soil Samples from Site 08, in mg/kg (dry weight)"

According to this table, TPH concentrations ranged from 11,400 to 6,530 mg/kg at depths of 1 and 4 feet, respectively. Unless this is an active site, Kirtland should plan to include a discussion of further sampling to determine the extent of contamination in Section 4.6.5 (Recommendations). For future investigations, it may save time and money for Kirtland to

continue sampling at greater depths when field screening indicates high concentrations of contaminants in shallow samples.

7. Page 4-48, Section 4.6.3 "Site Investigation"

Kirtland should plan to provide more information concerning the background samples that are planned for this site (the Explosive Ordnance Disposal Range), including when the samples are scheduled to be taken (see Comment No. 1).

8. Page 4-57, Section 4.8.1 "Site Description"

Is KAFB Production Well No. 4 an active well? Please specify.

9. Page 4-57, Section 4.8.3 "Site Investigation"

Kirtland should show the location of the proposed background borings on a figure and provide more information concerning these borings, including when the borings are scheduled to be installed (see Comment No. 1).

10. Page 4-61, Section 4.9.2 "Review of Previously Collected Data"

Kirtland may want to include a range of concentrations for the hazardous waste and metals analyses done in 1991 that were "not of regulatory concern".

11. Page 4-63, Section 4.9.3 "Site Investigation"

Are there any plans to conduct a magnetometer survey and/or soil gas survey at this site? These items were discussed in the Stage 2A Work Plan (August 1991). Kirtland may want to mention future work items in this section.

12. Page 4-63, Section 4.9.4 "Analytical Results and Comparison to Action Levels"

Line 2 of this section states that "lead was reported in one surface sample (KAFB140301) at a concentration of 45.8 mg/kg... (table 4.14) from Sewage Lagoon 1 (fig. 4.9)." However, table 4.14 shows three (3) surface samples with lead concentrations: KAFB140103, KAFB140301 and KAFB140401. Sample

KAFB140401 appears to have the highest lead concentration at 300 mg/kg.

13. Page 4-68, Section 4.10.3 "Site Investigation"

The third paragraph of this section states that "Soil borings (5 boreholes, approximately 100 feet deep) will be performed at the site." Are these boreholes proposed to be installed in addition to the five (5) boreholes installed during this Stage 2A investigation? Please clarify.

14. Page 4-74, Section 4.11.1 "Site Description"

Please indicate whether KAFB Production Well No. 4 is an active well.

15. Page 4-94, Section 4.15 "Site Description"

Is this an active site? Please specify.

16. Page 4-96, Section 4.15.4 "Analytical Results and Comparison to Action Levels"

According to table 4.22, beryllium concentrations ranged from 0.33 to 0.48 mg/kg.

Other Comments:

1. According to the Standard Conditions of the Kirtland HSWA permit, a total of three (3) copies of all plans, reports or other submissions must be submitted to the Agency. Please ensure that all future reports are submitted in triplicate.
2. Page 3-7, Section 3.5.4, Line 7, "Soil samples were analyzed..."
This sentence is repeated twice in this paragraph.
3. Page 4-21, Section 4.2.5 "Recommendations"
This section should be numbered 4.3.5.
4. Page 4-20, last sentence on page should read "phthalate was detected" and not "phthalate we detected".
5. Page 4-34, Paragraph 5, Line 1
This sentence references figure 4.5 and not figure 4.4.

6. Page 4-38, Paragraph 3, Line 1
Replace "form" with "from".
7. Page 4-57, Section 4.8.1, Line 1
According to figure 1.2, Landfill No. 3 is located to the east
of the TRESTLE facility.
8. Page 4-74, Section 4.11.1, Line 1
According to figure 1.2, Site 17 is located to the east of the
TRESTLE facility, not to the northwest.