



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
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HSWA KAFB G/M/T

FEB 21 1997



Mr. Benito Garcia, Chief
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044A Galisteo Street
Santa Fe, NM 87505

Dear Mr. Garcia:

The Environmental Protection Agency (EPA) has reviewed the December 23, 1996, Sampling and Analysis Plan submitted by Kirtland Air Force Base (KAFB) concerning SWMU OT-74, Former Pistol Range, and offers the attached comments.

If you have any questions, please contact Ms. Nancy Morlock of my staff at (214) 665-6650.

Sincerely yours,

David W. Neleigh
David W. Neleigh, Chief
New Mexico - Federal Facilities
Section

cc: Mr. Steve Pullen
New Mexico Environment Department

TRACK KAFB 2/21/97, 2/24/97, HRMB, EPA, RE; HSWA

KAFB1832



**EPA COMMENTS
KIRTLAND AIR FORCE BASE
SWMU OT-74 SAMPLING AND ANALYSIS PLAN DATED DECEMBER 23, 1996**

GENERAL COMMENTS

1. The Sampling and Analysis Plan (SAP) presents only site-specific information and makes reference of the Kirtland Air Force Base Base-Wide Plans for the Installation Restoration Program (Base-Wide Plans) as the source for other RFI procedures and information. EPA has previously reviewed the Base-Wide Plans and submitted comments to NMED and Kirtland. However, the Base-Wide Plans have not been approved by NMED as of this date. NMED may wish to consider completing its review of the Base-Wide Plans prior to taking final action on this Sampling and Analysis Plan.

Based upon EPA's review of the SWMU OT-74 Sampling and Analysis Plan and the Base-Wide Plans, the following information appears to be missing from the Sampling and Analysis Plan:

- A. Identification of Potential Receptors
- B. Site Background Information
 - Topography and surface drainage map for the vicinity of the SWMU
 - Location of all production and groundwater monitoring wells in the vicinity of the SWMU
- C. Precision objectives for all field instruments (this information should at least be summarized within the body of the SAP)

Kirtland should submit this information to NMED for review.

2. Kirtland should include a copy of its Standard Operating Procedure (SOP) for use of the X-ray fluorescence analyzer (see comment 1C, above). The SOP should specify, at a minimum, limitations and interferences; sample preparation; energy calibration; qualitative and quantitative analysis; quality control; detection limits; and data reduction, validation, and reporting. This information is particularly important since the proposed investigation of SWMU OT-74 relies heavily on the use of X-ray fluorescence.

SPECIFIC COMMENTS

3. **Section 2.2, Previous Investigations**
Kirtland should submit a map depicting the locations of the previous sampling locations. Analytical results for each sample should be presented on the map, or on an accompanying table.

4. **Section 2.3, Work Plan and Rationale, Proposed Sampling Plan**

- A. Kirtland states that fifty percent of the samples will be sent to a laboratory for confirmatory analysis. Kirtland should explain the rationale for only sending fifty percent of the samples to a laboratory for analysis. In general, field screening may be appropriate for guiding an investigation, but laboratory analysis should be completed for nature and extent determinations.
- B. Kirtland proposes to collect samples from the backstop at the surface (0-0.5 ft) and then at one-foot intervals in each pattern. However, Kirtland proposes to collect samples at two-foot intervals for the other areas. Kirtland should explain the rationale for the different sampling intervals.
- C. Kirtland should explain the rationale ensuring that samples taken from areas perpendicular to the backstop slope are accurate representations of maximum contaminant levels. The angle of sample dispersion relative to the soil surface may be inconsequential when precipitation falls over a large soil surface area.

5. **Section 2.4.1, Soil Pile**

- A. Does Kirtland plan to remove the 25-30 cubic yard soil pile? The presence of the soil pile near the present-day firing range could lead to the emplacement of more spent rounds, and could also lead to problems with runoff. NMED may wish to consider recommending an interim measure at this site.
- B. Depending upon the soil sampling results, the soil pile may need to be added to Kirtland's HSWA permit as a SWMU.
- C. Does Kirtland plan to remove the "spent rounds of various calibers" that are located near the present small arms range?

6. **Section 2.4.2, Expended Rounds on Ground Surface**

- A. Does the small, unnamed arroyo contain any visible evidence of contamination? EPA recommends that Kirtland conduct soil sampling along the arroyo adjacent to and downstream from this site.
- B. NMED may wish to consider requiring an interim measure to remove the spent rounds that are scattered on the surface and near-surface. NMED may also wish to consider adding this site to Kirtland's HSWA permit, pending the receipt of analytical information.