



BRUCE KING
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

ENTERED

KAFB 93
FILE
KAFB/LED/93
JUDITH M. ESPINOSA
SECRETARY
RON CURRY
DEPUTY SECRETARY

MEMORANDUM

TO: Stephanie Stoddard, RCRA Permitting Group
THROUGH: Steve Alexander, Technical Section Supervisor *SA*
FROM: Ron Kern, Technical Program *RK*
DATE: March 31, 1993
SUBJECT: **Background Soil Data Collection and Analysis for Methylene Chloride (MeCl) at Kirtland Air Force Base (KAFB) Battery Shop French Drain (FD), Albuquerque**

KAFB proposed in a letter dated March 19, 1993, a sampling and analysis plan for determining soil Lead (Pb) background concentration in the vicinity of the FD.

Stephanie Stoddard of the RCRA Permitting Group asked the technical group to provide comment on the applicability of the proposed program of sampling and analysis.

Analytical method 7421 has been proposed by KAFB for the analysis of Pb. This method has the lowest Practical Quantitation Limit (PQL) of recommended analytical methods for Pb and is acceptable to the technical group.

Three sample sites were selected and depicted on a simple sketch map by KAFB (attached). These appear to be within a horizontal distance of 250 to 600 feet from the FD; the map has no explanation of scale. These sample sites were selected to be outside the area of probable contamination from the FD and outside areas of other potential Pb contamination. Soil samples were proposed to be taken from a depth of three (3) feet.

Recommendations for Soil Pb Background Program:

1. Three (3) background soil samples are acceptable, but this should be considered as a minimum number.
2. A depth of three (3) feet is unacceptable because the previous soil boring program (July, 1992), for which these background samples are to apply, took samples from a minimum depth of ten (10) feet. Background soil samples should be acquired from a depth of not less than ten (10) feet at all sample sites.
3. Background soil samples should be collected from the same USDA



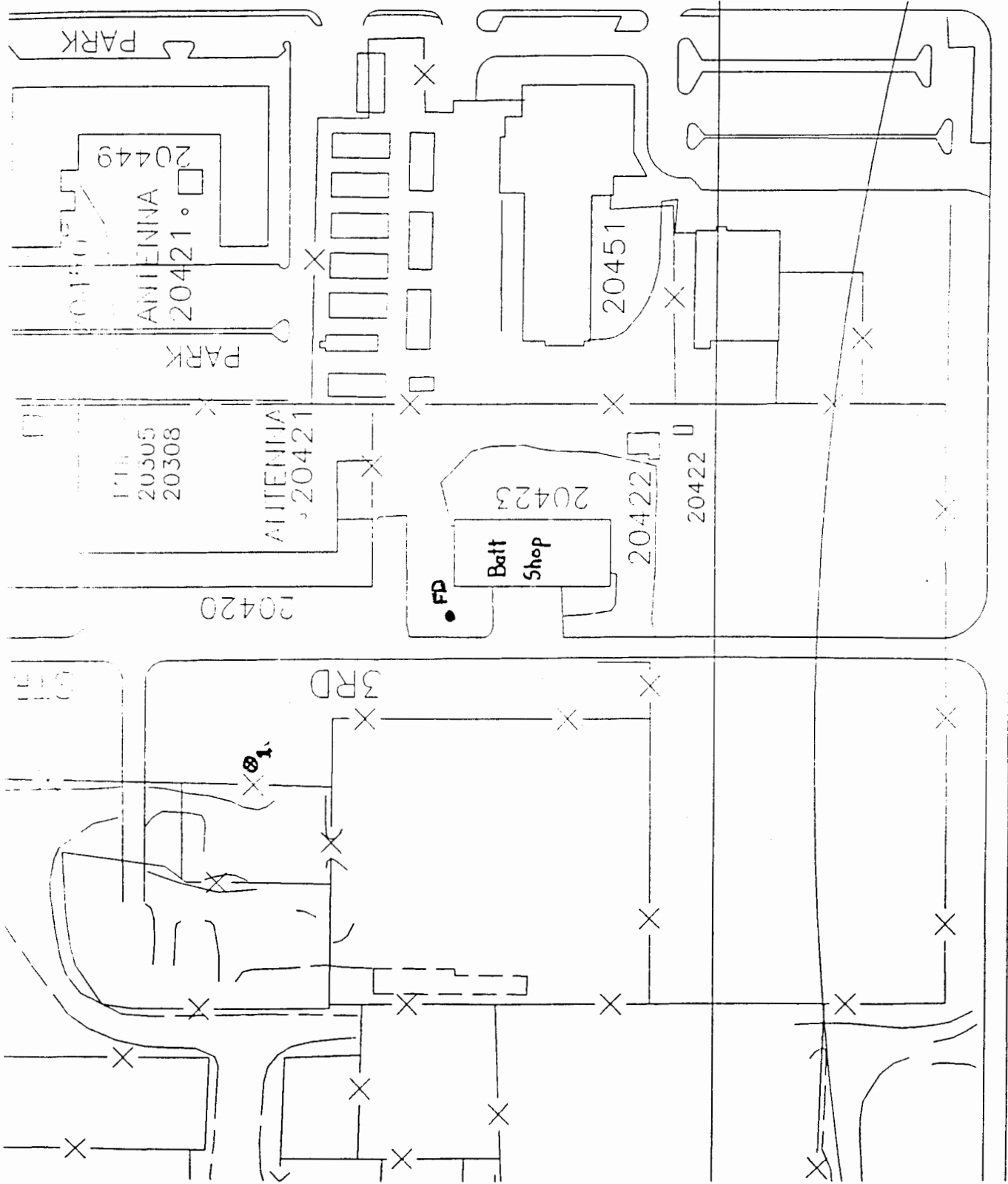
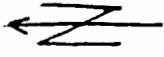
soil series as the soils located at the FD.

4. In discussion with John Gould (Supervisor, Installation Restoration Program, KAFB) on March 26, 1993, sample sites 2 and 3 on the attached map were clarified and appear to be acceptable background sample sites. Site number 1 is unacceptable and should be located in an area outside of any probable contamination.

5. Depending upon the analytical results, background soil Pb levels may be compared directly to the data for Pb levels (maximum 11 ppm) detected in the previous soil boring program (July, 1992) at the FD. If a direct comparison does not confirm the background nature of the Pb levels from the previous program, a statistical comparison of both data sets may be required.

Analysis for Methylene Chloride:

On March 26, 1993, Mr. Gould telephoned and suggested that KAFB might assume that the MeCl detected in two (2) soil samples (20 feet and 40 feet of depth) from boring SB-4 (July, 1992, soil boring program) is actual versus laboratory contamination and that KAFB might conduct a risk assessment to show that this contamination would probably be below health-based action limits. On March 29, 1993, HRMB informed Mr. Gould verbally that the proper approach to this investigation from the regulatory perspective is to first determine the concentrations and extent of MeCl contamination prior to development of a risk assessment. Mr. Gould was then informed that an acceptable solution would be to do another soil boring immediately adjacent to SB-4 as the means to determine whether the MeCl detected in the previous soil samples was the result of actual or laboratory contamination. Samples should be taken at a minimum from depths of 20 feet and 40 feet; samples should be analyzed at a minimum for MeCl with appropriate QA/QC documentation. Mr. Gould was informed that our comments would be formalized in a letter from NMED to KAFB.



Sample Locations - ⊗

⊗ 3.

⊗ 2.