

Stu NO
Tori



State of New Mexico
ENVIRONMENT DEPARTMENT
DOE OVERSIGHT BUREAU
P.O. Box 1663, MS/J-993
Los Alamos, New Mexico 87545

GARY E. JOHNSON
GOVERNOR

MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

1129
HSWA LDRIC 4/35/35-004, 35-009, 35-014,
35-016)

January 25, 1997

Mat Johansen, DOE AIP POC
U. S. Department of Energy
Los Alamos Area Office, MS A316
Los Alamos, New Mexico 87544

RE: Review of Los Alamos National Laboratory's "RFI Report for
Potential Release Sites 35-004, 35-009, 35-014, 35-016"
dated July, 1996.

Dear Mr. Johansen:

The DOE Oversight Bureau (DOE OB) has reviewed the subject document. The following comments are provided for the purpose of communicating the results of the review. They are not provided or intended for the purpose of representing the regulatory position of the New Mexico Environment Department.

General comments:

1. This report does not include radiological sample results. The results from the radiological sampling performed at these sites are needed to evaluate a proposal for No Further Action (NFA). All sample information resulting from the RFI should be included in the RFI report.
2. The report includes only the results from Multiple Chemical Evaluation (MCE) calculations. In order to present the results more clearly, the chemicals, concentrations and SALs used in the MCE should be presented in a table. Also, all chemicals found at concentrations above 0.1 of the SAL should be included in the MCE calculation.
3. This report utilizes qualitative risk assessments in place of quantitative risk assessments. The guidance document cited in section 3.4.2, Risk-Based Corrective Action Process (Environmental Restoration Decision Support Council 1996, 53751) does not discuss the use of qualitative risk assessment as a basis for a recommendation of NFA. The methodology and basis of the qualitative risk assessment should be clearly defined and discussed with the Administrative Authority.
4. X-Ray Fluorescence (XRF) was used to screen soil for mercury. The reported detection limit for mercury using XRF is 5 mg/kg. The SAL for mercury in soil is 23 mg/kg. The detection

T2



limit is greater than 0.1 of the SAL. Laboratory data should be reported to show the ratio of Hg concentrations to the SAL. Either the detection limit of 5 mg/kg should be used in the MCE or fixed laboratory data with a lower detection limit should be used.

5. For those elements that do not have an XRF UTL, or those which have an XRF detection limit greater than 0.1 of the SAL, fixed lab analytical results should be reported to support the XRF results.

Specific comments:

1. **§ 5.1.7.2.1, Page 5-9, Review of chemicals of Potential Concern and Extent of Contamination.**

"The concentration of aroclor 1260 in this sample was approximately three times higher than its SAL value"

Given the spatial separation of the sample points and the concentration of mixed arochlors in the samples, this site may require additional sampling to determine the extent of contamination. Sample AAC1158 seems to represent a hot spot. Additional information should be provided to show that the areas of maximum concentration have been sampled.

2. **§ 5.1.5, Page 5-7, Figure 5.1.5.1, Locations of organic chemicals and analytes that exceed UTLs and SALs at PRSs 35-004 (a) and 35-009 (e).**

This site should be considered for implementation of Best Management Practices (BMPs) in order to stop any of the mixed arochlors from entering surface water flow into Ten Site Canyon. The potential for contaminant migration into the canyon should be discussed and mitigated as needed.

3. **§ 5.8.1, Page 5-75, PRS 35-016(q), History.**

The report should include information on the past waste management practices in the Sodium Test Building. Also, the origin of the buried construction materials, and the purpose of the trench should be discussed. The selective asphalt capping of the waste material may be an indication of buried hazardous materials. The area of the trench buried and covered with asphalt may need further investigation. The origin and purpose of the recent backfill material not associated with this PRS should be discussed.

4. § 5.8.4.2, Page 5-77, Deviations from the Sampling and Analysis Plan.

"...engineering surveys showed that this material is recent backfill material and is not associated with the PRS."

The origin and purpose of the recent backfill material should be discussed. Where did the material come from? Is it clean? When was it deposited?

5. § 5.8.5, Page 5-79, Background Comparisons.

"Mercury was detected in one sample at a concentration of 6.16 mg/kg."

The SAL for mercury is 23 mg/kg. The concentration of mercury in the sample represents about .26 of the SAL. Contaminants found at concentrations above .1 of the SAL should be included in the MCE calculation.

Above background mercury concentrations in an active channel is a concern to the NMED Surface Water Quality Bureau. These concentrations may result in exceedences of the New Mexico Water Quality Control Commission standards for interstate and intrastate streams. During the current LANL Systematic Evaluation for Water Quality Compliance, this site should be evaluated for implementation of BMP's to stabilize the buried material and to prevent recent backfill and asphalt cap materials from eroding into the canyon.

If there are any questions, please contact me at 505-672-0448 or Chris Hanlon-Meyer, the DOE Oversight Bureau FU-4 and 5 Manager at 505-827-1536.

Sincerely,



Steve Yanicak, LANL POC
Department of Energy Oversight Bureau

SY:CHM:chm

Mat Johansen

Page 4 of 4

Review of RFI Report for PRSs in TA-35

January 25, 1997

cc: John Parker, NMED, Chief DOE OB
Benito Garcia, NMED, Chief HRMB
Glenn Saums, NMED, Program Manager, SWQB
Ted Taylor, DOE LAAO, Program Manager, MS A316
Bob Simeone, DOE FU-4 FPC, MS A316
Allyn Pratt, LANL, FU-4 FPL, MS J521
Gabriela Gainer, LANL, EES-13, MS M321