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MARK E. WEIDLER  
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**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

EDGAR T. THORNTON, III  
DEPUTY SECRETARY

September 23, 1997

G. Thomas Todd, Area Manager  
Los Alamos Area Office  
Department of Energy  
528 35th Street  
Los Alamos, New Mexico 87544

Dr. Sigfried Hecker, Director  
Los Alamos National Laboratory  
P. O. Box 1663, MS A100  
Los Alamos, New Mexico 87545

**RE: Request for Supplemental Information for RCRA Facility Investigation (RFI)  
Report for Technical Area 35, Potential Release Sites (PRSs) 35-004(a, g, h),  
35-009(e), 35-014(g1, g2), 35-016(b, j, n, q) dated July 1996  
Los Alamos National Laboratory NM0890010515**

Dear Mr. Todd and Dr. Hecker:

The RCRA Permits Management Program (RPMP) of the Hazardous and Radioactive Materials Bureau (HRMB) has reviewed the RFI Report for Technical Area 35 dated July 2, 1996, and referenced by EM/ER:96-356, and found it to be insufficient. LANL must respond to the request for supplemental information noted in Attachment A within thirty (30) calendar days of the receipt of this letter. If LANL does not submit a complete response to the request for supplemental information or submit the information within thirty (30) calendar days LANL should be advised that a Notice of Deficiency will then be issued.

Should you have any questions regarding this letter, please contact me or Mr. John Kieling, RPMP's LANL Facility Manager, at (505) 827-1558.

Sincerely,

  
Robert S. (Stu) Dinwiddie, Ph.D., Manager  
RCRA Permits Management Program  
Hazardous and Radioactive Materials Bureau

RSD:jek

attachment

11 SUDA LANL 4/11/97/35 TS



Mr. Todd and Dr. Hecker  
September 23, 1997  
Page 2

cc w/ attachments: T. Baca, LANL EM-DO, MS J591  
T. Davis, NMED HRMB  
R. Dinwiddie, NMED HRMB  
T. Glatzmaier, LANL DDEES/ER, MS M992  
J. Jansen, LANL EM/ER, MS M992  
M. Johansen, DOE LAAO, MS A316  
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T. Taylor, DOE LAAO, MS A316  
S. Yanicak, NMED DOE OB, MS J993  
File: Reading and HSWA LANL 4/1129/35  
Track: LANL, doc date, na, DOE/LANL, HRMB/jek, RE, File

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**ATTACHMENT A**  
**Request for Supplemental Information**  
**RFI Report**  
**Technical Area 35**  
**July 1996**

**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. The use of qualitative risk assessments are not appropriate for recommending NFA and is not an approve method by the Administrative Authority for assessing PRSs in the NFA process.
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 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. 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.
6. The report shall include an ecological risk assessment. Risk to ecological receptors shall be evaluated before sites are proposed for No Further Action.

**Specific comments:**

1. **§ 5.1.7.2.1, Review of chemicals of Potential Concern and Extent of Contamination, Page 5-9.** "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, 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), Page 5-7.** 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, PRS 35-016(q), History, Page 5-75.** 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 should be further investigated. 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. Indicate the origin of the material, type and when it was deposited.
5. **§ 5.8.5, Background Comparisons, Page 5-79.** "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.

Mercury above background 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.