



GARY E. JOHNSON  
GOVERNOR

State of New Mexico  
**ENVIRONMENT DEPARTMENT**  
*Hazardous & Radioactive Materials Bureau*  
2044 Galisteo  
P.O. Box 26110  
Santa Fe, New Mexico 87502  
(505) 827-1557  
Fax (505) 827-1544



MARK E. WEIDLER  
SECRETARY

EDGAR T. THORNTON, III  
DEPUTY SECRETARY

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

July 29, 1997

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

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

**RE: Request for Supplemental Information  
RCRA Facility Investigation Report  
SWMU 0-039  
Los Alamos National Laboratory  
NM0890010515**

Dear Mr. Todd and Dr. Hecker:

The Resource Conservation and Recovery Act Permits Management Program (RPMP) Hazardous and Radioactive Materials Bureau (HRMB) has reviewed the RFI Report for SWMU 0-039, submitted on February 28, 1996, and referenced by EM/ER: 96-082, and found it to be insufficient. The NMED Department of Energy (DOE) Oversight Bureau and the US Environmental Protection Agency (EPA) provided technical comments which were considered in staff review. 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 DOE/LANL does not submit a complete response to the request for supplemental information or submit the information within thirty (30) calendar days a Notice of Deficiency will then be issued.



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1/10/97/6/60039

Messr. G. Thomas Todd and Sig Hecker  
Jul 29, 1997  
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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

cc: T. Baca, LANL EM, MS J591  
T. Davis, NMED HRMB  
B. Garcia, NMED HRMB  
T. Glatzmaier, LANL DDEES/ER, MS M992  
K. Hill, NMED HRMB  
J. Jansen, LANL EM/ER, MS M992  
M. Johansen, DOE LAAO, MS A316  
J. Kieling, NMED HRMB  
M. Leavitt, NMED GWQB  
H. LeDoux, DOE LAAO, MS A316  
D. McInroy, LANL EM/ER, MS M992  
D. Neleigh, EPA, 6PD-N  
J. Parker, NMED DOE OB  
S. Pierce, NMED SWQB  
G. Saums, NMED SWQB  
T. Taylor, DOE LAAO, MS A316  
S. Yanicak, NMED DOE OB, MS J993  
File: Reading and HSWA LANL 1/1071/0/0-039  
Track: LANL, doc date, NA, DOE/LANL, HRMB/jek, RE, File

**ATTACHMENT A**  
**Request for Supplemental Information**  
**RFI Report for PRS 0-039**

**SPECIFIC COMMENTS**

1. **Page 41, Section 5.1.6, Table 5.1.6-1:** Please explain why results of the listed chemicals, except TPH, for Sample 0100-95-0023 are all printed as <25. Explain if 25 is the detection limit for this sample. LANL shall explain the reason the detection limit of this sample is so much higher. Also, indicate the units on the table for clarification.
2. **Page 43, Section 5.1.6, 1st Paragraph:** The Report stated 20 samples had EQLs that were higher than their respective SALs. LANL shall list these results along with their respective SALs regardless whether these chemicals are expected to be **present** in the site.
3. **Page 45, Section 5.1.7.2:** It states, "The reasonable maximum exposure use for this area would be for workers to walk through this area several times a day." Because the site is a local Community Center, children shall also be included in the possible exposure group. LANL shall also evaluate a residential exposure scenario.
4. **Page 47:** ED is indicated as 25 years for a worker and AT as 25 years x 365 days/year; but in Table 5.17.2.2-2, ED is indicated as 30 years and AT-nc(d) was printed as 10950, which is the product of 30 x 365. Explain as to which number is correct (25 or 30) and provide the corrected calculations.
5. **Page 50, first Paragraph:** It states, "It is also noted that the air concentrations estimated for the site using the EPA's Volatilization Factor Model (VFM) would fall below all of these ambient air guidelines and regulations." LANL shall list air concentration of Stoddard solvent<sup>TM</sup> estimated by this model and the concentrations listed in EPA's guidelines and regulations.
6. **Pages D-2 and D-3:** The PCE sample values had the superscript "c" attached, and "c" was noted in the bottom of Page D-3, as "**A duplicate of this sample reported a detected value of 0.027 mg/kg PCE.**" LANL shall explain how the duplicate of each sample results in a value of 0.027 mg/kg PCE.

7. **Page D-10:** The weakness of this argument is that the transport model used to estimate the depth of the PCE plume, **necessarily**, makes lots of assumptions, (e.g., steady state flow and isotropic flow parameters) and uses a number of default values. Small change in these parameters can change the calculated depth of the PCE plume, and thus the result is not very dependable. For instance on Page D-11 changes in  $\theta_r$ ,  $\Lambda$ , and  $I_b$  can alter the relative hydraulic conductivity values from the Brooks-Corey equation, and in turn the steady state water flux. The movement of PCE per year could be different, thus the plume depth of PCE.

Thus, the argument of LANL not having liability based on the discrepancy between calculated and observed plume depth is questionable. LANL shall resume the responsibility of cleaning the site.