



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

JUL 18 1996

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

RE: Technical Review of Los Alamos National Laboratory (LANL)  
RFI Report for SWMU 0-039, EPA I.D. No. NM0890010515

Dear Mr. Garcia:

The Environmental Protection Agency (EPA) has completed a technical review of Los Alamos National Laboratory (LANL) RFI Report for SWMU 0-039, submitted on February 28, 1996. The EPA found the RFI Report to be deficient, and comments are enclosed.

The EPA recommends that the Class 3 permit modification to remove the SWMU from the RCRA/HSWA permit not be approved until all comments have been resolved.

If you have any questions or need additional information, please contact Mr. Allen T. Chang of my staff at (214) 665-7541.

Sincerely yours,

*David Neleigh*  
David Neleigh, Chief  
New Mexico and Federal  
Facilities Section

Enclosure



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LOS ALAMOS NATIONAL LABORATORY (LANL)  
RFI REPORT FOR PRS 0-039

NOTICE OF DEFICIENCY

1. Page 41, 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. Is 25 a detect limit for this sample? LANL shall explain the reason the detection limit of this sample is much higher than others. (BPJ)
2. Page 43, 1st Paragraph: The Report stated 20 samples had EQIs 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. (BPJ)
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. (BPJ)
4. Page 47: ED was printed 25 years for a worker and AT was explained as 25 years x 365 days/year; but in Table 5.17.2.2-2, ED was printed as 30 years and AT-nc(d) was printed as 10950, which is the product of 30 x 365. Which number is correct (25 or 30)? (BPJ)
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" estimated by this model and the concentrations listed in EPA's guidelines and regulations? (BPJ)
6. Page D-2 and D-3, some 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 samples from different sample locations have same PCE concentrations (0.027 mg/kg) (BPJ)
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  $h_r$ ,  $K$ , and  $w_b$  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 whole argument of LANL not having liability based on the discrepancy between calculated and observed plume depth is unreliable and questionable. LANL should resume the responsibility of cleaning the site. (BPJ)