



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

*Star -  
Please forward  
to LANL/DOE  
by 5/12/98 or  
return to EPA by  
the same date w/  
rationale provided  
4/14/98*

April 9, 1998

APR 1998

MSWA LANL 4/11/98/35

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

RE: Review of the LANL VCA Completion Report for PRS 35-014(f),  
EPA I.D. No. NM0890010515

Dear Mr. Garcia:

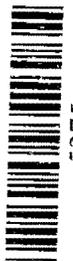
The Environmental Protection Agency (EPA) has completed a technical review of the Los Alamos National Laboratory (LANL) RCRA Voluntary Corrective Action (VCA) Completion Report for cleanup activities in Technical Area (TA) 35, Potential Release Site (PRS) 35-014(f), dated December 5, 1997. The EPA has found parts of the Report to be deficient and enclosed is a list of deficiencies.

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 W. Neleigh, Chief  
New Mexico/Federal Facilities  
Section

Enclosure



5275

**LIST OF DEFICIENCIES  
LANL VCA COMPLETION REPORT FOR  
PRS 35-014(f)**

**General Comments**

1. LANL needs to provide all soil boring descriptions and field screening results in the VCA Report. (**Best Professional Judgement, (BPJ)**)
2. The first page of this report is unclear. The first section describes this PRS as two oil stained areas; however the second section begins talking about underground storage tanks. Please clarify how the oil stained areas were contaminated and show the locations of the two tanks in Figure 1-1. (**BPJ**)

**Site Specific Comments**

1. Page 1: VCA Report is a stand alone document. The report should include a brief description of the two underground storage tanks (USTs). How long had these tanks been used? What kinds of chemicals were stored in the tanks? Were there any pipelines connected to these tanks (underground and/or above ground) and where do the pipelines end? Has LANL investigated the leaks from these pipelines? Please show them in Figure 1-1. (**BPJ**)
2. Page 11, Section 2.7: LANL needs to comply with NMED's cleanup levels for TPH and not be concerned with the Massachusetts Department of Environmental Protection cleanup standards. (**BPJ**)
3. Page 11, Section 3.1, 4th paragraph: Although the VCA workplan required LANL to collect at least five verification samples, LANL collected four samples instead and stated that "visual inspection did not show staining or evidence of suspected contamination." After the VCA, the site should be free of staining; otherwise, what was the VCA for? So, the verification samples should be collected from the neighborhood of the former contaminated area. LANL must collect as many samples as required by the workplan. (**BPJ**)
4. Page 11; Implementation: EPA realizes that this workplan was not approved by the Administrative Authority; however LANL should understand that if you reduce the number of samples

in an approved workplan you should get approval from the Administrative Authority first. If you do not get approval, then it is very likely that you will have to take the additional samples as required in the approved work plan.

**(BPJ)**

5. Page 13: Table 3.2-1 shows the TPH of four samples. Two of them have elevated TPH concentrations (2,500 mg/kg and 5,900 mg/kg), which are above the State's cleanup levels. Were these four samples collected from "spots of staining or evidence of suspected contamination"?

Which TPH analytical methods were used? If they were analyzed by the standard TPH analysis, the results are obviously not correct. LANL shall re-analyze them by using the extended TPH analysis, which includes both long-chain and short-chain hydrocarbons. **(BPJ)**

6. Page 11, last paragraph: Since TPH results showed either too low or too high concentrations, LANL shall take additional samples and verify which concentration is right. **(BPJ)**
7. Page 13, first paragraph: Please explain LANL's "Stop Work" criteria. **(BPJ)**
8. Page 13, Section 3.3 Conclusions and Recommendations: The results from Location IDs 35-2428 and 35-2429 confirmed the area had significant spills. Even though LANL removed 45 cubic yard of soils, the TPH in the southeast of Building TA35-188 is still higher than the State cleanup standard. **(BPJ)**
9. Page 13; Section 3.3 Conclusions and Recommendations: It states, "This sample was collected in bedrock tuff from material that did not exhibit any visual or olfactory indications of oil contamination."; however, the TPH in this sample is 5,900 mg/kg. LANL shall utilize the results from a qualified fixed laboratory, not from visual or olfactory indications, to determine whether the soil is free of contaminations.

Also, because of the high concentration at those locations, TPH may penetrate through the bedrock, and/or spread underground radially depending on the site's geological situation. LANL shall collect deeper samples at the two locations where elevated TPH is located to determine the vertical and radial extent of contamination. This does not mean that cleanup is necessary; however, determining the

extent of the TPH contamination is necessary. **(BPJ)**

10. Page 14, 4th paragraph: It states, "Excavation was not extended beyond the exposed soil because the existing asphalt predates the oil spills, and contamination was not found beneath the asphalt in the UST and Phase I RFI samples east of TA-35-188." TPH plume can spread underground regardless whether the asphalt predates the oil spills. LANL shall sample several locations around and beneath the asphalt at 2-ft intervals down to 10 ft. **(BPJ)**
11. Page 22, Section A.3.5: Does LANL know what kind of fuel was spilled and what percentage of BETX was in the fuel? Why was only the trace amount of BETX found in the soil where TPH was as high as 85,000 mg/kg? Please explain. **(BPJ)**
12. The Report Approval/Disapproval Form has not been signed by Mr. Theodore J. Taylor. **(BPJ)**