



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

See - forward to
Bureau by 12/15/97
11/12/97

October 31, 1997

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

RE: Review of LANL VCA Completion Report for PRS C21-027,
EPA I.D. No. NM0890010515

Dear Mr. Garcia:

The Environmental Protection Agency (EPA) has completed a technical review of Los Alamos National Laboratory (LANL) RCRA Voluntary Corrective Action (VCA) Completion Report for cleanup activities in Technical Area (TA) 21, Potential Release Site (PRS) C21-027, dated February 7, 1996. The EPA has found the Report to be deficient and enclosed is a list of deficiencies.

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

Sincerely yours,

David W. Neleigh, Chief
New Mexico/Federal Facilities
Section

Enclosure

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LIST OF DEFICIENCIES
LANL VCA COMPLETION REPORT FOR PRS C21-027

1. Page 1, 2nd paragraph of CORRECTIVE ACTION: LANL states, "It was expected that any contamination was removed during decontamination and decommissioning." LANL shall briefly depict what was the problem with this site, and what were the chemicals of potential concern (COPCs) that might exist at the site in the DESCRIPTION Section. Without knowing the type of contamination that once existed, how can LANL be sure that the contamination was removed? (**Best Professional Judgement, (BPJ)**)
2. Page 1, DESCRIPTION: Please describe what was removed from the below-ground section, and how deep it went. Were there any pipes buried underground? If that is the case, LANL shall sample the bottom soil along the pipe line and along the cooling tower for chromium (VI). (**BPJ**)
3. Page 1, CORRECTIVE ACTION: One sample taken for confirmatory sampling is inadequate. Note the top two samples to 12 inches were probably collected from the fill soil when the cooling tower pad was removed. (Note the two upper level samples are within the UTLs except for one calcium sample.) In addition, LANL must extend the vertical depth of sampling. (**BPJ**)
4. Page 4, Table 1: LANL shall explain how the chromium screening action level (SAL) was established. Is the value based on residential scenario or industrial scenario? Is the SAL for total chromium, chromium III, or chromium VI? The value (400 mg/kg) is much higher than both Region IX's Preliminary Remediation Goals (PRG) for either residential (30 mg/kg) or industrial (230 mg/kg). (**BPJ**)
5. Page 4, Table 1: The elevated chromium concentrations are found in sample location 21-4036. Sodium chromate (Cr⁺⁶) is a corrosion inhibitor commonly used in the past in cooling tower water circulation systems. The analytical result indicated the possibility of cooling water releases to the underground soil. Because the RPGs for Cr⁺³ and Cr⁺⁶ are different, LANL must resample this location from 2 ft to 5 ft deep at 1-ft intervals, and an additional location from surface to 5 foot deep at 1-ft intervals to analyze Cr⁺³ and Cr⁺⁶. (**BPJ**)