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



MAR 13 1997

4/11/97/35  
Hazard Unit

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

**RE: Review of Los Alamos National Laboratory RCRA RFI Report for Potential Release Sites (PRSS) in Technical Area 35, 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 RFI Report for Potential Release Sites (PRSS) in Technical Area 35, dated July 2, 1996. The EPA has found the Report to be deficient and enclosed is a list of deficiencies.

Based upon the soil sample results presented in the Report, EPA recommends that two (2) sites could be removed from LANL current RCRA/HSWA permit (see attached Summary Page). The EPA recommends that the Class 3 permit modification not be initiated by LANL until all comments have been resolved.

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

Sincerely yours,

*Michael D. Overbe...*  
David W. Neleigh, Chief  
New Mexico/Federal Facilities  
Section

Enclosure

TZ



**Review Summary**  
**RFI Report for Technical Area 35**  
**Los Alamos National Laboratory (LANL)**

This RFI Report, dated July 2, 1996, includes information on the following SWMUs:

PRSS 35-004(a,g,h, and m),  
PRS 35-009(e),  
PRSS 35-014(g<sub>1</sub> and g<sub>2</sub>) and  
PRSS 35-016(b,j,n, and q)

**Sites Where No Further Action (NFA) Appears Appropriate**

Based upon the information provided, EPA tentatively agrees with the NFA proposals for the following sites:

PRS 35-004(g)  
PRS 35-016(b)

**Sites Where Additional Information is Needed**

Additional information or further investigation is required for the following sites:

PRSS 35-004(a) and 35-009(e)  
PRS 35-004(h)  
PRSS 35-004(m) and 35-014(g<sub>2</sub>)  
PRSS 35-014(g<sub>1</sub>) and 35-016(n)  
PRS 35-016(j)  
PRS 35-016(q)

**LIST OF DEFICIENCIES  
LOS ALAMOS NATIONAL LABORATORY (LANL)  
RFI REPORT FOR PRSs IN TA-35**

**GENERAL COMMENTS**

1. Benzo[a]pyrene, has been detected above its SAL in several PRSs. LANL attributed the presence to the nearby asphalt-paved areas and are also products of incomplete combustion from motor vehicles, not from past activities. LANL needs to provide the supporting evidence to this claims. If not, LANL shall perform both human health and ecological risk assessment on the following PRSs: 35-014(g<sub>1</sub>) and 35-016(n), 35-016(j), and 35-016(q) (Best Professional Judgement, (BPJ))
2. Page 3-7, 1st paragraph: Has the document, *Application of LANL Background Data to ER Project decision-Making, Part 1: Inorganics* (Ryti et al. 1996, 53953), been reviewed and/or approved by NMED/EPA? (BPJ)
3. Page: 3-7, Section 3.3, Evaluation of Organic Chemicals: LANL states, AA chemical that is detected may be removed from further consideration if it can be determined that its presence is not due to Laboratory operations." The NMED/EPA questions the validity of this statement. If a chemical is detected at a LANL SWMU, then that chemical should be fully evaluated and investigated. (BPJ)
4. Page: 4-8, Section 4.2.1: Has LANL submitted a copy of its "ER project analytical services statement of work (LANL 1995, 49738)" which contains the analyte lists, estimated quantitation limits (EQLs), required QC procedures, and the acceptance criteria for analyses performed by both internal and external laboratories? (BPJ)

**SITE-SPECIFIC COMMENTS**

- PRS Nos. 35-004(a) and 35-009(e)
1. Page 5-9, Section 5.1.7.2.1: It states, "Exceeding a residential soil SAL by a factor of three in one of ten samples does not suggest a potential human health concern at an industrial facility such as TA-35.... Therefore, additional evaluation of Aroclor 1260 for human health risk will not be pursued." The NMED/EPA does not agree. Five out of ten samples from the Site found Aroclors. Further investigation of the location (#35-2103) and surrounding neighborhood is needed. The location could be a hot spot, LANL has to remove it. If the analytical result is an outlier, LANL has to prove it. (BPJ)

2. Page 5-9,: PCBs are a class B2 carcinogen and as such should be evaluated at a risk level of  $10^{-6}$  to be in accordance with Subpart S. Also, the derivation of action levels should incorporate ecological risk considerations (see Subpart G(3)(b)), which may necessitate the use of more stringent cleanup levels. Has LANL considered ecological risk when evaluating the Aroclor contamination at this site? NFA petition will be deferred until the ecological risk assessment has been completed. (BPJ)

PRS No. 35-004(h)

3. Page 5-29, Section 5.3.7.2.1: Since the area north of this site and east of TA-35-7 is the subject of an ongoing RFI investigation associated with PRS No. 35-003 (misc.), NFA determination will be deferred until the area investigation is complete. (BPJ)

PRS Nos. 35-004(m) and 35-014(g<sub>2</sub>)

4. Page 5-35, 1st Item, 3rd paragraph: "...at a concentration of antimony of 4.23 4.02 mg/kg,..." is confusing. LANL shall correct it. (BPJ)
5. Page 5-36, Table 5.4.5-1: Two sample results are given "<4". Is "4" the laboratory's Method Detection Limit (MDL) for Antimony? LANL shall not accept a MDL which is higher than that chemical's UTL. So as the Uranium and Cadmium. (BPJ)
6. Page 5-40, Section 5.4.7.2.1: LANL states that the elevated levels of inorganic (particularly lead) are "...probably a function of the numerous undifferentiated sources typical of an industrial facility such as TA-35". LANL must provide further documentation to support this statement. The analytical result from the surface sample taken from Location ID No. 35-2167 indicated it has elevated concentrations for all listed inorganic chemicals, not just for lead only. Further investigation at this location along with its near neighborhood is needed. (BPJ)

PRS No. 35-016(j)

7. Page 5-71, Section 5.7.6: Deeper soil samples should be collected from several locations at this site, especially near sample location 35-2192 where TPH was detected at 400 ppm in the deepest interval (2-3 feet) sampled. The vertical extent of contamination has not been defined. (BPJ)