



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
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DALLAS, TX 75202-2733

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MAY 28 1997



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

Re: Notice Of Deficiency (NOD) Comments on the Resource
Conservation and Recovery Act Facility Investigation (RFI)
Report for Technical Areas (TA) 3, 59, 60, and 61, Los
Alamos National Laboratory (LANL), EPA I.D. NM0890010515

Dear Mr. Garcia:

The Environmental Protection Agency (EPA) has reviewed
LANL's RFI Report for TA 3, 59, 60, and 61, dated February 29,
1996, and has determined the Report to be deficient. Enclosed
are a list of deficiencies for your review.

Should you have any questions, please feel free to contact
Nick Stone at (214) 665-7226.

Sincerely,


David W. Neligh, Chief
New Mexico and Federal
Facilities Section

Enclosure



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NOD Comments on TA 3, 59, 60, and 61

General Comment A: The RFI report, and other RFI reports, should incorporate the latest Screening Actions Level (SAL) guidance as found in the Region 6 document, Human Health Media-Specific Screening Levels, dated October 30, 1996. This document is attached to this comment letter.

General Comment B: The RFI report was very difficult to review. Information regarding specific sites was scattered among different sections of the report, the report was written in vague terms, and the data presented was not complete or questionable. The Phase I RFI report must be rewritten to clearly and concisely describe the site, the sampling, and the results.

General Comment C: Section 4.0 does an adequate job of outlining the QA/QC results of all the sampling activities. There are an inordinate number of analyses that were qualified or rejected. Holding times were exceeded, high and low recoveries of constituents, improper handling procedures, blank contaminations, insufficient volume of samples, and radiochemistry analyses were said to have errors greater than 50% in both directions. Poor sampling and lack of clarity in the report combine to make this RFI report unacceptable.

Listed below are specific comments regarding the RFI report:

Page 12, 3.2: In the discussion of the background comparison procedure, analytes are deleted from further analysis if the analyte value falls below the upper tolerance limit (UTL). The chemicals of potential concern (COPC) concentration carried forward to the screening assessment is the analyte concentration less the UTL value. The UTL values used in the analysis are not consistent with the UTL values listed in the "RFI Workplan for Operable Unit 1114," dated March, 1994. LANL must provide documentation as to the UTL values used and that the values represent the 95th confidence level of the 95th percentile of distribution (see Agreements and Action Items from Joint Environmental Protection Agency, Department of Energy, and University of California Meeting Held on September 18-19, 1995; EM/ER:95-541).

Page 15, 3.4.1: Under the screening assessment discussion, the report describes a procedure to retain COPC's due to the combined adverse health effects of several chemicals. The procedure "normalizes" the data by dividing the COPC concentration by the screening action level (SAL) where the individual COPC

concentration is less than the SAL. The chemicals with concentrations greater than the UTL are normalized and added together. If the total is greater than 1.0, then chemicals with a normalized value greater than 0.1 are retained as COPC's pending further evaluation. This procedure does not appear in the workplan. The facility must document the rationale used to justify this procedure and request comment and approval. The facility must address how the procedure adequately reflects the various toxicities of the analytes.

Page 93, 5.5.10: The no further action (NFA) recommendation is not adequately supported. The sample data indicates chromium above the SAL for one sample, and within 10% of the SAL for three samples. The quality control data for the sampling indicates all of the samples required some qualification. LANL must resample this potential release site (PRS) and demonstrate the validity of a NFA recommendation.

Page 102, 5.7.10: PCB's must be retained as a COPC because of test results reported in table 5.7.6-1. Sample No. AAB5918 indicates a PCB concentration of <1.7 mg/kg which is in excess of the SAL (1.0 mg/kg). This conclusion is further supported in table 5.7.7-4 which determines the multiple chemical evaluation for carcinogenic effects as 0.978. This PRS represents the wastewater discharge site to the environment. The data presented indicates a variability of contaminants and concentrations. All soil samples were taken from shallow depths (12 inches or less). Therefore, the Phase II investigation must resample this area to determine the extent of contamination and sample the soil column into the bedrock to assure that area of contamination is fully defined.

Page 119, Figure 5.7.11-2: The figure indicates a potential area of contamination outside of the proposed sample sites. The facility must sample beyond the potential contamination area in order to establish the boundaries.

Page 129, 5.8.10: PRS 3-015 and PRS 3-053 require a Phase II RFI based on the data presented. The conclusion recommending NFA due to roadway runoff is not supported by the Phase I RFI. The highest concentrations of contaminants were indicated at the outfall which is uphill and on the inside curve of the ditch. Roadway runoff contamination would not be expected at the outfall on the far side of the ditch. Furthermore, samples taken downgrade from the outfall should indicate similar contamination if the source is roadway runoff. The Phase II RFI should sample the potential area of contamination to adequately determine the vertical and horizontal extent of contamination.

Page 130, 5.9: A Phase II RFI is required for PRS 3-033, Plating

Rinse Waste Storage. The screening indicates five PAHs at levels in excess of the SAL. The conclusion that these COPCs are present due to roadway runoff is not supported. Figure 5.9.1-1 indicates PAH contamination behind the sump structure. If roadway runoff is the source of the contamination, all sample points should show similar results. Sample site 3-2403 is behind the sump structure from the paving, yet PAHs are indicated. No PAHs are indicated for Sample site 3-2402, which is near the paving alongside the sump structure. The Phase II RFI should sample the potential area of contamination to adequately determine the vertical and horizontal extent of contamination.

Page 145, 5.10.8.1: The receptor access score of zero is not supported. It appears that PRS 59-004 sits on the edge of Two Mile Canyon. As this area is undeveloped and accessible to native wildlife, a higher receptor score is indicated.

Page 168, 5.14.4: The document indicates FID readings ranging from 4 ppm to over 1000 ppm taken in sample holes ranging from 6 to 12 inches in depth. The samples sent in for laboratory analysis were taken from 1 foot to 7 feet in depth. The FID readings, and the observation of discoloration made in section 5.14.1, indicate that the site has surface contamination. Further sampling is required to determine the extent of this surface contamination.

Page 193, 5.17.10: A Phase II RFI is required for PRS 60-007(a), Sigma Mesa Stained Soil. The RFI document indicates this PRS as a remediated site. Sample No. AAB5806 indicated PCBs at an interpolated value of 11 ppm. The Phase II RFI must sample the potential area of contamination to adequately determine the vertical and horizontal extent of contamination.

Page 208, 5.19: The Phase II RFI for PRS 61-002, Radio Repair Shop PCB Storage, requires expansion and detail. No discussion is made on the effect of alluvial water flow under the paved area to the county landfill. No effort has been made to evaluate the PCB concentration under the paved area, though strong evidence (RFI Phase I) indicates PCBs being transported down gradient to the landfill. The Phase II RFI must sample this PRS completely to determine the vertical and horizontal extent to the contamination. This PCB transport outside of LANL is significant in that it might compromise the Subtitle D status of the Los Alamos County Landfill.