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**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

June 29, 1998

Mr. Theodore Taylor, Program Manager  
Los Alamos Area Office  
Department of Energy  
528 35th Street, MS A316  
Los Alamos, New Mexico 87544

Dr. John C. Browne, Director  
Los Alamos National Laboratory  
P. O. Box 1663, Mail Stop A100  
Los Alamos, New Mexico 87545

**RE: Approval upon Modification**  
**RFI Report on SWMU 0-030(g) and**  
**Response to Request for Supplemental Information**  
**Los Alamos National Laboratory**  
**NM 0890010515**

Dear Mr. Taylor and Dr. Browne:

The RCRA Permits Management Program (RPMP) of the Hazardous and Radioactive Materials Bureau (HRMB) will approve upon modification as detailed in Attachment A the RFI Report for Solid Waste Management Unit (SWMU) 0-030(g), dated September 1995, referenced by LA-UR-95-3263 and the Response to Supplemental Information dated June 10, 1998, referenced by EM/ER: 98-191.

Los Alamos National Laboratory (LANL) must submit to RPMP clean replacement pages incorporating the modifications detailed in Attachment A within thirty (30) calendar days of the receipt of this letter. Upon receipt, RPMP will review the replacement pages with the intent to finalize the approval of the document. However, should LANL fail to provide the replacement pages within the required time limit, RPMP will deny the aforementioned document.



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Should you have any questions regarding this matter, please contact me or Mr. John Kieling, RPMP's LANL Facility Manager, at (505) 827-1558.

Sincerely,

*Stephanie Kruse*

*for*

Robert S. (Stu) Dinwiddie, Ph.D., Manager  
RCRA Permits Management Program  
Hazardous & Radioactive Materials Bureau

RSD:ND

cc w/attachments:

J. Canepa, LANL EM/ER, MS M992  
J. Davis, NMED SWQB  
B. Garcia NMED HRMB  
M. Johansen, DOE LAAO, MS A316  
J. Kieling, NMED HRMB  
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J. Parker, NMED DOE OB  
R. Peck, VP, Housing Solutions, 508 West Cordova, Santa Fe, NM, 87501  
S. Yanicak, NMED DOE OB, MS J993  
File: Reading and HSWA LANL 1/1071/0/0-030(g)  
Track: LANL, 6/29/98, NA, DOE/LANL, NMED-HRMB/Dinwiddie, RE, File

**ATTACHMENT A**  
**Approval with Modifications**  
**RFI Report for Solid Waste Management Unit**  
**0-030(g)**

**Modifications:**

1. Los Alamos National Laboratory (LANL) shall formally submit all data from the Phase I RFI investigation with the Sampling and Analyses Plan (SAP) to be submitted for Phase II.
2. **LANL's Response to NMED Comment # 6:**  
Confirmatory sampling was done with EPA Region 6 input and approval. The sample suites were developed, with the determination that only lead and mercury were of significant concern to warrant the number of sample locations chosen, and agreed upon by Environmental Protection Agency (EPA), Department of Energy (DOE), and LANL. Documentation of this agreement is included as Attachment 3.

**RPMP Modification:**

Documentation provided in Attachment 3 is not formal and appears to be a selected portion of a log of telephone conversations between EPA and LANL and does not provide rationale for performing limited suite analyses at certain locations. LANL shall perform a more complete suite of analyses (all detected COPCs) on the samples analyzed in Phase II investigations.

3. **LANL's Response to NMED Comment # 2:**  
The analytical laboratory performing the kinetic phosphorescence analyses reported detection limits at 5 ng/g in soils and 1 ng/ml in water. Sample digestion was done using nitric acid per the SOP. Documentation of this analysis is included in Attachments 1 and 2.

**RPMP Modification:**

The background value for total uranium (i.e. 5.71 mg/kg) used in the RFI report (Table 4-3) for background comparison is based on hydrofluoric acid digestion and is not valid for comparison to nitric acid digestion techniques (the

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digestion method used in the KPA analyses). LANL shall reevaluate the background comparisons using appropriate uranium background values (not total uranium), this can be addressed in the new SAP.

LANL should use the background concentrations listed in the draft site-wide background document titled "Inorganic and Radionuclide Background Data for Soils, Canyons Sediments and Bandelier tuff at Los Alamos National Laboratory" (Ryti et.al, dated 3/16/98). In addition, LANL should indicate to which set of background concentrations the acquired data will be compared. However, prior to any comparison, LANL should identify the matrix (i.e., crushed tuff, soil or sediment) that best describes the fill material.

4. **LANL's Response to NMED Comment # 8:**

The wording for these sections was poorly chosen. The intent was to convey the fact that the concentrations present at the surface are extremely low to begin with and that the potential for migration and concentration is negligible. New text to address this issue is included as Attachment 4.

**RPMP Modification:**

The text in Attachment 4 is not new but taken from the executive summary of the RFI Report and is not acceptable to the RPMP. The RPMP recommends that LANL rewrite or delete the text referring to surface runoff dilution as a solution to contamination from all relevant sections of the RFI report. Since the full nature and extent of contamination is not known in the outfall area/canyons and the risk analyses have not been performed, the language used by LANL is premature and speculative. Human health and ecotoxicological screening assessment should follow HRMB approved Risk Based Decision Tree and should incorporate data from Phase I and Phase II SAP.

5. LANL shall submit the new SAP to RPMP 45 days prior to the field work implementation.