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Devlene 3/3/00  
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TA-0

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

January 4, 2000

Mr. Theodore Taylor, Project Manager  
Los Alamos Area Office  
Department of Energy  
528 35<sup>th</sup> Street, Mail Stop A316  
Los Alamos, New Mexico 87544

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

**RE: Request for Supplemental Information  
0-019 VCA Plan  
Los Alamos National Laboratory  
NM0890010515**

Dear Mr. Taylor and Dr. Browne:

The RCRA Permits Management Program (RPMP) of the New Mexico Environment Department's Hazardous and Radioactive Materials Bureau has reviewed the Voluntary Corrective Action Plan (VCA) for Potential Release Site 0-019 (LA-UR-99-1707) dated April 29, 1999 and referenced by EM/ER:99-107 and requests supplemental information as detailed in the attachment.

LANL must respond to the request for supplemental information within thirty (30) days of the receipt of this letter. Should you have any questions or require additional assistance regarding this request, please feel free to contact me at (505) 827-1558 extension 1012.

Sincerely,

John E. Kieling, Acting Manager  
RCRA Permits Management Program

JEK:dxc

**RECEIVED**

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DOE OVERSIGHT BUREAU



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LANL/ER/OU 1071

Mr. Taylor and Dr. Browne  
Request for Supplemental Information  
0-019 VCA Plan  
January 4, 1999  
Page 2

attachment

cc w/ attachment:

J. Bearzi, NMED HRMB  
J. Canepa, LANL EM/ER, MS M992  
J. Davis, NMED SWQB  
M. Kirsch, LANL EM/ER, MS M992  
D. McInroy, LANL EM/ER, MS M992  
D. Neleigh, EPA 6PD-N  
J. Parker, NMED DOE OB  
C. Sykes, DOE LAAO, MS A316  
S. Yanicak, NMED DOE OB, MS J993  
File: Reading and HSWA LANL 1/1071/0

## ATTACHMENT

### Comments

1. Figure 1.1-2. PRS 0-019 site map, page 3:

The figure contains a lot of information and it is difficult to read. Some of the symbols are too small to decipher and some look alike. It is also not clear what aboveground and underground structures will be investigated as part of this VCA.

In its final report, LANL should make separate figures to make it easier to understand what is being depicted. A suggestion would be to make a separate figure showing existing aboveground and underground structures, making a distinction between what structures were and were not investigated (left in place) as part of this VCA. There could be another figure enlarging the structures and their associated sampling and trenching locations.

2. Section 2.2 Nature and Extent, page 10, paragraph 3:

“Thus, the detected radionuclides do not share any common patterns of detection across samples, which suggests that these results reflect random laboratory measurement error. These data suggest that no sludge or historical release from the sludge beds was encountered in these boreholes and that it is likely that the contents of the sludge beds were removed prior to leveling the sludge bed area.”

It is not clear that the data collected from only two boreholes drilled in what appears to be two out of four former sludge beds are adequate to make these conclusions. Radionuclides were detected above fallout/background levels at depth within both boreholes, indicating that there may have been a release from the sludge beds. LANL should further determine the nature and the lateral and horizontal extent of contamination in the tuff beneath the sludge beds. LANL should collect additional samples from the other two sludge beds that were not previously sampled.

3. Section 3.1 Description of the Planned Remedial Action, page 12, paragraph 2:

“Observations will be made to visually identify contaminated soil if staining is present. Field screening of the soil will take place for H&S purposes (VOC and radiochemistry), which will aid in determining the presence of contaminated soil.”

LANL is biasing its sampling locations to areas where either contamination is visible or to areas where field instruments identify radioactivity and VOC. Other contaminants, such as metals, are more likely to be present (based on previous sampling results) and not likely to be detected with these field instruments. LANL should bias its sampling to areas where the pipeline may have leaked, such as joints.

4. Section 3.1 Description of the Planned Remedial Action, page 12, paragraph 5:

“Areas of the mesa-top not related to subsurface piping or the pump house will not be investigated due to extensive use by LAC over the past 30+ years”.

HRMB realizes that Los Alamos County (LAC) has reworked the mesa-top area since receiving ownership of the property. HRMB also realizes that the several feet of fill that were brought in by LAC to cover the remaining structures could not have been contaminated by activities associated with the CWWTP. However, potential contamination may exist in the fill from activities performed by LAC. The fill should not be ignored because it may represent an exposure pathway, if contamination exists. HRMB suggests that LANL discuss either sampling the fill or providing documentation regarding activities performed on this property by LAC with HRMB.

5. Section B-2.0 CONCEPTUAL SITE MODEL, page B-1, paragraph 3:

“First, sample results and field observations of the boreholes drilled to investigate the sludge drying beds suggest that there is no contamination associated with the former sludge drying beds. No sludge was encountered in either borehole. Thus, the sludge drying beds should be eliminated as contaminant sources.”

See Comment #2

6. Section B-3.2 Sampling Design, page B-6:

“A preliminary data review of the analytical results from the 1996 and 1997 samples and the first sampling event (excluding TCLP metals analysis) will be used to limit (if possible) the analytical suites for the samples obtained in the second sampling event.”

Since the treated and untreated effluent may not have been homogeneous, contamination may vary throughout the PRS. LANL should perform full-suite analyses for all of the samples collected during the second sampling event.

7. Section B-3.2 Sampling Design, page B-7, paragraph 1:

The sediments that have been potentially affected by the CWWTP have most likely migrated downstream from the source over the past 30 years. Contaminants may be present as far down as the confluence of Graduation Canyon with Pueblo Canyon. Therefore, LANL should expand its sampling design to include the characterization of drainage sediments as far downstream as the confluence with Pueblo Canyon.

8. Section B-3.2 Sampling Design, page B-7, paragraph 2:

LANL is determining its sampling locations based on the geomorphic survey. Since the geomorphic survey will determine the sediment packages that will most likely reflect post-LANL

activities, LANL should also base the sampling depths on the geomorphic survey. LANL should also provide the criteria it will use to determine any additional samples that will be collected.

9. Table B-3.2-1 SUMMARY OF SAMPLING DESIGN, page B-7:

In the first three rows, LANL states, "An additional depth will be sampled if visual evidence of contamination is noted under pipe."

It is unclear how deep LANL intends to sample if visual contamination is found. LANL should specify the depth of the additional samples.