HSWA LANL 3/10/84 14

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

April 12, 2000

Theodore Taylor, Project Manager
Los Alamos Area Office
Department of Energy
528 35th Street, Mail Stop A316
Los Alamos, NM 87544

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

RE: REQUEST FOR SUPPLEMENTAL INFORMATION
VCM REPORT FOR POTENTIAL RELEASE SITES 16-006(g), DRUM STORAGE AREA AGGREGATE [16-029(g2) AND C-16-074], 16-005(d), AND 16-034(p)
LOS ALAMOS NATIONAL LABORATORY, NM0890010515
INVOICE #HRMB-LANL-99-009

Dear Mr. Taylor and Dr. Browne:

The Hazardous and Radioactive Materials Bureau (HRMB) of the New Mexico Environment Department has reviewed the Voluntary Corrective Measures Report (VCM) for Potential Release Sites 16-006(g), Drum Storage Area Aggregate [16-029(g2) and C-16-074], 16-005(d), and 16-034(p) (LA-UR-99-3001), dated July 30, 1999, and referenced by E/ER: 99-202, 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.

6229

TC

Sincerely,

John E. Kieling
Acting Manager
Permits Management Program

JEK:dxg

cc w/attachment:
J. Bearzi, NMED HRMB
R. Dinwiddie, NMED HRMB
P. Young, NMED HRMB
J. Davis, NMED SWQB
J. Parker, NMED DOE OB
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C. Sykes, DOE LAAO, MS A316
J. Vozella, DOE LAAO, MS-A316
J. Canepa, LANL EM/ER, MS-M992
M. Kirsch, LANL EM/ER, MS-M992
D. McInroy, LANL EM/ER, MS-M992
File: Reading and HSWA LANL 3/1082/16

ATTACHMENT

The following table includes a complete listing of the potential release sites presented in this document, LANL's proposed actions, and the rationale for the AA's concurrence or non-concurrence on each proposed action.

PRS	LANL's PROPOSED ACTION	DOES AA CONCUR?	AA RATIONALE
16-006(g)	NFA	NO	Responses to following comments required
16-029(g2) and C-16-074	NFA	NO	Responses to following comments required
16-005(d)	NFA	NO	Responses to following comments required
16-034(p)	NFA	NO	Responses to following comments required

General Comments

1. At this time, it is reasonable to expect that the future land use for TA-16 will remain industrial. However, if there is even a possibility that parts of TA-16 will become open to the public as part of a historical preservation area, then LANL should perform a human health screening using a residential scenario in order to evaluate potential future risk. LANL should perform this screening for each PRS listed in this VCM report except 16-029(g2). If this possibility does not exist, LANL should provide updated documentation as evidence that the future land use for TA-16 will remain industrial.

2. The background values in the document titled "Inorganic and Radionuclide Background Data for Soils, Canyon Sediments and Bandelier Tuff at Los Alamos National Laboratory" (Ryti, et al.) have been accepted and verbally approved by HRMB. The LANL-wide background data set was designed to eliminate the need to collect separate background data sets. Even though most of the uranium values in this report are higher than the laboratory-wide uranium background value of 1.82 mg/kg, LANL should use the approved values for comparison purposes in this report. None of the uranium values should have been eliminated from further screening assessment based on comparison to the derived TA-16 specific background value of 3.85 mg/kg.

Specific Comments

PRS 16-006(g)

3. Section 2.2.2 Operational History, page 6, paragraph 2:

LANL Statement: "The inspection and repair room floors were fitted on three sides with lead-lined troughs leading outside to the trough under the porch."

HRMB Comment: This statement gives little information regarding the intended use of the troughs, and the handling and disposal of waste that entered the trough. LANL should include this information, along with information on the waste characteristics and the ultimate destination of the waste in the trough.

4. Section 2.3.4.2 VCM Plan Requirements, page 10, paragraph 3:

LANL Statement: "Table 2.3-1 presents the soil cleanup levels according to the approved VCM plan (LANL 1997, 55653.2). The EPA Region 9 PRGs for industrial soil were used as cleanup levels for the VCM activities. Note that some of the Region 9 PRGs have changed since they were included in the approved VCM plan."

HRMB Comment: LANL should document and discuss the changes in these PRGs.

5. Section 2.3.4.3 Remediation Stage I, page 11, paragraph 3:

LANL Comment: "According to the VCM work plan, one laboratory sample (0316-98-0100, location 16-3364) was collected from beneath the septic tank."

HRMB Comment: According to Figure 2.3-1, Location of PRS 16-006(g) samples, location 16-3364 is not located beneath the septic tank. Given that any contamination should be concentrated at the bottom of the drainline or the tank, a sample from beneath the tank should have been, at the least, field screened. LANL should clarify exactly where sample location 16-3364 is in the text and/or on the figure. If a sample was not collected directly beneath the tank, LANL should explain why.

6. Section 2.5 Conclusions and Recommendations, page 31, paragraph 1:

LANL Comment: "HEs (HMX and RDX) were detected below the septic tank at 0.18 mg/kg and 0.191 mg/kg, respectively."

HRMB Comment: See comment #5

PRSs 16-029(g2) and C-16-074

7. Section 3.3.4.5 Data Review, page 45, paragraph 6:

LANL Statement: "As a result, the uranium values obtained in 1998 did not provide sufficient information for locating and characterizing a potential release. In 1999, uranium analyses with better detection limits were performed. These results show that the uranium concentration in V-Site samples does not differ statistically from other samples collected around TA-16. Therefore, uranium will not be carried forward into screening assessment."

HRMB Comment: According to Table D-2.0-3, the samples analyzed in 1998 were collected at 24-48 inches and 48-72 inches, while the sample analyzed in 1999 was collected at 0-6 inches. Given this, LANL should explain how the second sample serves as a substitute for the first set of samples. LANL should also explain how one sample taken at the surface proves that there was not a release at the entire PRS. Also, see comment #2.

8. Section 3.3.5.1 Nature and Extent of Contamination in the Drum Storage Area Aggregate, page 49, paragraph 6:

LANL Statement: "Sample location 16-5820 was extensively sampled. Barium was detected....."

HRMB Comment: Sample location 16-5820 was extensively sampled. Several metals detected above background values at this one location indicate that there was a release. The vertical extent of contamination at this PRS has been determined but the extent of lateral contamination has yet to be determined. None of the borings were located downgradient of this location; therefore, the presence of other contaminant concentrations in the subsurface is not known. LANL should delineate the extent of lateral contamination. Additional samples should also be taken from the 2-6 foot depth interval and below.

9. Section 3.5 Conclusions and Recommendations, page 57, paragraph 3:

LANL Statement: "The data is considered adequate to define the nature and extent of contamination and to determine the need for any further action at the site."

HRMB Comment: This conclusion is not accurate. See comment #12.

PRS 16-005(d)

10. Section 4.3.4.1 D&D Activity, page 61, paragraph 2:

LANL Statement: "One branch headed due south for approximately 150 ft and dead-ended near the road. The other branch continued southeast to a point 145 ft from the shower area where it then forked in two directions. Both of these branches extended southward for approximately 75 ft in parallel."

HRMB Comment: It seems likely that these drainlines were connected to structures and did not come to dead ends. LANL should provide additional information on the rest of the drainlines including, but not limited to, any connecting structures or drainlines and any sampling data related to the removal of these structures or drainlines. If no sampling was performed, LANL should collect samples of the missing drainlines in order to determine nature and extent of contamination for the entire PRS or provide rationale for not doing so.

Miscellaneous Comments (No response required)

PRS 16-006(g)

11. Table 2.3-5 Frequency of Detected Inorganic Chemicals in PRS 16-006(g) Samples, page 17:

HRMB Comment: The table does not include the concentration range for uranium in soil, as is listed on the table on the following page ("Inorganic Chemicals with Concentrations at or Exceeding BVs in PRS 16-006(g) Samples"). LANL should correct the discrepancy.

12. Section 2.3.4.4 Data Review, page 18, paragraph 4:

HRMB Comment: "..., which is less than 12 in. from location 16-3557" should read "location 16-3357".

13. Section 2.3.5.1 Nature and Extent of Contamination in PRS 16-006(g), page 23, paragraph 4:

LANL Statement: "HMX and RDX were found at 0.18 ppm and 0.191 ppm, respectively, in sample 0316-98-0100, which was collected at a depth of 6.0 and 6.5 ft. In it six organic compounds including the HEs were detected, each at concentrations below or near EQLs. During subsequent sampling in February and March 1999 at location 16-5987, samples RE16-99-0005 and RE16-99-0021 were collected next to and 2 ft deeper than where sample 0316-98-0100 was

collected. The shallower sample, RE16-99-0005, contained acetone at 0.046 mg/kg and methylene chloride at an estimated value of 0.0026 mg/kg. Sample RE16-99-0021, collected from 16-5987 at a depth of 8-8.5 ft, contained no HEs or VOCs above BVs, indicating that the extent of contamination is bounded."

HRMB Comment: Since several contaminants were found in sample 0316-98-0100, LANL should have performed further investigation at this location to delineate the vertical extent of contamination. The subsequent samples that were collected were approximately 15 feet away from the previous sample location. In the future, LANL should collect deeper samples at the same location until (1) the contaminant concentrations show a decreasing trend or (2) the contaminant concentrations are below background.

PRS 16-005(d)

14. Table 4.3-3 Sampling Information for PRS 16-005(d), page 65:

HRMB Comment: The table lists sampling locations 16-3343 and 16-5793 as being at the south and north ends of the septic tank excavation, respectively. However Figure 4.3-1 (Sampling Locations at PRS 16-005(d)) shows the same sampling locations with the opposite numbers. LANL should clarify which of these has the correct sampling locations identified.

15. Section 4.3.4.5 Data Review, page 72, paragraph 2:

LANL Statement: "Silver was undetected in all eight samples with detection limits of 0.28-2.6 mg/kg. Seven of these samples have detection limits above the silver BV of 1 mg/kg..... Because one sample had detection limits below the BV, and seven samples had detection limits near the BV, this data can be used to show that silver has not been released at this site and will not be carried forward as a COPC."

HRMB Comment: Since seven out of eight samples had detection limits greater than twice the background value, LANL should have had the laboratory reanalyze the samples with lower detection limits. In the future, LANL should ensure that the laboratory achieve the required detection limits.

PRS 16-034(p)

16. Section 5.3.3 Preliminary Conceptual Model, page 89, paragraph 3:

LANL Comment: "Based on the history of operations at this building, and on the source of contamination, the suspected COCs at this PRS include SVOCs, inorganic chemicals (specifically barium and silver), and HE (RDX and TNT). Note that the suite of suspected COCs at this PRS differs from that of other PRSs in this report due to the differences in past building usage."

HRMB Comment: The description of the operational history of this building does not support these statements. Since the building that used to belong to this PRS once served as a laboratory, the presence of solvents at this PRS is possible. In addition, composited samples collected during the VCA of the incinerator removal were analyzed for VOCs. In an NOD for that VCA Report, the EPA states "VOC samples should not be composited, therefore the VOC results would not be valid." There is no compelling evidence to eliminate VOCs from the list of suspected COCs at this PRS based on past usage or past sampling results. LANL should ensure in the future that the appropriate analytes are investigated based on the site's previous activities.

17. Table 5.3-3 Sampling Information for PRS 16-034(p), page 98:

HRMB Comment: According to the text on page 96, screening sample RE16-99-0019 should have 16-5964 as the location ID.