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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

September 16, 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, MS A100
Los Alamos, New Mexico 87545

RE: Request for Supplemental Information
0-017 Sampling and Analysis Plan
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 has reviewed the draft Sampling and Analysis Plan for Solid Waste Management Unit 0-017 dated August 1998, and found that the information provided was not sufficient. Los Alamos National Laboratory (LANL) must respond to the request for supplemental information noted in Attachment A within thirty (30) calendar days of the receipt of this letter.

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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,

Benito J. Garcia, Chief
Hazardous & Radioactive Materials Bureau

BJG:nd

cc w/attachments:

J. Canepa, LANL EM/ER, MS M992
J. Davis, NMED SWQB
R. Dinwiddie, NMED HRMB
M. Johansen, DOE LAAO, MS A316
J. Kieling, NMED HRMB
M. Kirsch, LANL EM/ER, MS M992
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D. McInroy, LANL EM/ER, MS M992
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J. Parker, NMED DOE OB
J. Vozella, DOE LAAO,MS A316
S. Yanicak, NMED DOE OB, MS J993
File: Reading and HSWA LANL 1/1071/0
Track: LANL,9/16/98, NA, DOE/LANL, NMED RPMP/Garcia, RE, File

ATTACHMENT A
Request for Supplemental Information
SAP for Solid Waste Management Unit
0-017

1. **Introduction and Scope, p. 2**
LANL's statement "An ecotoxicological risk assessment will not be conducted because of the depth of the remaining piping and no viable pathways to receptors exist" is speculative. LANL should follow the reporting requirements of the RFI annotated outline and defer any decision regarding ecological risk assessment until analytical data has been obtained and evaluated.

2. **Field Work, p. 3**
Provide analytical results and list of detected constituents, if any, from the decommissioning and demolition event in March 1991, where 26 feet of pipeline was excavated and removed. A map showing the portions of the pipeline which were removed (e.g., segment of Line 170 removed in March 1991) should be provided.

3. **Sampling Approach/Design, Task 1, p. 4**
LANL should prepare and submit a detailed site map showing the pipelines (segments which were removed and the segments which were left in place) and associated structures, for the entire SWMU as stated in the work plan. The map should show the relationship of all the pipelines, manholes etc. and indicate the proposed sampling locations (including vertical sample/screening intervals), and soil boring depths. Where appropriate, LANL should bias sampling/screening locations based on observed stains or breaks in the pipeline.

   LANL states that radiological survey will not be conducted for the aboveground lines because they are no longer in existence. Contamination could still be present at the locations even though the pipelines have been removed in the past. A radiological survey should be conducted at these locations to determine if any contamination still exists.

4. **Sampling Approach/Design, Task 2, p. 4**
LANL states that Line 167 was removed from the north and south sides of Los Alamos Canyon but does not address the portion of the pipeline across the floor

of the canyon. Clarify if that segment was removed or left in place. Provide results of the samples collected between the anchors and removed pipe. This data might be useful to identify additional contaminants of concern. Provide results of any human health and ecological risk screening/assessment if conducted.

5. **Sampling Approach/Design, Task 2, p. 5**
LANL should review and evaluate existing documentation and data before performing additional sampling and removal of the pipeline sections and anchors. The conclusions of this evaluation should be addressed in the final report.

6. **Subsurface Sampling, Construction Activities, p. 6**
LANL states in the second bullet that clean soil removed from above the pipeline will be stockpiled and later used for backfilling. Explain how the soil will be determined to be "clean".

7. **Excavation and Disposal of Pipe, p. 6**
LANL proposes to leave the pipeline in place if found at depths greater than 15 feet. Provide a map with the location of trenches and sampling depths. Clarify if the contents of pipeline to be left in place will be investigated. Institutional controls may be required if the analyses indicate the presence of contamination in the pipeline and the pipeline is to be left in place.

LANL should clarify if wipe samples will be taken if no contents are found inside the removed pipeline.

LANL should provide estimates of the volume of waste to be generated and outline plans for characterization and disposal of the waste.

LANL is planning to conduct soil sampling using a backhoe bucket if the pipeline is located at depths less than 15 feet. This would result in composite samples. LANL should take discrete samples using a backhoe mounted sampler at 30 feet intervals and bias the sampling efforts towards any observed stained areas, breaks in the pipe, or elevated field screening results.

8. **Soil Sampling 3 Feet Below the pipeline, p. 7**
LANL proposes to collect samples 3 feet below the pipeline and to analyze these samples if there is an indication that contamination is present in samples immediately beneath the pipeline. This will help to determine the vertical extent of contamination only; it would not address the lateral extent of contamination in the trench.

LANL should sample at the fill/tuff interface in addition to samples taken at 3 feet if the interface is located deeper than 3 feet. Soil/tuff interface should be screened prior to sampling.

Additionally, LANL should ensure that the verification samples (which are to be held till the results of samples taken immediately under the pipe are reviewed) are analyzed within their prescribed holding times for relevant analyses.

LANL should clarify if the material below the vitrified clay pipe (VCP) is fill or soil that was not disturbed and use appropriate values for background comparisons.

Provide rationale for excavating one to two feet of soil beneath the pipeline and then using it for backfill if sample results indicate no contamination. It would be more appropriate and cost-effective to wait for the sample results and then decide whether contamination needs to be delineated and the soil from beneath the pipeline needs to be excavated.

LANL has discussed what it intends to do with soil removed from beneath the pipeline but has not address the soil which would be removed from above the pipeline. What criteria would be used to characterize the soil and how does LANL propose to dispose of it, if found contaminated.

9. **Site Restoration, p. 8**
Provide rationale for the statement in paragraph 2 which says that ULR-33 does not represent a more likely point of release if its intended purpose was to drain into Los Alamos canyon or provide documentation showing that it was never used for this purpose.

Field screening technologies such as field portable X-ray fluorescence may be useful in identifying potential contamination and citing an appropriate number of boreholes.

10. **Sampling Activities, p. 9**
Provide a list of radionuclides to be analyzed by gamma spectroscopy with their respective minimum detection limits.

LANL should include Sr-90, C-14 and cyanide as contaminants of potential concern or provide rationale for not including them. Sr-90, C-14 and cyanide were identified as potential contaminants of concern in the RFI Work Plan for

Operable Unit 1136 which contains TA-43, Health Research Laboratory building, the origination point of these pipelines.

11. **Table 4.2-1, p. 10**

LANL should use SW-846 5000 series method for the field preparation of volatile organic compounds.

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