LANL WF

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

August 4, 1997

Mr. G. Thomas Todd, Area Manager
Los Alamos Area Office
Department of Energy
528 35th Street
Los Alamos, New Mexico 87544

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

RE: **Request for Supplemental Information**
RCRA Facility Investigation Report
Potential Release Sites in Technical Area 16
16-003(k) and 16-021(c)
Los Alamos National Laboratory
NM0890010515

Dear Mr. Todd and Dr. Hecker:

The Resource Conservation and Recovery Act (RCRA) Permits Management Program (RPMP) of the New Mexico Environment Department has conducted an extensive review of the RCRA Facility Investigation (RFI) Report for Technical Area 16 dated September 1996 and referenced by EM/ER:96-502 and requests the attached supplemental information. LANL must respond to the request for supplemental information noted in the Attachment within thirty (30) calendar days of the receipt of this letter. If LANL does not submit the information within thirty (30) calendar days, LANL should be advised that a Notice of Deficiency will be issued.

As stated in the Environmental Restoration monthly meeting on April 15, 1997, RPMP requests that DOE/LANL continue to provide documentation detailing the various investigations which have occurred at 16-021(c) and 16-003(k) to date. Although the Data Quality Objectives remain consistent with the Phase II Sampling and Analysis Plan presented in this RFI Report, RPMP feels that new information (analytical results of surface and subsurface sampling, geophysical techniques and investigations, tracer study implementation, variations from the RFI Workplan, etc.) has been gathered which directly affects the goals and, more importantly, the direction of the continuing investigation.

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To meet this request, RPMP does not require the submittal of a corrective action report, per se, but would rather, be presented with updates or addendums on a regular and reasonable basis (such as field season). Specifically, RPMP would like to be provided documentation of the investigatory activities performed to date including, but not limited to, the following activities:

- Geophysical investigations including resistivity, streaming potential, seismic refraction, etc.
- Tracer study and spring/seep evaluations
- Results of drilling activities
- Bioremediation evaluation
- Variations from the approved RFI Workplan
- Rationale for proposed variations from the RFI Workplan including drilling plan modifications
- Progress on geological surveys as proposed in Section 5.2.11.2.1 of the RFI Workplan

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

Sincerely,

Robert S. ("Stu") Dinwiddie, Ph. D., Manager
RCRA Permits Management Program

RSD:kth

attachment

cc with attachments:

T. Baca, LANL EM-DO, MS J951 T. Davis, NMED HRMB
T. Davis, NMED HRMB
B. Garcia, NMED HRMB
T. Glatzmaier, LANL DDEES/ER, MS M992
J. Jansen, LANL EM/ER, MS M992
M. Johansen, DOE LAAO, MS A316
K. Hill, NMED HRMB
J. Kieling, NMED HRMB
M. Leavitt, NMED GWQB
H. LeDoux, DOE LAAO, MS A316
D. McInroy, LANL EM/ER, MS M992
D. Neleigh, EPA, 6PD-N
J. Parker, NMED DOE OB
G. Saums, NMED SWQB
T. Taylor, DOE LAAO, MS A316
S. Yanicak, NMED DOE OB, MS J993
File: Reading and LANL HSWA 3/1082/16
Track: LANL, see document date, NA, DOE/LANL, HRMB/kth, RE, File

ATTACHMENT
REQUEST FOR SUPPLEMENTAL INFORMATION
TA 16 RFI Report
16-003(k) and 16-021(c)
September 1996

SUMMARY:

PRS	PRS TYPE	LANL'S PROPOSED ACTION	DOES HRMB CONCUR?	HRMB'S RATIONALE
16-003(k)	13 HE sumps and drainlines associated with TA-16-260	VCA	Yes	Removal of drainlines and associated troughs with characterization
16-021(c)	Outfall associated with TA-16-260	Phase II sampling & CMS/CMI	Yes	CMS imposed by AA

COMMENTS:

1. Section 1.3.2:
   a. Pertinent sections of the quality assurance/quality control plan for FY95 TA-16 field campaign should be provided for reference.
   b. LANL should include in the text the frequency at which both field and laboratory QA/QC samples were obtained.
   c. LANL should add the locations of the QA samples to Figures 5.1.4-1 and 5.2.4-1.
2. Section 2.3: LANL should replace all references to the "main" aquifer with "regional" aquifer.
3. Section 2.3.1: LANL should include a figure indicating the barium and boron levels as indicated in the second to last paragraph of this section.
4. Section 2.3.2:
   a. LANL should explain any possible relationship between constituents identified in SHB-3 to site-related activities. And if any possible relationship exists, LANL should provide rationale for advancing boreholes to a depth less than the static water level in SHB-3. RPMP is concerned that constituents found in SHB-3 might be related to HE-related activities and that contaminants may be present in the regional aquifer since it has not been definitely constrained.
   b. LANL should also clarify if the ground water interval encountered in SHB-3 will also be intercepted during the drilling activities as discussed within this document.
   c. Please present the data, sampling dates, sampling intervals, etc. for SHB-3 and the background spring data to which it was compared.
   d. Please clarify what is meant by "swab" sample.

5. Section 3.1.1:
   a. Please define the acronym "TATB."
   b. Please provide the analytical methods, detection limits, summary of QA/QC documentation for the analyses conducted.
6. Section 3.1.2: LANL should provide the pertinent portions of the *Technical Approach to the RFI Report* as reference documentation for this report.
7. Section 3.3: LANL should include a compilation of all analytical data, including non-detectable concentrations, in Appendix A of the RFI Report.
8. Section 3.4.2: LANL should provide, as reference materials attached to this document, the pertinent sections of the *Screening Assessment Methodology* (McCann, et al.).
9. Section 3.4.3: LANL should provide in the text of this section further explanation why site-specific human health risk assessments were not performed for 16-003(k) and 16-021(c).
10. Section 4.0:
    a. LANL should ensure that all QA/QC results reported by the laboratory are present and correct in FIMAD and reported within this document.
    b. LANL should collect field duplicate samples at a minimum rate of 10%.
11. Section 4.3: LANL should clarify at each mentioning that "Table B-2" is located within Appendix B.
12. Section 5.0: For additional clarification, LANL could include a figure which references the analytical data (Appendix A - see Comment 7) and indicates the locations where contaminant concentrations were below SALs.
13. Section 5.1.3:
    a. Please include the adjective "sump" in the title of Tables 5.1.3-1, 2 and 3.
14. Section 5.1.4:
    a. LANL should include pertinent information such as a tabulated summary of Photo Ionization Detector/Flame Ionization Detector (PID/FID) readings, HE spot test and sodium iodide detector results in the RFI report.
    b. Please provide an explanation of "Request Numbers" within the text of the RFI report.
    c. LANL should provide well construction diagrams for those boreholes and wells installed.
15. Section 5.1.6: LANL should detail which SVOC compounds were undetected in sample 031-95-0051 and reference a figure indicating the sample's location.
16. Section 5.1.7: LANL should clarify if any potential radiological contaminants other than uranium exist at these PRSs.
17. Section 5.1.7.1: LANL should include the evaluation of lead in the Multiple Chemical Evaluation (Table 5.1.7-1). Section 3.4 indicates that the PRSs will be evaluated assuming a residential risk scenario; the risk posed by lead to children should, therefore, be included in the evaluation.

18. Section 5.1.10: Since no ecological risk analysis was performed, LANL should provide an errata sheet indicating the following correction to the third sentence: No constituents were found above SALs and MCE calculations indicate low probability of impact to human receptors due to the multiple constituent effects.
19. Section 5.2.2: A schematic diagram of the drainage channel and dam would be useful in visualizing the suitability of the proposed Best Management Practices.
20. Section 5.2.7.1: LANL should include the evaluation of lead in the Multiple Chemical Evaluation (Table 5.2.7-1). Section 3.4 indicates that the PRSs will be evaluated assuming a residential risk scenario; the risk posed by lead to children should, therefore, be included in the evaluation.
21. Section 5.2.7.2:
    a. The normalized concentrations of lead (0.145) and 1,3-dinitrobenzene (0.31) are greater than 0.1 in the MCE for noncarcinogenic effects (Table 5.2.7.1-1). LANL should carry forward these constituents, along with those that exceed SALs, into the Baseline Risk Assessment that is planned during the CMS/CMI process.
    b. The normalized concentration of chromium is 0.55 and is the driver for the MCE for carcinogenic effects (Table 5.2.7.1-2). LANL should carry forward these constituents, along with those that exceed SALs, into the Baseline Risk Assessment that is planned during the CMS/CMI process.
22. Section 5.2.9:
    a. Please clarify, within the text of the RFI report, the intent or purpose of presenting Table 5.2.9-1.
    b. LANL should present the traverses relative to EPA Region 9 residential PRGs in addition to the industrial PRGs.
    c. LANL should include lead, chromium and 1,3-dinitrobenzene in Table 5.2.9-1.
23. Section 5.2.11.1: LANL should state that concentrations are "greater" not "larger."
24. Section 5.2.11.2.1: Adding the pond and dam to Figure 5.2.11.2.1-1 would aid in visualizing the proposed activities.
25. Section 5.2.11.2.3:
    a. LANL must ensure that representative and confirmatory sampling for HE will occur. The HE screening kit has a detection limit of 100 ppm, whereas the SAL for HE is 15 ppm.
    b. LANL should also consult NMED DOE OB in the re-siting of boreholes to the location of geophysical anomalies.
    c. LANL should also present the sampling locations, depths, etc. provided in the text (pages 67 and 68) as a table for clarification.
    d. LANL should also provide well construction diagrams in RFI Workplans to obtain prior regulatory approval.
26. Section 5.2.11.2.5:
    a. After one year of quarterly sampling (for HE, VOCs, inorganics and anions), LANL should evaluate the data obtained from the alluvial wells and discuss the

results with the Administrative Authority to determine if continued sampling would enhance the investigation.

b. Please clarify which of the 2 well/borehole locations are accessible and tentatively accessible and discuss what will occur if a borehole is found to be completely inaccessible.

27. Appendix A, Analytical Suites: See Comment 7.
28. Appendix B, Table B-1: A crosswalk between request number and PRS/sample location would be extremely useful.
29. Appendix C, Section 1: LANL should perform or otherwise include a comparison of water balances for each of the potentially affected springs and seeps included in Table C-1.
30. Appendix C, Section 2:
    a. LANL should clearly indicate the names and locations of all background springs (p. C-2, first paragraph) and provide a summary of the background water chemistry data.
    b. Figure C-1 should be revised to clearly indicate sampling locations more so than NPDES outfalls.
    c. LANL should include tritium and oxygen-18 in Table C-2.
31. Appendix C, Section 3.0:
    a. LANL should provide a tabulation of the SALs and background concentrations for those analytes presented in paragraph 3, page C-6, Table C-3 and paragraph 3, page C-13.
    b. LANL should define the acronym "NQ" in paragraph 3, page C-13.