



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous & Radioactive Materials Bureau
2044 Galisteo
P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-1557
Fax (505) 827-1544



MARK E. WEIDLER
SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

November 19, 1997

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

Dear Sirs:

RE: Conditional approval upon modification: RFI Report for Potential Release Sites, 15-004(a-d,f), 15-007(b), 15-008(a,b), 15-009(e,j), 15-012(b), C-15-004; dated November 1995.

The New Mexico Environment Department Hazardous and Radioactive Materials Bureau (HRMB) has completed a review of the response to the Notice Of Deficiency (NOD) for the captioned report. Because the response is deficient, the captioned RCRA Facility Investigation (RFI) Report is conditionally approved upon submittal of the modifications presented in Attachment A. A summary list of Los Alamos National Laboratory (LANL) recommendations and HRMB responses is presented in Attachment B.

LANL must now submit to HRMB clean insertable replacement pages incorporating the modifications listed in Attachment A, and a Phase 2 report addressing the deficiencies listed in Attachment A. LANL must do this within thirty (30) calendar days of receipt of this letter, or HRMB will deny the report. Upon receipt of these modified pages, HRMB will review them with the intent of finalizing the approval.

In order to address Quality Assurance/Quality Control (QA/QC) problems associated with mercury and arsenic analyses, HRMB will accept resampling for these constituents as part of the Voluntary



4224

12

Mr. Taylor and Dr. Hecker
November 19, 1997
Page 2 of 2

Corrective Actions (**VCAs**). The decisions (e.g, proposing NFA based solely on human health, especially when High Explosive (**HE**) has been characterized only by field instrumentation) made by LANL based on the data presented in this RFI are faulty. Therefore, HRMB requires that LANL perform Phase 2 activities.

If you have any questions, please call myself or Mr. John Kieling, HRMB's LANL Facility Manager, at 827-1558.

Sincerely,



Robert S. "Stu" Dinwiddie, Ph.D., Manager
RCRA Permit Management Program

RSD/mjc

Attachments

cc w/attachments:

- B. Garcia, NMED HRMB
- J. Kieling, NMED HRMB
- J. Parker, NMED DOE OB
- S. Yanicak, NMED DOE OB, MS J993
- M. Leavitt, NMED GWQB
- G. Saums, NMED SWQB
- T. Baca, LANL EM-DO, MS J591
- J. Canepa, LANL EM/ER, MS M992
- T. Glatzmeier, DDEES/ER, MS M992
- D. McInroy, EM/ER, MS M992
- M. Johansen, LAAO, MS A316
- H. LeDoux, LAAO, MS A316
- T. Taylor, LAAO, MS A316
- J. Vozella, LAAO, MS A316
- D. Neleigh, EPA, 6PD-N

FILE: HSWA LANL 2/1086/15

TRACK: LANL, doc date, N/A, DOE/LANL, HRMB/Dinwiddie, RE:, File:

c:\wpwin\lanlcorr.act\ta15no95.rfi\approval.mod

TS
12/5/97

ATTACHMENT A

Attachment A, Work Plan Modification.

1. LANL's response to AA Comment 1 is insufficient. For LANL to simply say; "based on the RFI Work Plan" in its response is inappropriate. The RFI Report failed to provide sufficient documentation evincing the absence of VOCs, and LANL's response did not reference a specific section of the Work Plan which would provide this explanation.

LANL is reminded that this review was performed on the RFI Report and the review of sections of the Work Plan was necessitated by the deficiencies of that Report.

LANL must provide in the Phase 2 report a detailed explanation substantiating the absence of VOCs. Furthermore, the reviewer fails to understand why one sentence of the response is in regards to VOCs (which is what the AA's comment is about), and five are regarding High Explosives.

2. LANL recommends NFA for PRSS 15-004(a,d) and 15-004(c) based solely on field screening. To substantiate the field screening determination, LANL shall submit High Explosives samples from these PRSS for off-site laboratory analysis.

General Comments.

Comment 6a.

The brief summaries provided in the first paragraph of the screening assessment section for each PRS (Section 4.X.3) are deficient. This deficiency resulted in the NOD comment requesting summary discussions presenting the information contained in the requested table. LANL shall attach these discussions to the Phase 2 report.

LANL shall also include in the summary discussions a break down of each qualifier. That is, LANL shall not simply say, "x number of samples were J, UJ, or R." LANL shall quantify how many of each qualifier are present, and provide the corresponding percentages.

Comment 10

LANL's response is duplicitous and inadequate. LANL continues to propose NFA for sites for which only field screening High Explosives analysis was conducted. Also, no mention is made within the NOD response of those parts of the report which state that field screening determined the extent of contamination.

Specific Comments

Comment 11

The last sentence; "See response to General Comment 3" is confusing. The HE Spot Test would seem to have little to do with the geology of TA-15. LANL shall clarify this in the Phase 2 report.

Comments 16, 17 and 18

The phrase, "...data supports the recommendation for NFA based on human health.", is meaningless. NFA cannot be determined based solely on human health concerns. LANL shall include in the Phase 2 report the PRSs proposed for NFA based solely on human health concerns.

Comment 23.

LANL's response to this comment begins; "The percent recovery of tetryl in the blind QC sample was below the acceptable level of 10%. As a result, it may not be possible to accurately quantify this analyte and the data are qualified as R." In the Phase 2 report LANL must provide the guidance and rationale detailing the acceptability of a 10% recovery.

Comment 35

The text of the RFI Report states that 12 mercury samples were unusable because holding times were exceeded. The table supplied with the NOD response lists the total mercury samples as 57. Therefore 79% of the mercury samples for this PRS were usable, which contradicts the table which indicates that 87.7% of the data is usable. LANL must explain this discrepancy and supply the complete data set for this PRS within the Phase 2 report.

Comment 43

LANL's screening approach (e.g, using "the range of 10^{-4} to 10^{-6} " instead of the single value 10^{-6} for screening purposes) is inconsistent with EPA's Risk Assessment Guidance for Superfund. LANL shall use the single value 10^{-6} for screening purposes.

Comment 44 Comments 50 and 51 Comment 54

The report text states as follows: "*Field screening was used to bias samples sent for fixed laboratory analysis, as well as to determine the areal distribution of the contamination.*" This directly contradicts LANL's assertion in the response to NOD that field screening is not used to determine areal extent of

contamination.

Both comments 50 and 51 are also in regard to the use of field screening to define extent of contamination. Comment 51 states in part; "...XRF data... confirms the extent of lead on site at concentrations of potential concern."

Comment 54 is also in response to the use of field screening to define extent of contamination, and specifically the statement in the report; "Additional field XRF screening in the vicinity of the three lead hotspots north of PRS 15-004(b) during 1995 has defined the extent of soil contamination,...". LANL shall not use field screening to determine extent of contamination without confirmatory sampling and appropriate laboratory analysis.

Comment 46

LANL's response to this comment states in part; "These results were not used to characterize the site but rather to obtain information, if available, regarding the general level and type of contamination that might be encountered." HRMB's concern is not that the results in question were used to characterize this PRS for this report, but that obtaining information from flawed former efforts may lead to flawed assumptions and inadequate characterization of sites in general, including this specific PRS.

Comment 61

The report text is modified to read; "There are no **human health** COPCs at this site."

Comment 63.

This comment refers to specific comment 52. LANL's response is "See response to specific comment 42. Because comment 42 has nothing to do with comment 52, HRMB will take this a typographical error, and read it as "See response to specific comment 52."

Comment 66.

LANL shall not propose NFA based solely on human health concerns.

Comment 74.

Because antimony, barium, cadmium and lead all had normalized sums greater than 0.1, LANL shall retain them as COPCs in the VCAs for PRSs 15-004(f) and 15-009(e), and re-evaluate these PRSs accordingly.

Comment 75.

LANL's human health screening level assessment does not comply with EPA guidance regarding risk evaluation; it allows constituents with a normalized value greater than 0.1 to be dropped from the risk evaluation. LANL shall retain those constituents with a normalized value greater than 0.1 for the baseline risk assessment.

Comment 84.

LANL's response to comment 84; "There were **some** [emphasis added] HE samples that did not have holding time problems and no HE compounds were detected," is misleading. LANL shall revise the text to read; "No organics or HEs were detected in **some** samples from the E-F Firing Site."

Comment 85.

LANL shall provide in the Phase 2 report the proposed sampling to ensure that there has not been a release from this PRS, which is located on a slope which receives high amounts of runoff.

Comment 99.

LANL's response is inconsistent with the report text. LANL shall revise the text to read; "Because of the previous INEL investigation (DOE 1989, 0271) the suspected major constituents were known..."

Comments 102 and 106.

In an earlier response regarding holding times, LANL states that gross exceedances of holding times (more than twice) should be qualified. However, in this case the 14-day holding time is more than doubled and the data is considered unqualified. LANL shall resample this PRS for High Explosives.

ATTACHMENT B - REVIEW SUMMARY
RCRA Facility Investigation Report
Technical Area 15
November 1995

PRS	LANL'S PROPOSED ACTION	DOES HRMB CONCUR?	HRMB'S RATIONALE
15-004 (a)	NFA	No	NFA proposal based on human health only. HE not analyzed by a fixed laboratory.
15-004 (b)	VCA	Tentative	Plan includes resampling for HE.
15-004 (c)	NFA	No	NFA proposal based on human health only. HE data unusable.
15-004 (d)	NFA	No	NFA proposal based on human health only. HE not analyzed by a fixed laboratory.
15-004 (f)	VCA	Tentative	Plan includes resampling for cadmium and HE, but must also include analyses for antimony, barium, cadmium and lead.
AOC-15-004	NFA	No	LANL shall investigate possible fate and transport.
15-007 (b)	VCA	Tentative	Plan includes resampling for SVOCs and other COPCs.
15-008 (a)	VCA	Tentative	Plan includes resampling for mercury, cadmium and antimony, but must also include analyses for barium and lead.
15-008 (b)	VCA	Tentative	Plan includes resampling for mercury.
15-009 (e)	VCA	Tentative	LANL shall perform soil sampling as requested, including analyses for antimony, barium, cadmium and lead.
15-009 (j)	VCA	Tentative	LANL shall perform soil sampling as requested.
15-012 (b)	VCA	Tentative	LANL shall remove contaminated soil and perform confirmatory sampling.