

**Response to Notice of Disapproval for the Investigation Work Plan for
Middle Cañada Del Buey Aggregate Area
Los Alamos National Laboratory, NM 0890010515
Dated November 26, 2007**

INTRODUCTION

This submittal is the response by Los Alamos National Laboratory (LANL or the Laboratory) to the notice of disapproval regarding the "Investigation Work Plan for Middle Cañada del Buey Aggregate Area," issued by the New Mexico Environment Department (NMED) Hazardous Waste Bureau on November 26, 2007. The Laboratory submitted the investigation work plan to NMED on October 31, 2007.

This response follows the organization of NMED's notice of disapproval. NMED's comments are included below verbatim, and the Laboratory's responses follow each NMED comment.

GENERAL COMMENTS

NMED Comment

1. *The Tables in the Plan that provide historical sampling data (i.e., Tables 2.6-2, 2.6-3, and 2.6-5) do not include units of measurements for detected constituents. The Permittees must add a footnote to all appropriate tables specifying the units of measurement.*

LANL Response

1. Tables 2.6-2, 2.6-3, and 2.6-5 in the investigation work plan and Tables 2.3-2, 2.3-3, and 2.4-2 in the historical investigation report have been revised to include a table note specifying the units of measurement.

SPECIFIC COMMENTS

NMED Comment

1. **Section 4.1, Proposed Activities for AOCs 18-005(b) and 18-005(c), page 16:**

Permittees Statement: "Samples will not be analyzed for radionuclides, pH, cyanide, nitrates, perchlorate or organic chemicals since these areas were designated as AOCs solely because of the past presence of explosives."

NMED Comment: "The sentence preceding the quote above states that samples will be analyzed for cyanide and nitrates. Additionally, Table 4.1-1 indicates that cyanide and nitrates are included in the analyses. Resolve the discrepancy and revise the text accordingly. Since no investigations have been conducted at the site, the Permittees must include perchlorate and semi volatile organic analyses in a subset of samples. Perchlorate was considered a chemical of potential concern at other locations of former Magazines (e.g., AOCs 16-024(a and u) in S-Site Aggregate Area Investigation Work Plan).

LANL Response

1. The text in section 4.1 (p. 16 of the investigation work plan) has been revised to indicate that all samples collected from AOCs 18-005(b) and 18-005(c) will be analyzed for cyanide and nitrates. In addition, LANL will analyze all samples to be collected from Areas of Concern (AOCs) 18-005(b) and 18-005(c) for perchlorate and semivolatile organic chemicals (SVOCs) to ensure the determination of nature and extent. Table 4.1-1 has been revised accordingly.

NMED Comment

2. Section 4.2, AOC 51-001, page 17:

Permittees Statement: "Samples will be analyzed at off-site fixed laboratories for VOCs, SVOCs, TAL metals, cyanide, nitrate, isotopic plutonium, tritium, and isotopic uranium."

NMED Comment: The Permittees state that the samples will be analyzed for SVOCs and tritium, but did not include them in Table 4.2-1 (Summary of Proposed Sampling at AOC 51-001). Revise the table to include tritium and SVOC analyses.

LANL Response

2. Table 4.2-1 has been revised to indicate that samples collected from AOC 51-001 will be analyzed for tritium and SVOCs.

NMED Comment

3. Section 4.2, AOC 54-007(d), page 18:

Permittees Statement: "Dioxins, explosive compounds, PCBs/pesticides, perchlorate, and furans will not be analyzed because they are not related to historical operations at facilities in the northeast portion of TA-54 West served by this septic system."

NMED Comment: Since PCBs/pesticides were detected in samples collected in samples collected during previous investigations, they must be included in the analytical suite. Section 2.6.4 and Table 2.6-4 do not include discussion of samples that were analyzed for PCBs/pesticides. Revise the table and text accordingly.

LANL Response

3. Low concentrations of Aroclor-1254, DDE[4,4'-], and DDT[4,4'-] were detected in a single near-surface soil sample collected at the eastern edge of the drain field during the 1995 Resource Conservation and Recovery Act facility investigation (RFI). However; analytical data from the 1995 RFI presented in the 2001 voluntary corrective action (VCA) completion report was reevaluated and determined to be screening-level data and is therefore not presented in the data summary tables or discussed in investigation work plan (LANL 2001, 071473). The text in section 2.6.4 (p. 8 of the investigation work plan) and in section 2.4.2 (p. 5 of the historical investigation report [HIR]) has been revised to describe historical pesticide/for polychlorinated biphenyl (PCB) screening data. The text in section 4.3 (p. 18 of the investigation work plan) and Table 4.3-1 have been revised to indicate that samples collected from AOC 54-007(d) will be analyzed for PCBs/pesticides.

NMED Comment

4. Section 5.2, Sampling, page 19:

Permittees Statement: "Chemical analysis will be performed in accordance with the analytical statement of work (LANL 2000, 071233)."

NMED Comment: The Permittees must include a complete list of all fixed laboratory analytical methods to be used for various chemicals. Provide a Table summarizing the methods proposed for fixed laboratory analyses.

LANL Response

4. A new table summarizing the analytical methods proposed for the fixed laboratory analyses for the various chemicals at each AOC is provided as Table 5.2-1 in the investigation work plan. The text in section 5.2 (p. 19 of the investigation work plan) has been revised to reference the new table.

NMED Comment

5. Table 1.1-1, Summary of SWMUs and AOCs in Middle Cañada del Buey Aggregate Area, page 43:

NMED Comment: The Historical Investigation Report (HIR) indicates that area of concern (AOC) 54-001(d) will be subject to closure and post-closure care requirements of 20.1.4.500 NMAC. Since structure 54-81, a PCB storage pad, associated with AOC 54-001(d) is not included in Table O-1 (Permitted Units Actively Managing Hazardous Waste) of the 2007 Los Alamos National Laboratory, Draft Hazardous Waste Permit (Draft Permit), the Permittees must include investigation of AOC 54-001(d) in the Plan.

Pursuant to Section IV.C.1.a of the Consent Order, MDA J (SWMU 54-005) is not subject to requirements of corrective action under the Order. MDA J is included as a SWMU in the Permit and the Draft Permit.

LANL Response

5. The RFI work plan for operable unit 1148 (LANL 1992, 007669) describes AOC 54-001(d) as consisting of a PCB storage building (building 54-39) and a PCB storage pad (structure 54-81). A review of LANL's facility engineering database confirms that the pad was originally assigned structure number 54-81 in 1989 but that structure number 54-81 was cancelled in 1991 and the pad was combined with structure 54-39 in 1991. The more recent association of structure 54-39 with AOC 54-001(d) is consistent with LANL's Part B permit application renewal for TA-54. Pages 54-9 through 54-11 and the section titled "TA-54-39 and Containment Pad" provided in Attachment G of revision 3 of the Los Alamos National Laboratory, Technical Area 54, Part B permit renewal application that was submitted to NMED in June 2003 describe the containment pad as being associated with building 54-39. Photographs on page 54-10, the figure on page 54-11, and figures G-9 and G-10 in the Part B permit renewal show the containment pad [AOC 54-001(d)] located along the south edge of structure 54-39 (LANL 2003, 091318). The use of structure number 54-81 to describe the pad is based on historical documents and does not reflect current nomenclature. The work plan and HIR

have been revised to indicate that structure number 54-81 was a historical designation and that the pad is now considered part of structure 54-39. As such, the storage pad is included with structure 54-39 in the Technical Area 54, aboveground Area L container storage unit in Table O-1 (Permitted Units Actively Managing Hazardous Waste) of the 2007 Los Alamos National Laboratory Draft Hazardous Waste Permit and will therefore not be investigated as part of the Middle Cañada del Buey Aggregate Area investigation work plan. The text in section 2.1.2 (p. 3 of the investigation work plan) and in section 4.0 (p. 9 of the HIR) have been revised to include this information.

As part of DOE's Draft Part B Permit comments submittal, due to NMED in January 2008, AOC 54-001(d) will be requested to be removed from Table P-1 because it is also listed in Table O-1. The text in section 2.2.2 (pp. 3-4 of the investigation work plan) and in section 5.0 of the historical investigation report (p. 10) have been revised to indicate that pursuant to Section IV.C.1.a of the Consent Order, Material Disposal Area J (SWMU 54-005) is not subject to requirements of corrective action under the Consent Order and will not be investigated as part of the Middle Cañada del Buey Aggregate Area investigation work plan.

REFERENCES

- LANL (Los Alamos National Laboratory), May 1992. "RFI Work Plan for Operable Unit 1148," Los Alamos National Laboratory document LA-UR-92-855, Los Alamos, New Mexico. (LANL 1992, 007669)
- LANL (Los Alamos National Laboratory), September 2001. "Voluntary Corrective Action Completion Report for Potential Release Sites 51-001 and 54-007(d)," Los Alamos National Laboratory document LA-UR-01-5223, Los Alamos, New Mexico. (LANL 2001, 071473)
- LANL (Los Alamos National Laboratory), June 2003. "Los Alamos National Laboratory Technical Area 54 Part B Permit Renewal Application, Revision 3.0," Los Alamos National Laboratory document LA-UR-03-3579, Los Alamos, New Mexico. (LANL 2003, 091318)