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NEW MEXICO ENVIRONMENT DEPARTMENT

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EP2013-5058

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

March 18, 2013

Pete Maggiore
Environmental Operations Manager
Los Alamos Site Office
Department of Energy
3747 West Jemez Road, MS A316
Los Alamos, NM 87544

Jeffrey D. Mousseau
Associate Director Environmental Programs
Los Alamos National Security, L.L.C.
P.O. Box 1663, MS 991
Los Alamos, NM 87545

RE: DISAPPROVAL
INVESTIGATION/REMEDIATION REPORT FOR MATERIAL DISPOSAL AREA B, SOLID WASTE MANAGEMENT UNIT 21-015, REVISION 1
LOS ALAMOS NATIONAL LABORATORY (LANL)
EPA ID #NM0890010515
HWB-LANL-11-078

Dear Messrs. Maggiore and Mousseau:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Investigation/Remediation Report for Material Disposal Area B, Solid Waste Management Unit 21-015, Revision 1* (IRR), dated April 2012 and referenced by LA-UR-12-20089/EP2012-0067. NMED has reviewed the IRR and hereby issues this Disapproval. The Permittees must address the following comments before NMED can complete its review of the IRR.

COMMENTS:

1) **NMED Comment:** Provide a detailed description of the procedures followed for confirmation sidewall sampling. Specifically, detail the protocol followed upon detection of contaminants at concentrations greater than applicable screening levels in a sidewall sample, including a description of how the excavation limits were altered based on the detections and how confirmation that sufficient removal of contaminated materials was conducted. Provide figures and photo-documentation illustrating implementation of these procedures.

2) **Section 6.3, Post-remediation Fieldwork Summary, pages 35-37, Section F-5.1, Confirmation Sampling Methods, page F-3, and Section F-5.3, Borehole Sampling Methods, page F-4**

Permittees' Statements: "If a particular interval was selected for analytical sampling, samples of the broken tuff were removed from the core barrel and placed into the sampling bowl. The sampler further reduced the sample size using a decontaminated rock hammer or stainless-steel trowel, only to the extent required to containerize the sample. Samples for VOCs were collected first, after which all remaining sample containers were filled to the top to minimize headspace."
and
"Because samples for VOC analysis were not collected in sleeves and were handled before they were sealed in sample jars, some potential for VOC loss occurred during sample collection, and VOC results may be biased low."
and
"If the sample consisted of broken tuff, the sampler further reduced the size using a decontaminated rock hammer or stainless-steel trowel, only to the extent required to containerize the sample. The material was then passed through a 2-mm sieve into a sample bowl to remove foreign material. The sample material from the bowl was placed in appropriate sampling containers. In an effort to prevent the potential loss of VOCs, the sample container for VOCs was filled first, and then all remaining sample containers were filled."
and
"Borehole samples were collected in accordance with a subcontractor procedure technically equivalent to SOP-06.26, Core Barrel Sampling for Subsurface Earth Materials."

NMED Comment: The Permittees have clearly indicated in three separate statements that inappropriate sampling methods were used when collecting samples for VOC analysis. Analytical data for samples that were collected inappropriately is not valid. Sufficient evidence that VOCs are not present was not acquired. SOP-06.26 specifically dictates the use of brass sleeves for VOC sampling and it is also a requirement of Consent Order Section IX.B.2.b.i and ii unless another sample collection method is approved by NMED. The Permittees must provide data that meet quality assurance and quality control objectives in order to demonstrate that VOCs are not present in soils or tuff at the site. The Permittees

must submit a work plan detailing a sampling and analysis plan including protocol appropriate for evaluating for the presence of VOCs.

3) **Table 5.02, Confirmation Samples Collected during Excavation Activities**

NMED Comment: The Permittees provided no indication of the analyses requested for the samples collected. The standard Investigation Reports submitted by the Permittees include a table titled, "Samples Collected and Analyses Requested" which satisfies the requirements of Consent Order Section XI.C.12 for identifying the analytical methods. This section of the Consent Order also requires that detection limits be included in the tables. NMED is unable to complete its review of the IRR without this required information. The Permittees must revise Table 5.02, as well as tables for all other samples collected, to include the analyses requested and analyte detection limits or provide this information in new tables.

4) **Appendix C, Analytical Suites and Result and Analytical Reports**

NMED Comment: The Permittees provided no method to locate the appropriate laboratory requests and subsequent data reports for specific samples. NMED is unable to complete its review of the IRR without this information. In the Appendix C Tables, the Permittees must provide columns correlating each specific sample to the laboratory request PDFs, data package PDFs, and all other PDF documents included in Appendix C.

5) **Appendix C, Analytical Suites and Result and Analytical Reports**

NMED Comment: The Microsoft Excel data tables provided in Appendix C are missing essential information. For example, Table C-2.Confirmation_ORGANICS_040212.xls contains columns for sample depth which all indicate that samples were collected at a depth of zero. In addition, many samples have a Media designation of "na" and many cells for various contaminant constituents are left blank. NMED is unable to complete its review of the IRR without this information. The Permittees must revise the tables in Appendix C to include sample depths, media designations, and identification of non-detects and not analyzed samples for a particular constituent.

The Permittees must submit a response to the Disapproval and a VOC sampling work plan by **June 30, 2013**. All submittals (including maps) must be in the form of two paper copies and one electronic copy in accordance with Section XI.A of the Order. In addition, an electronic version of the revised IRR identifying all revisions in redline-strikeout format must be included with the submittal.

Please contact Ben Wear at (505) 476-6041 should you have any questions.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

cc:

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