

**Response to the Second Notice of Disapproval for the
Investigation Report for Lower Sandia Canyon Aggregate Area,
Los Alamos National Laboratory, EPA ID No: NM0890010515, HWB-LANL-11-019,
Dated September 8, 2011**

INTRODUCTION

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comments are included verbatim. Los Alamos National Laboratory's (LANL's or the Laboratory's) responses follow each NMED comment.

NMED Comment

3. Section 6.4.1.4, Site Contamination, Soil and Rock Sampling, page 32:

The NOD response states that the results of geophysical survey did not identify any landfill boundaries or buried waste at Solid Waste Management Unit (SWMU) 20-001(c). Because tuff was encountered at a very shallow depth (less than 1-2 ft bgs), it was decided the samples above the soil-tuff interface would not provide meaningful characterization data for the site. The sampling for SWMU 20-001(c) was not conducted in the proper locations during 1995 investigations. The results of geophysical survey conducted in 2010 did not identify the landfill boundaries. The Permittees propose to collect additional samples during a second phase of investigation to define the extent of contamination. Before collecting additional samples, the Permittees must conduct a historical document search to ensure that the samples collected during 2010 investigations are indeed from the location of former landfill.

LANL Response

3. Extensive historical research concerning the location of SWMU 20-001(c) was performed during preparation of the 1994 Operable Unit 1100 Resource Conservation and Recovery Act facility investigation work plan (LANL 1994, 034756) and the 2009 historical investigation report for Lower Sandia Canyon Aggregate Area (LANL 2009, 105078). The location investigated in 2010 represents the most likely location of the landfill, based on the historical information reviewed. The Laboratory is unaware of any additional historical documents that would change the proposed sampling locations. The locations specified in the Phase II investigation work plan will be sampled to complete the determination of extent of contamination.

NMED Comment

17. Section 9.1.1, Conclusions, Former TA-20, page 106:

NMED does not concur with the response to this comment. Polychlorinated biphenyls (PCBs) were detected at several locations at TA-20 and must be retained as chemicals of potential concern (COPCs) for risk evaluation purposes. Regardless of the source of the contamination, PCBs are present at the site and do contribute to the overall risk. If PCBs drive risk above target levels, the Permittees may wish to consider tying the remediation costs to the source area, but the fact that PCBs are present at TA-20 cannot be ignored and PCBs cannot be excluded from the site risk assessments.

LANL Response

17. Polychlorinated biphenyls will be included as chemicals of potential concern for the Technical Area 20 sites where they are detected and will be included in applicable risk-screening evaluations in the Phase II investigation report.

NMED Comment

18. Section B-5.3, Subsurface Tuff Sampling Methods, page B-4:

The response to this comment is not adequate. The Permittees have not demonstrated that appropriate methods have been used to collect samples for volatile organic compounds (VOCs) analysis. The Permittees must specifically describe the methods used to collect samples for VOCs. The Permittees must describe in detail the methods used to collect the samples from the sampling device, the procedures used to transfer the samples to sampling containers, the types of sample containers used, how the sample containers were filled to eliminate headspace, and the method of storage for the sample containers. Methods used to collect samples for different media such as soil, sediment, and tuff, must be described separately. The Permittees state that sample material had to be broken to fit into sample containers. It is not clear from the text that after samples were transferred into appropriate containers, how the samples were "broken" and whether there was any head space in the sample container after it was filled. The Permittees must describe every step of sample collection in detail so NMED can determine the validity of VOC data.

LANL Response

18. Sections B-5.1 and B-5.3 and Table B-1.0-1 have been revised to provide additional details on collection of samples for volatile organic compound (VOC) analysis. These descriptions are specific to the sampling method rather than to the media (e.g., soil samples are collected using the spade-and-scoop method in the same manner as sediment samples). As described in these revisions, containers for VOC analysis were filled as completely as possible. Because of the nature of some of the sample material (e.g., rock fragments), however, it may not have been possible to completely fill the container with no headspace.

REFERENCES

- LANL (Los Alamos National Laboratory), May 1994. "RFI Work Plan for Operable Unit 1100," Los Alamos National Laboratory document LA-UR-94-1097, Los Alamos, New Mexico. (LANL 1994, 034756)
- LANL (Los Alamos National Laboratory), April 2009. "Historical Investigation Report for Lower Sandia Canyon Aggregate Area," Los Alamos National Laboratory document LA-UR-09-2077, Los Alamos, New Mexico. (LANL 2009, 105078)