

**Response to the "Notice of Disapproval (NOD)
Delta Prime Site Aggregate Area Phase II Work Plan at Technical Area 21
Los Alamos National Laboratory (LANL), EPA ID No: NM0890010515, HWB-LANL-08-031,"
Dated November 12, 2008**

INTRODUCTION

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comments are included verbatim. The comments are divided into general and specific categories, as presented in the notice of disapproval. Los Alamos National Laboratory's (LANL's or the Laboratory's) responses follow each NMED comment. This response contains data on radioactive materials, including source, special nuclear, and byproduct material. Information on radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to NMED in accordance with U.S. Department of Energy (DOE) policy.

GENERAL COMMENTS

NMED Comment

1. *The enhanced visual representation of contaminant concentrations using the EarthVision program does not effectively convert a three-dimensional image to a two-dimensional figure. In some cases, sampling points appear to 'float' in the middle of the figure (e.g., Consolidated Unit 21-003-99 and SWMU 21-024(c), page A-14). The public may have difficulty understanding this depiction of contaminant concentrations. Review of the Permittees' proposed sample locations is better portrayed in Figures 6.3-1 through 6.5-28 of the Delta Prime Site Aggregate Area Investigation Report, Revision 1.*

LANL Response

1. Comment noted.

SPECIFIC COMMENTS

NMED Comment

1. **Section 3.0, Proposed Extent Sampling, Extent of Contamination at Consolidated Unit 21-006(c)-99, page 4:**

Permittees' Statement: "Americium-241, isotopic plutonium, and tritium activities increase with depth at the SWMU 21-006(b) seepage pit inlet pipe; however, activities decrease nearby (within 10 feet and downslope) under the seepage pit. Therefore, no further extent sampling is necessary in this area."

NMED agrees that the lateral extent has been determined for americium-241, tritium, and isotopic plutonium at solid waste management unit (SWMU) 21-006(b). However, concentrations of these contaminants increase with depth at location 21-601213, despite decreasing concentrations ten feet away. Vertical extent of americium-241, tritium, and isotopic plutonium at location 21-601213 has not been determined. The Permittees must revise the text where appropriate and Table 14 to include

sampling at former location 21-601213 to determine vertical extent of americium-241, tritium, and isotopic plutonium.

LANL Response

1. The statement on page 4 has been removed. At the direction of DOE, the Laboratory has added sampling location 2 to the proposed sampling table, Table 14, and to Figure 14 for Consolidated Unit 21-006(c)-99 at location 21-601213 to determine the vertical extent of americium-241, tritium, and isotopic plutonium. Two samples will be collected at 5 ft and 10 ft under the last sample collected, at 18.0 to 19.0 ft bgs and 23.0 to 24.0 ft bgs, respectively. DOE has directed the Laboratory to include collecting these samples to assist DOE in determining the final disposition of this site with respect to radiological contamination.

NMED Comment

2. **Section 3.1, Lateral Extent Sample Placement Strategy, page 5:**

Permittees' Statement: "When lateral extent for a COPC is not defined in an outfall, a sample is placed 10 ft or 20 ft from the original location in the direction in which lateral extent is not defined."

The Permittees have not explained how they determine the distance a sample location should be from the potential source. The Permittees must revise Section 3.1 to explain what factors are considered in the decision for placement of samples used to determine the lateral extent of contamination at an outfall.

LANL Response

2. The text on page 5 has been changed to read as follows: "When lateral extent for a COPC is not defined in an outfall, a sample is placed 10 ft or 20 ft from the original location in the direction in which lateral extent is not defined (depending upon the original sample spacing and the accessibility of the area to be sampled)."

NMED Comment

3. **Section 5.0, Schedule, page 5, paragraph 2:**

Permittees' Statement: "The laboratory will submit the Phase II investigation report 6 mo[nths] after all the extent samples are collected."

Because the Plan will be approved by NMED by the Notice Date (January 31, 2009), and based on the Permittees' time estimations for the readiness review and mobilization, field work, data validation, and report preparation, the Phase II Investigation Report must be submitted no later than January 31, 2010.

LANL Response

3. The DP Site Aggregate Area Phase II investigation report will be submitted on or before January 31, 2010.