Response to the Notice of Disapproval for the Delta Prime East Building Footprints Letter Work Plan for Delta Prime Site Aggregate Area, Technical Area 21, Los Alamos National Laboratory (LANL), EPA ID No: NM0890010515, HWB-LANL-10-043, Dated June 15, 2010

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. 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 policy.

SPECIFIC COMMENTS

NMED Comment

1. Section 2.1.3, Scope of Activities for Building 21-152 and Associated Structures, page 3, paragraph 2:

Permittees' Statement: *"Samples will be collected along the center of former building 21-152 in a 20-ft-based grid pattern (Figure 2.1-1, locations 31-41) at 0 to 1.0 ft and 2.0 to 3.0 ft bgs. At these locations, samples will be analyzed for asbestos in addition to the suites listed above. Samples are not planned to be collected under the hallway connecting buildings 21-152 and 21-155; these were locker/shower areas with low potential for contamination."*

NMED Comment: *The Permittees must revise Figure 2.1-1 to identify the location of the hallway between buildings 21-152 and 21-155. The Permittees must also provide justification as to why these locker/shower areas have "low potential for contamination."*

LANL Response

1. Figure 2.1-1 has been revised to label the hallway, the shower/locker/bathroom areas, as well as a small laboratory area on the south side of the hallway. LANL proposes to collect samples from one location under the former laboratory area at the 0–1.0- and 2.0–3.0-ft-depth intervals. The associated text in section 2.1.3, Table 2.1-1, and Figure 2.1-1 have been modified accordingly. The shower/locker/bathroom areas have a low potential for contamination for the following reasons:

    - These areas were used for worker personal hygiene.
    - No laboratory procedures occurred in these areas.
    - There was no radiological/chemical inventory stored in this area.
    - No spills were reported to have occurred in this area.

    The water from the showers/locker/bathroom areas was discharged into Solid Waste Management Unit (SWMU) 21-024(h) outfall until the mid-1960s. The outfall for SWMU 21-024(h) was sampled during the Phase I and II DP Site investigations. Based on site data, the Phase II investigation report

concluded that SWMU 21-024(h) does not pose potential unacceptable risks or doses under the current and reasonably foreseeable future land-use scenarios (residential, industrial, and construction worker).

NMED Comment

2. Section 2.1.3, Scope of Activities for Building 21-152 and Associated Structures, page 3, paragraph 5:

Permittees' Statement: "These samples will be analyzed for all suites listed above except for SVOCs and VOCs, as well as asbestos."

NMED Comment: *In addition to former building 21-153 and its associated plenum, a similar statement is made for exhaust stacks 21-322, 21-323, 21-388, and 21-466. The Permittees must provide justification for why samples beneath former building 21-153 and the exhaust stacks will not be analyzed for VOCs and SVOCs or revise the text and Tables 2.1-1 and 2.2-1 to show that samples collected beneath former building 21-153 and exhaust stacks 21-322, 21-323, 21-388, and 21-466 will be analyzed for VOCs and SVOCs.*

LANL Response

2. Building 21-153 and the associated plenum were demolished in the late 1970s. The justification not to sample for semivolatile organic compounds (SVOCs) and volatile organic compounds (VOCs) in this area is that the location of the former building and plenum is now partially covered with asphalt. Therefore, the detection of any VOCs and SVOCs at the site would not be tied directly to site operations. Additionally, building 21-153 and the associated plenum were used as a filter house (filtered laboratory exhaust), which was not associated with the storage or direct use of chemicals. This information has been added to the text in section 2.1.3.

   Exhaust stacks were mounted on reinforced concrete pads and were connected to the buildings by ductwork. Exhaust from laboratory hoods was vented through the stacks. The stacks received mainly tritium, which entered the stacks above the ground surface (http://www.lanl.gov/environment/air/neshap/hist_ast.shtml). This information has been added to the sections summarizing the operational history of each site.

   Stack 21-388 was recently removed during demolition activities at DP East. The concrete below the base of the stack was approximately 5 ft thick. No cracks in the concrete or any visible staining were evident below the stack. Radiological field screening determined this area was not contaminated. The other stacks at DP East should be of similar construction. Similar radiological field screening is to be performed during the future demolition of remaining stack structures 21-322, 21-323, 21-466, and one undesignated stack. If levels of radionuclides indicating a release are encountered during field screening under the removed stacks, SVOCs and VOCs will be added to the sampling suite for the stacks. This information has been added to the last bullet in section 2.2.3.