Response to the Notice of Disapproval for the Vadose Zone Subsurface Characterization and Vapor-Monitoring Well Installation Work Plan for Material Disposal Area V, Consolidated Unit 21-018(a)-99 Los Alamos National Laboratory, EPA ID #NM0890010515, HWB-LANL-06-021 Dated July 24, 2009

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.

SPECIFIC COMMENTS

NMED Comment

1. Drilling Approach, page 3:

This Section describes the approach for installation of the vapor-monitoring well at Material Disposal Area (MDA) V. The Permittees have outlined ten steps included in the installation process. However, it appears that items one (Measure and record the TD of the borehole after slough is removed) and two (Add bentonite pellets, hydrate using potable water, measure and record the depth) have been repeated on the following page. The Permittees must revise the text to remove the repetitive language in this Section.

LANL Response

1. The text was revised to remove the repetition of steps 1 and 2.

NMED Comment

2. Abandonment of Borehole 21-02523, page 2:

The Permittees have proposed to abandon borehole 21-02523 at MDA V so that the area can be prepared for staging activities associated with the field work at MDA B. NMED will allow abandonment of this borehole; however, NMED may require the Permittees to replace this borehole to support future vapor-monitoring activities at TA-21.

Additionally, the Permittees must revise Figure 1 to include the location of borehole 21-02523.

LANL Response

2. Figure 1 has been revised to include the location of borehole 21-02523.

NMED Comment

3. Table 1, MDA V Tentative Drilling Schedule, page 9:

The Permittees must provide in the text or in Table 1 the rationale for the tentative drilling schedule. Additionally, the Permittees must explain whether or not complications in drilling and vapor-monitoring well installation were taken into account when calculating the drilling and sampling schedule. The Permittees must revise the text or Table 1 where appropriate.

LANL Response

3. A section discussing the schedule and the rational for the well installation duration has been added to the work plan. Table 1 presents the proposed schedule for well installation and subsequent quarterly monitoring reports. The duration for installing the vapor-monitoring well is based on conditions encountered at Material Disposal Area (MDA) V and experience from installing similar vapor-monitoring wells at MDA T.

   Originally planned for May 15, 2009, mobilization at MDA V began May 26, 2009, following preliminary approval of the work plan by NMED on May 20, 2009, and the Memorial Day weekend (there was a safety concern related to starting work and immediately shutting down for the long weekend). The hollow-stem auger borehole and installation of seven vapor-monitoring ports to the total depth of the original borehole 21-24524 were completed on July 27, 2009. Drilling of the air-rotary borehole began on July 28, 2009.

   The total duration of the vapor-monitoring well installation will be 130 d and includes

   - a 7-d delay in obtaining the appropriate well screens from the manufacturer,
   - a 26-d delay to correct problems with the casing/drill bit in the air-rotary borehole, and
   - a 6-d delay to correct a drill-rig electrical malfunction.

   Well completion is anticipated by October 2, 2009. This proposed completion date does not include other possible drilling delays. LANL will notify NMED should such delays occur during drilling.