Response to the Notice of Disapproval for the Report on Baseline Geomorphic Conditions at Sediment Transport Mitigation Sites in the Los Alamos and Pueblo Canyon Watersheds Los Alamos National Laboratory EPA ID No: NM0890010515, HWB-LANL-08-004, Dated January 31, 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.

SPECIFIC COMMENTS

NMED Comment

1. *Figure 18 (pages 29 - 30), composed of multiple graphs, depicts cross section surveys of Pueblo Canyon near the Pueblo Canyon Grade Control Structure (GCS). According to the Monitoring Plan for Los Alamos and Pueblo Canyons Sediment Transport Mitigation Project, dated October 2009, the Permittees planned to survey a minimum of fifteen cross sections at 100-ft intervals for a distance of 1500 ft up canyon of the planned Pueblo Canyon Grade Control Structure and three cross sections at 100-ft intervals down canyon of the structure. Six cross sections are missing from Figure 18; the three cross sections up canyon and the three cross sections down canyon adjacent to the grade control structure. The missing cross section surveys are identified as -300, -200, -100, + 100, +200 and +300 in Figure 17, page 28. Revise the Baseline Report to include the missing cross sections in Figure 18 or explain why the cross sections were not surveyed.*

LANL Response

1. These cross sections were surveyed in April 2010 and the survey data were included in Attachment 1 of the report, but these cross sections were inadvertently left out of Figure 18 during compositing. The report has been revised to include these cross sections in Figure 18.

NMED Comment

2. *Figures 3, 4, 5, 7, 8, 9, 10, 12, 13, I5, 16, 18, 19, 22, and 23 consist of multiple 2-dimentional graphs, with elevation on the Y axis and distance on the X axis, depicting cross sections and thalweg profiles. The survey data used to generate the graphs were provided by the Permittees in Attachment 1. According to the Permittees, a "Geodimeter 620 total station survey method" was employed to generate the graphs. NMED could not interpret the coordinates provided in Attachment 1 or reproduce the graphs as depicted in Figures 3, 4, 5, 7, 8, 9, 10, 12, 13, 15, 16, 18, 19, 22, and 23. Provide the data in a format that can be used by NMED to reproduce the graphs and evaluate the cross sectional features.*

LANL Response

2. The survey data were obtained using either a total station or a global positioning system and used the New Mexico State Plane coordinate system. Graphs were prepared using Excel software after first converting the *x* and *y* coordinates to distance from the end of each section or profile. This conversion involved basic trigonometry (Pythagorean theorem). Columns have been added to the tables in Attachment 1 showing the calculated distances along each section or thalweg profile for each survey point (excluding benchmarks). The text has also been revised to describe this conversion.