Response to the Review of the Periodic Monitoring Report
for White Rock Watershed, September 22–October 1, 2009
Los Alamos National Laboratory, EPA ID NO: NM0890010515, HWB-LANL-10-019
Dated April 29, 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.

COMMENTS

NMED Comment

1. Number of Springs and Surface Water Locations Sampled

In the second paragraph of the Executive Summary, the Permittee states that four surface water monitoring stations and twenty-two springs were sampled. The last sentence of the first paragraph in Section 1.0 states that nineteen springs were sampled. The first sentence in Section 5.2.1 states that two surface water locations were sampled. Data in Table C-2, Analytical Results, indicates that twenty-three springs and three surface water locations were sampled. There are discrepancies between the data and the text. The Permittees must resolve these discrepancies in the next PMR.

LANL Response

1. Table C-2, Analytical Results, is correct in stating 23 springs and 3 surface locations were sampled. The text, Table 2.0-1, and Table 3.4-1 are incorrect. This discrepancy will be corrected in the next periodic monitoring report (PMR).

NMED Comment

2. Depiction of Sampling Locations

Figure 2.0-1, Watershed Sampling Locations, does not depict all of the locations that were sampled. La Mesita Spring, Ancho Spring, Sacred Spring, Sandia Spring and Firjoles at Rio Grande are not shown in Figure 2.0-1. However, the four springs are shown in Figure 4.2-1 (Watershed unfiltered dibenz(a,h)anthracene concentrations in µg/L). In addition, locations of Buckman Diversion SW and Rio Grande at Otowi (sampling locations listed in Table 8.4-1 White Rock Canyon and Rio Grande Watershed Interim Monitoring Plan (EP2009-0143)) are not depicted in Figure 2.0-1. The Permittees must depict all sampling locations in future Periodic Monitoring Reports.

LANL Response

2. Locations sampled during the periodic monitoring event (PME) will be included in Figure 2.0-1 that shows the sampling locations monitored during its PME. Although the Buckman Direct Diversion SW and Rio Grande at Otowi Bridge sampling locations are listed in Table 8.4-1 of the 2009 Interim Facility-Wide Groundwater Monitoring Plan (IFGMP), they have not been in PMRs since they are

sampled and reported separately under an agreement between the Laboratory and the City of Santa Fe. The NMED–Hazardous Waste Bureau will be provided previous reports and will be added to the list of those who receive LANL's bimonthly reports of surface monitoring results for the Rio Grande above the City of Santa Fe's Buckman Direct Diversion and Rio Grande at Otowi Bridge.

NMED Comment

3. Analytical Data Not Reported

Table 2.0-1, Monitoring Locations and General Information, indicates that Sandia Spring, Spring 1 and Spring 2 were sampled, but the analytical results are not included in the PMR. Further, a figure on page E-1 depicts an elevated level of unfiltered arsenic. Analytical data for these three springs which were sampled in September/October 2009, must be included in the next Periodic Monitoring Report.

LANL Response

3. Table 2.0-1 is correct in stating that Sandia Spring, Spring 1, and Spring 2 were sampled. The analytical data for this sampling round had not been validated when the data were compiled for the September to October 2009 PMR. The analytical data for this sampling round will be reported in the August 2010 White Rock PMR.

   The elevated arsenic value shown on a plot in Appendix E is correct. The arsenic data had not been validated when the data were compiled and screened for the report, but they had been validated when data were compiled for the Appendix E plots. The inconsistency between the text and Appendix E will be corrected in future PMRs by ensuring that the Appendix E plots include only data that were validated and compiled for the report.

NMED Comment

4. Analytical Data for Spring Not Sampled

Table 3.4-1, Observations and Deviations, indicates that Spring 5B was not sampled because the spring was mixing with the river. However, analytical data for Spring 5B dated 9/29/09 are included in Table C-2, Analytical Results. The Permittees must resolved these discrepancies in the next PMR.

LANL Response

4. Table 2.0-1 is correct in indicating that Spring 5B was sampled and the analytical data reported in Appendix C. Table 3.4-1 showing deviations, however, is incorrect in stating Spring 5B was not sampled.

NMED Comment

5. Practical Quantitation Limits Above Screening Levels

NMED noted that two chemicals were detected at concentrations that exceed standards. Dibenz(a,h)anthracene was detected in two samples at levels above the EPA tap water screening level (0.29 µg/L); in a field blank for Sacred Spring at 2.09 µg/L and in the groundwater sampled at La Mesita Spring at 1.63 µg/L. Indeno(1,2,3-cd)pyrene was detected in groundwater sampled at

Sacred Spring at 0.605 µg/L. The EPA tap water screening level for indeno(1,2,3-cd)pyrene is 0.29 µg/L. The Permittees must instruct GEL Laboratories, LLC to adjust its analytical methods so that practical quantitation limits are lower than screening level values for all analytes.

LANL Response

5. PMRs primarily report data collected under the 2009 IFGMP, which is the implementing document for groundwater monitoring across LANL. The IFGMP provides the sampling requirements and analytical methods required to be collected for specific watersheds and analyzed by the laboratory. Changes to analytical methods require modifications to the IFGMP.

   In its May 4, 2010, approval with modifications letter for the 2009 IFGMP, NMED required LANL to update Table C-4.0 of the IFGMP to include the applicable background and/or screening levels. NMED also required that for analytes whose practical quantitation limit exceeds the applicable background and/or screening levels, LANL highlight the record and provide an explanation for each occurrence. Table C-4.0 has been updated per NMED's required modifications in the 2010 IFGMP, submitted on June 29, 2010.

NMED Comment

6. Sampling of Rio Grande at Otowi and Buckman Diversion SW

In the 2009 Interim Facility-Wide Groundwater Monitoring Plan, the Permittee indicated that surface water at Rio Grande at Otowi and at Buckman Diversion SW would be sampled in September/October 2009. However, there is no indication in the PMR that these surface water locations were sampled. The Permittees must address this issue in the next PMR.

LANL Response

6. The following text will be added to Section 3.4, Deviations from Planned Scope, of the PMR due August 31, 2010:

   > Although the Buckman Direct Diversion SW and Rio Grande at Otowi Bridge sampling locations are listed in Table 8.4-1 of the 2009 IFGMP, they are sampled and reported separately under an agreement between the Laboratory and the City of Santa Fe.

   Table 3.4-1, White Rock PME Observations and Deviations, will also include the following information:

Location	Deviation	Cause	Comment
Buckman Direct Diversion SW and Rio Grande at Otowi Bridge	No data are included in this report for these locations.	These data are reported separately under an agreement between the Laboratory and the City of Santa Fe.	These data are reported separately. The NMED–Hazardous Waste Bureau will receive LANL's bimonthly reports of surface monitoring results for the Rio Grande above the City of Santa Fe's Buckman Direct Diversion and Rio Grande at Otowi Bridge.