

**Response to the Review of Periodic Monitoring Reports for Ancho Watershed,
April 12 – April 24, 2010, Los Alamos National Laboratory
EPA ID #NM0890010515 HWB-LANL-10-066,
Dated September 10, 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. *The second sentence of the first paragraph in Section 4.2 on page 3 states, "The screening levels with which the results are compared are shown in Table 4.2-1." However, Table 4.2-1 lists the sources of the screening levels, not the actual screening values. For clarification in future reports, the statement cited above must be revised to state that the Table lists the source of the screening levels.*

LANL Response

1. Beginning with the November 2010 periodic monitoring report submittal, this sentence will read "The sources of screening levels with which the results are compared are listed in Table 4.2-1."

NMED Comment

2. *It is unclear at what depth the port is located that is used for groundwater sampling for field parameters, collection of samples and for determining groundwater-level measurements. For example, Table 2.0-1, Monitoring Locations and General Information, on page 9, indicated that Port MP2B in Monitoring Well R-31 is positioned at 542.2 feet. However, groundwater-level measurements presented in Appendix B indicated that Port MP2B is located at 532.2 feet. Analytical results presented in Appendix C indicated that groundwater for tritium analysis was collected from the port at a depth of 532.5 feet. The Permittees must clearly indicate the depths of ports used to collect samples and measure parameters in future reports.*

LANL Response

2. R-31 is a five-screen well equipped with a Westbay sampling system. In each screen there are two sampling ports and one pumping port; screen 2 has an additional sampling port. Sampling ports MP2A (532.5 ft) and MP2B (542.5 ft) are located in screen 2 between 515 ft and 545.7 ft, which intersects the regional aquifer. Additional sample ports are provided within a single screen as backup measurement locations in case the water level drops below a port in the screen or mechanical problems prevent a port from being sampled.

The port depths provided in the periodic monitoring report are intended to indicate the screen from which the sample was taken. Table 2.0-1, Monitoring Locations and General Information, gives the screened interval and top and bottom screen depths.

NMED Comment

3. *NMED noted that the concentration of lead in the unfiltered groundwater sample collected from Test Well DT-9 was 20.1 µg/L, which is above the EPA drinking water system action level of 15 µg/L, and that a similar exceedance has not been previously observed.*

LANL Response

3. As described in the Periodic Monitoring Report for Ancho Watershed, April 12–April 24, 2010, section 4.2.2, similar lead values have been previously detected in this well:

“This is the third unfiltered lead value above 15 µg/L since the late 1980s; two 1993 total lead results misreported as filtered are above 50 µg/L.”

This well was drilled in 1960; it was cased with carbon steel, a lead metal packer connected the screen to the casing, and galvanized pipe was used for well components (pump columns, transducer lines) at different times. As with other wells installed during that period, samples from this well have shown high metal concentrations related to corrosion or flaking of well components.