General

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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

January 14, 2015

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Michael Brandt
Associate Director,
Environment, Safety, Health
Los Alamos National Laboratory
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RE: APPROVAL WITH MODIFICATIONS
INTERIM FACILITY-WIDE GROUNDWATER MONITORING PLAN FOR THE 2015 MONITORING YEAR, OCTOBER 2014 – SEPTEMBER 2015
LOS ALAMOS NATIONAL LABORATORY
EPA ID#NM0890010515
HWB-LANL-14-035

Dear Messrs. Maggiore and Brandt:

The New Mexico Environment Department (NMED) is in receipt of the United States Department of Energy (DOE) and the Los Alamos National Security, L.L.C.'s (collectively, the Permittees) document entitled "Interim Facility-Wide Groundwater Monitoring Plan for the 2015 Monitoring Year, October 2014 – September 2015" (Plan) dated May, 2014 and referenced by EP2014-0162. The Plan was received on May 30, 2014. NMED has reviewed the Plan and hereby issues this approval with the following modifications.

Specific Comments:

1. **2.0 TA-21 MONITORING GROUP, Table 2.4-1, Interim Monitoring Plan for the TA-21 Monitoring Group, page 53.**

   For monitoring location LADP-3, the Permittees must check the water level in the well at a minimum of twice per year (e.g., spring and fall) to determine if the well contains a

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sufficient volume of groundwater for sampling purposes. If sufficient groundwater is available for sampling then the Permittees must analyze for the constituents and compounds as prescribed in Table 2.4-1 of the Plan.

2. **3.0 CHROMIUM INVESTIGATION MONITORING GROUP, Table 3.4-1, Interim Monitoring Plan for Chromium Investigation Monitoring Group, page 54.**

As part of the ongoing contaminant characterization and interim measures activities specific to the hexavalent chromium plume investigation, the Permittees must increase the monitoring frequency for metals and general inorganics at wells MCOI-4, R-13, R-15, R-36, R-45 S1, R-45 S2, and R-62 from semiannual to quarterly. The monitoring frequency at R-1 must be increased from annual to semiannual.

The representativeness of groundwater samples obtained from well R-61 has been negatively affected by contaminants and well-rehabilitation chemicals introduced into the regional aquifer during well construction and subsequent rehabilitation attempts. The groundwater data from this well cannot be used by NMED to make regulatory decisions. Therefore, the Permittees are not required to conduct groundwater monitoring at well R-61 S1; however, the Permittees must continue to measure and report groundwater levels as part of the Chromium Investigation Monitoring Group groundwater monitoring program.

Groundwater chemistry and contaminant data collected from well R-62 during extended-development purging after the well was installed in early 2012 and during this year's extended pumping test (at 1.4 gpm) indicate that well stabilization could take several days of purging. Consequently, the Permittees must conduct a minimum of one multi-day extended purge/sampling event during the 2015 monitoring year (MY) with the goal of obtaining representative samples and associated water-quality data. Results from this year's extended pumping test should be used to estimate the amount of purge time needed for contaminant stabilization.

Monitoring well R-33 (screens S1 and S2) must be moved from the General Surveillance Monitoring Group to the Chromium Investigation Monitoring Group to monitor for potential contaminants sourced from upper Ten Site and/or Mortandad Canyons. Both screens at R-33 must be sampled semiannually.

3. **5.0 TA-54 MONITORING GROUP, Table 5.4-1, Interim Monitoring Plan for TA-54 Monitoring Group, pages 55 - 56.**

The sampling frequency for wells R-21, R-32 S1, R-38, R-49 S1, R-51 S1, and R-53 S1 must be increased from semiannual to quarterly for volatile organic compounds (VOCs) and low-level tritium.

4. **8.0 GENERAL SURVEILLANCE MONITORING GROUP, Table 8.3-1, Interim Monitoring Plan for General Surveillance Monitoring, page 60.**

   In addition to the proposed sampling frequency and analyte list for intermediate groundwater monitoring well PCI-2, the well must be sampled semiannually for VOCs and high explosive compounds.

General Comment:

5. For the 2016 MY plan, the Permittees must incorporate an up-to-date regional aquifer water-table map and a map illustrating the geology at regional aquifer water-table. The 2016 MY IFGMP must be submitted to NMED no later than **May 30, 2015**.

Please contact Michael Dale at (505) 661-2673 if you have questions.

Sincerely,

John E. Kieling
Chief
Hazardous Waste Bureau

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File: Reading and LANL 2014, IFGMP 2015 MY