

Associate Director for ESH Environment, Safety, and Health P.O. Box 1663, MS K491 Los Alamos, New Mexico 87545 505-667-4218/Fax 505-665-3811



Environmental Management

Los Alamos Field Office, MS A316 3747 West Jemez Road Los Alamos, New Mexico 87544 (505) 665-5658/FAX (505) 606-2132

Date:

JAN 1 5 2016

LAUR: n/a

LAUK. IVa

Refer To: ADESH-16-001

NMED Hazardous Waste Bureau

RECEIVED

Locates Action No.: U1600124

John Kieling, Bureau Chief Hazardous Waste Bureau New Mexico Environment Department 2905 Rodeo Park Drive East, Building 1 Santa Fe, NM 87505-6303

Subject: Response to the New Mexico Environment Department's Letter, "Establishment of Groundwater Background for the Regional Aquifer," dated October 16, 2015

Dear Mr. Kieling:

The U.S. Department of Energy (DOE) and Los Alamos National Security, LLC (LANS) have received the New Mexico Environment Department's (NMED's) letter, "Establishment of Groundwater Background for the Regional Aquifer," dated October 16, 2015. This letter presents information on groundwater background values that are based partly on an analytical method used for samples collected from a set of monitoring well and spring locations, collected by the NMED Hazardous Waste Bureau. A significant number of the new background values were obtained using a high-resolution inductively coupled plasma mass spectrometry analytical method that is not used by existing analytical laboratories contracted by Los Alamos National Laboratory (the Laboratory). NMED's letter requires DOE/LANS to begin using the new set of background values as "screening values for all future groundwater sampling (detection monitoring) of the regional aquifer...to determine the presence or absence of anthropogenic contamination, the distribution, nature and extent of contamination, the reliability and representativeness of groundwater samples collected at monitoring wells and springs, and to assess natural attenuation and progress of active remediation."

On November 19, 2015, DOE/LANS personnel met with NMED staff to clarify the direction NMED provided in its letter of October 16, 2015, and to discuss the technical and regulatory implications associated with the direction. Specific topics discussed include how robust the high-resolution analytical method is, whether the method is U.S. Environmental Protection Agency (EPA) certified or meets industry standard, and how the new results would apply as comparison values for results obtained from EPA-certified analytical methods currently used at the Laboratory, as required by the Compliance Order on Consent. During this meeting, it was agreed that the technical and regulatory implications warrant further discussion before a final decision is made

regarding the application of the proposed background values to the Laboratory's groundwater program.

Another point of discussion during the meeting was clarifying what background values the Laboratory is currently using for screening purposes. NMED's October 16, 2015, letter assumed the Laboratory has been using the values from the November 2011 Background Investigation Report, Update to Revision 4. The Laboratory clarified it is currently using Revision 3 of the Background Investigation Report for reporting purposes and proposed to continue using Revision 3 of the report pending resolution of the use and applicability of background values in NMED's October 16, 2015, letter.

DOE/LANS formally request that NMED's requirement to begin using the new background values immediately be deferred until several key technical and regulatory issues are resolved through follow-up meetings proposed for January and February 2016. This letter also requests that the Laboratory continue to use the Revision 3 background values to be consistent with previous screening results. The Laboratory will take the lead in scheduling a series of technical meetings and, as an outcome of the meetings, in recommending to NMED a mutually acceptable path forward.

We look forward to hearing from you regarding our requests. If you have any questions, please contact Jocelyn Buckley at (505) 665-5209 (jbuckley@lanl.gov) or Hai Shen at (505) 665-5046 (hai.shen@em.doe.gov).

Sincerely,

Alison M. Dorries, Division Leader Environmental Protection Division Los Alamos National Laboratory Sincerely,

David S. Rhodes, Supervisor Environmental Management Los Alamos Field Office

## AD/DR/SP:sm

Cy: Laurie King, EPA Region 6, Dallas, TX Katie Roberts, NMED Michael Dale, NMED-HWB Jerzy Kulis, NMED-HWB Pat Longmire, NMED-DOE-OB Steve Yanicak, NMED-DOE-OB, MS M894 lasomailbox@nnsa.doe.gov Kimberly Davis Lebak, DOE-NA-LA Peter Maggiore, DOE-NA-LA emla.docs@em.doe.gov Brian Hennessey, DOE-EM-LA Hai Shen, DOE-EM-LA Douglas Hintze, DOE-EM-LA David Rhodes, DOE-EM-LA Steve Paris, ADEP ER Program Danny Katzman, ADEP ER Program Stephani Swickley, ADEP ER Program Bruce Robinson, ADEP ER Program Randy Erickson, ADEP Jocelyn Buckley, ADESH-ENV-CP Mike Saladen, ADESH-ENV-CP Alison Dorries, ADESH-ENV-DO Michael Brandt, ADESH Amy De Palma, PADOPS Craig Leasure, PADOPS Public Reading Room (EPRR) PRS Database ADESH Records