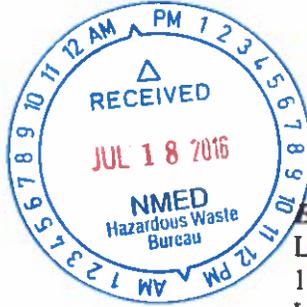




Associate Director for ESH
Environment, Safety, and Health
P.O. Box 1663, MS K491
Los Alamos, New Mexico 87545
505-667-4218/Fax 505-665-3811



Environmental Management
Los Alamos Field Office
1900 Diamond Drive, MS M984
Los Alamos, New Mexico 87544
(505) 665-5658/FAX (505) 606-2132

Date: JUN 27 2016
Refer To: ADESH-16-071
LAUR: 16-24016
Locates Action No.: n/a

Nicholas Schiavo, Water Division Director
Sangre de Cristo Water Division
City of Santa Fe
801 West San Mateo, P.O. Box 909
Santa Fe, New Mexico 87504

**Subject: Los Alamos National Laboratory Sitewide Monitoring Program, City of Santa Fe
Buckman Water-Supply Wells, 2016–2017 Sampling and Analysis Plan**

Dear Mr. Schiavo:

Los Alamos National Laboratory (the Laboratory) has sampled Buckman water-supply wells since 2001. The attached sampling and analysis plan represents the Laboratory's commitment for the next four quarters of sampling beginning on June 1, 2016.

The Laboratory will implement the following practices associated with groundwater data collected from Buckman water-supply wells.

1. The Laboratory will provide an automated report of the data upon receipt from the analytical laboratory. Sixty days after the automated report is provided to the City of Santa Fe, the data will be posted to the publicly accessible website, Intellus (<http://www.intellusnm.com/>).
2. If a potential contaminant is detected in a Buckman production well, the Laboratory will work with the Water Division to evaluate the data and review the need to modify the sampling and analysis plan or to collect additional samples to address any questions raised by the potential contaminant.



If you have questions, please contact Steve Paris at (505) 606-0915 (smparis@lanl.gov) or Hai Shen at (505) 665-5046 (hai.shen@em.doe.gov).

Sincerely,



John P. McCann, Acting Division Leader
Environmental Protection & Compliance Division
Los Alamos National Laboratory

Sincerely,



Peter Maggiore, Acting Chief of Staff
Office of the Manager
Los Alamos Field Office

JM/PM/BR/SP:sm

Attachment: City of Santa Fe Buckman Water-Supply Wells, 2016–2017 Sampling and Analysis Plan (EP2016-0069)

Cy: (w/att.)

Laurie King, EPA Region 6, Dallas, TX
Alex Puglisi, City of Santa Fe, Santa Fe, NM
Bill Schneider, City of Santa Fe, 801 West San Mateo, Santa Fe, NM 87505
Victor Archuleta, City of Santa Fe, 801 West San Mateo, Santa Fe, NM 87505
John Kieling, NMED-HWB, 2905 Rodeo Park Drive East, Building 1, Santa Fe, NM 87505
Stephanie Stringer, NMED-DWB, P.O. Box 5469, Santa Fe, NM 87502
Steve Yanicak, NMED-DOE-OB, MS M894
emla.docs@em.doe.gov
Hai Shen, DOE-EM-LA
Cheryl Rodriguez, DOE-EM-LA
Public Reading Room (EPRR)
PRS Database
ADESH Records

Cy: (w/o att./date-stamped letter emailed)

lasomailbox@nnsa.doe.gov
Peter Maggiore, DOE-NA-LA
Kimberly Davis Lebak, DOE-NA-LA
David Rhodes, DOE-EM-LA
Tim Goering, ADEM ER Program
Steve Paris, ADEM ER Program
Bruce Robinson, ADEM ER Program
Randy Erickson, ADEM
Jocelyn Buckley, ADESH-EPC-CP
Mike Saladen, ADESH-EPC-CP
John McCann, ADESH-EPC-DO
Michael Brandt, ADESH
William Mairson, PADOPS
Craig Leasure, PADOPS

**City of Santa Fe Buckman Water-Supply Wells
2016–2017 Sampling and Analysis Plan**

Location	Analytical Suites											
	Metals		Organics				Radionuclides		Inorganics			
	Metals ^a	Hexavalent Chromium ^b	VOCs	SVOCs	PCBs	HEXP	Radionuclides ^c	Low-Level Tritium	General ^d	Nitrate-nitrite	Perchlorate	
Buckman No. 1	1, 3	3	1, 3	1, 3	1, 3	1, 3	1, 3	1, 3	1, 3	1, 3	— ^e	1, 3
Buckman No. 6	1, 3	3	1, 3	1, 3	1, 3	1, 3	1, 3	1, 3	1, 3	1, 3	—	1, 3
Buckman No. 8	1, 3	3	1, 3	1, 3	1, 3	1, 3	1, 3	1, 3	1, 3	1, 3	—	1, 3
SF-3A	—	3	—	—	—	—	—	3	—	3	3	3
SF-4A	—	3	—	—	—	—	—	3	—	3	3	3

Notes:

Sampling schedule: 1 = Apr–Jun 2016; 2 = Jul–Sep 2016; 3 = Oct–Dec 2016; 4 = Jan–Mar 2017.

Samples collected for filtered analysis include metals, anions, cations, nitrate plus nitrite, ammonia, total phosphorus, specific conductance, pH, total dissolved solids (TDS), alkalinity, hardness, and perchlorate.

Samples collected for unfiltered analysis include mercury, volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), high explosive compounds (HEXP), radionuclides, tritium, total cyanide, total Kjeldahl nitrogen (TKN), and total organic carbon (TOC).

Quality Control samples will be collected according to Appendix D in the Interim Facility-Wide Groundwater Monitoring Plan for the 2017 Monitoring Year, October 2016–September 2017.

^a Metals analysis includes Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, SiO₂, Sn, Ti, V, U, and Zn.

^b Hexavalent chromium analysis to be performed at Los Alamos National Laboratory's Geochemistry and Geomaterials Laboratory. This laboratory does not participate in the U.S. Environmental Protection Agency contract laboratory program.

^c The radionuclide suite includes radium-226 and radium-228, americium-241, strontium-90, isotopic uranium, isotopic plutonium, gamma spectroscopy (for cesium-137, cobalt-60, neptunium-237, potassium-40, and sodium-22), gross alpha, gross beta, and gross gamma.

^d General inorganic analysis includes major anions (bromide, chloride, fluoride, sulfate); major cations (calcium, magnesium, sodium, potassium); nitrate plus nitrite (as N); TKN; ammonia; total phosphorus; total cyanide; TOC; TDS; alkalinity; specific conductance; pH; and hardness. TKN, TOC, and total cyanide are analyzed only in unfiltered samples.

^e — = This analytical suite is not scheduled to be collected for this location.

