



RECEIVED

DEC 19 2014



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

NMED
Hazardous Waste Bureau

National Nuclear Security Administration
Los Alamos Field Office, MS A316
Environmental Projects Office
Los Alamos, New Mexico 87544
(505) 667-4255/FAX (505) 606-2132

Date: DEC 19 2014

Refer To: ADESH-14-156

LAUR: N/A

Locates Action No.: N/A

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

**Subject: (1) Request for Extension to Complete the Installation of Well CdV-9-1(i) and
(2) Recommendation Regarding the Need to Install a Deep-Perched Monitoring
Well in the Vicinity of CdV-9-1(i)**

Dear Mr. Kieling:

This letter requests an extension from the December 31, 2014, date to complete the installation of perched-intermediate groundwater monitoring well CdV-9-1(i) to a new date of January 30, 2015. The U.S. Department of Energy and Los Alamos National Security, LLC (DOE/LANS) request this extension under Section III.J.2 of the March 2005 Compliance Order on Consent (Consent Order). This letter also provides the technical basis for not installing an additional monitoring well in the deep-perched zone in the vicinity of CdV-9-1(i), a requirement of the New Mexico Environment Department (NMED) in its May 31, 2013, approval with modifications of the CdV-9-1(i) work plan.

As a result of the complexity of the perched aquifer system encountered at CdV-9-1(i), drilling took longer than expected. Additional time was required to design the well to characterize the hydrology adequately (i.e., measure static water level profiles with depth) and to characterize RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine) concentrations within each individual perched zone encountered. During the well-design phase, DOE/LANS worked with your staff to discuss hydrologic, downhole geophysics, and chemistry data from the various multiple perched zones and to develop the monitoring well design. Ultimately, the proposed well design included two screened intervals and two small-diameter piezometers set within the annular space between the well casing and the borehole wall. The well design was submitted to, and subsequently approved by, your staff on December 4, 2014. This design was modified from the original one-screen well proposed in the March 28, 2013, drilling work plan for well CdV-9-1(i). Construction of the two-screen well with a piezometer nest is expected to require approximately 30% more time than a single-screen completion. Well construction began on December 8, 2014, and is anticipated it will take 30 total shifts and thus will delay well construction by 1 month.

In addition to the two water-bearing zones to be monitored at CdV-9-1(i), a potential deeper perched zone was encountered and evaluated for water productivity using driller's observations and detailed downhole geophysical data. This deeper zone was determined to be a low-producing zone and potentially unable to support a monitoring well. As indicated in NMED's approval with modification letter, dated May 31, 2013, if multiple deep-perched zones are encountered during drilling, DOE/LANS must submit a recommendation regarding the need to drill an additional deep-perched monitoring well in the vicinity of CdV-9-1(i). Because the deeper perched zone is not likely to support a monitoring well and an additional screen and two piezometers were included in the approved well design for CdV-9-1(i), the requirement to assess the multiple deep-perched zones that may need monitoring has been achieved. At this time, DOE/LANS do not recommend drilling an additional deep-perched monitoring well in the vicinity of CdV-9-1(i).

Once this extension request is approved, the subsequent deliverables associated with the revised installation date (i.e., summary fact sheet, well development, and well completion report) will also be modified based on the requirements in Section IV.A.3.e.iv of the Consent Order.

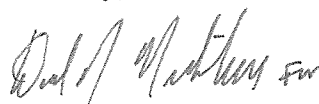
If you have any questions, please contact Steve Paris at (505) 606-0915 (smparis@lanl.gov) or Cheryl Rodriguez at (505) 665-5330 (cheryl.rodriguez@nnsa.doe.gov).

Sincerely,



Michael T. Brandt, DrPH, CIH, Associate Director
Environment, Safety, and Health
Los Alamos National Laboratory

Sincerely,



Peter Maggiore, Assistant Manager
Environmental Projects Office
Los Alamos Field Office

MB/PM/DM/SP:sm

Cy: Laurie King, EPA Region 6, Dallas, TX (date-stamped letter emailed)
Tom Skibitski, NMED-DOE-OB (date-stamped letter emailed)
Steve Yanicak, NMED-DOE-OB, MS M894
lasomailbox@nnsa.doe.gov
Annette Russell, DOE-NA-LA (date-stamped letter emailed)
Cheryl Rodriguez, DOE-NA-LA (date-stamped letter emailed)
David Rhodes, DOE-NA-LA (date-stamped letter emailed)
Kimberly Davis Lebak, DOE-NA-LA (date-stamped letter emailed)
Steve Paris, EP-CAP (date-stamped letter emailed)
Dave McInroy, EP-CAP (date-stamped letter emailed)
Randy Erickson, ADEP (date-stamped letter emailed)
Katie Roberts, ADESH-ENV-CP (date-stamped letter emailed)
Tony Grieggs, ADESH-ENV-CP (date-stamped letter emailed)
Alison Dorries, ADESH-ENV-DO (date-stamped letter emailed)
Michael Brandt, ADESH (date-stamped letter emailed)
Amy De Palma, PADOPS (date-stamped letter emailed)
Michael Lansing, PADOPS (date-stamped letter emailed)
PRS Database
Public Reading Room (EPRR)
ADESH Records (electronic copy)