General

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Date: JAN 14 2011
Refer To: EP2011-0039

RECEIVED JAN 2011

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

Subject: Extension Request for the Report for Reliability Assessment of Multiscreen Westbay Wells

Dear Mr. Bearzi:

In Los Alamos National Laboratory's (the Laboratory's) work plan to conduct reliability assessment of multiscreen Westbay wells, the Laboratory proposed providing the New Mexico Environmental Department (NMED) a report presenting the results of the assessment by April 11, 2011. The purpose of this letter is to request an extension to July 29, 2011, to submit the report.

As explained below, the basis for the extension request is the time required to transition funding from the American Reinvestment and Recovery Act (ARRA) project to projects under the Base Program, schedule the specialty contractor Schlumberger to remove the Westbay sampling equipment, and perform additional scope requested in NMED's June 15, 2010, approval with modifications letter.

Delays in implementing the work plan were caused by the transition of funding from the ARRA project to projects under the Base Program. Funding initially thought to be available through ARRA was ultimately needed at Material Disposal Area B, requiring a change of plans late in the Westbay procurement process.

Delays are also associated with subcontractor availability. Westbay equipment removals are required to be completed by the sole specialty subcontractor, Schlumberger, using proprietary equipment. Schlumberger personnel who can perform this work are limited and are first available to complete the work in mid-March.

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Finally, its June 15, 2010, letter, "Approval with Modifications (for the) Work Plan To Conduct Reliability Assessment of Multiscreened Westbay Wells, Los Alamos National Laboratory," NMED provided five modifications to the work plan. The Laboratory has provided the attached responses to these modifications and requests NMED concurrence or comments. It should be noted that additional development activities at CdV-R-15-3 and CdV-R-37-2 were not included in the original duration of the field effort presented in the work plan and therefore extend the duration of field activities.

Based on the time estimated to field implement the work plan and prepare a report, Los Alamos National Security, LLC, and the U.S. Department of Energy request an extension of 109 days, until July 29, 2011, to submit the reliability assessment report for multiscreen Westbay wells.

The Technical Area 16 (TA-16) 260 Outfall monitoring-well network contains Westbay wells. This extension request will not impact the 260 Outfall groundwater corrective measures study (CMS) schedule. The Laboratory is currently engaged in drilling two regional wells (R-63 and R-47) and conducting an aquifer test to support the groundwater CMS process. All Westbay wells within the vicinity of TA-16 will be given high priority in order to include them in the network evaluation for the revised groundwater CMS report.

If you have any questions, please contact Steve Paris at (505) 606-0915 (smparis@lanl.gov) or Hai Shen at (505) 665-5046 (hshen@doeal.gov).

Sincerely,

for

Michael J. Graham, Associate Director
Environmental Programs
Los Alamos National Laboratory

Sincerely,

for

George J. Rael, Manager
Environmental Projects Office
Los Alamos Site Office

MG/GR/CD/PH/SP/BW:sm

Enclosures: Two hard copies with electronic files – Response to the Approval with Modifications for the Work Plan to Conduct Reliability Assessment of Multiscreened Westbay Wells (LA-UR-11-0268)

Cy: (w/enc.)
Neil Weber, San Ildefonso Pueblo
RPF, MS M707 (w/ two CDs)
Public Reading Room, MS M992

Cy: (Letter and CD and/or DVD only)
Laurie King, EPA Region 6, Dallas, TX
Steve Yanicak, NMED-DOE-OB, MS M894
Mark Everett, EP-ET (w/ MS Word files on CD)
William Alexander, EP-BPS, MS M992

Cy: (w/o enc.)
Tom Skibitski, NMED-OB, Santa Fe, NM
Annette Russell, DOE-LASO (date-stamped letter emailed)
Hai Shen, DOE-LASO, MS A316 (date-stamped letter emailed)
Cheryl Rodriquez, DOE-LASO, MS A316 (date-stamped letter emailed)
Bruce Wedgeworth, EP-TA-21, MS C349 (date-stamped letter emailed)
Paul Huber, EP-TA-21, MS C349 (date-stamped letter emailed)
Steve Paris, EP-CAP, MS M992 (date-stamped letter emailed)
John McCann, EP-CAP, MS992 (date-stamped letter emailed)
Craig Douglass, EP-CAP, MS M992 (date-stamped letter emailed)
Michael J. Graham, ADEP, MS M991 (date-stamped letter emailed)

Response to the Approval with Modifications for the Work Plan to Conduct Reliability Assessment of Multiscreened Westbay Wells, Los Alamos National Laboratory, EPA ID No: NM0890010515, HWB-LANL-MISC-GW, Dated June 15, 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 modification.

NMED Modification

1. *In NMED's April 16, 2010 letter* (Approval with Direction of Request for Extension to Submit a Work Plan to Conduct a Reliability Assessment of Multiscreened Westbay Wells), *the Permittees were required to assess all screens in monitoring wells CdV-R-15-3, CdV-R-37-2, and R-26. The Plan does not include the assessment of R-26 screen 2. If rehabilitated, R-26 screen 2 could potentially serve as an upgradient regional aquifer background well for Consolidated Unit 16-021(c)-99. The Permittees must incorporate R-26 screen 2 into the assessment.*

LANL Response

1. Downhole video camera surveys were performed in R-26 on April 22 and July 14, 2004, to document screen conditions before the Westbay sampling system was installed. The results indicated the lower screen (screen 2) had significant fine-grained materials present throughout the slot openings, suggesting either ineffective development of the screened interval or invasion of the annular seal materials into the well screen. Subsequent attempts to sample R 26 screen 2 with the Westbay sampling system resulted in the plugging of the sampling port and sampler with a tan, viscous material, indicating potential problems with this well screen.

   During the Westbay reliability assessment, R-26 screen 2 will be further assessed using a borehole video camera following removal of the Westbay system. Additionally, an attempt will be made to bail solid material from the sump to determine if the well screen was invaded by bentonite. If the video assessment suggests R-26 screen 2 has the potential to be a productive screen that produces representative data, the screen will be redeveloped using the methods planned for CdV-R-15-3 screen 4 and CdV-R-37-2 screen 2. However, if bentonite is confirmed in the screen or evidence is found of significant damage to the well screen, rehabilitation of the R-26 screen 2 will not be attempted.

NMED Modification

2. *The Permittees must conduct rigorous redevelopment of CdV-R-15-3 screen 4 and CdV-R-37-2 screen 2. After swabbing and pumping, which are proposed in the Plan, the Permittees must jet the well screens with contaminant-and tritium-free local regional groundwater while simultaneously pumping the screens. Water quality samples must be collected and tested for the analytical suite presented in Table 4.1-1 of the Plan, at the midpoint of swabbing and pumping, at the end of swabbing and pumping, and at the end of jetting and pumping.*

LANL Response

2. Jetting of the well screens will be performed at CdV-R-15-3 screen 4 and CdV-R- 37-2 screen 2.

NMED Modification

3. *In addition to water quality samples, the Permittees must collect supplementary unfiltered sample aliquots during purging and redevelopment of CdV-R-15-3 screen 4 and CdV-R-37-2 screen 2 in order to determine the amount and composition of solids removed from the well screen, filter pack, and/or formation. At each screen, the Permittees must collect a minimum of four samples for solids determination during purging, a minimum of four samples during swabbing and pumping, and a minimum of two samples during jetting and pumping. Solids obtained from each sample must be analyzed for mineralogy and trace elements.*

LANL Response

3. The Laboratory will collect the specified number of unfiltered sample aliquots during purging and redevelopment of CdV-R-15-3 screen 4 and CdV-R-37-2 screen 2 identified by NMED. Solids obtained from each sample will be analyzed at the on-site Geochemistry and Geomaterials Research Laboratory (GGRL) for clay mineralogy using x-ray diffraction.

NMED Modification

4. *The Permittees must add total alkalinity to the list of field parameters collected during all purging and redevelopment activities.*

LANL Response

4. Alkalinity will be determined on field samples with the analysis being performed on-site at GGRL.

NMED Modification

5. *All laboratory data collected by the Permittees must be submitted to NMED within **60 days** of sample collection. All field data must be submitted to NMED within **15 days** of collection. Data submittals must be in the form of two paper copies and one electronic copy in accordance with Section XI.A of the March 1,2005 Order on Consent (Order).*

LANL Response

5. The Laboratory proposes to provide data in the following manner: field data, sample numbers, and sample type will be provided within 15 d of completion of field activities at each well, analytical data for samples analyzed on-site will be provided within 60 d of sample collection, and data for samples analyzed off-site will be provided via RACER (the Laboratory will notify NMED when the analytical data have been uploaded to RACER).

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