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Date: **APR 21 2010**
Refer To: EP2010-0178

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



Subject: Submittal of the March 2010 Monthly Progress Report Corrective Measures Study/Corrective Measures Implementation for Consolidated Unit 16-021(c)-99

Dear Mr. Bearzi:

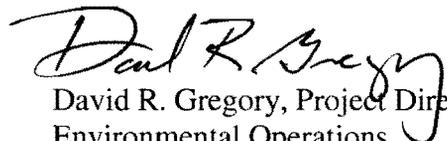
Enclosed are two hard copies with electronic files of the March 2010 Monthly Progress Report Corrective Measures Study/Corrective Measures Implementation for Consolidated Unit 16-021(c)-99. The report is submitted according to the approved corrective measures study plan for Consolidated Unit 16-021(c)-99.

If you have questions, please call John McCann at (505) 665-1091 (jmccann@lanl.gov) or Woody Woodworth at (505) 665-5820 (lwoodworth@doeal.gov).

Sincerely,


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

Sincerely,


David R. Gregory, Project Director
Environmental Operations
Los Alamos Site Office



MG/DG/DM/JM/DH:sm

Enclosures: Two hard copies with electronic files – March 2010 Monthly Progress Report
Corrective Measures Study/Corrective Measures Implementation for
Consolidated Unit 16-021(c)-99 (LA-UR-10-2489)

Cy: (w/enc.)
Neil Weber, San Ildefonso Pueblo
Woody Woodworth, DOE-LASO, MS A316
John McCann, EP-CAP, MS M992
RPF, MS M707 (two CDs)
Public Reading Room, MS M992

Cy: (Letter and CD only)
Laurie King, EPA Region 6, Dallas, TX
Steve Yanicak, NMED-DOE-OB, MS M894
Jeff Heikoop, EES-6, MS D462
Kristine Smeltz, EP-WES, MS M992

Cy: (w/o enc.)
Tom Skibitski, NMED-OB, Santa Fe, NM
Annette Russell, DOE-LASO (date-stamp copy emailed)
Dave McInroy, EP-CAP, MS M992
Michael J. Graham, ADEP, MS M991
IRM-RMMSO, MS A150 (date-stamp copy emailed)

Monthly Progress Report
Corrective Measures Study (CMS)/Corrective Measures Implementation (CMI) for
Consolidated Unit 16-021(c)-99
March 2010

This report summarizes Los Alamos National Laboratory (LANL) activities completed during March of fiscal year (FY) 2010 on the CMS/CMI for Consolidated Unit 16-021(c)-99, the Technical Area 16 (TA-16) 260 Outfall. Activities outlined in the CMS plan ([LA-UR-98-3918] approved by the New Mexico Environment Department [NMED] Hazardous Waste Bureau [HWB] on 9/8/99) and other related activities are described herein.

Description of Activities and Contacts – None.

Best Management Practices (BMPs) – BMPs are inspected quarterly and following significant precipitation events. Several small precipitation events occurred in March, none of which exceeded 0.5 in. BMPs were maintained in both the 260 Outfall area and PRB installation area in support of the CMI.

CMS Hydrogeologic Investigations – Hydrogeologic investigations include periodic water sampling as outlined in the Phase II Resource Conservation and Recovery Act facility investigation (RFI) work plan as well as continuing investigations delineated in the CMS plan. The ongoing spring sampling program, currently focused on capturing high-flow events, includes biannual sampling at Martin, SWSC, and Burning Ground Springs. These activities are now conducted under the auspices of LANL's interim facility-wide groundwater monitoring plan.

Snowpack within the Cañon de Valle watershed is average to above average in depth. Snowmelt has begun on the mesa top and on the north side of the canyons. Localized surface flow is present in mesa-top drainages. Martin Spring is flowing at a rate of <0.1 L/s, Burning Ground Spring is flowing at a rate of <0.2 L/s, and SWSC Spring has not started to flow.

The 90s Line Pond has approximately 2 ft of water and is frozen. Surface water is present in Cañon de Valle from Burning Ground Spring to beyond the former location of Material Disposal Area P.

RFI and CMS/CME for Surface System – These activities are complete.

RFI/Investigation Report (IR) and CMS/CME for Deep Groundwater – R-25c was completed in September 2008, and the well was constructed at that time. Well R-25c is not producing water. Well R-25b was drilled and the well constructed in October 2008. The well completion report for R-25c was submitted in September 2008, and the well completion report for R-25b was submitted in October 2008.

Well CdV-16-3(i) (renamed R-48) was deepened in September 2009. Well construction was completed in late September (NMED-complete on November 25, 2009).

Well R-47(i) at TA-14 was completed in November 2009 (NMED-complete on November 15, 2009).

CMI – The CMI plan was submitted to NMED on May 10, 2007. NMED updated the CMI schedule by letter on June 24, 2009.

Permitting for CMI activities continued in March. It was determined that the storm-filter systems in the springs required National Pollutant Discharge Elimination System (NPDES) permits; LANL's permitting group is working on these permits. The status of aluminum is problematic in the NPDES permitting process for these systems; negotiations with U.S. Environmental Protection Agency (EPA) are ongoing.

TerranearPMC (TPMC) completed well development and water-level monitoring activities in March 2010. Water levels in hydrologic monitoring wells and/or piezometers upgradient of the PRB increased by up to 1 ft. Several of the monitoring wells or piezometers distal from the stream channel are dry. The water level behind the cut-off wall at the PRB reached the intake pipe late in March. The valve to the vessel was opened on April 2, 2010. Background water-chemistry data were collected before the PRB valve was turned on.

An initial peer-review draft of the "Long-Term Monitoring and Maintenance Plan for the Corrective Measures Implementation at Consolidated Unit 16-021(c)-99" has been completed.

Public and Stakeholder Involvement – The Citizen's Advisory Board received a presentation on 260 Outfall cleanup activities in mid-March.

Percentage of CMS Completed

LANL estimates 100% of the surface CMS has been completed.

Problems Encountered/Actions to Rectify Problems

R-25c is not producing water, and the current level remains below the screen; R-25b is still showing high turbidity. LANL will continue to monitor the well screens.

The status of aluminum under potential NPDES permits for the storm-filter systems is problematic. The systems are not designed to remove aluminum, which is above standards, but is probably present as a naturally occurring chemical. Negotiations with EPA are being undertaken.

Bentonite present in R-47 necessitated completion of this well as an intermediate well. It is possible a new deep well will be required at this site.

Key Personnel Issues – None

Projected Work for April 2010

BMPs

- Continue to inspect existing BMPs following significant precipitation events
- Inspect new BMPs to support CMI

CMS Hydrogeologic Investigations

- Maintain site at the TA-16 trailers
- Check for presence and levels of water in Cañon de Valle alluvial system
- Continue precipitation monitoring

Groundwater CME/CMI

- Continue site restoration at wells R-47i and R-48

CMI

- Continue NPDES permitting and discussions with EPA
- Monitor water levels in PRB wells
- Sample PRB wells
- Continue site-restoration and waste-management activities at all CMI remedy sites

Public and Stakeholder Involvement – None.