



Los Alamos
 NATIONAL LABORATORY
 EST. 1943
 Los Alamos National Laboratory/University of California
 Risk Reduction & Environmental Stewardship (RRES)
 Remediation Services (RS), MS M992
 Los Alamos, New Mexico 87545
 (505) 667-0808/FAX (505) 665-4747

TA-16



Date: November 18, 2004
 Refer To: ER2004-0657

Mr. John Young, Project Leader
 Permits Management Program
 NMED – Hazardous Waste Bureau
 2905 Rodeo Park Drive East
 Building 1
 Santa Fe, NM 87505-6303

SUBJECT: OCTOBER 2004 CORRECTIVE MEASURES STUDY (CMS) PROGRESS REPORT FOR POTENTIAL RELEASE SITE (PRS) 16-021(c)-99, 260 OUTFALL

Dear Mr. Young:

Enclosed are two copies of the October 2004 CMS Progress report for PRS 16-021(c)-99, 260 outfall. This report is being submitted as part of the reporting conditions outlined in Section R, Task IX of Module VIII of the Laboratory's Hazardous Waste Facility Permit.

If you have any questions, please call Dave McInroy at (505) 667-0819 or Lance Woodworth at (505) 665-5820

Sincerely,

David McInroy, Deputy Project Director
 Remediation Services
 Los Alamos National Laboratory

Sincerely,

David Gregory, Federal Project Director
 Department of Energy
 Los Alamos Site Operations

DM/DG/DH/jr

Enclosures: 1. October 2004, CMS Progress Report (ER2004-0657)



Enclosures: 1. October 2004, CMS Progress Report (ER2004-0631)

Cy:(w/enc)

A. Dorries, ENV-ECR, MS M992
T. Grieggs, ENV-SWRC, MS K490
E. Rainey, ENV-ECR, MS M992
C. Rodriguez, ENV-ECR, MS M992
L. Soholt, ENV-ECO, MS M887
D. Stavert, ENV-EP, MS J591
D. Hickmott, EES-6, MS M992
D. Gregory, LASO, MS A316
L. Woodworth, LASO, MS A316
J. Schoeppner, NMED-GWQB
J. Kieling, NMED-HWB
S. Yanicak, NMED-OB, MS J993
M. Leavitt, NMED-SWQB
L. King, EPA Region 6
ENV-RS File, MS M992
IM-5, MS A150
RPF, MS M707

Cy:(w/o enclosure)

D. McInroy, ENV-RS, MS M992
B. Rich, ADO, MS A104
J. Bearzi, NMED-HWB
C. Voorhees, NMED-OB

Monthly Progress Report
Corrective Measures Study (CMS) for Potential Release Site (PRS) 16-021(c)-99
October 2004

This report summarizes Los Alamos National Laboratory (LANL) activities completed during October of fiscal year (FY) 2004 on the CMS for PRS 16-021(c)-99, the 260 outfall. Both the activities described in the CMS plan ([LA-UR-98-3918], approved by NMED-HWB on 9/8/99), and other related activities are described herein.

Description of Activities and Contacts

High Performing Team (HPT) Activities – The HPT met on October 12, 2004. Discussion topics included an update on activities associated with the TA-16-260 CMS, a review of recent springs data, an update on pending field activities at the TA-16-340 Complex (Fishladder), and a summary of anticipated TA-16 work planned for FY 05.

LANL personnel noted that the Laboratory stand down had affected work on several TA-16 projects including the TA-16-340 Complex cleanup and the intermediate-depth well drilling and sampling activities. LANL stated the stand down should not affect submittal of the TA-16-340 investigation report, but might limit the amount of data that would be presented in the TA-16 Ponds plan (due March 2005). It was noted that a separate meeting would probably be needed to determine a strategy for completing the CDV-2(i) and CDV-3(i) intermediate-depth wells. Current thinking suggests the former would be ‘overdrilled’ and re-completed and the latter would be left as an open borehole from which samples could be collected.

LANL personnel provided an update on the status of the hydrologic system in Canon de Valle, noting that the heavy fall monsoons had reinitiated flow in Martin spring and filled the 90s Line pond with water. Canon de Valle flow is confined to a reach from Burning Ground spring to east of MDA-P.

NMED and LANL personnel discussed the schedule for the CMS Report, which is expected to have final approval by March 2005. NMED personnel stated that they believed that initial public involvement and statement of basis activities would also be completed by that time. It was noted that LANL would attempt to ensure that the TA-16-260 CMS was on the agenda for the next quarterly public meeting. LANL and DOE personnel also stated they believed the CMI Plan deliverable (due September 2005) probably would have to be a partial (75-90%) design draft, inasmuch as additional changes to the plan were likely based on NMED comments following submittal. Further discussion of this topic will occur at a future HPT meeting.

LANL provided an update on springs data. Barium, iron, RDX and solvent data were reviewed. Trends are consistent with previous data, although the high flow event during March 2004 showed an increase in barium concentration relative to the low-flow trend.

LANL personnel discussed the status of the TA-16-340 Complex and HE ponds fieldwork. Fieldwork was anticipated to begin in October. NMED noted they planned to request the no-longer-contained-in request submitted by LANL be resubmitted using new waste-characterization data. LANL and DOE personnel agreed this was a good idea, but noted this might lead to logistical complications with the fieldwork.

LANL and DOE reviewed the anticipated TA-16 environmental work for FY 05, which includes: 1) reaching agreement with NMED on the CMS Report; 2) providing revised sections of the Phase III RFI Report to NMED, continued quarterly sampling; 3) completion of the CMI Plan; 4) completion of the intermediate-depth well; 5) completion of the TA-16-340 and HE ponds phase fieldwork; 6) completion of the HE ponds characterization and cleanup investigation workplan (due March 2005), and preparation for writing the sampling plans for the Canon de Valle aggregate area IWP (due September 2006). Several of these activities represent topics for future HPT meetings.

The next HPT meeting is tentatively scheduled for late November or early December 2004. Topics will include a 260 update, a discussion of the ponds and TA-16-340 Complex fieldwork, planning for public involvement, and updated information on drilling.

RCRA Facility Investigation (RFI) Phase II Report and CMS Plan– No activities this month.

Best Management Practices (BMPs)– BMPs are inspected quarterly and following significant precipitation events. Jute matting in the TA-16-260 drainage was repaired during October.

CMS Hydrogeologic Investigations– CMS hydrogeologic investigations include ongoing Phase II RFI sampling as well as continuing investigations outlined in the CMS plan.

The ongoing Phase II RFI sampling program includes collecting stable isotope samples at Martin and Burning Ground springs. This sampling is now focused on capturing high-flow events.

The hydrologic system in Canon de Valle is moderately wet, due to the monsoonal rains. SWSC spring contains a small amount of water. Martin Spring is flowing at a rate of ~ 25 mL/sec. Burning Ground spring is flowing at a rate of ~ 375 mL/ sec.

The 90s Line Pond contains water. Many of the other locations that had become wet during March and April, including Fishladder seep, and surface locations in Martin Spring Canyon and Canon de Valle, except from Burning Ground spring to just east of MDA-P, are now dry.

The annual update to the readiness review for the TA-16 monitoring project was completed.

Two precipitation samples were collected during this reporting period.

Quarterly sampling of the springs, seeps, and alluvial waters in Canon de Valle was completed. Quarterly sampling of CDV-R-15-3 and CDV-R-37-2 was completed. Field parameters for these wells were consistent with previous sampling rounds.

CDV-16-1(i) has had the pump installed and is waiting on electrical hook-up by KSL.

Ecological Risk Pilot–

The ecological risk pilot is complete and results are presented in the Phase III RFI Report.

CMS Bench and Pilot Studies– Write-up of bench and pilot studies, many of which were completed under the auspices of the Innovative Technology Remediation Demonstration (ITRD) program, is complete. The ITRD HE program is focused on two DOE sites: LANL and Pantex. Ongoing studies include:

1. A study of the passive barrier technology of Stormwater Management, Inc., potentially useful for removing HE and barium from waters (LANL).
2. At study of in situ anaerobic bioremediation of HE using gas-phase carbon additions (Pantex).
3. Oxidation, reduction, and in-situ bioremediation studies of groundwater contamination (Pantex).

Interim Measure (IM) –

The IM Report was approved by NMED in a letter dated January 13, 2003. No new activities occurred during this reporting period.

RFI and CMS Report –

The CMS Report was completed and submitted to NMED on November 26, 2003; the RFI Report was completed and submitted in October of 2003. A response to the NOD on the RFI Report was submitted on January 28, 2004 and an addendum to that NOD response was submitted on February 25, 2004. An approval with modifications for the RFI was received on June 23, 2004, and a response to the approval was submitted to NMED on July 23, 2004. The RFI text is currently being modified to reflect the NOD and Approval with Modification comments.

Public and Stakeholder Involvement– None.

Percentage of CMS Completed

LANL estimates 100 % of the surface CMS has been completed (please note this percentage does not reflect either the deep or intermediate boreholes being drilled per the CMS plan addendum).

Problems Encountered/Actions to Rectify Problems

CDV-16-2(i) and CDV-16-3(i) are not producing significant amounts of water.

Key Personnel Issues

None.

Projected Work for November 2004

RFI Reports and CMS Report

- Issuing of revised RFI report

BMPs

- Continued inspection of existing BMPs following significant precipitation events.

CMS Hydrogeologic Investigations

- Site maintenance at the TA-16 trailers.
- Maintenance of autosamplers
- Checking for levels and presence of water in alluvial and deep wells. Sounding CDV-16-2 (i) and CDV-16-3 (i)
- Precipitation monitoring
- Data analysis.

Ecological Risk Pilot

- None

CMS Bench and Pilot Studies

- None

Public and Stakeholder Involvement

None