



TA-16



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

National Nuclear Security Administration  
Los Alamos Site Operations, MS A316  
Environmental Restoration Program  
Los Alamos, New Mexico 87544  
(505) 667-7203/FAX (505) 665-4504

Date: January 19, 2005  
Refer To: ER2005-0034

Mr. James Bearzi, Chief  
NMED – Hazardous Waste Bureau  
2905 Rodeo Park Drive East  
Building 1  
Santa Fe, NM 87505-6303



**SUBJECT: DECEMBER 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 December 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,

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

Sincerely,

*David R. Gregory*  
David Gregory, Federal Project Director  
Department of Energy  
Los Alamos Site Office



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DM/DG/DH/bms

Enclosures: 1. December 2004, CMS Progress Report (ER2005-0034)

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  
D. Stavert, ENV-EP, MS J591  
D. Hickmott, EES-6, MS M992  
D. Gregory, LASO, MS A316  
L. Woodworth, LASO, MS A316  
J. Bearzi, NMED-HWB (2 copies)  
J. Schoeppner, NMED-GWQB  
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  
C. Voorhees, NMED-OB

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

This report summarizes Los Alamos National Laboratory (LANL) activities completed during December of fiscal year (FY) 2005 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 did not meet during December 2004.

The next HPT meeting has been tentatively scheduled for January 10, 2005. Topics will include a 260 update, a discussion of impacts of the RCRA Facility Investigation (RFI) Phase III notice of deficiency (NOD) on the CMS, 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.

**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 significant fall rains. SWSC spring contains a small amount of water. Martin Spring is flowing at a rate of ~ 10 mL/sec. Burning Ground Spring is flowing at a rate of ~ 375 mL/ sec, which is similar to the flow rate observed during November.

The 90s Line Pond contains water. This has impacted planned drilling activities in that pond. Many of the other locations that had become wet during last spring's runoff, including Fishladder Seep, and downgradient surface locations in Martin Spring Canyon and Canon de Valle, except from Burning Ground Spring to just east of MDA-P and the upper reaches of Martin spring canyon, are now dry.

Two precipitation samples were collected during this reporting period.

CDV-16-1(i) is now ready to be sampled.

CDV-16-2(i) and -3(i) were sounded to determine water levels. The level in CDV-16-2(i) appears to be slightly higher than it was during the last sounding, which was completed during June, 2004.

***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, have been completed. 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. A 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 modifications were completed during December and submitted to NMED.

***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 water. CDV-2(i) will be overdrilled or redrilled to ensure that it produces water.

## **Key Personnel Issues**

None.

## **Projected Work for January, 2005**

### ***RFI Reports and CMS Report***

- Discussions of CMS Report with NMED personnel.

### ***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
- Quarterly sampling of the hydrologic system

### ***Ecological Risk Pilot***

- None

### ***CMS Bench and Pilot Studies***

- None

### ***Public and Stakeholder Involvement***

A public meeting is scheduled for January 26, 2005