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Los Alamos National Laboratory/University of California  
Environmental Stewardship (ENV)  
Environmental Remediation & Surveillance (ERS), MS M992  
Los Alamos, New Mexico 87545  
(505) 667-0808/FAX (505) 665-4747

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

Date: July 21, 2005  
Refer To: ER2005-0443

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



**SUBJECT: MONTHLY PROGRESS REPORT CORRECTIVE MEASURES STUDY FOR  
POTENTIAL RELEASE SITE 16-021(c)-99, JUNE 2005**

Dear Mr. Young:

Enclosed are two copies of the June 2005 Corrective Measures Study (CMS) Progress Report for Potential Release Site (PRS) 16-021(c)-99, the 260 Outfall. The report is submitted according to the approved CMS Plan for PRS 16-021 (c)-99.

If you have questions, call Don Hickmott at (505) 667-8753 (dhickmott@lanl.gov) or Woody Woodworth at (505) 665-5820 (lwoodworth@lanl.gov).

Sincerely,

David McInroy, Deputy Program Director  
Environmental Stewardship  
Los Alamos National Laboratory

Sincerely,

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



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DH/jk

Enclosure: Monthly Progress Report Corrective Measures Study for Potential  
Release Site 16-021(c)-99, June 2005 (ER2005-0467)

Cy: (w/enc)

P. Reneau, ENV-ECR, MS M992  
D. Hickmott, ENV-ECR MS M992  
D. Gregory, DOE LASO, MS A316  
L. Woodworth, DOE LASO, MS A316  
L. King, EPA Region 6  
ENV-ECR File, MS M992  
RPF, MS M707  
S-7, MS F674

Cy: (w/o enclosure)

A. Dorries, ENV-ECR, MS M992  
D. McInroy, ENV-ERS, MS M992  
B. Rich, ADO, MS A104  
D. Goering, NMED-HWB  
D. Pepe, NMED-OB

**Monthly Progress Report**  
**Corrective Measures Study (CMS) for Potential Release Site (PRS) 16-021(c)-99**  
**June 2005**

This report summarizes Los Alamos National Laboratory (LANL) activities completed during June of fiscal year (FY) 2005 on the CMS for PRS 16-021(c)-99, the TA-16-260 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 June 2005.

The next HPT meeting is tentatively scheduled for August. Topics will include a TA-16-260 update, a discussion of the intermediate-well drilling, and a discussion of the upcoming RFI Report for deep groundwater.

***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. BMP repairs were not required in June.

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

The ongoing Phase II RFI sampling program, currently focused on capturing high-flow events, includes collecting stable isotope samples at Martin and Burning Ground Springs.

The hydrologic system in Cañon de Valle remains wet, due to the heavy snowfalls. A significant amount of water is flowing over the weir at SWSC spring (100 mL/sec). Martin Spring is flowing at a rate of ~ 10 mL/sec and Burning Ground Spring is flowing at a rate of ~ 1000 mL/ sec.

The 90s Line Pond contains water, which has impacted planned drilling activities in the pond. Fishladder Seep and downgradient surface locations in Martin Spring Canyon and Cañon de Valle all contain water. The alluvial wells in both Cañon de Valle and Martin Spring Canyon are wet.

One precipitation sample was collected during this reporting period.

CDV-16-1(i) was sampled in early June.

### ***Ecological Risk Pilot–***

The ecological risk pilot is complete; 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 2004 and submitted to NMED. An NOD on the CMS Report was received on May 16, 2005. A response to that NOD was submitted on June 15, 2005.

***Public and Stakeholder Involvement –*** A tour of the TA-16-260 outfall site and of Canon de Valle in the vicinity of Burning Ground Spring was held on June 17, 2005. Approximately 10 members of the public, including citizen's advisory board members, attended this tour.

### **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. CDV-16-2(i) will be redrilled in an attempt to isolate the source of water encountered during the initial installation.

## **Key Personnel Issues**

None.

## **Projected Work for July 2005**

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

- Discussions regarding the 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.
- Annual readiness review
- Precipitation monitoring
- Data analysis
- Quarterly sampling
- Groundwater modeling
- Initial work on groundwater RFI report
- Redrill of CdV-16-2(i)

***Ecological Risk Pilot***

- None

***CMS Bench and Pilot Studies***

- None

***Public and Stakeholder Involvement***

None planned.