TA-16

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

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: September 14, 2004
Refer To: ER2004-0522

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: AUGUST 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 August 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, scope of work for Resource Conservation and Recovery Act CMS at the Laboratory, Task IX, Reports, Part A, Progress, 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. August 2004, CMS Progress Report (ER2004-0505)

6509

Cy:(w/enc)
A. Dorries, RRES-ECR, MS M992
T. Grieggs, RRES-SWRC, MS K490
D. Hickmott, EES-6, MS M992
E. Rainey, RRES-ECR, MS M992
C. Rodriguez, RRES-ECR, MS M992
L. Soholt, RRES-ECO, MS M887
D. Stavert, RRES-EP, MS J591
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
RRES-RS File, MS M992
IM-5, MS A150
RPF, MS M707

Cy:(w/o enclosure)
D. McInroy, RRES-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
August 2004

This report summarizes Los Alamos National Laboratory (LANL) activities completed during August 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. Note that work during August was limited by the LANL stand down that began on 7/19/04.

Description of Activities and Contacts

High Performing Team (HPT) Activities – The HPT did not meet in August, 2004.

The next HPT meeting is tentatively scheduled for September, 2004. If field work at the TA-16-340 Complex has started, this meeting may be held at LANL and will include a tour of the 'Fishladder' work. 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. No BMP repairs were required in August.

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 ~ 100 mL/sec. There also appears to be a small subsidiary seep four ft upgradient from the typical discharge location of Martin spring. Burning Ground spring is flowing at a rate of ~ 400 mL/ sec.

Many of the locations that had become wet during March and April, including the 90s Line Pond, 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.

Two precipitation samples were collected during this reporting period.

CDV-16-1(i) has had the pump installed and is waiting on electrical hook-up by KSL. Sounding of boreholes CDV-16-2(i) and CDV-16-3(i) and sampling at CdV-R-37-2 were not accomplished during August due to the Laboratory stand down. A meeting was held in early August to discuss the path forward for these boreholes.

Recent monitoring data from Burning Ground and Martin springs were evaluated, including the March 2004 data. Results are consistent with previous evaluations. Geologic data for boreholes CdV-16-2(i) and CdV-16-3(i) were evaluated. Dacites in these boreholes appear to be related to the Cerro Grande subunit of the Tschicoma dacite.

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 RFI Report was completed and submitted to NMED in September of 2004. The CMS Report was completed and submitted to NMED on November 26, 2003. A response to the NOD on the RFI Report was submitted on January 28, 2004. An addendum to that response was submitted on February 25, 2004. Text was modified in March to reflect the latest NOD. An approval with modification on this report was received on June 23, 2004. The response to this approval with modification was submitted to NMED on July 23, 2004. Text is currently being modified to reflect the NOD and approval comments.

Public and Stakeholder Involvement– None during this reporting period.

Percentage of CMS Completed

LANL estimates 100 % of the surface CMS has been completed to date. Note this percentage does not reflect the deep and intermediate boreholes being drilled per the CMS plan addendum. LANL estimates that 65 % of the deep groundwater CMS has been completed.

Problems Encountered/Actions to Rectify Problems

CDV-16-2(i) and CDV-16-3(i) are not producing water. This means that nature and extent of groundwater and of groundwater contamination remain poorly constrained. LANL/DOE will continue to sound these boreholes and decide how to proceed over the next few months.

Key Personnel Issues

None.

Projected Work for September 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.
- Update to annual readiness review
- Preparation for quarterly sampling

Ecological Risk Pilot

- None

CMS Bench and Pilot Studies

- None

Public and Stakeholder Involvement

A presentation on the TA-16-260 work will be made at the RRES-RS colloquium on September 9, 2004.