TA-160

Los Alamos NATIONAL LABORATORY

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: April 19, 2004
Refer to: ER2004-0204

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

Dear Mr. Young:

Enclosed are two copies of the March 2004 CMS Progress report for PRS 16-021(c), the 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/th

Enclosures: March 2004, CMS Progress Report (ER2004-0167)

Cy:(w/enc)
A. Dorries, RRES-ECR, MS M992
T. Grieggs, RRES-SWRC, MS K490
D. Hickmott, EES-6, MS M992
N. Quintana, 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
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
J. Johnson, ADO, MS A104
S. Martin, NMED-HWB
C. Voorhees, NMED-OB

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

This report summarizes Los Alamos National Laboratory (LANL) activities completed during March 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 260 HPT did not meet during March 2004.

The next HPT meeting is scheduled for April 12, 2004. Topics will include a 260 update, updated information on drilling, and a more detailed discussion of the sampling strategy for the Fish ladder complex.

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 March.

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 samples at Martin and Burning Ground sprins for stable isotopes. This sampling is currently focused on capturing high-flow events.

The alluvial and intermediate wells were checked for presence and level of water. All five of the alluvial wells in Canon de Valle contained water, as did two of three alluvial wells in Martin Spring Canyon. All of the intermediate depth boreholes were dry. Martin spring has begun producing water again due to the spring snowmelt.

Canon de Valle was wet from Burning Ground spring to MDAP. The 90s Line pond contained water. Fish Ladder seep and Water Canyon at the Canon de Valle confluence were also wet.

One precipitation sample was collected during this reporting period.

Quarterly sampling within the Canon de Valle alluvial system was initiated.

Sounding of boreholes CDV-16-2(i) and CDV-16-3(i) was accomplished twice times during March. The water depth level in CDV-16-2(i) was 1019 ft and the water depth level in CDV-16-3(i) was 1350 ft. The levels remained constant during March.

Ecological Risk Pilot– The ecological risk pilot has been completed and the 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. 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) –No new activities occurred during this reporting period. The IM Report was approved by NMED in a letter dated January 13, 2003.

RFI and CMS Report –The RFI Report was completed and submitted to NMED in September. 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.

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 61% of the deep groundwater CMS has been completed.

Problems Encountered/Actions to Rectify Problems

The fact that CDV-16-2 (i) and CDV-16-3 (i) are producing water at an extremely low rate is of concern. This means that nature and extent of groundwater contamination remains poorly constrained. LANL/DOE will continue to sound these boreholes and decide how to proceed over the next six months. Additional boreholes may be required.

Key Personnel Issues

None.

Projected Work for April 2004

RFI Reports and CMS Report

- Continued incorporation of NOD comments into RFI Report text.

BMPs

- Continued inspection of existing BMPs following significant precipitation events.

CMS Hydrogeologic Investigations

- Site maintenance at the TA-16 trailers.
- Quarterly sampling
- 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