TA-16

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Date: March 22, 2005
Refer To: ER2005-0150

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

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MAR 2005
NMED Hazardous Waste Bureau

SUBJECT: SUBMITTAL OF FEBRUARY 2005 CORRECTIVE MEASURES STUDY PROGRESS REPORT FOR POTENTIAL RELEASE SITE 16-021(c), THE 260 OUTFALL

Dear Mr. Young:

Enclosed are two copies of the February 2005 Corrective Measures Study Progress Report for PRS 16-021(c), the 260 Outfall. The report is being submitted in accordance with the approved CMS Plan for Potential Release Site 16-021 (c).

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

Sincerely,

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

Sincerely,

David Gregory, Project Manager
Department of Energy
Los Alamos Site Operations

DM/DG/DH/ds

Enclosure: February 2005 Corrective Measures Study Progress Report for Potential Release Site 16-021(c), the 260 Outfall

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

This report summarizes Los Alamos National Laboratory (LANL) activities completed during February 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 February 2005.

The next HPT meeting is tentatively scheduled for late March or early April 2005. Topics will include a TA-16-260 update, a discussion of the CMS report, 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– 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; currently focused on capturing high-flow events.

The hydrologic system in Cañon de Valle is very wet, due to the significant fall rains and heavy snowfalls. SWSC Spring contains a small amount of water flowing over the weir. Martin Spring is flowing at a rate of ~ 50 mL/sec. Burning Ground Spring is flowing at a rate of ~ 500 mL/ sec, an increase compared to the flow rate observed during December.

The 90s Line Pond contains water and is frozen, which has impacted planned drilling activities in the pond. Fishladder Seep, and downgradient surface locations in Martin Spring Canyon and Cañon de Valle are now dry, except from Burning Ground Spring to 50 ft east of MDA-P and the upper reaches of Martin Spring Canyon. The alluvial wells in both Cañon de Valle and Martin Spring Canyon are wet.

Two precipitation samples were collected during this reporting period.

The pump in CDV-16-1(i) has been repaired and is awaiting power hook-up and testing.

Boreholes CdV-16-2(i) and CdV-16-3(i) were sounded; water levels are consistent with previous sounding events.

A pump test has been initiated at PM-4 to evaluate the hydrologic properties of the regional aquifer. CdV-15-3 and CdV-37-2 are part of the monitoring network for this pump test. No drawdown has been seen at either of these two wells; sampling will occur after completion of the pump test in March.

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 2004 and submitted to NMED.

Public and Stakeholder Involvement– A newspaper article on the TA-16-260 cleanup activities appeared in the *Los Alamos Monitor* on February 14, 2005.

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 water. CDV-16-2(i) will be overdrilled or redrilled in an attempt to isolate the source of water encountered during the initial installation. The pump in CDV-16-1(i) has been repaired and is awaiting hook-up to power and testing..

Key Personnel Issues

None.

Projected Work for March, 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. Sounding CDV-16-2 (i) and CDV-16-3 (i)
- Repair of pump in CDV-16-1(i)
- Precipitation monitoring
- Data analysis

Ecological Risk Pilot

- None

CMS Bench and Pilot Studies

- None

Public and Stakeholder Involvement

None.