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Date: June 22, 2005
Refer To: ER2005-0371

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

RECEIVED
JUN 2005
Hazardous
Waste Bureau

SUBJECT: **SUBMITTAL OF MAY 2005 CORRECTIVE MEASURES STUDY PROGRESS REPORT FOR POTENTIAL RELEASE SITE 16-021(c)-99, THE 260 OUTFALL**

Dear Mr. Young:

Enclosed are two copies of the May 2005 Corrective Measures Study Progress Report for PRS 16-021(c)-99, the 260 Outfall. This report is being submitted in accordance with the approved CMS Plan for Potential Release Site 16-021 (c)-99.

If you have any questions, please call Don Hickmott at (505) 667-8753 or Lance Woodworth at (505) 665-5820.

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

DH/jk

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

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

This report summarizes Los Alamos National Laboratory (LANL) activities completed during May 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 met on May 23, 2005. Discussion topics included: 1) an update on TA-16-260 and TA-16-340 activities, 2) a discussion of the TA-16 intermediate-depth wells, and 3) a discussion of the TA-16-260 CMS Report notice of deficiency (NOD).

LANL personnel provided an update on the status of the hydrologic system in Cañon de Valle, noting the heavy spring runoff had yielded an extremely wet hydrologic system. It was noted the water in the 90s Line pond had impeded sampling therein. Further details on the status of the hydrologic system are provided below and in the April CMS monthly report. It was noted that quarterly sampling of the hydrologic system and the deep wells had been completed in April.

LANL personnel updated NMED on the status of the TA-16-340 sampling efforts. It was noted minimal progress on soil excavation had occurred during April due to a sewage-line break that had required updating the excavation permit and that pipe removal had been completed in early May. It was noted that a new drainline had been discovered that was not part of the existing solid waste management units. LANL requested to remove and sample this using the same strategy as outlined for the other drainlines. NMED personnel thought this was reasonable. Reinitiation of fieldwork was slowed due to delays in the associated D&D project.

LANL described the current status of the intermediate-well drilling. CdV-1(i) is now ready for sampling. CdV-2(i) is scheduled to be redrilled in the coming months. CdV-3(i) needs to be discussed in an upcoming HPT meeting to determine whether to attempt to complete this as a well, to plug and abandon the borehole, or to continue to sample from the open borehole.

NMED, LANL, DOE, and LANL subcontractor personnel discussed the NOD on the TA-16-260 CMS report. LANL and DOE noted the general response strategy for most of the comments. Key areas of discussion included: 1) NMED's request that silver contamination be remediated to meet ecological risk ARARs. It was agreed that LANL could propose a phased investigation of sampling, biota toxicological testing, and, if investigation results warrant, limited soil removal in the SWSC cut area; 2) the grouting option for the 17-ft depth surge bed and clarification of how that option would be

pursued; 3) LANL noted that it might not be possible to obtain firm information concerning blasting behind TA-16-260; 4) LANL and DOE discussed the rationale for reducing monitoring frequency to twice yearly until Media Cleanup Standards were attained; 5) LANL described the arguments that address the contaminants specified for consideration in comments 14-18. In general it appeared that LANL, NMED, and DOE had come to general agreement on the path forward on the NOD comments.

LANL noted that a public tour would be scheduled for late June and invited NMED personnel to participate.

The next HPT meeting is tentatively scheduled for July. 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 required in May. Repairs to the jute matting in the outfall area were completed.

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 is very wet, due to the heavy snowfalls. A significant amount of water is flowing over the weir at SWSC spring (200 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.

Power has been restored to the pump in CDV-16-1(i) and it will be 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.

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 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 June, 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.
- Sampling of CDV-16-1(i)
- Precipitation monitoring
- Data analysis
- Groundwater modeling

Ecological Risk Pilot

- None

CMS Bench and Pilot Studies

- None

Public and Stakeholder Involvement

A tour for the public is planned for late June.