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

This report summarizes Los Alamos National Laboratory (LANL) activities completed during July 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 July was limited by the LANL shutdown that began on 7/19/04.

Description of Activities and Contacts

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

The next HPT meeting is tentatively scheduled for August, 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 July.

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 alluvial and intermediate wells were checked for presence and level of water. Four of the five alluvial wells in Canon de Valle contained water, as did one of three alluvial wells in Martin Spring Canyon. All of the intermediate depth boreholes were dry. SWSC spring contains a small amount of water. Martin Spring is now dry.

Most 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. It appears that the hydrologic system has returned to the low-flow state that it has been in during the recent drought.

Quarterly sampling was completed at all locations that contained water. Quarterly sampling was completed at well CdV-R-15-3.

No precipitation samples were collected during this reporting period.

Sounding of boreholes CDV-16-2(i) and CDV-16-3(i) and sampling at CdV-R-37-2 were not accomplished during July due to the HE experiments that were being conducted in TA-16-340. For safety reasons access to these well sites was limited.

Recent monitoring data from Burning Ground and Martin springs were evaluated. A key result is that barium concentrations in Burning Ground spring have stabilized, and are declining slightly.

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 CMS Report was completed and submitted to NMED on November 26, 2003. The RFI Report was completed and submitted to NMED in September. 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.

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

LANL's ecological risk assessor, Mark Tardiff, and principal data analyst, Terre Mercier, have left the HEPS team.

Projected Work for August 2004

RFI Reports and CMS Report

- None

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.
- Quarterly sampling at CdV-R-37-2

Ecological Risk Pilot

- None

CMS Bench and Pilot Studies

- None

Public and Stakeholder Involvement

A poster presentation on the TA-16-260 work will be made at the EES Division public meeting in mid August.