Monthly Progress Report
Corrective Measures Evaluation (CME)/Corrective Measures Implementation (CMI) for Consolidated Unit 16-021(c)-99
June 2011

This report summarizes Los Alamos National Laboratory (LANL) activities completed during June of fiscal year 2011 on the CME/CMI for Consolidated Unit 16-021(c)-99, the Technical Area 16 (TA-16) 260 Outfall. Activities outlined in the corrective measures study (CMS) plan ([LA-UR-98-3918] approved by the New Mexico Environment Department [NMED] Hazardous Waste Bureau [HWB] on 9/8/99) and other related activities are described herein.

Description of Activities and Contacts – No contacts in June 2011.

Surface CME/CMI

Best Management Practices (BMPs) – BMPs are inspected quarterly and following significant precipitation events. One very small event occurred in June; it did not exceed 0.5 in.

CME Hydrogeologic Investigations – Hydrogeologic investigations include periodic water sampling as outlined in the Phase II Resource Conservation and Recovery Act facility investigation (RFI) work plan as well as continuing investigations delineated in the CMS plan. The ongoing water sampling program, conducted under the auspices of LANL's interim facility-wide groundwater monitoring plan, includes biannual sampling at Martin, SWSC, and Burning Ground Springs.

Flow in the TA-16 canyons remained low in June because of minimal spring runoff. Martin Spring is flowing at a rate of <0.08 L/s, Burning Ground Spring is flowing at a rate of <0.3 L/s, and SWSC Spring did not flow over the weir-box exit.

The 90s Line Pond remains wet but is very small in extent. Surface water is present in Cañon de Valle from upstream of the 260 Outfall channel to beyond the former location of Material Disposal Area P. Most alluvial wells in Cañon de Valle and Martin Spring Canyon are wet, but those in Fishladder Canyon are dry.

CMI – Permitting for CMI activities continues to proceed slowly. It was previously determined the storm-filter systems in the springs required National Pollutant Discharge Elimination System (NPDES) permits because of elevated levels of aluminum. As noted in previous progress reports, the problem is that naturally occurring levels of aluminum in the spring water exceed current water standards.

TerranearPMC continued water-level monitoring activities for the permeable reactive barrier (PRB) in June and acquired materials to reconfigure the PRB to include granular activated carbon (GAC) in place of zero-valent iron (ZVI). Flow into the PRB was bypassed on June 17, 2011, to prepare for the replacement of ZVI. Reconfiguration of the PRB was delayed by the LANL evacuation associated with the Los Conchas fire.

Subsurface CME/CMI

RFI/Investigation Report and CME for Deep Groundwater – Well R-25c, completed in September 2008, has not produced water since it was completed.

Well CdV-16-4(ip) was drilled to a depth of 1150 ft in August 2010 (NMED complete on August 23, 2010).

The report for the recent hydrologic tests at CdV-16-4ip and R-25b was submitted to NMED on June 8, 2011.

Public and Stakeholder Involvement – None.

Problems Encountered/Actions to Rectify Problems

The status of aluminum under potential NPDES permits for the storm-filter systems is problematic, as noted above. A meeting with NMED Surface Water Quality Bureau was held in May as part of the ongoing efforts to resolve this issue.

The ZVI cell in the PRB has problems with clogging with precipitates. The media in the high explosives–removal cell will be adjusted from ZVI/sand to GAC.

Key Personnel Issues – None

Projected Work for July 2011

Surface CME/CMI

BMPs

- Continue to inspect existing BMPs following significant precipitation events

CME Hydrogeologic Investigations

- Maintain the TA-16 trailers
- Check for the presence and levels of water in Cañon de Valle alluvial system
- Continue precipitation monitoring

CMI

- Continue NPDES permitting discussions with NMED
- Continue monitoring water levels and field parameters in PRB wells
- Reconfigure PRB cells (as described above)
- Continue waste management activities for water at CMI remedy sites

Subsurface CME/CMI

- Analyze deep groundwater data in the context of the Water Canyon/ Cañon de Valle investigation report

Public and Stakeholder Involvement – Continue discussions with NMED personnel regarding the issue of aluminum in springs