

REPORT OF COMPLETION OF ANNUAL WORKPLAN ACTIVITIES

Site Name: Lawrence Livermore National Laboratory (LLNL),
Site 300, Pit 6 Landfill (Operable Unit 3)

Activity: Non-Time-Critical Removal Action

CALSITES Activity Codes: PCA Code - 14010, Site Code - 200180 70

Size of Activity:

Small Medium
 Large X-Large

Description of Activity: A 2.5-acre cover system was constructed over three buried trenches and six pits containing solid waste, potentially hazardous materials, and animal carcasses from biomedical research. The cover system consists of four engineered layers which include (in order from top to bottom): 1) a two-foot thick topsoil and vegetative cover; 2) a geocomposite drainage layer; 3) a combined high-density polyethylene (HDPE) and geosynthetic clay liner; and 4) a two-foot (minimum) compacted soil foundation layer placed on the existing ground surface. Soil for construction of the cover system was obtained from a six-acre on-site borrow area.

Along with the cover system, a surface water run-off and run-on control system was constructed. The surface water control system consists of perimeter subdrains (constructed with HDPE and drain rock) and shotcrete and rip-rap lined drainage ditches and associated culverts. The construction of the cover and surface water control systems is documented in a October 1997 report prepared by Golder Construction Services, "Construction Quality Assurance for Pit 6 Landfill Closure, LLNL Site 300."

Long-term groundwater monitoring will be performed to: 1) evaluate the natural attenuation of a volatile organic compound plume and the effectiveness of the cover system; and 2) to detect future releases from buried wastes. Surface water monitoring will also be performed at two intermittent springs.

Volume Treated, Stabilized, or Disposed: An estimated 1,762 cubic yards of solid waste is buried in the three Pit 6 trenches. Facility records indicate the solid waste consists primarily of: shop and laboratory materials contaminated with residues of uranium, thorium, and beryllium; capacitors; empty drums and tanks; a degreaser; compressed gas cylinders; pallets; and mercury filled lamps and ignition tubes. An estimated 149 cubic yards of animal carcasses were placed in the six smaller animal pits in the Pit 6 area.

Approximate Cost and Funding Source: \$2 million, all of which was funded by the U.S. Department of Energy's Environmental Restoration Division

Dates of Implementation: June 2, 1997 through August 29, 1997

Confirmation of Report: The information contained in this report is true and correct to the best of my knowledge.

Mark E. Piro

Project Manager

12/18/97

Date

[Signature]

Unit Chief

12-18-97

Date

Barbara J. Cook

Branch Chief

12-18-97

Date