



LAWRENCE LIVERMORE NATIONAL LABORATORY - LIVERMORE SITE

Livermore, Alameda County, California

Office: Oakland Operations Office

Size: 811 acres (1.3 square miles)

NPL Status: Placed on the NPL on July 22, 1987.

Mission: The Lawrence Livermore National Laboratory (LLNL) was established in 1952 to function as a national scientific and technical resource for the nuclear weapons program and other programs of national interest. LLNL performs research, development, and testing associated with the nuclear design aspects of all phases of the nuclear weapon life cycle. The Laboratory, consisting of two noncontiguous parcels (Livermore Site and Site 300), is also involved in the following programs: inertial fusion, magnetic fusion, biomedical and environmental research, isotope separation, and applied energy technology and other research-related activities.

Overview of Environmental Conditions: Contamination of groundwater and soil with tetrachloroethylene, perchloroethylene, and trichloroethylene.

CERCLA/RCRA Remediation Funding in FY 98: \$12,299,000

Progress in Reaching Interagency Agreement

The DOE entered into an FFA with EPA Region IX and the State of California for cleanup of the LLNL-Livermore Site. This FFA was executed on November 1, 1988 and became effective in February 1989. The FFA-enforceable milestone schedule of deliverables was renegotiated in May 1998. The EPA and state agencies approved a revised schedule that updated the prioritized activities to continue plume control on the western and southern perimeters where there is offsite contamination and began to focus on source area removal. New milestones were negotiated to implement a phased approach for in-situ cleanup at Trailer 5475 using Reductive Catalytic Dehalogenation technology.

Specific Cost Estimates and Budgetary Proposals Involved in Each Interagency Agreement

Funds budgeted for environmental restoration to support the FFA milestones at the LLNL-Livermore Site total \$11.5 million of appropriated funding for FY 99 and \$10.5 million for FY 00 according to the request in the President's Budget.

Public Comments Regarding Interagency Agreements

An IAG in the form of an FFA became effective in 1989; as a result, a technical assistance group is in place. This group continues to support a community working group to review post ROD documents and to provide input into the recent renegotiations and priorities of the site remediation efforts. A revised FFA Schedule of Deliverables was negotiated with EPA and the state and shared with the public in May 1998.

Progress in Conducting Remedial Investigations/Feasibility Studies

The Draft Final Feasibility Study (FS) was submitted to the state and the EPA in December 1990 and the proposed Remedial Action Plan was submitted in October 1991, in preparation for the November 1991 public hearing on the proposed plan for onsite remediation activities. A responsiveness summary for the public comments and final ROD was approved by DOE in June 1992. A five-year review of the ROD was completed in August 1997. All RI/FS activities were completed.

Progress in Conducting Remedial Actions

The ROD for the LLNL-Livermore Site was approved by DOE, EPA, and the State of California in June 1992. The ROD called for a cleanup of soil and groundwater using seven treatment facilities and 24 initial extraction locations. Subsequent negotiation with the regulators resulted in streamlining operations and reporting requirements, replacing pipelines, repairing facilities with portable treatment facilities, and increasing the total number of wells and treatment facilities. Four permanent treatment facilities and about 11 portable treatment units (PTUs) are in operation around the site. Due to continuing remediation, hydraulic control of the western offsite plume has been established. Additionally, a successful demonstration of the Dynamic Underground Stripping Technology was performed at the Gasoline Spill Area, which resulted in the removal of approximately 10 thousand gallons of fuel hydrocarbons. A Vapor Treatment Facility was installed at Building 518 in FY 97.

Also in FY 97, six of the 11 PTUs were installed and the other five were installed in FY 98. Mass removal rates of contaminants exceeded site projection as presented in the Remedial Design Reports. In FY 1999, a soil vapor extraction system will be installed at Trailer 5475 and two additional portable treatment systems will be activated.