NPL Site Narrative for Lawrence Livermore National Laboratory (Site 300) (USDOE)

LAWRENCE LIVERMORE NATIONAL LABORATORY (SITE 300) (USDOE)
Livermore, California

Conditions at proposal (July 14, 1989): Lawrence Livermore National Laboratory (LLNL) (Site 300) covers approximately 11 square miles north of Corral Hollow Road near the City of Livermore, California, straddling the Alameda/San Joaquin County line. The area is rural. LLNL was first owned by the Atomic Energy Commission. It is now owned by the U.S. Department of Energy (USDOE) and operated by the University of California. The main LLNL site, located 15 miles west of Site 300, was placed on the NPL in July 1987.

Site 300's primary mission since its inception in 1955 has been to test high explosives. It has also operated a number of solid waste landfills, accepting waste from the LLNL main site, Site 300, and Lawrence Berkeley Laboratory. Land disposal ceased at Site 300 in November 1988. Site 300 also formerly maintained a number of waste lagoons and dry wells for disposal of liquid wastes and waste waters. The dry wells have been removed from service, and the lagoons have been replaced by two double-lined surface impoundments. The lagoons are scheduled to be capped in the summer of 1989.

Tests conducted in 1983 by an LLNL contractor detected trichloroethylene (TCE), trans-1,2-dichloroethylene, and tetrachloroethylene in on-site monitoring wells. Soil is also contaminated. These chlorinated hydrocarbons are found in the vicinity of Buildings 834, 830, and 817 and Pit 5. The highest concentrations are of TCE near Building 834. TCE is used as a cooling and heating agent to test the stability of various high explosive compounds and is stored near Building 834 for distribution through aboveground piping. A leak is suspected as the source of soil and ground water contamination. Approximately 350 people obtain drinking water from wells within 3 miles of Site 300, most of them on Site 300 itself.

During 1983 and 1984, LLL observed increases in tritium concentrations in shallow monitoring wells downgradient from experimental and waste disposal areas in the west firing area of Site 300. The shallow aquifer is not a present or potential source of drinking water.

In 1989, EPA issued a Corrective Action Order under Section 3008(h) of the Resource Conservation and Recovery Act (RCRA). The State has issued a draft Cleanup and Abatement Order. In the summer of 1989, USDOE plans to complete a feasibility study identifying alternatives for cleanup at Site 300.

Status (August 30, 1990): LLNL has completed capping the lagoons. LLNL is appealing the RCRA order to EPA. The State draft order is pending resolution of the RCRA order.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at ATSDR - ToxFAQs (http://www.atsdr.cdc.gov/toxfaqs/index.asp) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.