

## THE UNITED STATES DEPARTMENT OF ENERGY/NATIONAL NUCLEAR SECURITY ADMINISTRATION HAS COMPLETED A FIVE-YEAR REVIEW FOR THE LAWRENCE LIVERMORE NATIONAL LABORATORY'S LIVERMORE SITE

The U.S. Department of Energy (DOE)/National Nuclear Security Administration has completed the sixth Five-Year Review of its environmental cleanup at Lawrence Livermore National Laboratory's (LLNL) Livermore Site.

### THE REVIEW PROCESS

Superfund law requires that the protectiveness of cleanup actions be evaluated every five years when contaminants remain at the site above levels that allow unrestricted access. The purpose of the Five-Year Review is to evaluate the progress of the cleanup remedy toward achieving the Site's cleanup objectives, and whether the remedy continues to be protective of human health and the environment. The Five-Year Review summarizes the nature and extent of contamination and describes DOE's progress in cleaning up the Livermore Site.

DOE's final Five-Year Review report for the Livermore Site is now available to the public at the LLNL Environmental Document Repository in the Livermore Public Library located at 1188 South Livermore Ave, Livermore, CA 94550 [telephone: (925) 373-5500]; the LLNL Public Affairs Office, 7000 East Ave., Livermore, CA 94550 [contact: Scott Wilson (email: wilson101@llnl.gov)]; and online at <https://enviroinfo.llnl.gov/>.

“La ley Superfund exige que las acciones para restaurar sitios sean evaluadas cada cinco años mientras estos permanezcan contaminados a niveles sobre los que permiten acceso sin restricciones. El propósito de la evaluación es para estimar el progreso que se ha logrado hacia los objetivos de la restauración y para decidir si las acciones implementadas continúan a proteger la salud de la población y el medio ambiente. La evaluación proporciona un resumen de la naturaleza y el grado de la contaminación y describe el progreso efectuado por el Departamento de Energía (DOE por sus siglas en inglés) para restaurar al sitio de Livermore.

El reporte de la evaluación realizada por DOE está disponible en la biblioteca pública de Livermore situada en 1188 South Livermore Ave, Livermore, CA 94550 [teléfono: (925) 373-5500]; en la oficina de LLNL Public Affairs, 7000 East Ave., Livermore, CA 94550 [contacto: Scott Wilson (correo electrónico: wilson101@llnl.gov)]; y en la red <https://enviroinfo.llnl.gov/>.

### SITE HISTORY

LLNL's Livermore Site is an applied science laboratory operated by Lawrence Livermore National Security, LLC. The Livermore Site is located approximately three miles east of the downtown area of Livermore, California. The 800-acre Livermore Site was converted from agricultural use into a Navy flight training base and aircraft assembly and repair facility in 1942. In the 1950s, the Atomic Energy Commission converted the site into a weapons design and basic physics research laboratory. Initial hazardous materials releases occurred at the Livermore Site when the site was the Livermore Naval Air Station. There is also evidence that localized spills, unlined landfills, and leaking tanks and impoundments contributed volatile organic compounds (VOCs), fuel hydrocarbons, metals, and tritium to the groundwater and unsaturated sediments in the post-Navy era. By 1987, a plume of VOCs had migrated off site about 2,200 feet west of the current LLNL property. These past operations resulted in the Livermore Site being placed on the EPA National Priorities List in 1987. A Record of Decision was signed in 1992 that established

the cleanup remedies and cleanup standards for the Livermore Site. Previous Five-Year Reviews were completed in 1997, 2002, 2007, 2012, and 2017.

#### CLEANUP OBJECTIVE

The Livermore Site remedial action objectives are: (1) prevent future human exposure to contaminated groundwater and soil, (2) prevent further migration of contaminants in groundwater, (3) reduce contaminant concentrations in groundwater to levels below Maximum Contaminant Levels (MCLs), and reduce the contaminant concentrations in treated groundwater to levels below state discharge limits, (4) prevent migration in the unsaturated zone of those contaminants that would result in concentrations in groundwater above an MCL, and (5) meet all existing permit discharge standards for treated water and oil vapor, and to treat vapor so that there are no measurable atmospheric releases from treatment systems. The remedy at the Livermore Site is protective of human health and the environment for the site's industrial land use. The cleanup standards for groundwater are drinking water standards. Because drinking water standards do not differentiate between industrial and residential use, the groundwater cleanup remedy will be protective under any land use scenario upon completion.

#### FOR MORE INFORMATION:

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