THE UNITED STATES DEPARTMENT OF ENERGY/NATIONAL NUCLEAR SECURITY ADMINISTRATION IS CONDUCTING A FIVE-YEAR REVIEW OF THE HIGH EXPLOSIVES PROCESS AREA OPERABLE UNIT AT LAWRENCE LIVERMORE NATIONAL LABORATORY'S SITE 300

The U.S. Department of Energy /National Nuclear Security Administration has begun the second Five-Year Review of its environmental cleanup of the High Explosives Process Area Operable Unit at Lawrence Livermore National Laboratory's Site 300.

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 report summarizes the nature and extent of contamination and describes the U.S. Department of Energy's progress in cleaning up the High Explosives Process Area Operable Unit. The draft Five-Year Review report for the High Explosives Process Area Operable Unit is now available to the public at the Laboratory's Environmental Repository in the Tracy Public Library, 20 East Eaton Avenue, Tracy, CA 95377, [telephone (209) 835-2221]; the Laboratory Discovery Center, Greenville Road at East Gate Drive, Livermore, CA 94551, [telephone (925) 422-4599]; and online at http://www-envirinfo.llnl.gov/. Upon completion of the review, a copy of the final report will be placed in the information repositories listed above and a notice will also appear in local newspapers announcing the completion of the Five-Year Review report.

SITE HISTORY

Lawrence Livermore National Laboratory's Site 300 is a U.S. Department of Energy experimental test facility operated by Lawrence Livermore National Security, LLC. Site 300 is used for the research, development, and testing of high explosive materials. Site 300 is located in the Altamont Hills between Livermore and Tracy, California. Site 300 was placed on the National Priorities List in 1992. The High Explosives Process Area Operable Unit is one of nine operable units at Site 300 where contaminants have been released to the environment from past operations. A Site-Wide Record of Decision was signed in 2008 that established the cleanup remedy and cleanup standards for the High Explosives Process Area Operable Unit. A previous Five-Year Review was completed in 2007. The High Explosives Process Area has been used since the 1950s for the chemical formulation, mechanical pressing, and machining of high explosives compounds into shaped detonation charges. Volatile organic compounds, high explosive compounds, perchlorate, and nitrate have been released to the environment from past operations.

CLEANUP OBJECTIVE

The selected remedy for the High Explosives Process Area Operable Unit includes: (1) monitoring ground water to evaluate the effectiveness of the remedy in achieving cleanup standards, and to ensure there is no impact to downgradient water-supply wells; (2) institutional

controls, such as access/land-use restrictions and measures to prevent use of contaminated ground water and onsite worker exposure to contaminants volatilizing from surface water; (3) extracting and treating volatile organic compounds, high explosive compounds, and perchlorate in ground water to mitigate unacceptable volatile organic compounds inhalation risk for onsite workers, prevent further impacts to ground water and offsite plume migration, and reduce contaminant concentrations in ground water to cleanup standards; and (4) monitored natural attenuation of nitrate in ground water.

FIVE-YEAR REVIEW RESULTS

The remedy at the High Explosives Process Area Operable Unit is protective of human health and the environment upon completion (i.e., when cleanup standards are achieved) for the site's industrial land use. The cleanup standards for ground water are drinking water standards. Because drinking water standards do not differentiate between industrial and residential use, the ground water cleanup remedy will be protective under any land use scenario upon completion.

FOR MORE INFORMATION:

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