Work performed under the auspices of the U. S. Department of Energy by Lawrence Livermore National Laboratory under Contract W-7405-Eng-48.

Lawrence Livermore National Laboratory Employs Portable Treatment Units to Reduce the Cost of Cleanup at its Livermore Site

UCRL-MI-135903

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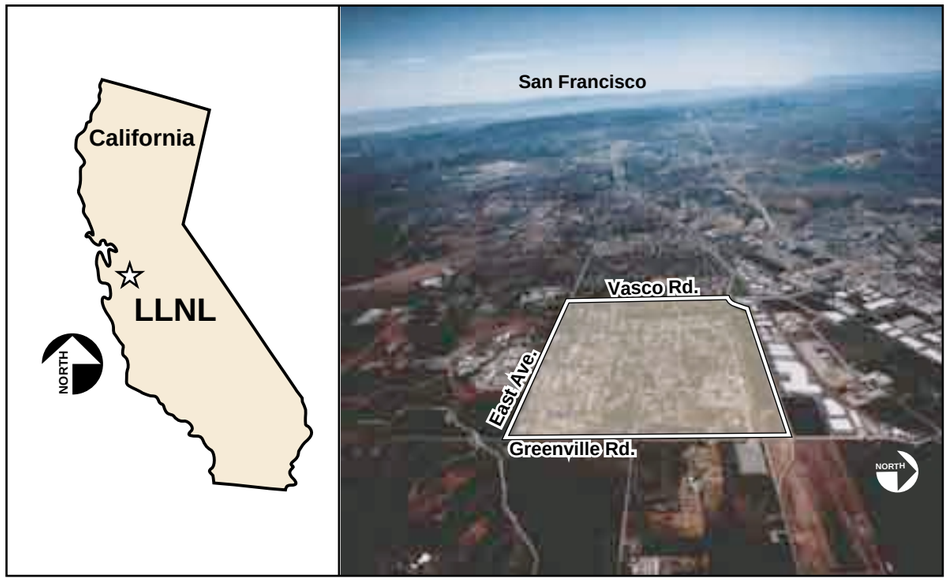
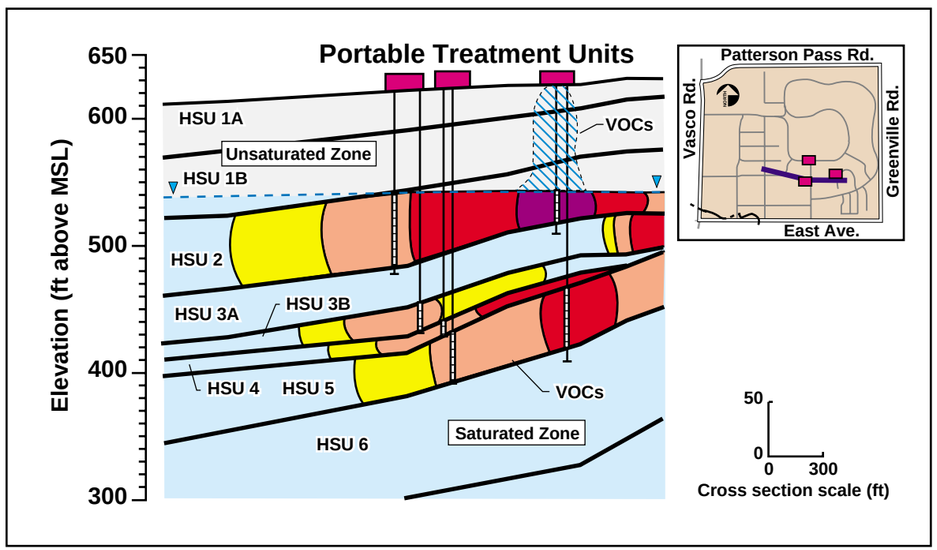


Location of Lawrence Livermore National Laboratory Livermore Site



Portable treatment units will target individual Hydrostratigraphic Units (HSUs) for source area control and distal plume remediation.

- Ground water at the Livermore Site is contaminated with volatile organic compounds, fuel hydrocarbons, metals, and tritium.
- Ground water remediation has been underway since 1988; offsite contamination has been hydraulically controlled and significantly reduced.
- Five fixed ground water treatment facilities have been constructed and are removing contaminants from the distal parts of the plumes and from source areas.
- We are now constructing portable treatment units instead of fixed treatment facilities and pipelines.
- Portable treatment units use an off the shelf air stripper to remove VOCs from ground water.
- Portable treatment units are as effective as fixed treatment facilities at only 40% of the cost of constructing fixed treatment facilities with pipelines.
- Site-wide cost savings could exceed $10M.
- Portable treatment units can be easily moved to other locations to optimize remediation as the contaminant plumes contract to the source areas; therefore, we expect to achieve faster cleanup.
- Regulatory agencies and the public endorse this new concept of employing portable treatment units.

Small, compact, portable treatment units, as shown in the foreground, are being used instead of fixed treatment facilities as shown in the large building behind.