

COMMUNITY UPDATE

The mission of DTSC is to protect California's people and environment from harmful effects of toxic substances by restoring contaminated resources, enforcing hazardous waste laws, reducing hazardous waste generation, and encouraging the manufacture of chemically safer products.

Whittaker-Bermite Facility 21116 West Soledad Canyon Road, Santa Clarita CA

SITE LOCATION AND HISTORY

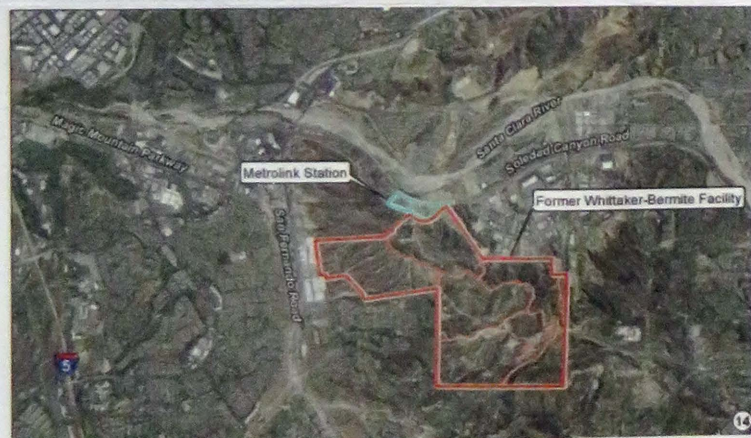
The Whittaker-Bermite Facility is in Santa Clarita, at 22116 West Soledad Canyon Road occupies about 996 acres. The Facility, started making dynamite in the early 1930s. Later, fireworks and oil field explosives were made at the site.

Product lines grew to flares, photoflash devices for battlefield illumination and other explosives. Between 1967 and 1987, the Facility assembled 20-millimeter (mm) and 30-mm ammunition rounds, detonators, fuses, boosters, flares and signal cartridges, rocket motors, and missile main charges.

The Facility made many products for the U.S. Department of Defense. This affected the number of staff, buildings needed, turnover of building usage, chemicals used, and waste by-products generated. Some products were made in small quantities on an as-needed basis, while others were mass-produced. Other products remained in research and development stages.



Soil treatment compound and treatment cells for bio-treatment of perchlorate



The manufacturing and testing operations ceased in 1987 and decommissioning and cleanup of the production and assembly buildings that had started during 1980s continued under the ownership of Santa Clarita LLC (SCLLC) which had purchased the site for a planned mix use development. After SCLLC defaulted, Whittaker took on the responsibility of site cleanup that continues to date.

The 996-acre Whittaker-Bermite Facility Site is bound by Bouquet Canyon Road/Railroad Avenue to the west, West Soledad Canyon Road to the north, and Golden Valley Road to the east.

Image Source: Google Earth



WHY IS CLEANUP NECESSARY?

Chemicals such as potassium and magnesium perchlorate (used in flares) and ammonium perchlorate (used as solid rocket fuel) were handled at the facility. Industrial solvents such as trichloroethene (TCE) and tetrachloroethene (PCE) were used for cleaning parts in manufacturing and operations. Waste handlings that were done in accordance with the acceptable practices of those times resulted in the release of waste chemicals to soil and groundwater beneath the site. Due to its high solubility and mobility, perchlorate was moved by groundwater a considerable distance, eventually reaching the nearby off-site water production wells. As a result, six water production wells for the community that had low levels of perchlorate were shut down in 1997. To protect the groundwater resources, it was necessary to contain and cleanup the affected groundwater at the site. The soil under the former operations areas impacted by perchlorate and solvents needed to be cleaned up. After SCLLC defaulted, the Department of Toxic Substances Control (DTSC) issued a cleanup and abatement order to Whittaker to examine and clean up the soil and groundwater in the source areas beneath the site. Whittaker has hired several specialty contractors to conduct soil and groundwater investigation and cleanup in compliance with the DTSC order.

HOW IS THE SITE BEING CLEANED UP?

Under oversight of the DTSC and other regulatory agencies, Whittaker has worked with the local water companies to restore lost groundwater production for the community by importing drinking water and by installing well-head treatment facilities for the impacted wells. As a result of these efforts, two of the production wells that were shut down in 1997 were restarted in 2010 and a third well will be restarted in 2017. Additional efforts for installing replacement wells by the water purveyors are in progress.

The groundwater pump and treat system was designed to capture and clean up contaminated deep groundwater beneath the site. Eight extraction well clusters have been installed to multiple depths along



Groundwater treatment facility

the western border of the site to capture contaminated groundwater. In addition, 24 performance monitoring wells have been installed to expand the existing groundwater monitoring wells network to monitor and confirm capture of contaminated groundwater at the site. Over 15,000 feet of piping has been installed to convey extracted water to the treatment system located near the northern boundary of the site along Soledad Canyon Road. The treatment facility is equipped to remove the site chemicals from the extracted groundwater. Also, a pilot-scale permeable reactive zone that was installed in subsurface along the northwestern boundary of the site near the Metrolink station in 2015, will be expanded to capture and treat chemicals in shallow water near the northern site boundary.

The overall goal of the site cleanup program is to cleanup areas of the site where past waste handling operations resulted in chemical releases to soil and groundwater that may present an unacceptable risk to human health or the environment. These methods are carried out within the general context of a cleanup plan that includes two primary processes: in situ soil vapor extraction to remove volatile organic compounds (VOCs) from the subsurface soils; and, excavation and ex situ bioremediation of the soils impacted with perchlorate.

Soil vapor extraction (SVE) systems have been operated at 15 areas of the site to remove VOCs/solvents from the soil. Removal of VOCs from seven areas has been successfully completed and eight areas are currently operating. As the SVE operations are completed in the current areas, the available SVE systems will be moved to the remaining five areas that require VOC cleanup, which are currently under construction. All SVE operations have been conducted in compliance with the South Coast Air Quality Management District rules and permits.



One of the nine SVE system operating to remove VOCs

Excavation and ex situ bioremediation is being used to clean soil from areas contaminated with perchlorate. The contaminated soil is dug-up, and taken to to a soil treatment facility at the site where water and amendments are mixed with the soil and then placed in 67 treatment cells. The cells are covered to prevent ambient air interaction and promote natural soil micro-organisms (bacteria) population growth and biological break down of the perchlorate. Soil samples are often collected to monitor and record the progress of biodegradation. Typically, complete treatment is achieved within 20 to 30 days during the warmer summer months and from 45 to 90 days during the cooler winter months. Upon completion, the clean soil in the cells is removed, spread out to dry, and then used to backfill the excavation areas. With recent addition of equipment and construction of an additional treatment pad area and 57 more cells, the excavation and bioremediation of the perchlorate-impacted soils is expected to be completed in 2018.



Due to the history of weapons and explosives handling and testing at this site, Whittaker retained a specialty contractor to survey the specific site areas where “munitions and explosives of concern” (MEC) were assembled, stored, handled, or tested. Items found during survey of the subject areas were temporarily stored in safe storage chambers. These items were “demilitarized” at the site and the scrap metal and fragments of such material were carefully inspected and rendered safe before hauling to a metal recycling facility. Based on results of the MEC surveys, five landfill areas at the site were determined to contain munitions fragments. A plan for management of those landfills has been prepared and approved by DTSC. Construction activities related to management of the fill areas is expected to begin in 2017 and completed by mid-2018.

FREQUENTLY ASKED QUESTIONS ABOUT THE WHITTAKER-BERMITE SITE CLEANUP

What are the health risks?

There are no current health risks for people living, working or going to school near the Site. Cleanup of the contaminants will prevent the potential for exposure in the future.

Is my water safe to drink?

Yes. Environmental and public health agencies have water quality standards in order to protect consumers and ensure public health and safety. All drinking water must be of a quality that meets these high standards. Santa Clarita Valley drinking water is tested throughout the year and is safe to drink. For more information about your drinking water quality call your water company or go to the Castaic Lake Water Agency at www.clwa.org.

Can winds blow contaminants into my neighborhood?

Cleanup of the soils is currently underway and is carefully monitored to ensure public safety. If conditions become windy, the cleanup operation is stopped. If you have any concerns during high winds, call the City of Santa Clarita at 661-259-CITY (2489).

Is storm water coming from the Site contaminated?

Storm water and soil erosion are captured on-site. The water is pumped to a treatment system and contaminants are removed. The cleaned water is released into the Santa Clara River under a permit with the Los Angeles Regional Water Quality Control Board.

Who is paying for the cleanup?

Whittaker Corporation is paying for the cleanup.

What will happen to the property after it is cleaned up?

DTSC is only responsible for the cleanup of the Site. Our goal is to protect public health and environmental resources. We do not decide what happens to the property after cleanup is completed. The City of Santa Clarita is the public agency that has jurisdiction over future land uses of the Site. For questions or comments about the future use of the cleaned property contact the City of Santa Clarita Planning Department at 661- 259-CITY (2489).

Who can I contact for more information?

If you have any questions or would like to be added to the mailing list, contact Sr. Project Manager Jose Diaz at (818) 717-6614 or jose.diaz@dtsc.ca.gov or Public Participation Specialist Amanda Dominguez at (323) 605-7125 or amanda.dominguez@dtsc.ca.gov

