



Cooper Drum Superfund Site



U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • August 2011

Cleanup Work Plans Completed Soil Cleanup Begins

This fact sheet by the U.S. Environmental Protection Agency (EPA) provides information on the cleanup plans and activities being conducted at the Cooper Drum Company Superfund Site (Cooper Drum).

EPA will oversee the cleanup of soil and groundwater contamination at the Cooper Drum Site (see Figure 1), which will be performed by a group of responsible parties who contributed to this contamination.

EPA recently approved work plans for soil and groundwater cleanup. Construction of the Soil Vapor Extraction (SVE) treatment system has been completed and the system began operating in February 2011.

The next step is to construct the remaining cleanup systems and begin treating or removing the contamination beneath the Site and in the groundwater plume which extends to Southern Avenue. The groundwater treatment system will be constructed during summer 2011 and begin operating by fall 2011.

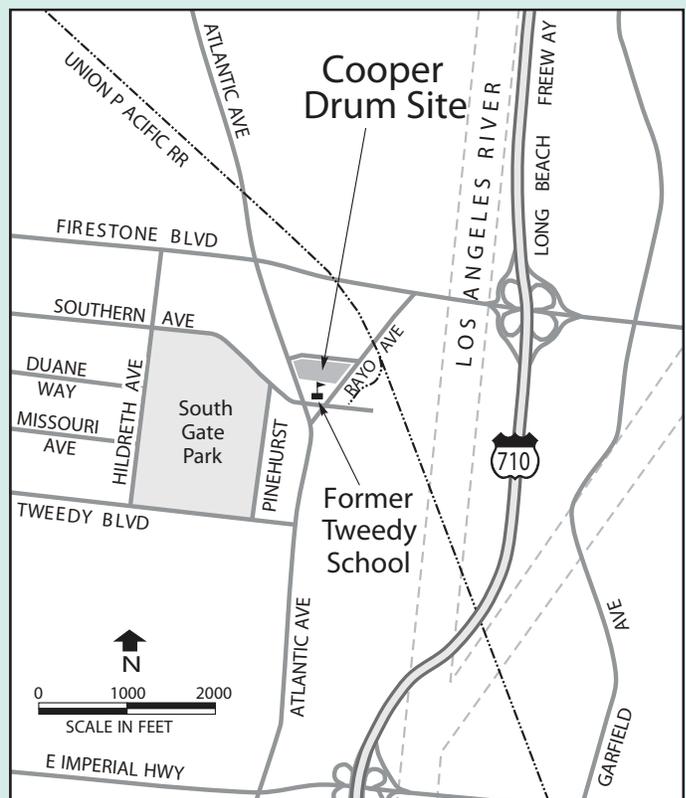


Figure 1: Location Map of Cooper Drum Superfund Site

Contamination in the Soil

The contaminated soil beneath the Site will be cleaned up to prevent volatile organic compounds (VOCs) in soil gas from continuing to migrate downward into the groundwater. Polyaromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs) and lead are also contaminants of concern in the soil. These contaminants have lower mobility (as compared to the VOCs), are generally found at a shallow depth beneath the asphalt pavement (down to approximately 10 feet), and are not a threat to groundwater.

Site Background

The Cooper Drum Site includes a 3.8-acre property in a mixed residential, commercial and industrial area located at 9316 South Atlantic Avenue in South Gate, Los Angeles, California. Rayo Avenue borders the site to the east and the former Tweedy Elementary School property is located directly to the south.

Several different companies have used the site to recondition and recycle steel drums that once contained a variety of industrial chemicals. The Site property is no longer used for drum reconditioning. Currently, the Site is vacant and there are no activities except for construction and operation of the soil and groundwater treatment systems.

From 1996 to 2001, EPA conducted a Remedial Investigation and Feasibility Study for the Site, and in June, 2001, placed the Site on the National Priorities List (commonly called Superfund). As a result of site investigations, various contaminants were identified in two source areas of the Site. Drum-cleaning activities within the drum processing area (DPA) and the former hard wash area (HWA) resulted in extensive soil and groundwater contamination (see Figure 2 and 3).

Volatile organic compounds (VOCs) are the primary contaminants of concern in soil, soil vapor and groundwater because they have been detected the most often and at the highest concentrations. Eleven VOCs, including trichloroethene (TCE) and its breakdown products, have been detected above action levels that require cleanup. These VOCs were primarily used as industrial solvents. Site contaminants above cleanup levels are present in the shallow aquifer and have not moved vertically into the deeper aquifers that are used for municipal drinking water supply.

Contamination in the Groundwater

VOCs are the primary contaminants found in Site groundwater at concentrations above state and federal drinking water standards (Maximum Contaminant Levels, or MCLs). For example, the MCL for TCE is 5 parts per billion (ppb), and Site groundwater analytical sampling results have detected TCE concentrations up to 480 ppb.

In addition to the 11 VOCs, one other contaminant found in the groundwater above MCLs is 1,4-Dioxane, which is used as a stabilizer in industrial solvents. The primary source area of groundwater contamination is found directly beneath and adjacent to the Site property; however, the extent of the groundwater contaminant plume extends downgradient to the south to at least McCallum Avenue (See Figure 2).

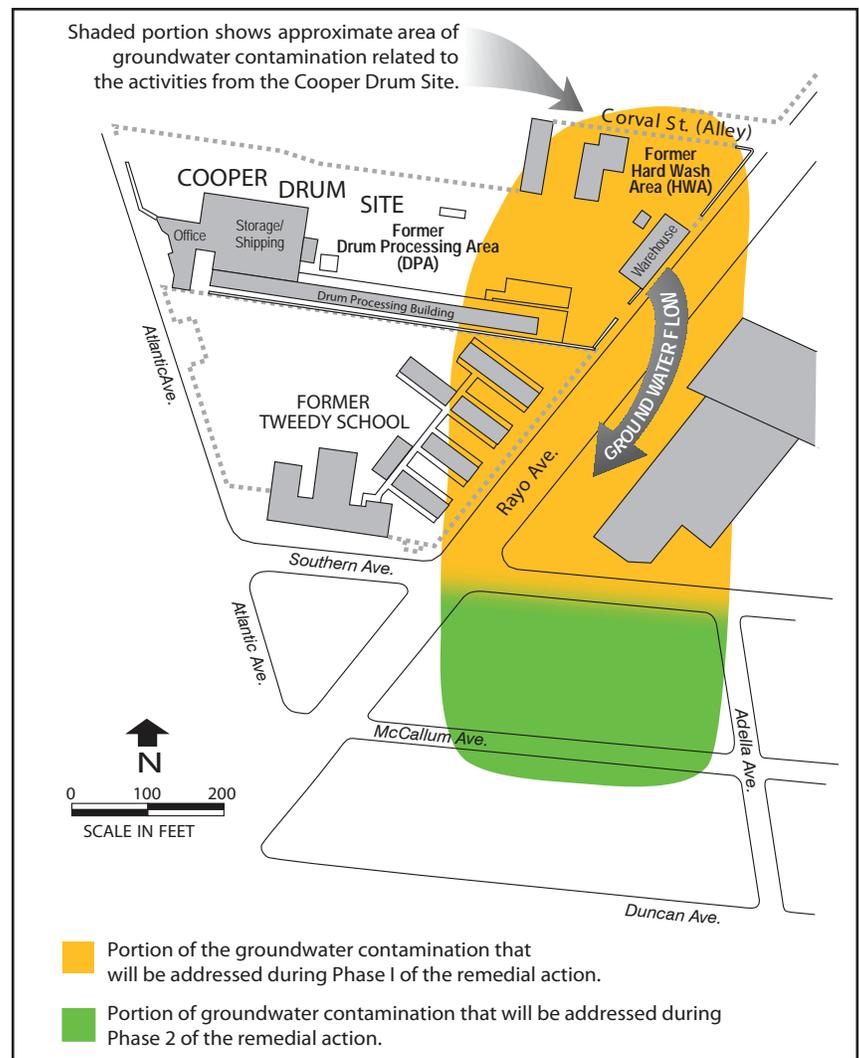


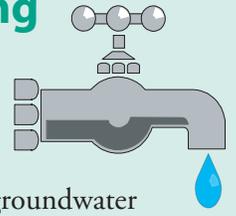
Figure 2: Site Map of Cooper Drum Superfund Site

Soil Remedy

EPA’s cleanup remedy for contaminated soil at the Site includes three elements:

- Extraction and treatment of VOC-contaminated soil vapors and dewatering and treatment of a perched groundwater layer;
- Excavation and disposal of near-surface soils impacted by non-VOC soil contaminants, including PAHs, PCBs and lead; and
- Institutional controls (a State Land Use Covenant with the property owner) to prevent exposure to soil contaminants by limiting future use of the Site where excavation is not feasible, such as under existing structures.

Is My Drinking Water Safe?



Yes. Although groundwater contamination has occurred, groundwater aquifers used for drinking water are much deeper than the contamination. Contamination at the Cooper Drum Superfund Site has not affected drinking water sources in the South Gate area.

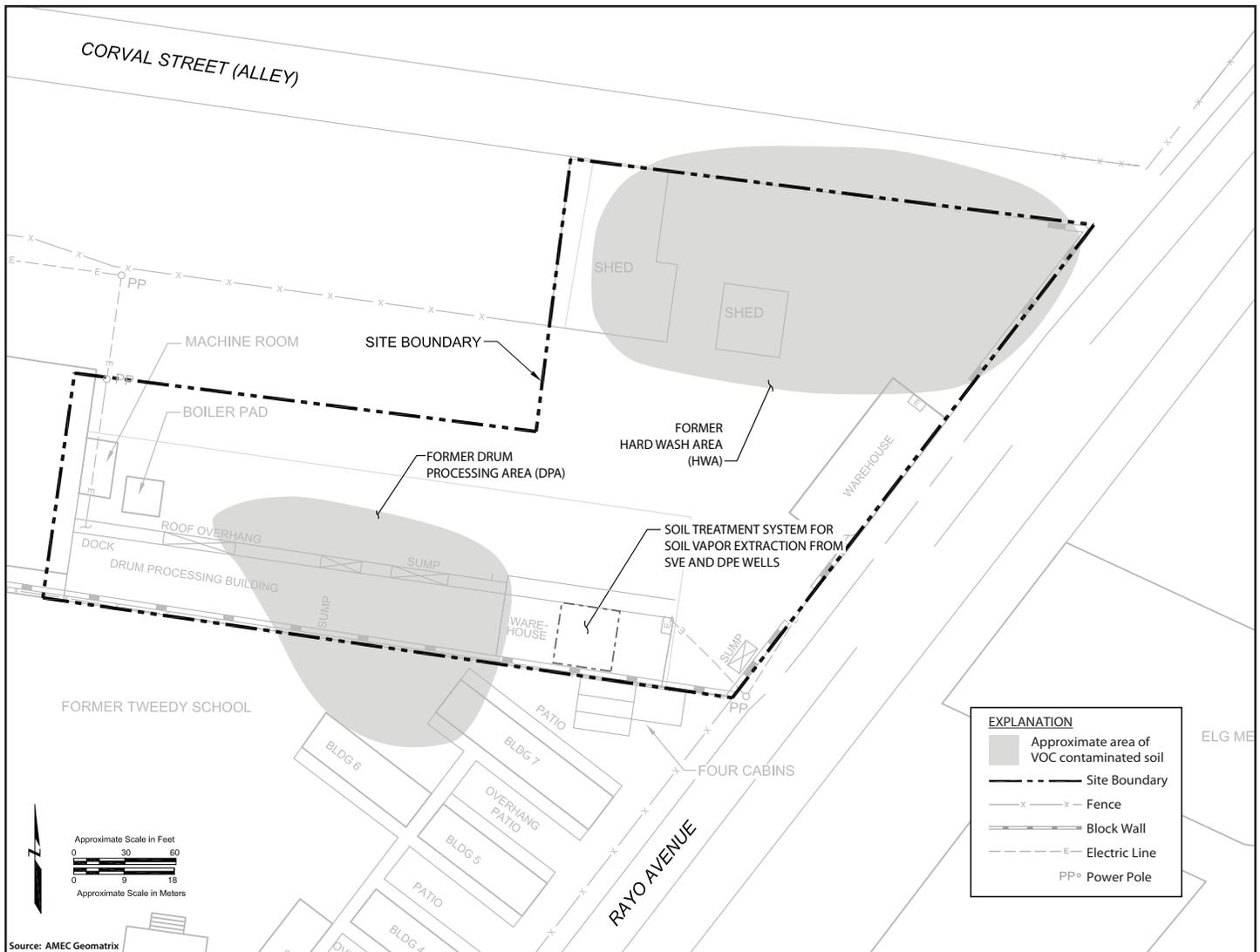


Figure 3: Soil Remediation of VOC-Contaminated Soil

The on-site treatment system consists of 12 shallow soil vapor extraction (SVE) wells and 12 deeper extraction wells, which will simultaneously remove soil vapor and groundwater, and vapor monitoring wells.

The extraction system is generally within the Site boundary (see Figure 3). System operation is estimated to be five years. Vapor monitoring and groundwater extraction wells will continue to be sampled until the cleanup is completed. The treated groundwater will be discharged to the sanitary sewer.

Confirmation soil samples will be collected at excavation areas to ensure that all impacted soils are removed from the Site. All excavated soils will be transported and disposed of at an approved off-site facility. All excavated areas will be backfilled with clean soil material.

Groundwater Remedy

EPA's Cooper Drum groundwater cleanup method includes groundwater extraction to contain movement of the plume and treatment of contaminants. This treatment consists of

advanced oxidation using ozone and hydrogen peroxide, and carbon filters to reach final cleanup standards prior to discharging the treated water to the sanitary sewer.

The groundwater remedy will be implemented in two phases. Phase 1 will address the portion of the groundwater plume from the on-site source down to Southern Avenue. Phase 2 will address the portion of the groundwater plume that extends further south to McCallum Avenue. The results of groundwater sampling in this area have shown that contaminated groundwater plumes from adjacent areas have comingled (mixed) with the Cooper Drum plume. As a result of plume comingling, additional monitoring to characterize the plumes is being performed in this area. Therefore, Phase 2 will be completed at a later date.

The Phase 1 groundwater extraction wells will be installed on-site and downgradient to Southern Avenue to contain and treat the contaminated groundwater plume. The extracted groundwater will be conveyed via underground piping back to the treatment system located within the Cooper Drum property. The placement and operation of the Phase 1 groundwater extraction wells have been

Site Information Repositories

Copies of technical documents, reports and fact sheets related to the Cooper Drum Site are available for review at the locations listed below.

U.S. EPA Superfund Records Center
95 Hawthorne Street, Suite 403S
San Francisco, CA 94105-3901
Telephone: (415) 820-4700



Leland R. Weaver Library
4035 Tweedy Blvd.
South Gate, CA 90280
Telephone: (323) 567-8853

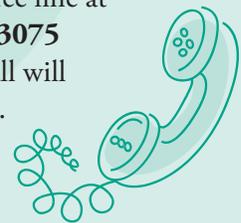
Information is also available on the US EPA Region 9 website at <http://www.epa.gov/region09/CooperDrum>

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Or you may leave a message on EPA's toll-free line at **(800) 231-3075** and your call will be returned.



designed to minimize the impact from adjacent co-mingling plumes. However, it is anticipated that further action at the adjacent contaminated sites will also be needed to contain those plumes.

Who is doing the cleanup work?

In February 2009, the EPA issued an Administrative Order to 43 parties including the current site owners and 41 companies that previously sent steel drums to the site for reconditioning. These parties will be performing the cleanup work including building and operating the remedy. EPA is now overseeing the project to insure that the cleanup systems are built and operated as planned.

Next Steps

Soil Remedy

EPA originally approved the cleanup plan for the soil remedy in February 2010 after the successful completion of a pilot test for the Soil Vapor Extraction treatment system. The system began operation in February 2011. The treatment system for the perched groundwater layer within the soil will begin operation by fall 2011.

Groundwater Remedy

Two groundwater extraction wells will be installed on the site in July 2011, and the treatment system is scheduled to begin operation by fall 2011. After evaluating the system's performance and installing additional off-site extraction wells, the full-scale extraction system is scheduled to become operational in January 2012.

Community Involvement

EPA is committed to involving the public in the cleanup process at the Cooper Drum Superfund Site. Our Community Involvement Program focuses on answering the community's questions about the cleanup effort, providing information to the community about site activities, and incorporating community issues and concerns into Agency decisions.

One convenient place to find major site documents is to go to EPA's web site: www.epa.gov/region09/cooperdrum.

To learn more, you can find an extensive amount of information at EPA's Information Repository (see Page 4).

EPA is updating its Community Involvement Plan, which is the document that organizes EPA's public participation effort. If you are interested in being interviewed to help us with this effort, please contact David Cooper, Community Involvement Coordinator (see Page 4).



Mailing List Coupon

If you are not already on EPA's mailing list for the Cooper Drum Superfund Site, please send an e-mail or return the coupon below to David Cooper.

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City, State _____ Zip _____

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E-mail (optional) _____

Affiliation (optional) _____



Cooper Drum Superfund Site

Cleanup Work Plans Completed – Soil Cleanup Begins

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