

Groundwater Cleanup Project at the Montrose and Del Amo Superfund Site in Los Angeles County, CA

The former Montrose Chemical plant manufactured the pesticide DDT from 1947 until 1982, but was shut down and demolished by 1983. Montrose's operations caused soil and groundwater contamination. Most notably, the soil was contaminated with DDT and groundwater was contaminated with chlorobenzene. That groundwater contamination has reached layers from 60 to 200 feet below ground and has spread to an area more than a mile long and about a mile wide.

Since the two sites are right next to each other, over the years the chlorobenzene from Montrose and the benzene contamination from Del Amo has started to mix together. Other chemicals in the groundwater from nearby industries must also be treated, such as the solvent trichloroethene (TCE). EPA is treating the groundwater cleanup as a single project even though the contamination is from two or more separate sources. None of this contaminated water is used as drinking water.

Just east of the Montrose Site sits the Del Amo site where synthetic rubber was manufactured between 1942 and 1972. Operation of the Del Amo plant resulted in the creation of benzene groundwater contamination.

See page 3 to learn more about major chemical contaminants at the Sites

Current Activities

In 1999, EPA decided what action it would take to stop the groundwater contamination from spreading and to clean it up. In 2012, EPA approved the plans for the "Groundwater Remedy Infrastructure"—the system that will be built to clean up the groundwater. The goal is to make as much of the groundwater as possible clean enough to drink. Montrose, under EPA's supervision, will perform the construction work. To clean up the

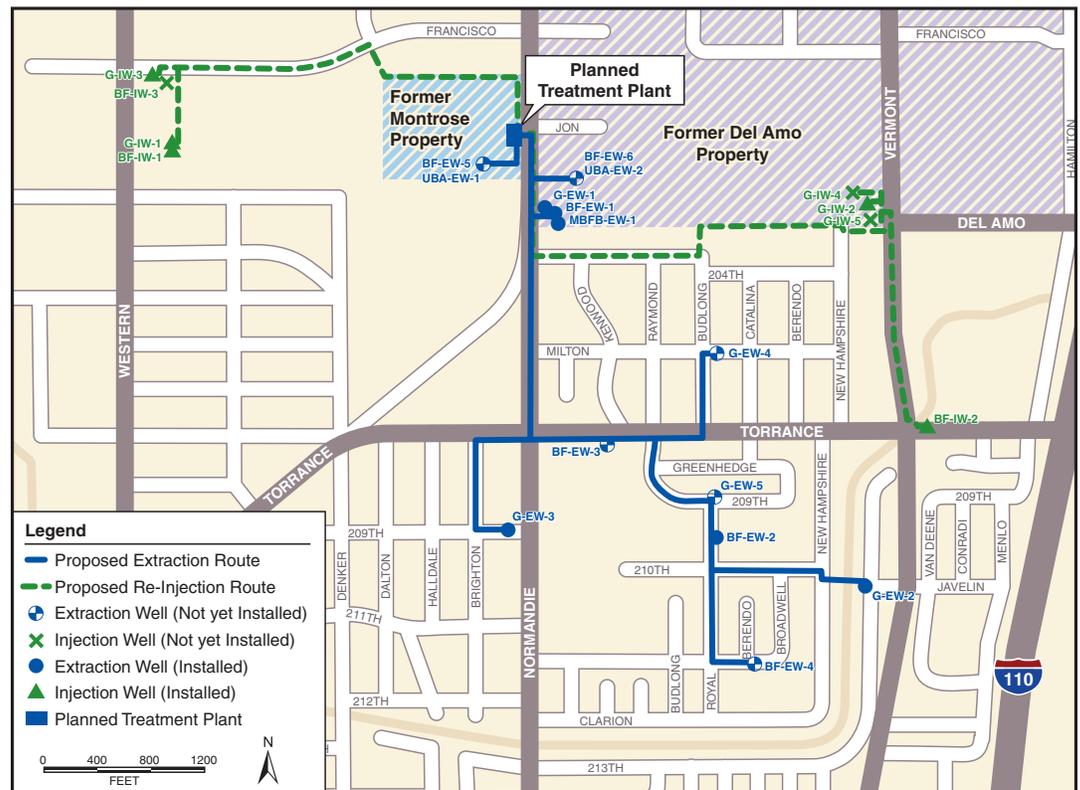


Figure 1: Groundwater Remedy Infrastructure

groundwater, Montrose will first build a water treatment plant, dig wells, and install about 30,000 feet of pipes. The treatment plant, once completed, will pull the contaminated groundwater up from some of the wells, remove the chlorobenzene, benzene and TCE, and then return the cleaned water back into the ground through other wells. Figure 1, below, shows the location of the treatment plant, the wells, and the piping system.

Construction of the groundwater treatment system is scheduled to begin on March 18th, 2013, and will take about 18 months to complete. Construction activities will include building the treatment plant, wells, and underground piping to and from the treatment plant and the wells. The treatment plant will be built on the fenced Montrose property and requires removing the existing asphalt cover, moving and grading the soil, pouring a concrete slab, and constructing the water treatment plant. The Groundwater Remedy Infrastructure will clean the groundwater and operate indefinitely to contain the remaining sources.

Safety and Traffic Measures

- Traffic will be safely diverted during the work
- Noise will be temporary and similar to other utility work you may have seen
- Soil removed from the trenches will be stored on the former Montrose property until needed to refill the completed pipeline trench
- Pipelines will be constructed in short 400 foot sections and covered with heavy steel trench plates outside of the 7 am to 5 pm work hours
- Completed and tested sections of pipeline will be refilled and paved, leaving cleaned street surfaces
- Crews will always try to avoid working in intersections, driveways, schools or bus stops

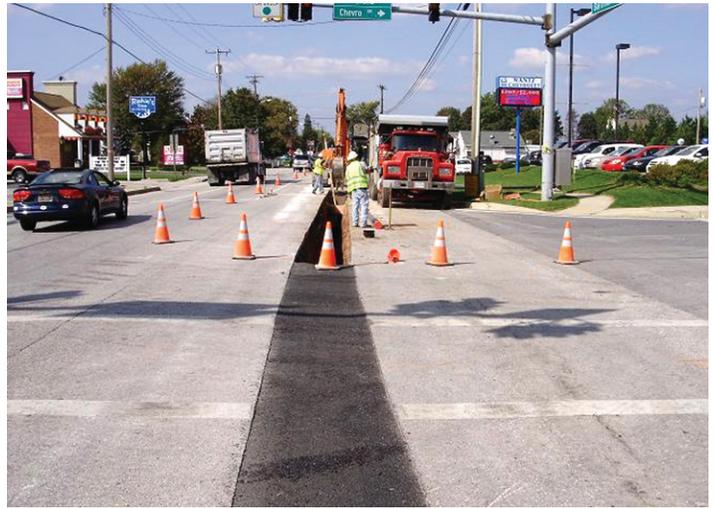


Figure 2: Trenching

Installation of the wells and pipelines will take place on both public and private property. The pipes carrying contaminated water from extraction wells to the treatment plant will be double-walled high-density polyethylene (HDPE) pipe, the most common and protective type of pipe used for moving contaminated water. The pipes carrying treated water from the treatment plant to injection wells will be single-walled HDPE pipe.

The pipes will be buried in trenches under the streets. This work will be similar to other types of utility work you may have seen. Sometimes, road lanes and intersections will have to be closed for a short period of time while crews dig trenches to install the pipelines. See Figure 2 for an example of how trenching work will look.



Figure 3: Drill Rig



Figure 4: Well Vaults

The Groundwater Remedy Infrastructure requires a total of 22 wells: 14 to extract (or “pull out”) the water and 8 to re-inject (or “put back”) the water. Eleven of the 22 wells have already been completed. An additional 11 wells will be dug as part of this construction project. All of the wells will be below street level and securely locked in concrete vaults. See Figure 3 for a photo of the kind of drill rig used to drill a well.

Figure 4 is an example of covers to the concrete vaults that will hold the underground well. Dust and air monitoring will be conducted during all construction activities, and plans are in place to ensure that dust does not blow into homes or businesses during the construction work.

Will the workers I see at the work site be from the EPA?

EPA is the government agency that is overseeing the clean up of the Superfund sites. Most of the workers you will see are contractors working for Montrose (with EPA oversight). If you have any questions or concerns, please contact one of the people listed below.

Since this work involves construction activity in the neighborhoods surrounding the Montrose and Del Amo sites, EPA is providing this update and public meeting opportunity to be sure you know what is happening and why the construction is taking place.

Major Chemical Contaminants

Chemical	Uses	Dissolves in Water	Vaporizes in Air	Potential Human Health Concerns
DDT	Pesticide	No	No	Cancer, Liver problems
Chlorobenzene	Manufacturing of DDT	Poorly	Poorly	Liver problems
Benzene	In Petroleum, in Chemical Manufacturing	Poorly	Yes	Cancer, Blood Disorders
TCE	Solvent, Degreaser	Slightly	Yes	Cancer, Kidney, Developmental effects

United States Environmental Protection Agency, Region 9
75 Hawthorne Street (SFD-6-3)
San Francisco, CA 94105
Attn: Dana Barton (Montrose 2/13)

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For More Information

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**Toll-free number to leave
a message:** (800) 231-3075

EPA's Information Repositories

Many of the Montrose site reports, fact
sheets, and other related documents can
be viewed at:

Torrance Civic Center Library
3301 Torrance Boulevard
Torrance, CA
(310) 618-5959

Carson Public Library
151 E. Carson Street
Carson, CA
(310) 830-0901

Additional Information

**About the Montrose
Superfund Site:**



EPA's Website:

www.epa.gov/region09/Montrose

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