



SAN FERNANDO VALLEY AREA 2 SUPERFUND SITE

Glendale North and South Operable Units

U.S. ENVIRONMENTAL PROTECTION AGENCY • REGION 9 • SAN FRANCISCO, CA • AUGUST 1998

Construction of Glendale Groundwater Treatment Plant Under Way

Introduction

The U.S. Environmental Protection Agency has prepared this fact sheet to update the community on activities at the San Fernando Valley Area 2 Superfund Site, which involves contaminated groundwater in the San Fernando Valley Basin. A major activity currently underway at the site is the construction of the Glendale North and South Operable Units (OUs). An OU is an area where an interim action is taken as part of an overall site cleanup. The Glendale OUs are the final OUs EPA intends to construct for the San Fernando Valley Groundwater Basin before EPA determines the final remedy for the basin (see Figure 1). This fact sheet provides background information about the site, describes the treatment facilities, and discusses construction and other activities at the site.

EPA encourages the public to attend and participate in the community meeting on September 16, 1998, at 7:00 p.m. at the Glendale Public Library, 2nd Floor Auditorium, 222 East Harvard Street, Glendale. At the meeting, EPA will explain the plans for the treatment facilities, the construction activities, and give an update on site activities.

COMMUNITY MEETING

You are cordially invited to a community meeting regarding construction and other activities at the San Fernando Valley Superfund Site, Glendale North and South Operable Units.

**Wednesday
September 16, 1998
7:00 p.m.**

**City of Glendale
Public Library
2nd Floor Auditorium
222 East Harvard Street
Glendale, CA**

Representatives of the EPA, the City of Glendale, and the Glendale Respondents Group (GRG) will answer questions from the public regarding the site.

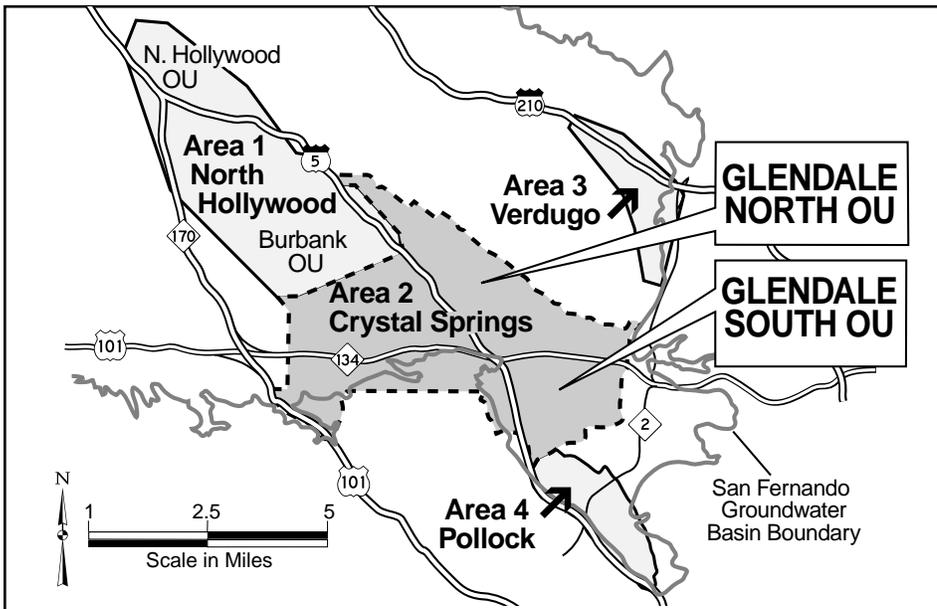


Figure 1: San Fernando Valley Superfund site

Cleanup Strategy

EPA listed the San Fernando Valley sites on the National Priorities List (NPL) in 1986. EPA conducted a basin-wide Remedial Investigation (RI) of all of the sites, and simultaneously began implementing OUs, adopting Records of Decision (RODs) requiring interim cleanups in 1987 (North Hollywood) and 1989 (Burbank). In January 1992, EPA completed the RI describing the nature and extent of groundwater contamination in the Glendale North and South Areas. In April 1992, EPA completed the Feasibility Study (FS) for the areas, and proposed cleanup plans for both areas later that year. EPA finalized the RODs in June 1993, selecting groundwater pump and treat as the interim cleanup remedy. The remedy is expected to operate for 12 years.

Similar to the systems imple-

mented in North Hollywood and Burbank, EPA proposed that the treated water would be supplied to the City of Glendale (City) or another municipality willing to accept the water for distribution in their water system, or if that option was not available, the treated water would be reinjected into the aquifer or disposed of at water spreading grounds.

Parties Doing the Cleanup

EPA identified a number of parties as potentially responsible for the volatile organic compound (VOC) contamination. These parties joined together to form the Glendale Respondents Group (GRG). The GRG is paying the costs for the cleanup, including the design, construction, and operation and maintenance of the treatment facilities.

Design of Treatment Facilities

In March 1994, EPA entered into an agreement with the Glendale Respondents Group to design the remedy for the cleanup. The GRG completed the design in September 1996, which consists of a plant capable of treating 5,000 gallons per minute (gpm) of contaminated water extracted from eight wells. The extraction wells form a containment barrier across the VOC contamination. The Glendale North OU extraction wells have a capacity of 3,300 gpm, and the South OU extraction wells have a capacity of 1,700 gpm. EPA approved the design in November 1996.

Treatment Technologies

The treatment plant uses two treatment technologies to remove

Site Background

San Fernando Valley (Area 2) is an area of contaminated groundwater covering approximately 6,680 acres near the Crystal Springs Well Field in the Cities of Glendale and Los Angeles. This area is part of the San Fernando Valley Groundwater Basin, an aquifer which, prior to the discovery of contamination, had provided drinking water to more than 800,000 residents of the Cities of Los Angeles, Glendale, and Burbank, and the La Crescenta Water District. Approximately three million people reside within three miles of this site.

In 1980, concentrations of chlorinated VOCs, including trichloroethylene (TCE) and perchloroethylene (PCE), were found to be above Federal Maximum Contaminant Levels (MCLs) and State Action Levels (SALs) in a number of city production wells. Those solvents were widely used in a number of industries including aerospace and defense manufacturing, machinery degreasing, dry-cleaning, and metal plating. Some contaminants currently affecting the basin's water supply can be traced as far back as the 1940s, when chemical wastes' disposal went unregulated throughout the Valley. In response to the public health threat, the cities were forced to either shut down their wells and provide alternate sources of drinking water or blend contaminated well water with water from clean sources.

Results of a groundwater monitoring program conducted from 1981 to 1987 revealed more than 50 percent of the water supply wells in the eastern portion of the San Fernando Valley Groundwater Basin were contaminated. Approximately 50 public drinking water supply wells are located within the Area 2 site perimeter. The shutdown of these wells has resulted not only in the cities turning to more expensive sources of drinking water, but in the loss of a substantial drinking water source in an area where this resource is already scarce.

VOCs from the water (See Figure 2). The primary VOC removal technology is air stripping commonly referred to as packed tower aeration. In air stripping, the contaminated water is pumped to the top of a tower and discharged through a series of nozzles into the packing material in the tower. Simultaneously, air is forced upward through the packing material at the bottom of the tower. As the water trickles down through the packing, the air “strips” the VOC from the water since VOCs have a greater attraction for air than water. Clean water exits the bottom of the tower while the VOC-laden air exits the top.

The clean water then passes through a liquid phase granular

activated carbon (LPGAC) system. The LPGAC system is the “polishing” step of the water treatment process, to ensure that only water meeting all drinking water standards, except for nitrates, leaves the treatment plant. Nitrate levels are addressed at a later stage of the process.

The air that exits the air stripper is sent to a vapor phase granular activated carbon (VPGAC) system to remove the VOCs before the air is discharged to the atmosphere. The discharged air will meet all South Coast Air Quality Management District (AQMD) requirements. The recovered VOCs will be disposed of at an EPA approved facility.

Nitrate levels in the treated groundwater are reduced to drink-

ing water standards by blending the treated water with Metropolitan Water District (MWD) water. This blending will take place at Glendale’s Grandview Pump Station (GVPS) before the treated water is served to the public. The treated, blended groundwater will meet all federal and state standards for drinking water.

Construction Activities

Construction for the Glendale OUs will occur in three primary areas (see Figure 3). The water treatment plant (WTP) and the North OU extraction wells are located near the Glendale Recycling Center and the Grayson Power Plant. The South OU extraction

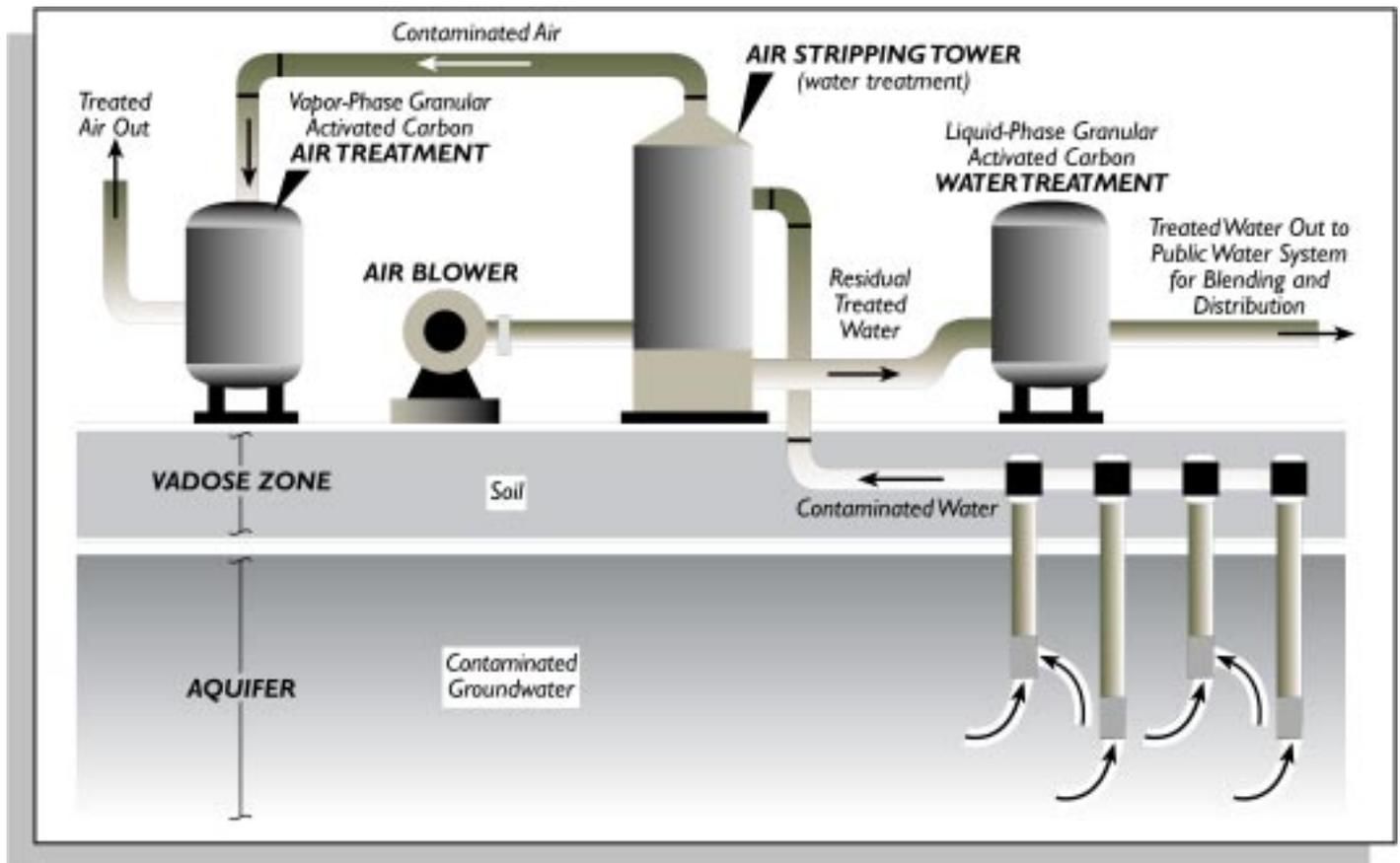


Figure 2: Groundwater Treatment Technology

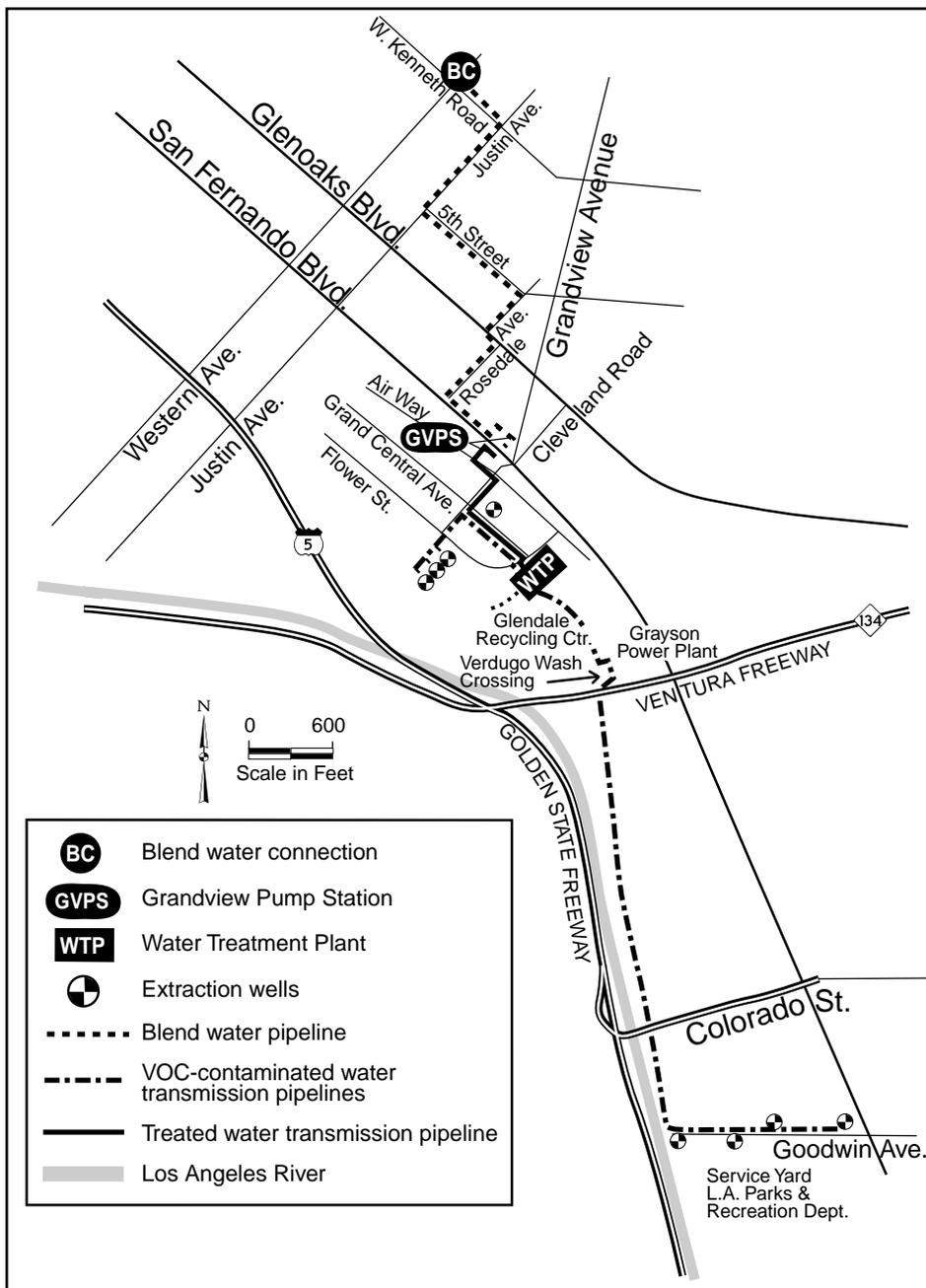


Figure 3: Glendale Operable Units

wells are located on Goodwin Avenue and in the Central Service Yard of the Los Angeles Department of Recreation and Parks. The transmission pipeline from the South OU wells to the treatment plant is located along the Los Angeles River. This pipeline crosses the Verdugo Wash, runs along the river near the Grayson Power Plant,

and finally connects with the water treatment plant.

The City will also be building a blending pipeline and refurbishing the Grandview Pump Station during this period. The blending pipeline starts at an MWD connection on Western Avenue and West Kenneth Road, and makes its way through various City streets, before connect-

ing into the pump station located near San Fernando Road and Grandview Avenue.

• Site Activities to Date

In November 1996, EPA issued Unilateral Administrative Order 97-06 to the GRG to start preconstruction activities for the treatment facilities. These activities included selecting contractors, obtaining lease agreements for various properties, and preparing various construction plans, including the construction quality assurance project plan, health and safety plan, contingency plan, remedial action work plan, operational sampling and analysis plan, and performance standards assessment plan. These activities were completed in September 1997.

In September 1997, EPA issued Unilateral Administrative Order 97-18 to the GRG to start construction of the treatment facilities. So far, the GRG has completed construction of three extraction wells, and has started construction of the treatment plant and various collector and transmission pipelines.

• Future Construction Activities

The major construction activities for the treatment facilities have recently begun. These activities include constructing the water treatment plant, pipelines, and the remaining five extraction wells.

As in any construction project, there will likely be some inconveniences to the community such as traffic, noise, and dust in the air. EPA, the City, and the GRG are taking steps to minimize these inconveniences by issuing traffic advisories, using equipment and machinery that create minimum

noise levels, and implementing dust control measures where necessary. If there are any special concerns EPA should be aware of, please call Duane James, EPA's Remedial Project Manager, at (415) 744-2253 or (800) 231-3075.

Operation and Maintenance

The treatment plant will be ready for operation by summer of 1999 delivering 5,000 gpm to the City. The City will own and operate the treatment plant after an initial startup and shakedown period by the GRG. During the shakedown period, the GRG will conduct all

necessary diagnostic testing to ensure that the plant produces safe drinking water and operates safely before turning operations over to the City. All of the GRG's work is conducted under EPA oversight, and in coordination with other state and local agencies, including the California Department of Toxic Substance Control (DTSC) and the California Department of Health Services Office of Drinking Water (DHS).

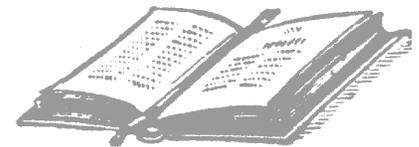
Consent Decree

EPA, the City, and the GRG are currently negotiating a Consent Decree, an agreement which will be

entered in the Central District of California federal court as a settlement of EPA's claims against the GRG. This agreement describes, among other things, the construction, operation and maintenance of the treatment plant, and EPA's oversight of all site work. After an agreement has been reached, a U.S. District Court will review the agreement before approving it. While the Court reviews the agreement, the public will also have an opportunity to review the agreement which will be published in the Federal Register. The public can send their comments to the Court. ■

Information Repositories

Copies of technical documents relating to the site are available for review at the following locations:



City of Glendale Public Library
222 East Harvard Street
Glendale, CA 91205
(818) 548-2021

Los Angeles Department of Water and Power (LADWP) Library,
111 North Hope Street, Room 518
Los Angeles, CA 90012
(213) 367-1994

U.S. EPA Superfund Records Center
95 Hawthorne Street, Room 403
(SFD-7-C)
San Francisco, CA 94105
(415) 536-2000

Some of these documents may also be viewed online at EPA's website: www.epa.gov/region09/waste

Mailing List Coupon

If you would like to be on our mailing list to receive information about the site, please complete and return this coupon to Jacqueline Lane, Community Involvement Coordinator, U.S. EPA, Region IX, 75 Hawthorne Street (SFD-3), San Francisco, CA 94105, (800) 231-3075 or (415) 744-2267.

Name:

Address:

Telephone:

Affiliation (if any):

For More Information

If you have any questions or would like more information about activities at the site, please contact those listed below.

Jacqueline Lane

Community Involvement Coordinator
U.S. EPA, Region IX
75 Hawthorne Street (SFD-3)
San Francisco, CA 94105
(800) 231-3075 or (415) 744-2267

Duane James

Remedial Project Manager
U.S. EPA, Region IX
75 Hawthorne Street (SFD-7-4)
San Francisco, CA 94105
(415) 744-2253

Randy Wittorp

EPA Media Contact
U.S. EPA, Region IX
75 Hawthorne Street (CGR-3)
San Francisco, CA 94105
(415) 744-1589

You may also visit EPA's website at www.epa.gov/region09/waste. From this page, select San Fernando Valley Superfund site.

Printed on Recycled  Recyclable Paper

United States Environmental Protection Agency
Region 9
75 Hawthorne Street (SFD-3)
San Francisco, CA 94105
Attn: Jacqueline Lane

Official Business
Penalty for Private Use, \$300

PRESORTED
FIRST CLASS MAIL
POSTAGE & FEES
PAID
U.S. EPA
Permit No. G-35