OMEGA CHEMICAL SUPERFUND SITE

U.S. Environmental Protection Agency • Region 9 • San Francisco, CA • September 2009

EPA Issues Draft Remedial Investigation Report for Downgradient Plume at Omega Site

The United States Environmental Protection Agency (EPA) and two groups of potentially responsible parties (PRPs) have been conducting an investigation of the **groundwater** and soil contamination at the Omega Chemical Corporation **Superfund** Site (Omega Site) in Whittier, CA. This fact sheet summarizes the Draft **Remedial Investigation** (RI) for Operable Unit 2 (OU-2), which is defined as the area of contaminated groundwater downgradient of the former Omega Chemical facility. This area has been impacted by the release (via spills and leaks) of hazardous substances at the former Omega Chemical Corporation facility (see map Figure 1).

EPA completed the Draft RI report for OU-2 in March, 2009, and the report is available on-line at www.epa.gov/region09/OmegaChemical. The Draft RI report summarizes investigations that EPA conducted to characterize the nature and extent of groundwater contamination, including the kinds of contaminants, where they are located, and at what depth. To conduct the RI, the EPA reviewed existing data and generated new data by collecting and analyzing groundwater and soil samples from locations **downgradient** from the former Omega Chemical facility.

Contaminants of Concern

The primary **contaminants of concern** (COCs) at the Omega Site are **volatile organic compounds** (VOCs), meaning that they evaporate readily in air. Semi-volatile organic compounds (SVOCs) which evaporate less readily than VOCs, including 1,4-dioxane, are also present at the Omega Site. The primary VOCs of concern are tetrachloroethene (PCE), trichloroethene (TCE), and 1,1-dichloroethene (1,1-DCE). PCE and TCE are solvents that have been widely used by industry as cleaning and degreasing agents. 1,1-DCE is not commonly used in commercial products, but can be formed when other VOCs degrade. Another group of VOCs, Freons, are also contaminants at the Omega Site. Freons are used as coolants and pressurizers in spray can products.

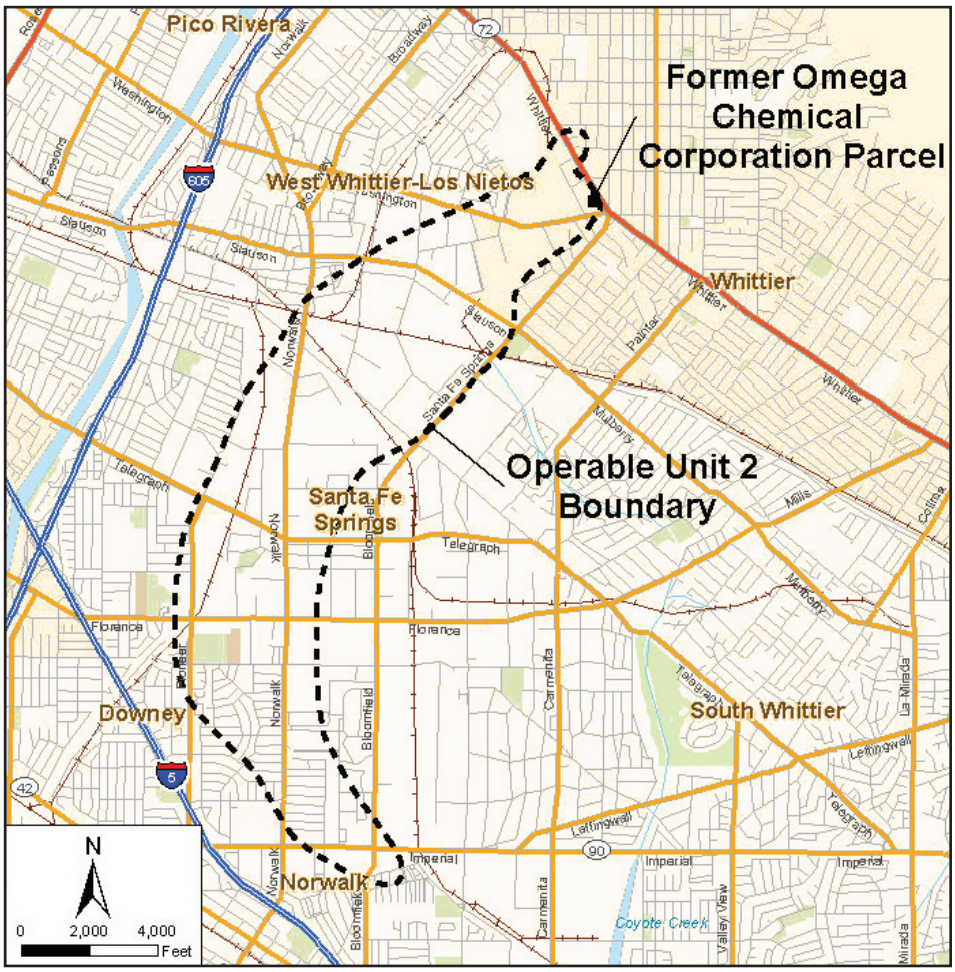

Figure 1: Site Location Map

*Words in **bold** are defined in the Glossary on page 3

Site Background

The Omega Chemical Corporation was a solvent and refrigerant recycler that operated from approximately 1976 to 1991, in Whittier, California. Drums and bulk loads of waste solvents and other chemicals from various industrial activities were processed at the Omega property to form commercial products. As a result of spills and leaks, the soil and groundwater beneath the Omega property became contaminated. In 1995, a group of PRPs, later known as the Omega Chemical Site PRP Organized Group (OPOG), performed the removal of approximately 2,700 drums under EPA oversight.

To better handle large site cleanups, EPA often separates site investigation and cleanup actions into parts called Operable Units. At the Omega Chemical Superfund site, Operable Unit One (OU-1) includes soil and groundwater contamination on and near the former Omega property). Operable Unit Two (OU-2) consists of the groundwater contamination that has migrated downgradient (moving southwest) of OU-1 (see Figure 1).

In September 2005, EPA selected an interim containment action for the highly contaminated groundwater within OU-1. A pump and treat system to contain the groundwater within OU-1 has been constructed and is now operational. OPOG completed a remedial investigation (RI) and **feasibility study** (FS), for OU-1 soils in May 2008, which evaluated the nature and extent of soil and soil vapor contamination associated with the former Omega property. In September 2008, EPA issued a **Record of Decision** for OU-1 soils, in which EPA memorialized its selection of a **soil vapor extraction** (SVE) system to remove and treat the chemical vapors that are in the soil within OU-1. A series of SVE wells will be used to pull the contaminant vapors out of the soil and into a **granular activated carbon** (GAC) filter. Once the contaminants are removed by the GAC filter, the clean air created through this process will be released into the atmosphere.

EPA conducted an Indoor Air sampling investigation in the vicinity of OU-1 and sampling results revealed that volatile organic compounds (VOCs), had migrated from contaminated soil and groundwater and accumulated in some nearby buildings. The indoor VOC levels were highest in Skateland, adjacent to the former Omega property. In April 2006, EPA directed OPOG to undertake an indoor air cleanup action at Skateland. However, in September 2006, OPOG purchased the Skateland property and in 2007 demolished the building, eliminating the need for the proposed indoor air cleanup action. EPA continues to monitor and investigate Indoor Air levels in the vicinity of OU1. In early 2009, EPA directed OPOG to implement temporary indoor air measures including air purifiers and increased air circulation at facilities adjacent to the former Omega property

In addition, EPA has been conducting a remedial investigation (RI) for OU-2 groundwater and released a draft RI report in March 2009. EPA is now working on a feasibility study (FS) to evaluate potential cleanup alternatives for OU-2.

Draft Remedial Investigation Results

The Draft RI found that high concentrations of VOCs are present in the groundwater that is found at depths of between 30 and 100 feet below ground level. The groundwater plume is approximately 4.2 miles in length. Drinking water typically comes from separate aquifers at depths greater than 200 feet in this area. Of the VOCs detected, PCE is generally present at the highest levels. The contamination decreases as the plume moves to the south and southwest (see Figure 1). Other contaminants are also present in the OU-2 groundwater, including TCE, 1,1-DCE, various other VOCs, hexavalent chromium, fuel hydrocarbons, and other chemicals.

In addition to identifying the nature and extent of the contamination, and a review of removal action alternatives to contain contaminated groundwater, EPA conducted a human health risk assessment (HHRA) as part of the Draft RI, which identified possible ways that people might be exposed to the OU-2 groundwater contamination. The HHRA concluded that there is no substantial risk to residents from contaminant volatilization from groundwater, and subsequent contaminant vapor migration through soil and intrusion into buildings within the OU-2 area.

EPA will continue to collect data and update the Draft RI report while we undertake the next phase of the Superfund process, called the Feasibility Study. In this phase, EPA develops cleanup objectives, evaluates possible cleanup technologies and combines them, as appropriate, into possible cleanup. An FS evaluates each alternative against a standard set of criteria used by EPA in the selection of Superfund cleanup actions. The development and evaluation of alternatives will be described in the OU-2 FS, scheduled to be released in 2010.

Following the FS, EPA will issue a **Proposed Plan** that describes the various clean up alternatives reviewed, and EPA's preferred option for cleanup of any contamination that poses a significant threat to human health or the environment. The Proposed Plan will be available for public comment shortly after the FS is completed. There will be a 30-day comment period and a public meeting so the public comment on the Proposed Plan. EPA will consult State and local agencies and consider public comment before selecting the remedy for OU-2.

Technical Assistance Program

A Technical Assistance Grant (TAG) is available for citizens who live near a Superfund site. The grant helps qualified citizen groups affected by a Superfund site hire an independent technical advisor to help interpret and comment on site-related information. An initial grant of up to $50,000 is available. For further information about the grant, please call us and request an application (toll-free at 800-231-3075) or get it from the TAG web page by going to the following EPA website: http://www.epa.gov/superfund/community/tag/index.htm

Site Information Repositories

EPA maintains site information repositories at the locations below. These **Information Repositories** contain project documents, fact sheets and reference materials. EPA encourages you to review these documents to gain a more complete understanding of the site. EPA also has a site information web page at: www.epa.gov/region09/OmegaChemical.

Whittier Public Library
7344 S. Washington Avenue
Whittier, CA 90602
(562) 464-3450
Mon, Tues, Wed. 10:00 a.m. to 9:00 p.m.
Thursday, Friday 10:00 a.m. to 6:00 p.m.
Saturday 10:00 a.m. to 5:00 p.m.

U.S. EPA Superfund Records Center
95 Hawthorne Street
San Francisco, CA 94105
(415) 536-2000
Monday-Friday 8:30 a.m. to 4:00 p.m.

Glossary of Terms

Contaminants of Concern: Site-specific chemicals that exceed regulatory levels or pose a potentially significant risk to human health and the environment.

Downgradient: in the direction of groundwater flow

Feasibility Study: A study that determines the best way to clean up environmental contamination.

Granular activated carbon is a form of carbon that has been processed to make it extremely porous and thus it has a very large surface area available for adsorption of chemicals.

Groundwater: The supply of water found below the ground surface, usually in aquifers.

Information Repository: A location accessible to community members (such as a local library) that houses documents, reports and other site-related information and Administrative Records for the site. EPA also maintains an information repository for all Superfund sites at its offices in San Francisco.

Proposed Plan: A document that summarizes the cleanup alternatives evaluated as part of the feasibility study process, and identifies the preferred cleanup alternative.

Remedial Investigation: The process of determining the nature and extent of hazardous material contamination at a site, and assessing risks to human health and the environment for the purpose of developing and evaluating remedies.

Record of Decision: The document that formalizes EPA's decision to implement a specific remedial action.

Soil Vapor Extraction Soil vapor extraction or *SVE* removes harmful chemicals, in the form of vapors, from the soil above the water table. Vapors are the gases that form when chemicals evaporate. The vapors are extracted (removed) from the ground by applying a vacuum to pull the vapors out.

Superfund: The federal program established under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), to clean up the nation's uncontrolled hazardous waste sites.

Vapor Intrusion: The process by which contaminant vapors migrate through subsurface soils and enter overlying buildings. The source of the vapors is usually contamination in soils and/or groundwater.

Volatile Organic Compounds: Carbon-containing chemical compounds that evaporate readily at room temperature.

OMEGA CHEMICAL SUPERFUND SITE

EPA Issues Draft Remedial Investigation Report for Downgradient Plume at Omega Site

U.S. EPA Contacts

Jackie Lane
Community Involvement Coordinator
U.S. EPA Region 9 (SFD-6-3)
Direct: (415) 972-3236
Toll-free: (800) 231-3075
lane.jackie@epa.gov

Lynda Deschambault
Remedial Project Manager
U.S. EPA Region 9 (SFD-7-1)
Direct: (415) 947-4183
Toll-free: (800) 231-3075
deschambault.lynda@epa.gov

U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

United States Environmental Protection Agency
Region 9
75 Hawthorne Street (SFD-6-3)
San Francisco, CA 94105
Attn: Jackie Lane (Omega 9/09)

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

Official Business
Penalty for Private Use, $300

Address Service Requested