



SOLA OPTICAL USA, INC. SUPERFUND SITE



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U.S. EPA Reviews Cleanup of Site

The United States Environmental Protection Agency (EPA) has completed its second Five-Year Review for the Sola Optical USA, Inc. Superfund Site (Site) in Petaluma, California. The purpose of the five-year review process is to evaluate whether a Superfund cleanup remedy is still protective of human health and the environment. This fact sheet summarizes the findings of the Five-Year Review and explains how you can get a copy of the report.

Summary of Five-Year Review Findings

This five-year review was completed in September 2005. The first five-year review for this Site was completed in September 2000, and the next five-year review will be performed in 2010.

The cleanup for this site is still underway. When it is completed, all contaminant levels will meet the cleanup standard, and use of the property will not be restricted or limited in any way. The result of the five-year review is that

EPA has determined that the remedy (as specified in the 1991 Record of Decision [ROD] for the Site) is currently protective of human health and the environment. This is because the groundwater contamination has been reduced below federal regulatory levels in all but a very limited area around one well, and no one is currently being exposed. However, in order for the remedy to continue to be protective in the long term, the following must occur:

1. The groundwater cleanup standard of 5 micrograms per liter, for a chemical called 1,1-Dichloroethane (1,1-DCA), must be attained.

2. EPA must identify, select and monitor institutional controls to prevent inappropriate use of the groundwater that is still contaminated above cleanup levels. Institutional controls are legal mechanisms that control activities at a site, such as permit rules or land-use restrictions.

In addition, EPA will need to change its ROD, since the previously selected remedy (groundwater extraction and treatment) is no longer being used. EPA is using a different cleanup strategy, Monitored Natural Attenuation, (MNA) (for more details, see text box and EPA Recommendations on page 2.)

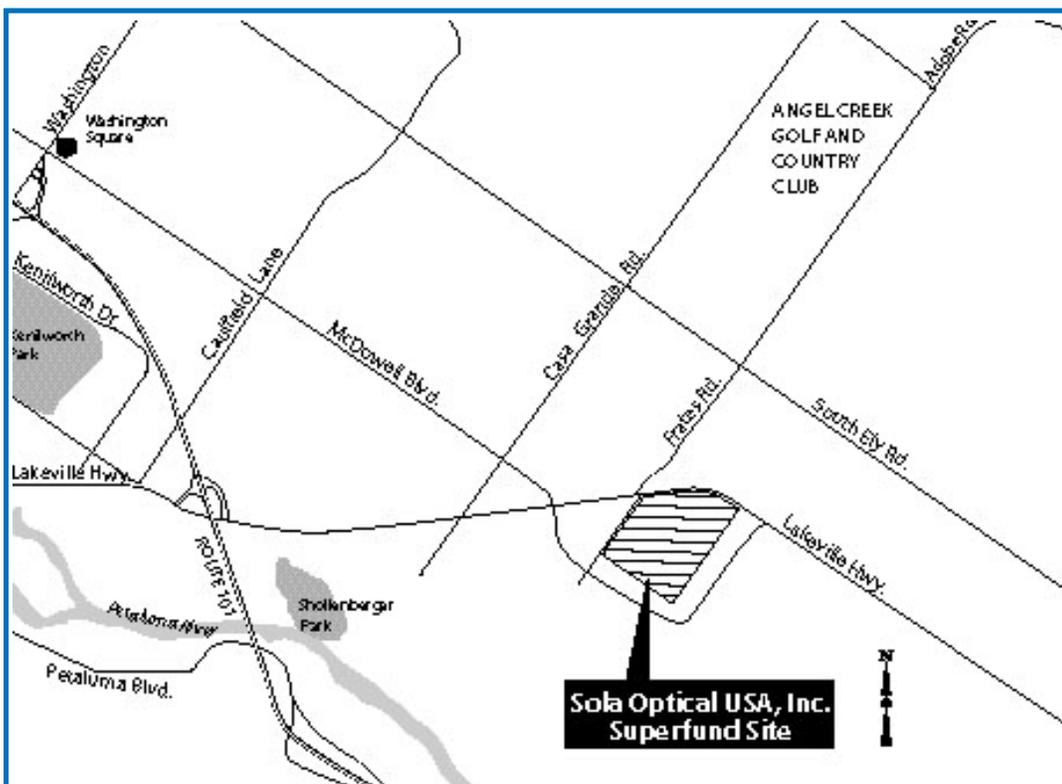


Figure 1: Sola Optical Superfund Site location

Cleanup Remedy Selected in 1991 ROD

The remedy for the Site, as specified in the 1991 ROD, called for:

- Converting two deep monitoring wells to extraction wells, to prevent the movement of contaminants into the deeper portion of the aquifer;
- Constructing two additional shallow extraction wells, to reduce the clean-up time;
- Using the existing carbon filter system to treat any water discharged off-site to Adobe Creek;
- Monitoring the groundwater to confirm capture of the contaminant plume and to measure progress towards achieving the cleanup standard of 5 micrograms per liter.



Figure 2: Location of prior contaminant release

WHAT IS MONITORED NATURAL ATTENUATION?

Monitored Natural Attenuation, or MNA, is the process whereby contaminated groundwater is cleaned-up by natural forces. These natural forces include a variety of natural, physical, chemical or biological processes that, under favorable conditions, act without human intervention to reduce the concentration of contaminants in groundwater. Removal or control of the contamination source and long-term performance monitoring are essential components of an MNA remedy. Scientists must monitor these conditions to ensure the desired clean-up is occurring.

EPA Recommendations

EPA concluded that the remedy at the Sola Site currently is protective. However, several issues were identified and the following recommendations were made:

- **MNA** – Because the cleanup goal for 1,1-DCA has not yet been met, EPA recommends:
 - Continue to monitor and review the data;
 - Assess possible enhancements to the natural attenuation;
 - Amend the ROD to reflect the changes to the remedy.
- **Institutional Controls** – Because the ROD did not include institutional controls to prevent unauthorized use of the groundwater that has not yet been fully cleaned-up, EPA recommends:
 - Assess the adequacy of existing governmental controls to limit groundwater use at the Site;
 - Evaluate the potential for current commercial development to result in exposure to contaminated groundwater;
 - Amend the ROD to select the appropriate institutional controls.

SITE BACKGROUND

Sola Optical USA, Inc. manufactured optical lenses on this 35-acre Site from 1978 through 2001. The facility consisted of a manufacturing building and an adjoining administration office building. Six 1,000 gallon underground storage tanks, located behind the north corner of the manufacturing building, were used for storing solvents.

In 1982, the California Department of Health Services identified acetone in an on-Site well. Subsequently, Sola reported that soil adjacent to the six underground solvent storage tanks was contaminated with volatile organic compounds (VOCs), as was the shallow groundwater beneath the facility. In 1986, the State found low levels of solvents in the Petaluma #5 City Well. The well was shut down until the groundwater cleanup could be completed. Affected residences were connected to the Petaluma Water Department distribution system.

Active groundwater extraction and treatment occurred at the Site from 1988 to 1997, in accordance with the 1991 ROD. By 1997, the groundwater extraction system was no longer succeeding in reducing contamination concentrations, so it was shut down and monitored to see if contamination concentrations increased again. The concentrations did not increase, so in 2001, the groundwater treatment system was dismantled. Monitored Natural Attenuation ("MNA") is now being used for the Site. A ROD Amendment will be prepared in 2006 to document this approach.

The Sola manufacturing facility closed in October 2001, and the property was sold in 2002. The other part of the Site, an eleven acre property adjacent to the manufacturing facility, had been previously sold to RNM Properties in 2000 for commercial development. Sola Optical, Inc., no longer owns any of the Site. The former manufacturing facility is currently used by at least two different tenants, who use the main building and loading docks.



Figure 3: Location of groundwater under treatment

U.S. EPA Reviews Cleanup of Sola Optical Superfund Site

INFORMATION REPOSITORIES

Two information repositories hold the Second Five-Year Review Report, as well as other relevant documents, for Sola Optical USA, Inc:



Petaluma Public Library

100 Fairgrounds Drive

Petaluma CA 94952

(707) 763-9801

Mon, Thurs, Fri, Sat:

10:00 a.m. to 6:00 p.m.

Tues, Wed: 10:00 a.m. to 9:00 p.m.

Superfund Records Center

95 Hawthorne St., Room 403

Mail Stop SFD-7C

San Francisco, CA 94105

(415) 536-2000

Mon-Fri: 8:00 a.m. to 5:00 p.m.

Find it on the Web... You can obtain the Five-Year Review Report, as well as other site information, from EPA's Web site at: <http://www.epa.gov/region09/waste/sfund/superfundsites.html>
Click on "Site Overviews" and scroll to "Sola Optical USA Inc." See the "Site Document and Reports" section.



Other Web Pages... More information about the Site is available on the following EPA Web page: <http://cfpub1.epa.gov/supercpad/cursites/csitinfo.cfm?id=0902280>

FOR MORE INFORMATION

If you have questions about the Sola Optical Superfund Site or would like to be added to the mailing list, please contact:

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