Executive Summary

Once the location of an eyeglass manufacturer, the Sola Optical USA, Inc. Superfund site (Sola Optical) in Petaluma, California, is now home to a large industrial park, the Cader Corporate Center and continues to support administrative offices for Petaluma Poultry. During the 1980s, chemicals used in making eyeglasses leaked on site, contaminating soils and groundwater. Sola Optical worked with the U.S. Environmental Protection Agency (EPA) to ensure the safe industrial use of the site, during and after cleanup. The successful cleanup was also compatible with ongoing redevelopment activities at the site, which will support the area’s agricultural economy. Sonoma County has a $750 million agricultural market, dominated by wine grapes, dairy and poultry products, which requires space for storage, processing and businesses that support crop production. This case study explores the site’s cleanup and reuse, illustrating the opportunities, benefits and impacts of Superfund redevelopment in action.

Beneficial Effects

- The site is now home to five businesses. Four of them are part of the newly developed Cader Corporate Center. Petaluma Poultry continues to use the former manufacturing facility for administrative offices and truck parking.
- Light industrial and warehouse space in Sonoma County is 93 percent occupied. The Cader Corporate Center fills a need for this type of space in a rapidly growing region.
- When fully built out, the Cader Corporate Center will provide more than $3.5 million in annual employment income.
- The total market value of properties at the site was over $13.7 million in 2015.

Figure 1. The site’s location in Petaluma, Sonoma County, California.
Introduction

Superfund cleanups restore value to properties and benefit surrounding communities. Once a property is ready for reuse, it can strengthen a local economy by supporting jobs, new businesses, tax revenues and spending. This case study captures the beneficial effects of new and existing development at Sola Optical.

This case study captures the on-site and community impacts of new development at the site. The site is located on the eastern outskirts of Petaluma, about an hour north of downtown San Francisco. The site is just south of route 116 and about a mile east of Highway 101. The site borders Adobe Creek, which flows into the Petaluma River; in total, it spans 35 acres. The Sola Optical Plant covered about 24 acres of the site. Surrounding land uses include mixed industrial and commercial areas, homes, natural areas, and undeveloped open space. According to the Sonoma County Economic Development Board, about 59,540 people live in Petaluma. About 496,253 people live in Sonoma County.¹

Site History

From 1978 to 2001, Sola Optical made eyeglass lenses at a manufacturing facility on site. The company used solvents to produce the lenses, which were stored in six underground storage tanks behind the manufacturing building. In 1982, Sola Optical discovered that the solvents had contaminated soils and groundwater near the tanks. Contaminants included 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), methylene chloride and 1,1,1-trichloroethane (1,1,1-TCA).

The San Francisco Regional Water Quality Control Board ordered Sola Optical to examine the cause of the leak. The company removed the six tanks and additional nearby soils in 1985. However, some contamination remained. Sola Optical removed additional contaminated soil and installed a groundwater treatment and monitoring system. EPA placed the site on the Superfund program’s National Priorities List in 1990.

EPA Site Information: A Community and Redevelopment Resource

According to Cushman and Wakefield, the real estate company responsible for leasing the site property, EPA site documents and remedial project managers addressed community and developer concerns, removing potential redevelopment obstacles. The documents and remedial project managers:

• Provided real-time technical assistance.
• Shared quantifiable information.
• Reduced uncertainty.
• Showed how contaminant levels declined over time.

Site Cleanup and Transformation

EPA selected the final groundwater remedy in the site’s 1991 Record of Decision (ROD). It focused on continuing to treat contaminated water to meet drinking water quality standards. Sola Optical operated the water treatment system from 1992 until 1997 and continued to monitor chemicals in the groundwater.

EPA evaluated the amount of chemicals in the groundwater at the site in 2007. EPA agreed that monitoring the natural breakdown of chemicals in the groundwater was acceptable, but updated the cleanup plan to prevent property owners and tenants from using water below the site as a drinking water supply since the amount of chemicals in the groundwater remained above acceptable levels. EPA also collaborated with Sonoma County on institutional controls that require EPA review of any new well permits on site to ensure the water is safe for public consumption or other uses. After all cleanup goals were met, EPA took the site off the NPL in October 2013.

Beneficial Effects

Supporting Petaluma’s farm economy through redevelopment
Sonoma County supports a large agricultural market with annual values for wine grapes of $468 million, milk products of $119 million and poultry and egg products of $99 million. Given the importance of agriculture in the county, space is needed for storage, processing and for products that support crop production.

The existing use and ongoing redevelopment at the site provide needed support for the agricultural community. The site is now divided into two parcels. The 24-acre area with the former Sola Optical manufacturing building is owned by Kland, L.L.C. Petaluma Poultry leases the 107,000-square-foot facility for truck parking and its administrative offices. The undeveloped 11-acre area in the southwest portion of the site was purchased by RNM Cader, L.L.C. in 2001. RNM Cader, L.L.C. constructed improvements to the site such as building pads and parking lots in 2005 to accommodate office space, but the recession soon after halted redevelopment. New York Life Investments acquired the undeveloped property in 2014 with plans to encourage light industrial use. The undeveloped 11-acre parcel was redeveloped as the Cader Corporate Center.

Businesses and Jobs
Construction of the Cader Corporate Center finished in the fall of 2016. It consists of three buildings that provide over 268,000 square feet of light industrial, manufacturing, storage and distribution and office space. Four local

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businesses – Scott Laboratories, Clover Stornetta Farms, Hydrofarm and Cowgirl Creamery – are located in the Cader Corporate Center.³

Scott Laboratories is a local provider of lab services and fermentation yeast, cellar supplies, packaging, processing and bottling equipment to North American wine, craft brewing and distilled spirit industries. Scott Laboratories is consolidating its Petaluma-area offices at the Cader Corporate Center. Clover Stornetta Farms is a provider of organic and American humane certified dairy products. Cowgirl Creamery is a local dairy business that will make cheese on site. Hydrofarm is a manufacturer of hydroponic systems, supplies and high-intensity halide, sodium and fluorescent grow lights for indoor gardening.

**Property Value and Tax Revenues**

![Figure 4. Views of Cader Corporate Center during construction, 2016.](image)

The vacancy rate for warehouse space in Sonoma County is low, about 7 percent. The site’s redevelopment has helped address this demand, supporting some of the highest leasing rates in the county.⁴ On-site properties also generate property tax revenues that support local government and public services. During the 2014-2015 fiscal year, on-site properties generated $158,338 in local property taxes. These parcels had a combined total estimated property value of over $13.7 million.⁵

**Conclusion**

EPA’s cleanup of the Sola Optical site protected public health and the environment, laying a solid foundation for the future. The detailed site information provided by EPA during the Superfund process addressed community concerns and provided the certainty needed for the development community and prospective tenants to move forward with their plans. Today, the Cader Corporate Center provides much-needed warehouse and office space in Petaluma. Looking forward, the site’s redevelopment may also help foster broader revitalization in the area, serving as a city-wide hub for employment, business growth and community amenities.

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⁴ Interview with Steve Leonard of Cushman and Wakefield, realtor for the site.  
⁵ [http://www.sonoma-county.org/assessor/ParcelMaps.htm](http://www.sonoma-county.org/assessor/ParcelMaps.htm)

*For more information about EPA’s Superfund Redevelopment Initiative (SRI), visit:*  
[https://www.epa.gov/superfund](https://www.epa.gov/superfund)
Technical Appendix

Employment Information for On-site Jobs
EPA obtained the data included in this Technical Appendix directly from reputable sources, and reported the data as presented by those sources.

Information on the number of employees and sales volume for on-site businesses came from the Hoovers/Dun & Bradstreet (D&B) database. EPA also gathered information on businesses and corporations from D&B.

D&B maintains a database of over 225 million active and inactive businesses worldwide. Database data include public records, financials, private company insights, extensive global information, telephone numbers and physical addresses.

When Hoovers/D&B database research could not identify employment and sales volume for on-site businesses, EPA used the Manta database. These databases include data reported by businesses. Accordingly, some reported values might be underestimates or overestimates.

Wage and Income Information for On-site Jobs
EPA obtained wage and income information from the U.S. Bureau of Labor Statistics (BLS). Part of the U.S. Department of Labor, the BLS is the principal federal agency responsible for measuring labor market activity, working conditions and price changes in the economy. Its mission is to collect, analyze and disseminate essential economic information to support public and private decision-making. All BLS data meet high standards of accuracy, statistical quality and impartiality.

EPA used the BLS Quarterly Census of Employment and Wages database to obtain average weekly wage data for businesses at the Sola Optical USA, Inc. Superfund site. Average weekly wage data were identified by matching the North American Industry Classification System (NAICS) codes corresponding with each type of business with weekly wage data for corresponding businesses in Sonoma County. If weekly wage data were not available at the county level, EPA sought wage data by state or national level, respectively. In cases where wage data were not available for the six-digit NAICS code, EPA used higher-level (less-detailed) NAICS codes to obtain the wage data.

To determine the annual wages (mean annual) earned from jobs generated by each of the selected businesses at the Sola Optical USA, Inc. Superfund site, EPA multiplied the average weekly wage figure by the number of weeks in a year (52) and by the number of jobs (employees) for each business.
### Table 1. Sola Optical USA, Inc. Superfund Site: Information for On-Site Organizations and Businesses

<table>
<thead>
<tr>
<th>On-site Business</th>
<th>NAICS Code</th>
<th>NAICS Title</th>
<th>Number of Employees</th>
<th>Average Weekly Wage (2014)</th>
<th>Annual Wage (Mean Annual) per Employee</th>
<th>Total Annual Income</th>
<th>Annual Sales (2015)</th>
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<tbody>
<tr>
<td>Clover-Stornetta Farms, Inc.</td>
<td>311511</td>
<td>Fluid Milk Manufacturing</td>
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<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>Hydrofarm, Inc.</td>
<td>339999</td>
<td>All Other Miscellaneous Manufacturing</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td>Petaluma Acquisition, LLC</td>
<td>311615</td>
<td>Poultry Processing</td>
<td>237</td>
<td>$596.00</td>
<td>$30,992.00</td>
<td>$7,345,104.00</td>
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<tr>
<td>Petaluma Poultry</td>
<td>112390</td>
<td>Other Poultry Production</td>
<td>2</td>
<td>$582.00</td>
<td>$30,264.00</td>
<td>$60,528.00</td>
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<td>Scott Laboratories, Inc.</td>
<td>423990</td>
<td>Other Miscellaneous Durable Goods Merchant Whlsrs</td>
<td>50</td>
<td>$1,306.00</td>
<td>$67,912.00</td>
<td>$3,395,600.00</td>
<td>$100,000,000.00</td>
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<tr>
<td>The Cowgirl Creamery Corporation</td>
<td>424430</td>
<td>Dairy Product (except Dried or Canned) Merchant Wholesalers</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>289</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$10,801,232.00</strong></td>
<td><strong>$100,100,000.00</strong></td>
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- NAICS code provided in the D&B database.
- Data are from the D&B database.
- Average weekly wage per employee based on BLS 2014 Average Weekly Wage data.
- Total annual income figures derived by multiplying “Number of Employees” by “Annual Wage (Mean Annual) per Employee.”
- Not available.

### Property Values and Local Tax Revenue Generated from Property Taxes

EPA obtained data on the most recently assessed values for property parcels at the Sola Optical USA, Inc. Superfund site in September 2016 through property records accessible through Sonoma County’s online property appraisal database (http://www.sonoma-county.org/assessor/searchroll.htm). EPA also obtained 2016 property tax information for the site parcels.

### Table 2. Property Value and Tax Summary for Taxes Payable in 2016

<table>
<thead>
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<th></th>
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<tr>
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<td>1480 CADER LN PETALUMA CA 94954-5644</td>
<td>$6,769,687.00</td>
<td>$77,654.58</td>
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<tr>
<td>--------------</td>
<td>----------------------------------------</td>
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<td></td>
<td>$13,803,725.00</td>
<td>$156,338.64</td>
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