

NPL Site Narrative for Spectra-Physics, Inc.

SPECTRA-PHYSICS, INC. Mountain View, California

Conditions at proposal (June 24, 1988): Spectra-Physics, Inc. (SP) has manufactured electronic equipment and gas lasers on Terra Bella Boulevard and Middlefield Roads in Mountain View, Santa Clara County, California, since 1961. The 11.5-acre site consists of nine buildings in a light industrial complex. SP uses a variety of cleansers, degreasers, and lubricants in its manufacturing processes, including isopropyl alcohol, acetone, methyl alcohol, trichloroethylene (TCE), Freon, 1,1,1-trichloroethane (TCA), and Solvasol Solvent 360. In an inspection conducted in 1981, the California Regional Water Quality Control Board (CRWQCB) found that areas where hazardous wastes were stored had no dikes or systems to collect leachate; rusty barrels were also found on-site.

Ground water investigations began at the SP facility in September 1984 after tests at Teledyne Semiconductor (adjacent and downgradient of SP) indicated possible upgradient sources of contamination. (The Teledyne site was placed on the NPL in July 1987.) Soil and ground water collected at SP contained TCE, TCA, and 1,2-dichloroethylene. SP's plume of contaminated ground water has merged with Teledyne's and migrated off-site. More than 200 private drinking water wells had been drilled into the 1-square-mile plume. Most wells have been closed; 47 were found contaminated above State Action Levels. The owners now obtain water from municipal water supplies. An estimated 189,000 people obtain drinking water from public and private wells within 3 miles of the site.

Teledyne is operating two extraction wells on-site -- one in the shallow zone and one in the intermediate zone. The wells pump the water to the surface and discharge it to the sanitary sewer; the ground water is not treated before discharge. SP will evaluate the effectiveness of this system in preventing its on-site plume from migrating off-site. Both companies are jointly designing an off-site extraction system.

San Francisco Bay (2.5 miles downstream of the site) is used for recreational activities. Permanente Creek is tidally influenced within 1 mile of the site. Several species of birds designated as endangered species by the U.S. Fish and Wildlife Service are found within the area of tidal influence.

Status (February 11, 1991): In February 1990, SP installed a vapor extraction system to reduce concentrations of contaminants in soil.

Under an order issued by CRWQCB, SP conducted a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. The RI/FS was completed in December 1990. In February 1991, CRWQCB will adopt a final cleanup and abatement order requiring SP to implement the best remedial alternative evaluated in the RI/FS. This alternative will include expanding the existing soil vapor extraction system and the ground water extraction system. In April 1991, EPA will complete a Record of Decision describing the selected remedy.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see

the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.