

Toxics and Microchips

The Silicon Valley Toxics Coalition Battles Local Industry

In January 1982, a brief article about the contamination of a well in South San Jose, Calif., appeared on the inside pages of the *San Jose Mercury News*. An anonymous tip had led a reporter to the story.

The contaminants were deadly industrial solvents used to "degrease" microchips — trichloroethane and dichloroethylene — that had leaked from an underground storage tank at a Fairchild Camera and Instrument plant. The chemicals, which have been linked to health problems in the cardiovascular and central nervous systems, seeped into the soil and into the nearby well, which had supplied drinking water to 16,500 homes before it was closed in December 1981. Neither state officials nor the Great Oaks Water Company, which operated the well, gave the public any reason for the closing.

Public reaction to the news story was immediate. Local residents were worried that the contamination was the cause of the unusual number of stillbirths, miscarriages and birth defects in their area. For although there was no scientific evidence connecting the industrial chemicals from the Fairchild leak to birth defects, the rate of abnormal births in South San Jose was higher than other cities in California's Santa Clara County. Moreover, a study by state health officials more than a year after the well had been closed found that the rate had returned to normal.

Convinced the contaminated water had caused the health problems, residents who had been exposed to the toxic chemicals joined environmental organizations, firefighters and labor unions to form the Silicon Valley Toxics Coalition (SVTC) in July 1982.

The founding of the coalition marked a key point in California's fight against toxic chemicals. Before the Fairchild leak, the microchip and computer industries located in the Santa Clara Valley—better known as Silicon Valley—had enjoyed a longstanding public misconception about the nature of the high-tech industry, according to attorney Ted Smith, who helped form the SVTC. In Smith's view, the toxics coalition was formed at a time when most of the world still thought the industry was a "clean" business.

But the industry in Silicon Valley is based on a technology dependent on toxic chemicals, as people who were



Ted Smith and friends at a rally.

concerned about worker exposure knew all along. Smith had represented local employees in workers compensation cases, and he and others involved with the Santa Clara Center for Occupational Safety and Health knew production workers who made the chips were getting sick from chemical exposure. Moreover, a 1980 report by state health officials showed that occupational illness rates were three times higher for workers in the semiconductor firms than in manufacturing companies; half of these illnesses were believed to involve exposure to toxic chemicals.

At the time, however, environmental laws were inadequate to deal with the handling of these chemicals. The Great Oaks company, for example, regularly tested the water supply for pesticides and bacteria, but not for industrial chemicals. Nor is the high-tech industry capable of self-regulation, a point Smith learned from firsthand experience. He says the industry is so competitive that companies are "putting all [their] money into making that chip a little bit faster or a little bit smaller," and ignoring the potential health hazards.

"They have a very hard time getting their noses out beyond that quarterly dividend time frame," he says, adding: "We are not just a company town but a whole company valley with a single industry dominant. And all the local politicians are kind of caught in the squeeze; they don't want to piss off the industry."

And this story does not begin and end with Fairchild. After the spill, officials tested 79 companies and found 65

of them had dangerous chemicals leaking into the ground beneath their plants. More public wells were closed, and concern about the problem has continued to grow. Today, there are 150 known toxic spills that have contaminated groundwater in Silicon Valley and, according to the coalition, more than 200 public and private wells have been affected.

The SVTC, meanwhile, has been an effective force in pushing for groundwater protection laws. In 1983, it helped craft and pass the Model Hazardous Materials Storage Ordinance, a local law that requires safer containment and monitoring of chemical storage and which has inspired similar legislation in other parts of the country. The SVTC also led the effort to have 29 federal Superfund sites listed in Santa Clara County, reportedly the largest number of sites in any single county in the country. And it campaigned for the passage in 1986 of Proposition 65, the state toxics initiative that identifies the most dangerous chemicals used in industry, outlaws their discharge into drinking water and requires businesses using the chemicals to issue clear warnings to the public of their potential danger.

Today, the SVTC continues to expand, reaching beyond issues concerning groundwater while still focusing largely on high-tech toxics. The coalition has backed proposed toxic gas legislation that would be the first local law in the country designed to prevent a gas leak disaster and which goes far beyond state and federal regulations, according to Smith. The coalition has also formed a task force to look at ways of reducing the environmental risk from the emission of chlorofluorocarbons (CFCs), which deplete the earth's ozone layer.

Silicon Valley poses a unique challenge. Ten years ago, there was no environmental movement. Today, the public's perception of the high-tech industry is changing, as is the regulation of the industry. While it may be too late to save the aquifer under Silicon Valley, the Silicon Valley Toxics Coalition's impact on public policy may help other areas with similar problems.

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