At Fairchild, new reports of toxic leaks rise to surface

By Susan Yochum and Tim Harris

Since reports of industrial chemicals leaking into a public drinking water system in the Santa Clara Valley were made public two weeks ago, the company has been under increasing pressure to address concerns about the safety of its water supply.

Fairchild is one of several companies that have been identified as possible sources of toxic leaks in the area. The company has been working with regulatory agencies to investigate the issue further.

According to state and federal regulations, companies are required to report any incidents that could impact public health. Fairchild has been cooperative in providing information and samples for testing.

While the source of the leaks remains uncertain, the company is taking steps to address concerns and improve the safety of its water supply.
By Susan Yoachum and Tom Harris
Staff Writers

Since reports of industrial chemicals leaking into ground water in the Santa Clara Valley first came to public attention five weeks ago, no company has come to represent the problem more than Fairchild Camera & Instrument Corp.

The focus on Fairchild sharpened Friday when state water-quality control officials confirmed they are considering civil penalties against Fairchild for chemical contamination of one public drinking well in South San Jose and ground-water contamination at three other Fairchild plants in Santa Clara County.

Two of those leaks were discovered Thursday.

Fairchild officials disclosed Friday that they found new ground-water contamination from industrial solvents at two Fairchild factories in Santa Clara County — one in Santa Clara and another in Palo Alto. The contaminating solvent is trichloroethylene (TCE), a cleaning solvent suspected of causing cancer.

A similar ground-water contamination problem also was found at Fairchild’s San Rafael plant in Marin County. And late Friday afternoon, notice of TCE contamination in two private wells at a Fairchild plant in Healdsburg in Sonoma County was relayed to state water officials, who said they will begin testing water in the area Monday. Fairchild officials could not be reached to confirm the Healdsburg leak.

No drinking water has been found to be contaminated in those four leaks.

Fairchild’s first contamination problem, at its South San Jose plant, forced the shutdown Dec. 5 of a public drinking well. The second contamination problem, made public last week, was found at one of Fairchild’s Mountain View facilities. A private well directly across the street contains dangerous levels of TCE — but there are several semiconductor plants in the area, and it is unclear where the TCE originated.

The solvent leak at Fairchild’s South San Jose plant was only one of a number of chemical-handling problems that have surfaced at the 6-year-old semiconductor plant.

According to state and city inspectors and current and former employees, the problems at the South San Jose facility have included:

- An acid leak that leached into the ground behind the plant as a result of a break in the 12-inch pipe leading to an acid-neutralization tank. City inspectors, who confirmed that leak, learned of it from an anonymous informant. City officials measured the pH of the shallow water deposits at 3.7. That is far more acidic than the 5.02 pH allowed under city standards for release into the waste-water system.
- An outside-air-venting system that was operated without water and other necessary parts. That resulted in what air-pollution authorities called “diminished effectiveness” of the scrubber system for one or two months during 1981.
- Repeated alterations and modifications that were made inside the plant without the required permits. Those changes, documented by air-pollution authorities, were referred to by employees as “musical chairs.”
- Small chemical spills and evacuations that occurred frequently, according to current and former employees.
- A large hydrofluoric acid leak in 1980 that reportedly flowed into the ground unchecked for at least 24 hours. This complaint, and others made by a former employee, are being investigated by the state Regional Water Quality Control Board.

In four of the five sites where Fairchild plants have leaked chemicals into the ground, tests have shown soil and ground-water contamination from the cleaning solvent TCE. The potent solvent has been found in concentrations ranging from as low as 5 parts per billion of water to 500,000 parts per billion. The public-health alert level for TCE is 5 parts per billion.

The smallest levels of TCE were found at Fairchild’s Palo Alto plant at 4001 Miranda Ave., situated near the Veterans Administration Medical Center. Fairchild spokesman John Salazar said that the TCE levels there were “just trace amounts, just above 5 parts per billion.”

At their Santa Clara facility at 3105 Alfred St., Salazar said, the concentrations are “in the range of 10 to 50 parts per million,” or 2,000 to 10,000 times the legal limit. Wednesday, test results confirmed that TCE had seeped into the ground near the Mountain View plant at 369 Whisman Road in dangerously high amounts, as great as 180,000 times the public-health alert level.

Water-analysis tests of public drinking wells in Santa Clara and Mountain View have shown no detectable levels of TCE. Although a private well in Mountain View has been shut down because of TCE contamination.

Palo Alto residents get 100 percent of their water from San Francisco’s Hetch Hetchy system, but Palo Alto officials have ordered tests of the 10 back-up wells as a precaution.

A public drinking well 2,000 feet from Fairchild’s South San Jose plant at 101 Bernal Road has been shut down since Dec. 5, when 1,1,1 trichloroethane was found in the well as much as 25 times higher than the alert level of 300 parts per billion. The cleaning solvent 1,1,1 trichloroethane is a less-potent solvent now favored by industry as a substitute for TCE. Solvents are used in semiconductor manufacturing to degrease and clean silicon chips, which must be ultra-pure.

TCE has not been used by Fairchild in any significant quantities since 1976, Salazar said.

Although Fairchild officials say they are certain that the South San Jose water-contamination problem was caused by a leak from a buried, 5,000-gallon solvent storage tank, Salazar said they don’t know the cause of the other contaminated areas.

Although the ground water clearly has been found to be contaminated, Salazar said “we have not found any leaks around any of the tanks.”

“It’s kind of a mystery,” Salazar said.

Salazar declined Friday to comment on the other reported problems at the South San Jose site, saying that his top priority was to notify the media of the additional TCE contamination problems.

Fairchild did not notify the press of its first two contamination problems. On Jan. 20, the Mercury News reported the South San Jose contamination after receiving an anonymous tip. On Feb. 26, the Mercury News reported the Mountain View contamination after receiving information from a confidential source.