

---

# GLOBAL ELECTRONICS

---

Issue No. 117

December, 1992

---

## IT'S OFFICIAL: CHIP WORK IS UNSAFE

In early December, the Semiconductor Industry Association (SIA) released the results of a three-year, \$3.8 million epidemiological study of 18,000 wafer fabrication workers at 15 companies. The study, conducted by researchers at the University of California at Davis School of Medicine, confirmed that chip production workers suffer a high rate of miscarriage and a host of other ailments associated with on-the-job exposure to toxic chemicals. The UC Davis team singled out glycol ethers, a class of chemicals used in wafer production, as the likely cause of reproductive disorders.

Some observers are surprised that an industry-organized study would admit such a poor health record. However, in Silicon Valley and other high-tech centers, activists who have been attacking the industry's safety record for fifteen years wonder why it took so long for employers just to recognize that problems exist. In 1981, the Santa Clara Center for Occupational Safety and Health published a report documenting that glycol ethers caused reproductive disorders in animals, citing a government study. In 1989, the Silicon Valley Toxics Coalition again documented the link, and in a state-sponsored report it urged the substitution of safer chemicals in the production process.

The SIA organized its study in 1987, after Digital Equipment Corporation released a study showing a high miscarriage rate among production workers at its Hudson, Massachusetts fab plant. Community and worker groups asked to participate in the oversight of the SIA study. Although SIA ignored the activists, it knew it was being watched and contracted with a reputable research team.

This October, the results of a similar study at IBM's chipmaking plant leaked out, showing an extremely high miscarriage rate among workers expose to glycol ethers.

Spokesmen for the chip industry have promised to phase out glycol ethers, but they warn that change will not come instantly. Instead, employers are informing their workers about the study results. One of the firms, Hewlett-Packard, announced, "women employees working in fab areas who are either pregnant or trying to conceive have been advised to consult with their manager to discuss any health concerns. If a transfer is requested, HP will reassign a woman worker to an appropri-

ate alternative job if one is available outside the fab area, according to company management."

While it's good that industry is finally moving in the right direction, its slow pace fails to recognize the human toll of its health and safety practices. The chip industry is known for its flexibility and speed of product innovation, but it appears unwilling to set firm, prompt deadlines for the elimination glycol ethers.

To speed the phase-out of glycol ethers, health and safety activists—some of whom have been criticizing the semiconductor industry's use of toxic chemicals for 15 years—established the Campaign to End the Miscarriage of Justice, announcing a six-point program one day after the SIA study became public:

1. By January 1, 1993 the semiconductor companies should commit to aggressive goals and timetables for the phase-out of glycol ethers and other reproductive toxins. Campaign members believe that six months to one year is a reasonable time frame to phase in safer alternatives.
2. The findings of this study must be communicated honestly and completely to the affected workers in easily understood language, including translation into all appropriate primary languages.
3. Workers who choose to transfer away from dangerous chemicals must be guaranteed no loss in pay, seniority or other benefits, including the right to return to the previous job.
4. The semiconductor industry must establish democratically elected health and safety committees at each semiconductor plant to ensure that those people most directly affected are involved in the design and implementation of the health and safety solutions.
5. Semiconductor companies must support SEMATECH as the major research center to develop safer manufacturing processes for the semiconductor industry. SEMATECH member companies must match the federal govern  
(continued on page 2)

**STRIKE AT VERSATRONEX!**  
see page 3

ment's earmarked funds for environmental manufacturing.

6. The semiconductor industry must adopt the principle that it will no longer use chemicals which have not been adequately tested for reproductive, cancer and other adverse health affects.

For more information, contact the Silicon Valley Toxics Coalition or the Santa Clara Center for Occupational Safety and Health, both of which are located at 760 N. First Street, San Jose, CA 95112. Phone numbers: SVTC—408/287-6707; SCCOSH—408/998-4050.

---