

THE SILENT AGENTS

Toxic byproducts
FROM COMPUTERS CAN BE
HARMFUL TO workers,
neighbors AND THE
environment. IN A
20-YEAR CRUSADE, Ted
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more he finds to do.

Dell Inc. founder and CEO Michael Dell is used to raucous receptions on the rough-and-tumble personal computer industry circuit. But when he left the stage after delivering the keynote address at the Consumer Electronics Show in Las Vegas in January 2003, he was not expecting to be hammered by a "chain gang." Outside the show stood activists dressed as prisoners wearing "Dell Recycling Team" signs and shackled to PCs. They protested that Dell's computer recycling program used prison labor working in unsafe conditions. According to the San Jose-based Silicon Valley Toxics Coalition, which organized the demonstration, Dell's recycling vendor exploited prisoners and created an unfair competitive situation for Dell's rival Hewlett-Packard, because HP was using a more expensive commercial recycler with higher safety standards.

The Stanford alumnus who heads the coalition, Theodore G. "Ted" Smith, smiles at the memory. Within six months of the protest, Dell announced it would stop using prison labor. Dell subsequently beefed up its recycling program and vowed to reduce several harmful chemicals in its products, earning it a "dramatic turnaround" designation in SVTC's annual report card. A poster autographed by Michael Dell promoting Dell's recycling program sits on the conference room wall at the coalition's headquarters, a crowded two-story house converted to office space in downtown San Jose. "We had a good meeting a few months ago," says Smith, JD '72.

BY JOAN O'C HAMILTON PHOTOGRAPHS BY BARBARA RIES

Indeed, on the same day in mid-July, both Dell and HP announced further recycling measures: Dell would pick up old computer systems from anyone buying new Dell equipment; while for seven weeks HP would collect *any* discarded electronics brought to Office Depot stores. These programs are "both good models," Smith says. But all the computer makers, he insists, "have a long way to go."

Were you to meet Smith in the boardroom of a start-up, his dogged determination, high energy and affable nature would seem right in step with the optimistic, can-do types who have driven the high-tech phenomenon. For at least half Silicon Valley's glory years, however, Smith has been shining a light on the environmental dark side of all that progress and productivity. The byproducts of the high-tech revolution include groundwater pollution, worker safety issues and hazardous waste disposal problems. As an advocate for sustainable, ethical and safe industry practices, Smith meets with executives, other activists, government regulators and officials, trying to link people who do similar work and provide them with resources and technical information.

The advent of silicon chips in the 1950s gave birth to what was initially billed as a miraculous "clean" industry in Silicon Valley. However, chip making uses a slew of toxic chemicals such as arsenic and gallium arsenide. Companies stored these chemicals in underground tanks. Those tanks leaked—as all tanks do, Smith says, especially when solvents and acids are combined in them. In the early 1980s, the first significant groundwater pollution from semiconductor manufacturing was found in South San Jose. The Environmental Protection Agency eventually designated 23 different sites in Santa Clara County—one of the densest concentrations in the nation—as requiring remediation via its 1980 national "Superfund" cleanup program.

Smith, then a local civil rights and labor attorney, formed SVTC in 1982. Funding from various foundations pays for his salary and a small staff. From the start, the group united neighbors, workers, firefighters and others who sought more information, accountability and cleanup of toxics from Fairchild, IBM, National Semiconductor, Hewlett-Packard and other technology companies.

Smith and the coalition developed the Hazardous Materials Model Ordinance for cities in Santa Clara County, and other path-breaking regulatory actions requiring companies to identify and properly handle and store toxic chemicals. The model

ordinance called for replacing the leaking tanks with more robust double tanks—the outer one traps leakage from the inner—that could be monitored. These provisions were later incorporated into California and federal laws.

Although monitoring and remediation continue, cleaning up groundwater through pumping and filtration can take decades. The coalition still works to educate local low-income and minority communities about toxic threats at home and work. (The specific health impacts of individual toxic exposures are notoriously hard to prove—the larger environment, smoking, poor diet, genetics and other health problems create myriad variables. But people who live near natural sources of arsenic, for example, have higher rates of skin and lung cancer.)

Smith's insistence on solving problems in the larger context of social justice—making sure poor people do not bear an unfair share of the burden, for example—sometimes brings him toe to toe not only with high tech, but even with other environmentalists. And it makes him one of the nation's leading actors in what's called the "environmental justice" movement.

"Environmental justice is not about birds and trees, it's about people. Ted is a giant in the field," says Luke Cole, '84, an attorney and director of the San Francisco-based Center on Race, Poverty and the Environment, and a former member of the EPA's National Environmental Justice Advisory Council. Gail Brownell, quality systems manager at Agilent Technologies, considers the coalition an important player in the larger societal discussion about the role of companies and doing business in an ethical and safe way. "Some in industry may get frustrated with him when he's across the picket line," she says. However, Brownell considers that "grudging admiration. The truth is if someone like Ted has frustrated you, he's probably being effective."

As the Dell protest showed, simply making one situation "cleaner" is never enough for Smith. "We got some flack from our friends and allies," who questioned why he was attacking Dell when it at least was recycling, Smith explains. But he believes recycling shouldn't be done at the expense of anybody's safety, and he's working for solutions that spread disposal costs fairly. The coalition tries to educate communities that are courting high-tech industry or disposal contracts about the true costs. "You don't just want to sweep our problems under somebody else's rug," says Chad Rafael, a coalition board member and an associate professor of communication at Santa Clara University.

These days, Smith is focused on trying to rid high tech

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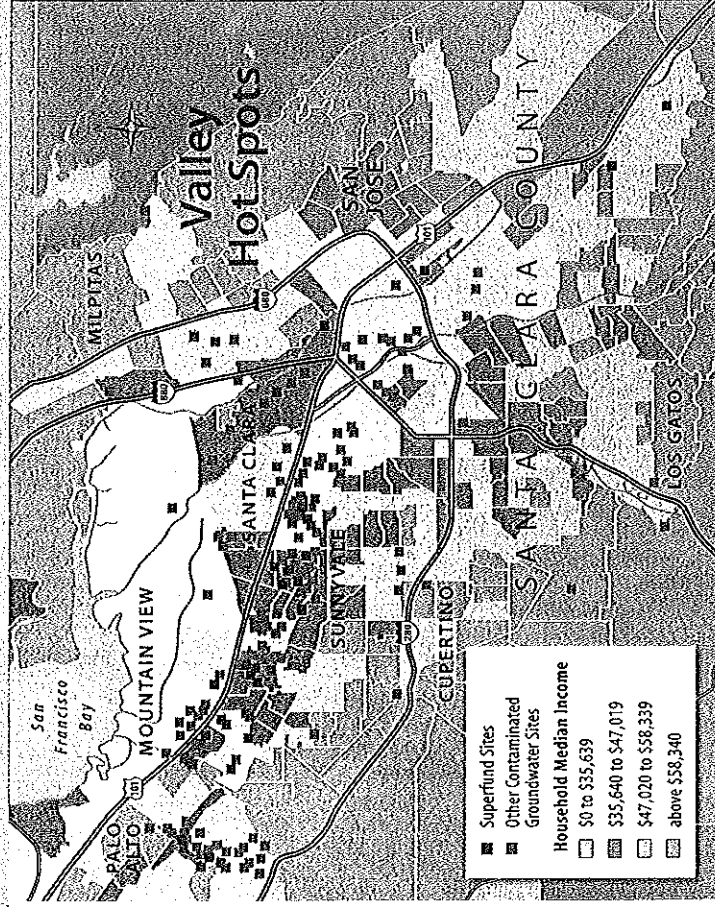
IT'S ABOUT PEOPLE: Smith's coalition monitors industry's effects on neighborhoods and workers. Dell stopped using prison labor for recycling after the group's protest at a trade show.

products of toxic substances from the get-go, to preempt disposal problems and worker safety threats. Currently, threats from obsolete technology grow daily: PCs, cell phones, monitors, handheld assistants and other electronic gadgets are rich in mercury, lead and other heavy metals. A single computer monitor, for example, contains about five pounds of lead. According to some estimates, more than 300 million computers became obsolete between 1997 and 2004, and they contain 1.2 billion pounds of lead. In his quest to get producers to rethink the design and manufacture of their products, Smith co-founded the International Campaign for Responsible Technology. He also is the national coordinator for the Computer TakeBack Campaign.

U.S. companies and communities have been developing computer recycling programs for some time. But in recent years, international environmental activists such as the Seattle-based Basel Action Network have produced shocking evidence that many recyclers are simply exporting toxics overseas. BAN has compiled a video showing one recycling effort in China where materials are burned over open flames, with worthless plastic components flung into rivers or pits. That's why Smith is aligning with groups in Europe and elsewhere trying to establish more environmentally sustainable practices from the initial design of products to their eventual dismantling.

"People think the United States is the world environmental leader and it just isn't so," Smith says. The European Union, for example, demands that its producers take responsibility for their products' entire life cycle. It has banned a number of toxic chemicals from products—such as brominated flame retardants (PBDEs), which end up in the dust around computers. According to the Environmental Working Group, an Oakland, Calif., nonprofit, PBDEs build up in people's bodies over a lifetime. In laboratory animals, minute doses have impaired attention, learning, memory and behavior. Smith hopes that when confronted with the legal liability to dispose of toxics safely, "The leadership of those companies will say 'design out the nasty stuff!'"

The issue of exporting e-waste to China is one example of the complex tensions that sometimes beset the environmental justice movement, notes Stanford Law School professor Buzz Thompson, '73, MBA '75, JD '76. For one thing, the measure of success goes beyond purely cleaning up emissions or restoring a natural habitat. One tenet of environmental justice is an emphasis on local decision making. "You may be shipping toxics overseas, but you're also providing [workers there] with



a livelihood. Do you let people in an impoverished area make that decision?"

Smith worries that overseas communities "are in many cases unaware of the health issues. For a small amount of money, they're exposed to very serious risks. If people were well informed and chose to accept risks, that might be another thing." Visiting China recently, Smith says he saw a groundswell of activists trying to protect public health. "They're fighting their own grassroots fight."

How to reduce toxic emissions from factories is another controversy. One method allows polluters to buy and trade emission rights, creating an incentive for companies to convert to lower-emission technologies without harshly penalizing companies that don't have the capital or ability to convert quickly. However, such programs tend to create "hot spots" around old factories and keep pollution levels high for lower-income people who live nearby.

Business does not happily embrace solutions that require radical changes in design or taking on responsibility for products

BREATHER: Known for his unflagging energy, Smith says he unwinds by singing in a peace chorus.



long since off the loading dock and out of warranty. But more and more companies are paying closer attention to environmental issues. Take Dell. "We are very customer-focused, and [recycling and disposal issues] were not something we were hearing about from our customers," says Pat Nathan, Dell's sustainable business director. She was hired a year ago to shape a more comprehensive program for environmental and social issues.

"When we started [talking with Smith's organization], some of the targeting and protests were difficult and antagonistic," Nathan concedes. Dell insisted, for example, that its recycling vendor promised it was complying with all safety standards. However, Nathan says that when Dell became aware of the extent of some of the disposal and recycling problems overseas,

and the sheer magnitude of equipment headed for the recycling stream, "We realized we had to get out in front of our customers on this." Dell also vowed to reduce or eliminate lead and other dangerous chemicals from its products. Nathan says she considers Smith "very intelligent, articulate and compelling in his message. He can engage with business and he listens very well."

Smith's longtime pressure on the semiconductor industry has not endeared him to other companies. At Intel, a spokesman says the company is a good citizen that pays attention to the environment regardless of whether the toxics coalition or others raise concerns. In April, Intel announced it would reduce the lead content of its products by 95 percent this year, and it has committed publicly to other environmental goals, such as recycling

SMITH WANTS TO rid products of toxic substances from the get-go TO PREEMPT DISPOSAL AND SAFETY PROBLEMS. SOME ESTIMATE 300 million computers became obsolete since 1997, AND THEY CONTAIN 1.2 billion pounds of lead.

chemical wastes, lowering energy usage and offsetting fresh water use. "We certainly don't see eye to eye on many matters," says an Intel spokesman. "We assume that his ultimate objectives on environmental health and safety are similar to ours."

Smith's passion to fight for environmental justice is rooted in civil rights activism. He says he had an idyllic childhood, growing up the son of a General Electric engineer who worked at the Hanford Atomic Power Lab in Washington state and Knolls Atomic Power Lab in Schenectady, N.Y. He loved sports and music and planned to play football at Wesleyan, but watched his sports dreams evaporate after a serious knee injury.

He graduated in 1967 and worked in poor neighborhoods in Washington, D.C., with the Head Start Program. One of his most vivid memories was the evening in 1968 when Martin Luther King was shot and poor areas of Washington literally ignited with rage. "I had gone from a pastoral life to the middle of a cauldron," he recalls. "I was angry at the injustice I saw."

Smith applied to several law schools, ending up at Stanford. "One of the reasons I wanted to go to law school was to not only understand the legal system, but develop analytical thinking. I was an English major; I didn't know anything about science or law." Unfortunately, he says, he saw among his fellow students insularity and privilege, and minimal understanding of the peace movement or civil rights. "I was lucky to make it through." He did make some important connections, however, including one with then-professor Byron Sher, who would later enter politics and successfully turn Smith's ideas about toxics reform into state legislation in Sacramento.

In a UC-Berkeley oral history study of environmental justice leaders, Smith describes a transforming event for him on Earth Day in 1970: "I remember talking to some of my friends, saying 'Earth Day?' What the hell is this thing all about? Is this a bunch of tree huggers or what?" But as he thought about the larger consequences, it began to occur to Smith that "if there could be a social justice perspective brought into the environmental movement, it could make a difference."

After Stanford, Smith set up a private practice representing San Jose cannery workers trying to organize, as well as other labor and civil rights cases. He met his future wife, Amanda Hawes, today a well-known occupational health and safety attorney. (Hawes represented the plaintiffs in the high-profile toxic-exposure lawsuit against IBM in San Jose this year, which was decided in IBM's favor.) Smith says Hawes first alerted him to the growing number of workers who had concerns about

the chemicals they were handling for the electronics industry. Moreover, groups such as firefighters often bore the brunt of the poorly inventoried and dangerous chemicals involved in fires. Smith brought those groups together and has been spearheading broad-based, grassroots efforts ever since.

The exodus of manufacturing from Silicon Valley and worms about the outsourcing of software and service jobs have created a more challenging environment for the coalition's message. "A lot of companies were very public about criticizing us when they moved," and blamed environmental standards, in part, for the rising costs of doing business here, Smith says. But, he argues, "Job fight has relatively little to do with environmental standards. It has everything to do with increasing profits in a global environment. That's what led to our realization that we had to network with other people, and to be protective about the higher standards we're trying to develop. We feared that they would try to beat down the standards under the guise of an international campaign."

Smith says he's noticed a softening lately in industry's posture toward these issues, and he attributes that in some degree to younger, more environmentally savvy managers. He says Hewlett-Packard has always been among the most forward-thinking local actors. (HP has won a number of awards, including some from EPA, for its pioneering recycling center in Roseville and other environmental stewardship efforts.)

Still, Smith continues to push for more activism at the highest levels. "We don't have very many CEO-level people in the United States who are willing to step forward. There is a Japanese CEO who says we need to get to the point where making high-tech products is like growing organic vegetables. These are real visionary [positions]. Within high tech [there], we haven't seen that."

Colleagues say Smith's sense of humor, his close family (he has three grown children) and another of his passions, singing, seem to help fuel his vast amount of energy. He rehearses once a week with the San Jose Peace Chorale and sings in the group's frequent concerts. Both the music and the peace orientation renew him after his stressful, often combative day job, he says. One of his favorite songs is based on the words of Chief Seattle, the 19th century Native American leader who spoke eloquently about the sanctity of the environment. The song begins, "This we know; all things are connected." ■

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