Workers at Big Government Lab Sue Over Exposure to a Toxic Chemical



Joseph Marino in his home in Islip, N.Y., with a map of the Brookhaven National Laboratory. Credit Brittainy Newman/The New York Times

By Hiroko Tabuchi Published Aug. 22, 2019Updated Aug. 28, 2019

UPTON, N.Y. — As a technician at Brookhaven National Laboratory, one of the nation's most prestigious science labs, Joseph Marino's job in the late 1990s and early 2000s was to clean and maintain the supercomputers that have helped researchers unlock some of the world's biggest scientific and medical mysteries. He polished copper connectors, he said, until "they reminded you of gold."

One of the cleaning fluids he used while wiping the machines by hand over the years was trichloroethylene, or TCE, a toxic degreaser that the Trump administration has targeted as part of its broad effort to weaken regulations on chemicals. TCE is still widely used by dry cleaners as a stain remover and by factories as a degreaser.

Mr. Marino, who later lost a kidney to cancer, is now suing the operators of the Department of Energy lab for \$25 million over exposure to TCE, alleging that they negligently supplied the cleaner to him and many other workers there without warnings or protections. He is also suing Dow Chemical and Zep, alleging that they made and sold the chemical without adequate safety warnings.

The lawsuit is a rarity. Most TCE claims are settled through a limited workers' compensation system that, in Mr. Marino's case, awarded him \$50,000 for his exposure to the chemical, plus \$15,000 a year for lost wages — sums he says barely cover his health care. So, Mr. Marino chose to take on the operators of the lab directly, opening up a significant new battle front.

"There were higher-ups who knew about the contaminants. They knew about the dangers," said Mr. Marino, 60, one recent morning at his home on Long Island, where he lives with his wife and two dogs.

This week, a second former technician, Ronald Yuhas, 77, filed a similar suit. If successful, the lawsuits could prompt more workers exposed to TCE for decades to sue over workplace exposure.



A spray can of the TCE degreaser of the type that

Mr. Marino says he used in his work. Credit Brittainy Newman/The New York Times

The lawsuits take on added resonance at a time when the Trump administration is rolling back protections against TCE.

Under President Barack Obama, the Environmental Protection Agency took steps to restrict the chemical, declaring it "carcinogenic to humans by all routes of exposure" and proposing a ban on two of its high-risk uses — in spot dry cleaning, and as a degreasing spray at factories. But, at the urging of industry groups including the American Chemistry Council, the E.P.A. has indefinitely delayed the ban, leaving as many as 178,000 workers exposed to the chemical, according to E.P.A. estimates.

Now that the Trump administration has delayed the TCE restrictions, "very few facilities are actually making a move to safer alternatives because they were waiting to see what E.P.A. will do," said Liz Hitchcock, acting director for Safer Chemicals, Healthy Families, a Washington-based group that supports stricter safety rules.

A Department of Energy official, who initially said she was looking into the matter, did not respond to subsequent requests for comment.

Dow declined to comment beyond saying that it no longer manufactures or sells TCE. Zep, based in Atlanta, did not respond to requests for comment sent through its website, nor did it respond to queries left with its investor relations and customer service lines. It markets TCE in spray cans for the cleaning of power tools, electric motors, printing equipment, typewriters and office equipment, according to the site.

The Brookhaven cases touch on the darker legacy of a world class research lab that has contributed to seven Nobel Prizes, including the 2009 prize in chemistry for research into DNA, for which researchers carried out X-ray work at Brookhaven.



The campus of the Brookhaven National Laboratory in Upton, N.Y. Credit Brookhaven National Laboratory



A researcher in the 1950s working with a research reactor at Brookhaven. Credit Brookhaven National Laboratory



The main gate in the late 1940s, when Brookhaven was new. Credit Brookhaven National Laboratory

The sprawling, 5,300-acre site, built in 1947, has a history of leaks and spills of radioactive or toxic materials, much of it from the Cold War years when national security interests overshadowed environmental and health protections. In the late 1990s, the lab <u>disclosed that radioactive tritium</u> had been leaking into nearby groundwater for more than a decade from a storage tank filled with spent fuel rods beneath a research reactor at the lab.

The site has also suffered several spills of TCE, and a plume of the chemical extends in the groundwater beyond the boundaries of the lab, according to E.P.A. maps.

At a recent meeting of a group of Brookhaven retirees, at a classic Long Island diner a 20-minute drive from the lab, the conversation was punctuated with news of former colleagues who were battling disease or who had died.

Around the table was Frank Devito, 84, in a faded Yankees cap, who worked at the lab for three decades, does dialysis three times a week for renal failure and keeps the group's tally of deceased colleagues — 38 at the latest count. There was also Fred Squires, 67, who remembers scrubbing parts in a tray full of TCE, with rubber gloves and no mask, and who has kidney cancer.

There was Jerry Hobson, 64, a former rigger at the site who suffered a kidney failure and recently had his workers' compensation application denied. And Mr. Yuhas, 77, who rose to shift supervisor during his four-decade career at Brookhaven and later learned he had renal cystic disease and chronic kidney impairment.

"It was all over the whole laboratories, in spray cans," Mr. Yuhas said of TCE.



From left, former Brookhaven employees Dan Carroll, Ron Yuhas, Frederick Squires III and Jerry Hobson at the Coram Diner in Coram, N.Y. Credit Brittainy Newman/The New York Times

The Brookhaven lab is a town in itself, with its own post office, fire department, gymnasiums and swimming pool. Former workers describe their colleagues as their family.

And government records show that the Department of Energy took steps to address the risks posed by toxic chemicals to workers at its labs. The department, in fact, halted the use of trichloroethylene in its facilities in 1990, after studies linked the chemical to health risks.

In his lawsuit, Mr. Marino, who was sent to work at the lab by two separate staffing agencies, alleges that Brookhaven contractors instead stockpiled the chemical in drums and directed workers to use it until as recently as 2006. Unaware of the dangers, hundreds of technicians continued to use trichloroethylene — trichlor, they called it — to maintain the site's advanced computers.

In one episode at the facility, Mr. Marino alleges in his lawsuit, the chemical hung so thick in the air, a manager told the staff not to worry because the radiation "will kill you before the fumes from that stuff does."



Drums of radioactive groundwater taken from test wells on the southern border of the laboratory in March 1997. Credit Richard Drew/Associated Press

In 1997, the Department of Energy fired a nonprofit organization that had run the lab since its inception, Associated Universities, and hired Brookhaven Science Associates, a partnership between the State University of New York at Stony Brook and the contractor Battelle. The lab, which today employees about 2,500 scientists and other staff members, has been a Superfund cleanup site since the late 1980s.

Both Associated Universities and Brookhaven Science Associates are named as defendants. Former representatives for Associated Universities could not be reached. Battelle referred questions to Brookhaven Science Associates, where a spokesman, Peter Genzer, said the lab did not comment on litigation.

As many as 2,200 facilities still use TCE to remove grease from metal parts, and four out of five of the country's approximately 65,000 dry

cleaners use it as a stain remover, according to E.P.A. estimates. Because of its more widespread use in the past, it contaminates more than 700 sites across the country and is present in the drinking water of 14 million Americans, the bipartisan nonprofit group Environmental Working Group estimated last year.

The Trump administration shelved the Obamaera restrictions on TCE use in the workplace after lobbying by the American Chemistry Council, the industry group. In emailed comments, the lobby group said that it had not advocated for the elimination of TCE regulations, and rather had suggested exemptions for critical uses.

The Department of Energy says it no longer uses TCE at its facilities. Former Brookhaven lab workers gathered at the diner say that decision came decades too late. "This can't happen to anybody else," Mr. Marino said.



Mr. Marino and one of his dogs, a German Shepherd named Max, at his home in Islip. Credit Brittainy Newman/The New York Times

Hiroko Tabuchi is a climate reporter. She joined The Times in 2008, and was part of the team awarded the 2013 Pulitzer Prize for Explanatory Reporting. She previously wrote about Japanese economics, business and technology from Tokyo. <u>@HirokoTabuchi</u> • <u>Facebook</u>

A version of this article appears in print on Aug. 22, 2019, Section A, Page 21 of the New York edition with the headline: Workers at Federal Lab on Long Island Sue Over Exposure to a Toxic Chemical.