

BLOOD TESTS PROVE WORKERS MAY HAVE PLENTY TO FEAR - Times-Picayune, The (New Orleans, LA) - February 18, 1991 - page A9

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In February 1989, state environmental officials warned the public not to eat trout caught in the Calcasieu River because the fish were contaminated with a cancer-causing chemical.

The state had found 60 parts per billion of toxic hexachlorobenzene in the flesh of the fish, a level officials decided was too high for safe eating.

On the other side of the state, workers at the Vulcan Chemicals plant near Geismar were told by the company's management that their blood contained that much or more of the same toxic chemical, but that there was no evidence they were being harmed.

"They told us there's nothing to say how many parts per billion was harmful in a human being," said Duke King, president of the Oil, Chemical and Atomic Workers union local at Vulcan. "Now, we know what it is in a fish, because they quarantined the fish.

"Hell, we knew we weren't good to eat," King said. "We knew that."

The workers at Vulcan, like those at chemical plants across the state, deal with a myriad of chemicals every day. As the experience at Vulcan shows, they aren't always protected from high levels of exposure to these frequently toxic, sometimes cancer-causing substances. And their employers aren't always eager for open examination of the effects of that exposure.

Vulcan's problems with hexachlorobenzene - called simply hex in the shorthand of the chemical industry - began 20 years ago, when the company started producing industrial solvents that left behind the messy waste.

"From the start, in the early '70s, it was just dumped out on the ground, into an open pit," King said. "We had an area for 2 12 years that was about 4 inches deep in this stuff."

*** Cattle were the clue ***

But Vulcan's employees didn't know it was dangerous to their health until an outbreak of cattle contamination was traced to hex wastes hauled off the plant site. The wastes were being dumped at what is now the Cleve Reber Superfund site in Sorrento, one of the worst hazardous waste sites in the country.

In 1973, the U.S. Department of Agriculture turned up unacceptable levels of hex - about 5 parts per billion - in beef cattle in Ascension and Iberville parishes. State officials immediately slapped a quarantine on 250 square miles of grazing land in the two parishes, affecting more than 38,000 cattle.

"The highest levels in the cattle were in areas where they were grazing immediately adjacent to particularly rough spots on the route" traveled by dump trucks bearing waste hex from Vulcan to Cleve Reber, said Vance Gordon, manager of environment and health for Vulcan. Investigators determined the hex had spilled along the roadside and was eaten by the cattle.

When workers started to worry about their own health after the cattle contamination came to light, the company began testing their blood.

According to results submitted to the union by Vulcan, blood tests of workers between 1977 and 1981 indicated an average hex level of about 250 parts per billion among employees working near the area where hex was manufactured, and in some cases, as much as 400 parts per billion.

Between 1981 and 1985, union officials said, the company would not test workers' blood for hex, claiming it was not a health hazard. In 1985, OCAW negotiators insisted that the blood tests be resumed as part of a new union contract.

"Their reasoning was that there was no data, no study on hex - there's nothing to say how many parts per billion was harmful or whatever in a human being," King said. "But our argument was, well, you don't want to wake up to 50 people dropping dead. It's kind of hard to go back and do the studies then, you know?"

*** Hex levels dropping ***

The most recent tests show that hex levels have dropped. Most workers have less than 100 parts per billion of hex in their blood, although several of those who were working for the company in the early 1970s still test as high as 125 parts per billion.

King's hex level has dropped from 170 parts per billion to 33 parts per billion, he said.

The reductions are the result of major changes in the way hex is handled at Vulcan, Gordon and King said. The material now is contained in an enclosed system, with waste moved by pipe to an incinerator and burned.

"The results that we got during our last set of physicals showed extremely low levels, which indicated that what we'd done was successful," Gordon said.

Company officials say there is no evidence that their workers are suffering ill effects from any chemicals.

"We've got more than 10 years of data on all of our plant medical history, and what we really found out was that the workers are in really good health, and we can't see any effects from the substances and agents that we work with here at the plant," Gordon said.

But several toxicologists specializing in occupational exposure are less sanguine. Dr. Howard Frumkin, an epidemiologist and specialist in occupational medicine at Emory University Hospital in Atlanta, said the threat from chronic hex contamination can't be dismissed, even at the low levels now reported among Vulcan workers.

*** Danger may not be over ***

According to extensive medical literature on hex exposures, the chemical causes a series of skin disorders resulting from damage to the liver. The skin disease can deteriorate into a form of arthritis and it also can cause damage to kidneys and the body's immune system, based on historical records of human contamination and extensive animal testing, Frumkin said.

Animal tests also show the chemical is a potent carcinogen, leading the federal Environmental Protection Agency to classify it as a probable cancer-causing agent in humans.

And scientific studies of the chemical show that it is stored in the body's fat deposits at levels as much as 100 times higher than those in the blood.

Frumkin said workers who have been chronically exposed to hex, or who still have levels of hex in their blood, should be participating in a medical screening program that includes regular, thorough checkups, with tests of liver and kidney functions.

"Not doing ongoing testing is a way to bury the problem and keep everybody ignorant," he said.

Barbara Shane, a toxicologist at Louisiana State University's Institute for Environmental Studies, said the chemical industry historically has shown an unwillingness to allow outside scrutiny of worker health data.

"Some companies have data going back 40 or 50 years," she said. "No one is allowed to go in and look at that data. What we have here are essentially some human guinea pigs."