

The New York Times

EPA Charts Risks of a Ubiquitous Chemical

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By FELICITY BARRINGER – September 30, 2011



Carla Winn for The New York Times
Ed Abney of Berea, Ky., was diagnosed with Parkinson's disease in 2001 after spending 24 years working with trichloroethylene in a factory. The E.P.A. has just calculated the chemical's risks.

So you wanted to clean grease off a bit of machinery. The year was 1956 or 1971 or even 1993. Your cleaner of choice was probably the industrial degreaser trichloroethylene, a petroleum-based clear liquid that was as common in mid-20th-century America as Ipana toothpaste, Crackerjack and asbestos. It was used in dry-cleaning, in machine shops and on military bases.

Production of the chemical grew to 321 million pounds in 1991 from 260,000 pounds a decade earlier.

Having leached into groundwater, it is one of the most widely dispersed pollutants in the country today. If the groundwater is close to the surface, it can vaporize and enter the air in people's homes. The ground and water at hundreds of military bases (<http://vets4politics.blogspot.com/2009/03/trichloroethylene-senator-hillary.html>) are infused with it.

Trichloroethylene has also been linked to increased risks for kidney cancer and bladder cancer (http://www.atsdr.cdc.gov/sites/lejeune/tce_pce.html) and has been tied to Parkinson's disease in recent studies, (<http://www.theipi.org/index.php?src=news&refno=14&category=News%20Articles>) including one involving Ed Abney, a retired metalworker I wrote about in 2009 who spent 24 years working with TCE in a small Kentucky factory.

Regulations limiting a chemical like TCE in water, at Superfund sites or in the air inside a home can be established by states or by the federal government. But until the risk is known — how many parts per million or per billion in water, or land or air have been shown to harm human health — regulators can do relatively little in the way of requiring clean-ups. This will allow them to tighten existing standards.

The preparation of the risk assessment had been under way early in the George W. Bush administration but was sidetracked for several years while more scientific evidence about the chemical was assembled.

On Wednesday, the Environmental Protection Agency finally completed and distributed its evaluation(<http://www.epa.gov/ncea/iris/subst/0199.htm>).

Two days earlier, activists in communities in states including New Jersey, North Carolina to California had dispatched a letter to Lisa P. Jackson, the E.P.A. administrator, asking that the finding be released without delay. “We have been waiting for a decade for E.P.A. to finalize the toxicological review for this cancer-causing chemical,” the letter said.

Lenny Siegel, executive director of the Center for Public Environmental Oversight (<http://www.cpeo.org/>), who helped organize the drafting of the letter, said in an e-mail that the E.P.A.’s action would “lead directly to more protective exposure standards for vapor intrusion, and it is also likely to cause the re-evaluation and possibly lowering of the drinking water standard for TCE.” He added, “As Joe Biden would say, this is a big deal!”

The risks of trichloroethylene were recently recognized by New York City education officials when they closed the building housing the Bronx New School, which had been a factory and industrial warehouse.

Mr. Siegel predicted that the E.P.A.’s action would prompt a flurry of state regulation. “We’re expecting all of the states to incorporate this standard,” he said.

He suggested that the biggest part of the clean-up bill would involve groundwater if the E.P.A. translates the risk assessment into a new maximum level for TCE in drinking water.

Responses:

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4:26 pm

TCE is a dangerous contaminant. It is one of the contaminants at Camp Lejeune, as was perchloroethylene (or tetrachloroethylene), which is used in dry cleaning. Both of these are organic solvents and cause harm in drinking water. It is encouraging to hear that the EPA may reevaluate the maximum contaminant levels (MCL) of these, and hopefully of other, contaminants. The National Research Council suggested many MCLs should be lower than they currently are. There is now a movie out about Camp Lejeune called *Semper Fi: Always Faithful*, reviewed in NYT: <http://movies.nytimes.com/movie/465304/Semper-Fi-Always-Faithful/overview>. My research has focused on improved groundwater remediation; the Camp Lejeune story was particularly troubling: <http://dmkahler.blogspot.com/2011/09/groundwater-contamination-and-camp....>

<http://green.blogs.nytimes.com/2011/09/30/e-p-a-quantifies-trichloroethylene-risks/#more-115971>