

Johnson Controls unit Tyco knew since 2013 it was polluting wells. It took 4 years to notify neighbors

By Lee Bergquist, Milwaukee Journal Sentinel | February 4, 2019



Heat vapors rise during hands-on fire training at Tyco Fire Product's training facility in Marinette in 2007. The company is currently assessing the extent of contamination from its firefighting foam. (Photo: USA TODAY NETWORK-Wis)

A Marinette manufacturer of firefighting foam knew it was polluting groundwater at least four years before the company began providing bottled water to residents and was ordered by state officials to investigate the extent of the contamination.

State records show Tyco Fire Products had test results of soil and well contamination on its property dating back to October 2013 for a class of compounds known as perfluorinated chemicals.

The chemicals are facing growing scrutiny in Wisconsin and nationally because of their human health risks.



It wasn't until November 2017 that Tyco said it believed the chemicals had spread outside its 380-acre fire technology center, where testing and fire-control training have taken place since about 1962.

Tyco Fire Product operates a fire technology center in Marinette where chemicals used in firefighting foam have been found in groundwater. (Photo: Johnson Controls)

The next month, on Dec. 11, 2017, the company began distributing bottled water to residents whose private wells might be affected. Tyco said it is providing bottled water to 121 properties and has installed 37 water treatment systems in this northeastern Wisconsin community.

"The law says that they need to report the information immediately," said Darsi Foss, director of remediation and redevelopment for the Department of Natural Resources, which is overseeing the cleanup.

Despite warnings about the health impacts of the chemicals for more than a decade, Tyco has defended its actions by saying that not as much was known about perfluorinated chemicals in 2013 as today.

The company has some of the highest known concentrations of the chemicals in groundwater and soil in Wisconsin, according to DNR records.

[Widely used](#), perfluorinated chemicals have properties that keep food from sticking to pans; allow carpets to resist stains; and in the fire protection business, help spread fire-retardant foams.

But the compounds are highly resistant to breaking down in the environment.

Epidemiology studies cited in a [federal report](#) released last year suggest that the chemicals can lead to increased risk of pregnancy-induced hypertension, liver damage, thyroid disease, asthma, decreased fertility, some cancers and a decline in response to vaccines.

Tyco says that it suspended spraying foam products outdoors in November 2017.

'The book should be thrown at these people'

But for some residents with private wells in the path of the chemical plume, it's meant years of unwittingly drinking potentially unsafe water.

"I'm pissed. I'm mad," said Jeff Lamont, a retired hydrogeologist who spent 28 years working on cleaning up polluted sites.

"A single citizen is required to abide by the law," Lamont said. "But a major multibillion corporation does not have to — and they consciously make those decisions? I think that the book should be thrown at these people."

Test results from his well have jumped from about 20 to about 65 parts per trillion over the past year for one of the compounds — perfluorooctanoic acid, or PFOA.

In November 2016, the U.S. Environmental Protection Agency issued a lifetime nonenforceable health advisory of 70 parts per trillion for PFOA and a companion chemical, perfluorooctane sulfonate, or PFOS. But some states are taking steps to regulate the chemicals because of concerns the Trump administration will not.

In March 2018, the DNR asked the Department of Health Services to recommend safe levels of PFOA and PFOS in groundwater. That review is now considering 27 compounds and should be completed by the middle of the year, according to Rob Thiboldeaux, a toxicologist for health services.

Enacting regulations in Wisconsin could still take several years.

On a separate front, the DNR said it will conduct an expansive program this year to test for perfluorinated chemicals in water and fish tissue in the Marinette River and not-yet-identified rivers in the Mississippi and Wisconsin river basins.

Tyco is a unit of Glendale-based Johnson Controls International and operates two facilities in Marinette. Both have contaminated groundwater with the chemicals.

Buried in 2,273-page report

According to DNR records, Tyco discovered the chemicals at its fire training center in 2013. The results were mentioned briefly in a 2,273-page report filed with the DNR in November 2016 from the company's consultants for a separate cleanup project.

Why didn't the company report the discovery when it learned about it?

"In 2013, there was not the level of awareness and information as there is today associated with PFOS/PFOA," said Fraser Engerman, a spokesman for Johnson Controls International.

Also, Tyco has said that it has worked with suppliers to "greatly reduce" the content in its products.

Concerns date back years

However, health impacts of perfluorinated chemicals have long been known.

Minnesota-based 3M Co. stopped producing PFOS and PFOA in 2002.

In 2006, eight companies voluntarily agreed to phase out production of both PFOS and PFOA by 2015.

Jamie C. DeWitt of East Carolina University started studying perfluorinated chemicals in 2005 at the EPA and at a federal research laboratory.

"There were concerns then about data coming out of independent studies and academic institutions that these compounds produced adverse health effects in humans and experimental animals," said DeWitt, a professor of toxicology.

"They are synthetic compounds that are designed to make our lives better because of their properties. But they are not designed to go into our bodies."

Tyco's explanation

Tyco has acknowledged on its website that it knew about the chemicals as early as 2013.

"Question: Is it true you first saw readings for PFOS and PFOA as far back as 2013 and 2014?"

“Answer: Yes, testing that we were doing on our fire training property in 2013 and 2014 returned readings that indicated that PFOS and PFOA were present in the soil and groundwater. However, at the time we did not have data showing movement of the compounds off-site.

“It wasn’t until 2016 that we had data that showed we had concentrations of these compounds at the edge of the property, so we then began the series of tests which led us to where we are today.”

But critics of the company’s actions to date, such as former Mayor Doug Oitzinger, dismissed the explanation. “It’s a ridiculous argument,” he said. ““Yeah, we have a forest fire, but it’s on our property, so don’t worry about it.””

“This isn’t news to them. They know that these pollutants have been judged an environmental danger.”

In Marinette, the chemicals are entering the Green Bay shoreline from ditches and groundwater, according to Tyco records filed with the DNR.

In all, Tyco says it has tested 168 wells and 56 have shown some evidence of perfluorinated chemicals.

When the news came out in December 2017 that Tyco was distributing bottled water to some property owners, Janell Goldsmith said, “we never thought we would be a part of that.”

The fire training center is about 1½ miles away.

Family suffered health problems

Janell and Duane Goldsmith have lived in their home for 18 years. Tests by Tyco of their well water have twice reported PFOA levels of 110 parts per trillion — above the federal health advisory of 70 parts per trillion.

Duane has been diagnosed with gastrointestinal stromal tumor cancer and Janell suffered from pregnancy-induced high blood pressure, according to a lawsuit filed in December in Marinette County Circuit Court by law firms led by Napoli Shkolnik of New York City.

The couple’s two sons, ages 10 and 13, have had developmental delays, according to the suit. Tyco has installed a water filtration system in the house.

“They’ve known about this for how long — and they have been using these chemicals?” Janell said. “You don’t expect it to happen to your family and to your community. So much crosses your mind.”

The City of Marinette has found concentrations in Tyco's wastewater stream, even though the company says most of the foam used in indoor testing is collected and trucked off-site.

Perfluorinated chemicals have also been found near the city's water intake pipe off the shore in Green Bay. Levels detected in municipal drinking water are not considered a safety threat, according to state and local officials.

When Tyco told the DNR in 2017 that the contamination was spreading, "that is when we said 'you need to identify private wells,' " said Steve Ales, the DNR's field operations manager for remediation and redevelopment.

"And ever since then, we have been working much more closely with the company."

The DNR's Foss said the agency's chief concern is making sure that Tyco identifies how far the pollution has spread and cleans it up.

"They have an obligation to act, whether we direct them to or not," Foss said. "I think they are acting now and that is the best we can do — once we found out there was a problem."

Incoming Deputy Secretary Elizabeth Kluesner said DNR's leadership needs to know more about the Tyco case, including possible enforcement action. The agency is under new direction since the election of Gov. Tony Evers, a Democrat.

"My understanding is that there is an issue here," Kluesner said.

"We will decide what this administration is going to do, (but) we need to get briefed by the staff to get a better picture and an exact timeline of exactly what happened here."

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