

Wisconsin battles waste plants that spread hazardous PFAS

By STEVEN VERBURG Associated Press JUNE 29, 2019 — 12:10AM

MADISON, Wis. — Wisconsin wastewater plants were built to keep pollutants out of the environment, but state regulators have come to realize the facilities may be spreading hazardous industrial chemicals in ways that increase health risks.

Normal sewage treatment processes kill bacteria, but they can't touch highly fluorinated chemicals known by the acronym PFAS (pronounced "pea-fass"), which have been described as one of the most seminal public health challenges of coming decades.

PFAS typically enter the human body in drinking water contaminated by the heaviest users of the chemicals — military bases, fire departments and many manufacturers. One route PFAS takes to drinking water begins at the users' sewer drains.

Miles of underground sewer lines carry the virtually indestructible synthetic compounds to publicly owned sewage plants, which release them with treated wastewater into public waters and treated sewage sludge that is applied to farm fields as fertilizer.

Operators of Wisconsin treatment plants that handle industrial waste are faced with a challenge because the state has fallen behind others in setting easily enforceable standards for PFAS pollution of water, the Wisconsin State Journal reported.

In one of several efforts to catch up under new Democratic Gov. Tony Evers, state Department of Natural Resources regulators said earlier this month they plan to ask more than 170 public treatment plants with industrial customers to test treated wastewater for 36 kinds of PFAS.

The DNR said it wants to better understand where contamination exists. A similar program of voluntary testing of public treatment plants in Michigan resulted in efforts by manufacturers that reduced PFAS releases. The Michigan program was backed up by enforceable standards.

Treatment plants have options. Local ordinances — like the one governing the Madison Metropolitan Sewerage District — authorize them to halt industrial releases of hazardous materials. But enforcement could be more difficult than it would be under state or federal standards if polluters resisted potentially costly measures for properly disposing of PFAS.

Under a Madison sewerage district "action plan" dated June 4, managers are studying the ordinance. They may decide in about six months whether to add PFAS restrictions to pollution limits already in place for 19 industrial customers, a spokeswoman said. An educational effort to reduce releases from other sources may also be mounted.

For now, though, district managers said they first want to see more research on PFAS risks and advice on testing. They point out that PFAS disposal is costly and problematic. And they are lobbying for federal PFAS standards, questioning how strict the limits need to be, and seeking assurances that land parcels contaminated with "low levels" of PFAS won't be declared Superfund sites that carry cleanup costs and public stigma.

"We're taking this issue very seriously," said Madison Metropolitan Sewerage District Chief Engineer and Director Michael Mucha. "There are a lot of interests at play here, and for us to be making these kinds of decisions not knowing all the facts is an uncomfortable area to be in."

It will be important to stop any contamination at its source, Mucha said. If the district couldn't annually spread its 37 million gallons of sewage sludge — called biosolids — on 5,000 acres of fields where crops are grown to feed farm animals, disposing of it would be costly. Removing PFAS from sludge and incinerating it would add to costs while posing environmental risks, he said.

A Madison conservationist who helped bring to light PFAS contamination in Madison said there's no excuse for not testing wastewater, especially considering the high price farmers could pay if their crops are found to be contaminated with PFAS.

"There's also a high cost in the health of the wildlife and humans exposed to the PFAS that enters the food chain or eventually washes off these fields into waterways and fish," said Midwest Environmental Justice Organization director Maria Powell. "Which costs are more important? Who should bear the burden of these costs?"

Powell said failure to test wastewater parallels the inaction of federal, state or local governments to determine how far PFAS has spread from the Truax Air National Guard base. It was measured under the base in 2017 at 40,000 parts per trillion, more than 500 times the U.S. Environmental Protection Agency health advisory level of 70 parts per trillion.

Mucha said there was uncertainty about how to test wastewater for PFAS. But DNR water quality manager Adrian Stocks said the state Laboratory of Hygiene can analyze water, soil or biosolids for PFAS. The DNR was expected this summer to finalize standards for private labs to use.

No matter how much or little PFAS is in sewage from industries in the Madison area, there's no doubt that much of the water from nine PFAS-tainted city wells is going down drains in homes and businesses to the treatment plant, Powell said.

"Shouldn't the priority be on assessing how much PFAS is coming into the plant, being released from the plant into waterways and being spread on farmland?" Powell said. "We need this information as soon as possible to assess risks to public and environmental health."

One Wisconsin community, Marinette, in the northeast corner of the state, stopped distributing its sludge to farmers after it tested a sewer line coming from a Johnson Controls subsidiary, Tyco Fire Products, which manufactures PFAS-based firefighting foam that has contaminated drinking water.

There were high levels of PFAS coming from Tyco. It was also detected in sludge at the plant. At the DNR's request, the plant has been storing the sludge. Tyco plans to separate it into liquid and solid material. The solids would be incinerated and the liquids run through a carbon filter to remove the chemicals, plant manager Warren Howard said.

It's not clear when the plant will again produce PFAS-free sludge. The last tests showed PFAS was still entering the plant. The company said it believes PFAS in groundwater is entering sewer lines through cracks, which it plans to seal before more testing, Howard said.

The Madison sewerage district handles more than 40 million gallons of wastewater per day from 26 communities. It hasn't tested for PFAS in the wastewater it receives or the effluent and sludge it releases.

The nine Madison municipal wells where the chemicals have been detected have been at levels below a state groundwater standard state toxicologists recommended earlier this month for two PFAS compounds found in the water. One well about a mile from the contaminated Truax site has been shut down as a precaution.

Madison sewage plant employees have observed signs of PFAS contamination — excessive foaming that causes maintenance problems — for more than a decade, a period when the plant's pretreatment director spoke repeatedly with Truax personnel about releases of PFAS-based firefighting foam into sewer lines.

Emails obtained under the state open records law show that at least back to 2017, plant employees were hearing from professional associations about PFAS hazards and raising questions about the chemicals passing through the plant.

In December 2017, then-director of pretreatment Ralph Erickson sent the plant ecological services director, Martin Griffin, information about what other states were doing. Four months later, Assistant Chief Engineer Jeff Brochtrup emailed co-workers to ask if Truax used PFAS and if wastewater had been tested.

Griffin asked for more information, and eventually had a worker find out the cost of adding PFAS to the contaminants it tests for. But when employees asked about starting testing, the answer from top managers was "no." At least one worker expressed concerns

about how the contaminant might impact the Metrogro sludge program.

"I'm nervous of how this will (affect) biosolids land application and the Metrogro program in the next couple years," District Resource Recovery Manager Kim Meyer said in a Feb. 28 email to three co-workers. "I wish they (government regulators) would put a heavy hand on the sources and have more understanding for us as the receivers/end-use handlers."

Experts say drinking water is the main way people ingest PFAS. Among the major polluters are military bases, firefighter training sites, metal plating companies, and manufacturers of paper products, leather goods, textiles, industrial surfactants, resins, molds, plastics, wire, semiconductors and equipment for photolithography, according to the nonprofit Interstate Technology and Regulatory Council.

Griffin, the district ecological services director, said he examined a list of 19 industrial customers who are required to pretreat or privately dispose of wastewater to keep certain pollutants out of the plant, and none could be a major PFAS source as defined by the council.

Darsi Foss, the DNR's division administrator for environmental management, said that states like Michigan have sometimes found smaller businesses — for example, a dry-cleaner that also waterproofed clothing using PFAS — have been significant polluters.

An estimated 5 million to 10 million people in at least 33 states have been exposed to PFAS in drinking water.

Some members of Congress are pushing for federal limits to help enable cleanups, but there has been resistance from the Department of Defense, which is facing cleanups at hundreds of bases where PFAS-based firefighting foam has been used.

Nineteen states have set PFAS limits or guidelines for PFAS in water. Most took the actions between 2015 and 2017. In March, Maine became the first to require testing of sewage sludge that is spread on the land.

Last year, Michigan required wastewater testing for PFAS and found 250 metal finishing companies releasing the compounds into sewer lines at levels up to thousands of times higher than state water standards.

High concentrations were also found coming down sewer lines from military bases, fire stations, refineries, landfills, industrial laundries and sites where paint, paper products and medical supplies were made.

Private industry and public wastewater treatment plants resisted testing when the program was rolled out, said Jon Russell, a field operations manager for Michigan's Department of Environment, Great Lakes and Energy.

"This effort has required considerable investment by (sewage plants) as well as affected industrial users — especially some metal finishers, so some pushback was anticipated," Russell said. "That has changed considerably, and while we still have debates over details with affected parties, the overall concept is pretty well established."

It was crucial that Michigan had water quality standards for PFAS that erased any doubt about legal requirements for cleaning up pollution and preventing it from happening in the first place, Russell said.

Wisconsin has begun much later than many other states in taking initial steps toward setting PFAS standards.

The administration of former Wisconsin Gov. Scott Walker postponed the start of the process here until early last year. State toxicologists on earlier this month recommended groundwater limits for two of the 4,000 or more PFAS compounds, but under Walker-era laws, it will take two or three years before they could be considered for final approval.

A proposed law written with the assistance of the DNR and the state Department of Health Services, and which is based on what other states are doing, would speed up the setting of limits and efforts to find out where drinking water is contaminated. It has

dozens of Democratic co-sponsors, but no such support from Republicans, who control the state Legislature.

"It's really unacceptable for us to not take action when there is a health hazard," said the bill's author, Sen. Mark Miller, D-Monona. "That's one the strongest responsibilities we have, is to protect public health."

A spokeswoman for Assembly Speaker Robin Vos, R-Rochester, didn't directly address a question about the bill. Senate Majority Leader Scott Fitzgerald, R-Juneau, didn't respond to requests for comment.

Lobbyists for manufacturing concerns including the paper industry have urged lawmakers to go slowly and carefully examine PFAS regulations before acting.

A water quality task force announced by Vos in January has held public hearings and plans to schedule one on PFAS, said chairman Rep. Todd Novak, R-Dodgeville. Novak said he hopes the panel will roll out proposed legislation on at least some water pollution problems this fall or winter. He said he couldn't predict how PFAS would be addressed because it hasn't been discussed.

An AP Member Exchange shared by Wisconsin State Journal.



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PFAS Amendment Could Force EPA's Hand On Regulation



By Peter Chawaga

In a significant regulatory development for one of the greatest contaminant threats to U.S. drinking water, the Senate Environment and Public Works (EPW) Committee has agreed upon a proposed amendment to a defense policy bill that would address the presence of per- and polyfluoroalkyl substances (PFAS).



“The amendment would direct [U.S.] EPA to issue a final drinking water regulation for PFOA and PFOS — two common PFAS — within two years, while requiring the nation’s water systems to engage in expanded monitoring for other PFAS,” the Association of Metropolitan Water Agencies reported. “In addition to requiring PFOA and PFOS regulations, the agreement would effectively create an expedited process under the Safe Drinking Water Act for EPA to issue regulations for PFAS.”

While PFAS contamination in drinking water has sprung up in communities across the country, the EPA currently only has health advisories for PFOA and PFOS at 70 parts per trillion in drinking water. Given the adverse health effects associated with PFAS consumption, some local regulators have felt that these advisories do not go far enough and have been working to implement their own restrictions.

Though the EPA has said that it will decide whether it's setting actual drinking water standards for PFAS by the end of 2019, this new amendment could get the ball rolling more quickly and potentially help address PFAS contamination at its source.

“The amendment ... would put pressure on the agency to speed up that timeline, adopting a drinking water standard within two years,” according to *The Hill*. “Thursday’s Senate amendment would also force the EPA to consider barring new uses of PFAS and require PFAS manufacturers to share data on their production.”

If passed, the amendment would reportedly require the EPA to make regulatory determinations for PFAS within 18 months of their placement on the Contaminant Candidate List. Once the EPA makes the decision to regulate a PFAS, it would then have 18 months to propose that regulation and then another year to finalize it.

“Finally, the proposal would require the EPA to issue a lifetime drinking water health advisory for any PFAS or class of PFAS for which EPA finalizes a toxicity value and testing procedure, unless EPA determines the substance is unlikely to appear in drinking water,” per the Association of Metropolitan Water Agencies.

The U.S. Senate will be reviewing the amendment this week. If passed, it could motivate the tougher regulatory stance on PFAS that many consumers and water agencies around the country have been calling for.

To read more about the rules surrounding drinking water contaminants, visit [Water Online's Regulations And Legislation Solutions Center](#).