

Class of chemicals under growing scrutiny detected at four military sites in Wisconsin

Lee Bergquist, Milwaukee Journal Sentinel | Aug. 28, 201



An emerging class of chemicals have been found in soil and groundwater at the Air National Guard 128th Air Refueling Wing in Milwaukee. (Photo: Tyger Williams / Milwaukee Journal Sentinel)

An emerging class of chemical compounds discovered at a Johnson Controls affiliate in northern Wisconsin has also been found at Wisconsin military sites, including the Air National Guard 128th Air Refueling Wing in Milwaukee.

Known as perfluorinated chemicals, the widely manufactured compounds are prompting heightened concerns nationally because of their potential impacts on human health.

A [federal draft report](#) released in June found the chemicals present a greater public health risk than previously known.

The report said epidemiology studies suggest that the chemicals are associated with increased risk of pregnancy-induced hypertension, liver damage, thyroid disease, asthma, decreased fertility, some cancers and a decline in response to vaccines.

In Wisconsin, much of the concern stems from the chemicals when they are used to fight fires at military bases and industrial sites.

The chemicals, including perfluorooctanoic acid, or PFOA, and perfluorooctanesulfonic

acid, or PFOS, are used in fire-retardant foams and in products such as Teflon and rain wear.

The chemicals can seep into soil and pollute surface water and groundwater and potentially contaminate drinking water.

Records and email correspondence from the Department of Natural Resources show the compounds have been found in the soil and groundwater at sites of the 128th, as well as the 440th Airlift Wing of the Air Force Reserve. The 440th moved to a base in North Carolina in 2007.

Also, PFOA and PFOS have been detected in ponds and sediments at the 128th.

According to the agency, the pair of chemicals have been found in concentrations above the current [federal lifetime health advisory](#) level for drinking water of 70 parts per trillion.

There is no sign, however, that they have infiltrated private wells, according to DNR records.

DNR spokesman Jim Dick said in an email that the Air National Guard has submitted plans to remove the contaminants from the air field.

In addition, records show similar types of contamination have been found at Fort McCoy between Sparta and Tomah; at Volk Field at Camp Douglas in Juneau County and at Truax Field in Madison.

The City of Madison detected perfluorinated compounds in 2017 in one well near Truax, but below the health advisory of 70 parts per trillion.

State investigations

Other states are investigating whether the chemicals are in public drinking water. [In Michigan, the state is spending \\$1.7 million to test water](#) and said on Aug. 21 it is finding evidence of the compounds. Only one community, Parchment near Kalamazoo, is so far known from the surveys to [have drinking water with concentrations above 70 parts trillion](#).

Some health and environmental groups are pressing the Trump administration to set stricter guidance than that, and some states have moved independently to clamp down on the chemicals.

EPA and White House officials in January wanted to delay the publication of the June draft study, which could lead to tougher limits on the chemicals, according to emails made public under open records requests by the [Union of Concerned Scientists](#), an advocacy group.

In March, the DNR asked the state Department of Health Services to recommend safe levels for 16 substances found in groundwater, including PFOA and PFOS. The evaluation process is continuing, a health official said.

Wisconsin's rule-making process to regulate new chemicals can take years to complete and require a review by the Legislature.

At a Tyco Fire Products manufacturing plant in Marinette, the company has been providing drinking water systems to residents whose private wells are polluted. The company is also evaluating strategies to remove the chemicals from ditches leading to Green Bay and Lake Michigan.

Tyco, a unit of Johnson Controls in Glendale, is monitoring the extent of groundwater contamination. In late 2017, the company began investigating how chemicals had strayed from the property and how best to contain the pollutants.

"The Tyco-Marinette situation pointed out that this emerging ... issue was something that had to be addressed" by multiple divisions within the agency, Dick said.

That prompted officials to organize an internal work group to try to determine the scope of the problem in Wisconsin and how best to proceed.

Laura Olah is executive director of Citizens for Safe Water Around Badger, a group that was organized over long-standing pollution problems at the former Badger Army Ammunition Center in Sauk County.

She praised the DNR for trying to better understand the problem but called on the agency to do more.

"We know there are at least four military installations in Wisconsin where there is contamination," Olah said.

"But there has to be more communications with the public," she said. "They need to know more about the chemicals, the extent of groundwater flow and the potential impact on them."
