

Comments to the Water Utility Board, July 23, 2019

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Water Utility Board Members:

Thank you for including a discussion today about the PFOA/PFOS standards recently released by the Wisconsin Department of Health Services.

We were pleased to see the proposed groundwater standard of 20 ppt for PFOA + PFOS from the Wisconsin Department of Health Services (DHS); this is a huge improvement over the EPA's inadequate Health Advisory Level (HAL) of 70 ppt. As our [February 5, 2019 comments](#) noted, and DHS stated in its technical documents supporting their proposed standard, the EPA's HAL does not protect infants. (PHMDC's "fact" sheet assured the public for many months that EPA's HAL did protect infants; this language should be amended or deleted from all PHMDC and Water Utility information, if it hasn't been yet.)

Some scientists and national environmental organizations believe that, based on scientific studies, the standards should be even lower than 20 ppt (see text from our Feb. 5 comments in footnote).¹ Recently, Dr. Linda Birnbaum with the National Institute of Environmental Health Sciences (NIEHS) [proposed that the drinking water threshold for just PFOA should be 0.1 ppt](#), based on studies associating this compound with pancreatic cancer, which is dramatically increasing.

On the other hand, powerful [Wisconsin industry lobbying groups](#) are arguing that DHS's standards are far too low and are working to thwart them, saying they will negatively impact jobs and the economy. The DHS standard for PFOA/PFOS will now go through DNR Legislative rule making, and these powerful players will work hard to influence this process to make them less protective. Even if the proposed DHS standards make it intact through DNR rule making, final standards will not be issued for years. Most regulatory experts say that EPA will not issue final PFAS MCLs for about a decade.

While these contentious debates play out for years, the Madison Water Utility needs to make a critical decision very soon about whether or not to put Well 15 back into use.

In this context, our recommendations:

1. MEJO supports the recommendation of the Greater Sandburg Neighborhood Association that the Madison Water Utility adopt the protective Vermont public health standard of 20 ppt for five PFAS combined to guide the decision about Well 15 now. Based on this standard, we also agree that Well 15 should not be put back into service unless there is some kind of mitigation to remove PFAS.²

We should not wait years for political debates among scientists, industry, and the Wisconsin Legislature to be resolved before taking actions to protect the most vulnerable Madison residents. It's our understanding that the Water Utility has authority to set its own policy on PFAS (and other contaminant) standards to protect Madison residents, and the current Water Utility policy is to treat a well when a contaminant reaches 80% of the MCL. Even if the Vermont standard is not adopted, the levels of PFOA and PFOS are already 60% of the DHS's proposed 20 ppt standard (and this is just for two of the ten PFAS present in the well).³

[The Vermont standard](#) is not unscientific or radical. Vermont scientists used the same formula and assumptions that the EPA used to develop its HAL, with one key difference: they used a higher water ingestion rate for infants (who drink more water per body weight than adults), resulting in a lower, more protective standard. [The information sheet by PHMDC](#) handed out at a previous Water Utility Board meeting shows this comparison very clearly (see pg. 4-5).

¹ Included in our February 5, 2019 letter to the WUB: "Legislators in other states have proposed standards of as low as [5 ppt](#) each for one or both compounds, and Boston University and Harvard scientists have proposed a 1ppt PFOS limit based on their findings of immune system effects in children that affect their responses to vaccines—see [here](#) and [here](#). A [Natural Resources Defense Council \(NRDC\)](#) analysis of the ATSDR recommendations proposed levels as low as 3 ppt and 1 ppt for PFOS to prevent immune system effects."

² We realize mitigation is very expensive, appropriate mitigation methods and disposal of PFAS wastes are controversial.

³ Based on emerging science, state and federal regulatory developments, the Utility could revisit any standard it adopts in the future if city residents and the Board feel evidence merits that.

Well 15 currently has a total of 34 ppt of the five PFAS considered in Vermont's standard (and a total of 56 ppt of ten PFAS compounds).⁴ People in the Well 15 area are drinking all of these compounds right now, but it will be many years before DNR promulgates rules on PFAS compounds other than PFOA and PFOS. Given that there are numerous families with babies, pregnant women, and women who may become pregnant in the Well 15 service area, we believe the Vermont standard, based on science and *designed to protect infants*, is a reasonable standard for the Water Utility to adopt now.

2. We support the Greater Sandburg Neighborhood's request that a Well 15 Citizen Resident Advisory Panel be created to involve residents who drink this water in decisions about how to address the PFAS and contaminants in other wells that serve the area. People in the Well 15 area should be provided with full information about the contaminants in other wells that will provide water with Well 15 off--and are providing the area's water now.⁵ MEJO also recommends that the Water Utility consider a comprehensive approach to addressing water quality problems in all the north and east side wells, which are used in various combinations in different seasons to serve these areas.

3. We ask that the Water Utility Board get more information about the PFAS found in Reindahl Park and the former Burke sewage treatment plant and share it at a future board meeting. It's critical that the Water Utility and other government agencies take immediate steps to understand how far PFAS has spread from the Truax base, as well as other PFAS sources in the Well 15 area.

Reindahl Park

In June 2018 Sandburg residents asked the Madison Metropolitan Sewerage District to test for PFAS along a route where they will build a new sewer line. July 2018 test results by MMSD showed levels of PFOA + PFOS (combined) at 30-40 feet deep that are about the same as in Well 15, which is in the park. One well had 12.1 ppt PFOA + PFOS and a total of 22.24 ppt for six PFAS combined (PFOA, PFOS, PFBS, PFNA, PFHxS, PFHpA).

Questions that should be addressed: How deep and wide is the PFAS plume under the park (testing was very limited--just four shallow borings)? Is the PFAS from Truax ANG? Or from the pesticides used at Reindahl Park (some pesticides contain PFAS)? Or another source? Why are the city and DNR allowing this PFAS-contaminated water to be sucked up (dewatering) and discharged back into storm drains and ditches into the park—going back into Starkweather Creek and seeping back down into the aquifer? What range of PFAS levels will be drawn up as dewatering continues for many months, drawing water from deeper levels? How will this affect Well 15? How will dewatering PFAS into the park affect the community gardens, sports fields, splash pad, and other parts of the park heavily used by low income people and minorities? Many more questions could be added to this list.

Former Burke sewage treatment plant

In February 2019, consultants tested groundwater under the former Burke Sewage Treatment plant in Truax Field (near Bridges Golf Course), on behalf of MGE, which purchased the site from Reyco in February for \$5.5 million dollars. February test results showed significant levels of PFAS: PFOA (18-25ppt), PFOS (5.1-23ppt), PFHxS (1.8-50ppt), PFBA (15-33ppt), and more. Total PFAS levels in groundwater wells: TW1: 111.8 ppt, TW2: 43 ppt, TW3: 55 ppt, TW4: 89.4 ppt. A June 2019 consultant report indicates that these wells and one more will be re-tested, as well as up to four sludge/soil samples.

Questions that should be addressed: What does MGE plan to do with this site? What is the source of the PFAS? What are the vertical and horizontal extents of the PFAS plume under this area? Has DNR issued a responsible party letter to MGE and/or previous owners of the site, Reyco? Why hasn't DNR asked the responsible party to follow NR 716 and other NR 700 laws? Why isn't DNR asking the responsible party to test the golf ditch that drains from this site directly into Starkweather Creek? Many more questions could be added to this list.

⁴ Of the five PFAS Vermont considers, max levels found in Well 15 to date: PFOS—5.9ppt, PFOA—5.7 ppt, PFHxS—20-21 ppt, PFHpA—2.6 ppt. As of yet no PFNA has been detected. However, groundwater beneath two nearby sites (Reindahl Park and the former Burke sewage treatment plant) have both been found to have detectable levels of PFNA, so it could reach the well in the future. **New Hampshire just proposed a drinking water standard of 18 ppt for PFHxS, which is one of the compounds used originally to replace PFOA and PFOS.**

⁵ For instance, Well 11, currently serving the Well 15 area, has up to **0.31 ug/L** of 1, 4-dioxane (the proposed DHS groundwater standard is **0.35 ug/L, PAL 0.035 ug/L**). Well 11 has up to **0.30 ug/L trichloroethylene (TCE)** (the proposed DHS groundwater standard is **0.50 ug/L, PAL 0.05 ug/L**). Well 11 also has an average of **880 ng/L** hexavalent chromium (DHS proposed a groundwater standard of **70 ng/L, PAL of 7 ng/L**).