



## KEEPING RESIDENTS INFORMED ABOUT PFAS

Ann Arbor Water diligently monitors and ensures the protection of safe drinking water. The City holds this responsibility with the utmost seriousness, which is why the City maintains a per- and polyfluoroalkyl substances (PFAS) action plan. This action plan is to keep residents informed about the measures being taken to remove PFAS contamination from our source and drinking waters.

**REMOVING PFAS ACTION PLAN:** Ann Arbor drinking water is produced through three main processes, lime softening, ozone disinfection and activated carbon filtration. The City uses granular activated carbon (GAC) treatment for PFAS. We are confident in this technology because it has proven reliability for PFAS removal for many years in countless applications across the globe and is considered one of the best available technologies recommended for water utilities. Furthermore, we installed our own pilot filters, tested several GAC medias ourselves, and selected the GAC filter media that was most effective at removing PFAS. Using GAC filtration, we continue to meet Michigan's PFAS regulations in our finished drinking water, we already meet the PFAS regulations proposed by U.S. Environmental Protection Agency (EPA), and we are watching closely for regulatory developments as EPA's finalized regulations are expected in the coming year.

**MONITORING AND TESTING:** Every month, the City takes proactive measures by sending water samples from both the Barton Pond intakes and the finished drinking water to an independent laboratory for PFAS testing, going beyond the quarterly regulatory testing requirement. PFAS testing uses specialized equipment and protocols to quantify PFAS at incredibly low nanogram per liter levels, also known as parts per trillion (ppt) concentrations. We are using the best certified methods that exist and posting that data for our customers on our website. We are also watching for any new discoveries in the analytical technology for PFAS and will evaluate newer methods if they are developed and proven to be reliable.



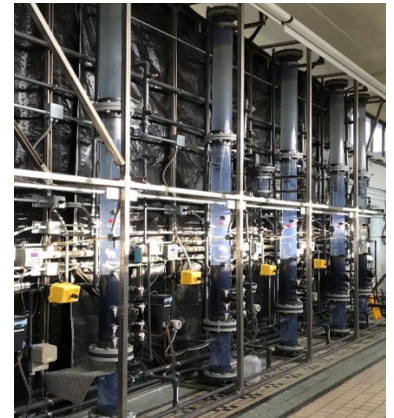
*Testing in the City's Environmental Laboratory*

**PROTECTING OUR WATERWAYS:** While we have been able to effectively treat our source waters to ensure the safety of the City's drinking water, the most effective tool to protect the City's water supply is to eliminate these harmful chemicals from our watershed. Unfortunately, the most significant sources of these chemicals come from entities outside the City, such as upstream industries and wastewater treatment plants. The City and its local partners will continue to advocate for eliminating these contaminants at their source, so Ann Arbor water customer do not have to carry the financial burden of removing these chemicals from their water supply. While emerging contaminants may continue to be detected, our dedicated staff are prepared to not only face these challenges, but also remain an industry leader in pioneering solutions.

**LOOKING AHEAD:** The City's PFAS levels are well below the Michigan Department of Environment, Great Lakes, and Energy (EGLE) drinking water maximum contaminant levels (MCLs) and Environmental Protection Agency's (EPA) proposed drinking water MCLs, but we continue to improve our treatment processes and strive to learn more about other emerging contaminants. One way the city is dedicated to continuous improvement is by actively participating in research. In partnership with North Carolina State University, a leader in PFAS research in the U.S., the city

explored new technologies for removing PFAS from drinking water and implemented one of the best available technologies for PFAS removal for municipal water systems. Our research has also enabled us to optimize our replacement schedule for our filter media. The GAC in our filters is regenerated every 3 years at an average cost of \$250,000 per year to ensure maximum PFAS removal. We will continue to participate in PFAS research projects to ensure you, our customers, have access to the best and most current solutions and technology. We also have active research projects with University of Michigan and are building a pilot version of our full-scale treatment process to allow us to test additional water treatment technologies before implementing them at full-scale, using frequent online analytics and in-lab testing to determine if the process is suitable for the large-scale plant. We are dedicated to continuously optimizing our process and searching for solutions for any water quality challenge we may face. After all, we all drink Ann Arbor's water – and we take the responsibility to stay ahead of any potential threats to the safety of our drinking water very seriously.

**STAY INFORMED:** Our drinking water team will continue sharing PFAS water quality data on our website as soon as the data is validated. We also address water quality concerns and provide customer updates through a variety of communication channels, such as Facebook, Twitter, NextDoor, our monthly online resident newsletter, and regular email notifications. To review the PFAS data and to learn more about your drinking water and the City of Ann Arbor's efforts to provide high quality water, visit [www.a2gov.org/PFAS](http://www.a2gov.org/PFAS).



*Ann Arbor pilot filters used to test GAC products for PFAS removal*

## Frequently Asked Questions about PFAS

**What are PFAS?** PFAS is an acronym for per- and polyfluoroalkyl substances, a group of over 14,000 synthetic inorganic chemicals extensively utilized in numerous industries for producing fluoropolymer coatings and products renowned for their resistance to heat, oil, stains, grease, and water. These chemicals find their way into various consumer products, including nonstick pans, stain-resistant carpets, paints, polishes, and waxes. Termed as "forever chemicals," PFAS possess a remarkable trait of not decomposing naturally, leading to persistent environmental presence. They have been associated with severe health concerns, such as cancer, fetal complications, and other serious health problems. This calls for heightened awareness and measures to address their potential risks and ensure the safety of our communities and environment.

**What are the maximum contaminant levels for PFAS?** Michigan Department of Environment, Great Lakes, and Energy (EGLE) established maximum contaminant levels for seven PFAS compounds in August of 2020, including PFOS (16 ng/L), PFOA (8 ng/L), PFNA (6 ng/L), PFHxS (51 ng/L), HFPO-DA also known as GenX (370 ng/L), PFBS (420 ng/L), and PFHxA (400,000 ng/L). On March 14, 2023 the U.S. Environmental Protection Agency (EPA) proposed drinking water regulations for PFAS, and final regulations are expected by the end of 2023 or early 2024. **Ann Arbor already meets EPA's proposed PFAS regulations as well as EGLE's regulations and produces water that is protective of public health.** In addition to meeting EGLE and EPA regulations, Ann Arbor holds itself to a higher standard and works to maintain less than 8 ng/L of PFOS plus PFOA combined and less than 50 ng/L for the sum of all PFAS.

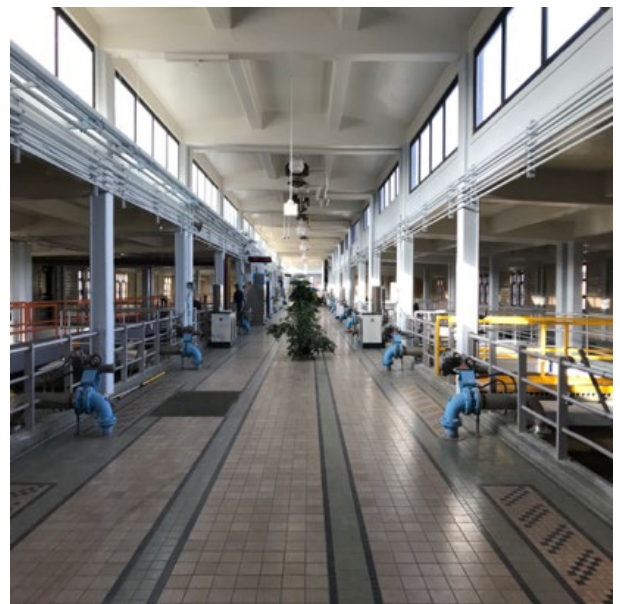
**What are the levels of PFAS in Ann Arbor's drinking water?** Ann Arbor already meets EPA's proposed PFAS regulations as well as EGLE's regulations and produces water that is protective of public health. The City of Ann Arbor monitors its source water and finished water regularly for 28 PFAS compounds, including all regulated compounds, the six compounds included in EPA's proposed drinking water regulations, and the four the compounds included in the EPA health advisory. We post our data at [www.a2gov.org/PFAS](http://www.a2gov.org/PFAS) as it becomes available. Analysis times are often greater than a month, but you will find the most recent data we have on our website.

**What is being done to protect our drinking water from PFAS?** Several of the new health advisory levels are below the limit that any known method can quantify today, specifically for PFOS and PFOA. We are aware that these health advisory levels are lower than the regulated values from the state of Michigan and the levels that the best detection methods can achieve. We are still confident that our water is safe. That is because City of Ann Arbor has installed granular activated carbon (GAC) treatment for PFAS, one of the best technologies that exist today for removal of PFAS. We are confident in this technology because it has proven reliable for PFAS removal for many years in countless applications across the globe and is considered one of the best available technologies recommended for water utilities. Furthermore, we installed our own pilot filters, tested several GAC medias ourselves, and selected the GAC filter media that was most effective at removing PFAS. We monitor our filters closely and they have been working as expected. We continue to meet all PFAS regulations in our finished drinking water, and we continue to participate in research to ensure we are using the best available technology as advances are made.

**Where can I see test results of PFAS in our water?** Independent lab verified testing results of PFAS in the source water and finished drinking water are posted on the City's website at [www.a2gov.org/PFAS](http://www.a2gov.org/PFAS).

**Where can I get more information about PFAS?** More information about PFAS is available on the United States Environmental Protection Agency (EPA) website at [www.epa.gov/pfas](http://www.epa.gov/pfas) and the City's website at [www.a2gov.org/PFAS](http://www.a2gov.org/PFAS).

**Can people bathe and swim in water containing PFAS?** The Michigan Department of Health and Human Services (MDHHS) has issued a "Do Not Eat Fish" advisory for the Huron River and advises people and their pets to avoid foam on the Huron River. Foam can have much higher amounts of PFAS than the water, and swallowing foam with PFAS could be a health risk. Swimming or bathing in water containing PFAS is not a health concern because the amount of PFAS is typically low compared to foam. Although swallowing PFAS is the main way to get it in your body, an accidental swallow of river or lake water is not a health concern. Although current science indicates PFAS does not move easily through the skin, it's best to rinse off foam, including family pets, after contact and bathe or shower after the day's outdoor activities. None of this information changes recommendations for people's water used at home. For more information about fish advisories, see [www.Michigan.gov/EatSafeFish](http://www.Michigan.gov/EatSafeFish). More information about PFAS and foam is under the [Surface Water Workgroup](#) section at [Michigan.gov/pfasresponse](http://Michigan.gov/pfasresponse).



*Ann Arbor's filter gallery houses GAC treatment for PFAS*