IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Abington/Rockland Joint Water Works has levels of PFAS6 above the Drinking Water Standard

This report contains important information about your drinking water. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). Please translate it or speak with someone who understands it or ask the contact listed below for a translation.

What happened and what is being done?

On October 2, 2020, the Massachusetts Department of Environmental Protection (MassDEP) promulgated a ***new*** drinking water regulation and maximum contaminant level (MCL) for PFAS6. The MCL ***decreased*** the previous Massachusetts Office of Research and Standards Health Advisory of 70 nanograms per liter (ng/L) for two PFAS compounds to 20 ng/L for the sum of six per-and polyfluoroalkyl substances (called PFAS6). This regulation required our public water system to begin sampling for PFAS6 in April of 2021. However, our water system took advantage of a free MassDEP PFAS sampling program to proactively and voluntarily sample for PFAS6 prior to the new regulations taking effect.

Based on new sampling results from the 3rd quarter of 2021, our water system recently violated this drinking water standard and is taking the following corrective actions:

Currently, Abington/Rockland Joint Water Works (ARJWW) is investigating water treatment and other options. In a ***short-term and immediate effort*** to address PFAS6 detected at the Hingham Street Water Treatment Plant, ARJWW immediately involved our Engineers and notified MassDEP. We quickly developed a potential method of Water Treatment to remove the existing PFAS6, permitted it, and are presently implementing the addition of ***powdered activated carbon (PAC)*** in our treatment process. Our initial PAC application resulted in a PFAS6 reduction of ~20%. However, the application of PAC has not consistently reduced the PFAS6 numbers below 20 ppt (see results in the table below) and we have stopped the PAC addition as approved by the MassDEP. In the meantime, the Joint Water Works has been working on obtaining funds as we move towards implementing a long-term corrective action plan. This is a work in progress for the Joint Water Works as we explore all feasible avenues to improve PFAS6 removal efficiency. We will ***continue to monitor and address*** the PFAS6 detects and ***will apply the best possible method for long-term corrective action in our treatment plant.***

Proactive Sampling/Testing Efforts by Abington/Rockland Joint Water Works (ARJWW)

ARJWW ***proactively and voluntarily*** sampled for PFAS6 ***prior*** to the implementation of the new regulations. Elevated levels of PFAS6 were confirmed during routine monitoring of the drinking water at the Hingham Street Water Treatment Plant (finish/treated water entering distribution) in Rockland. *This is 1 of 3 sources that supplies drinking water to our system*. PFAS6 levels were reported ***below*** the 20 ng/L MCL at our Great Sandy Bottom Water Treatment Plant (WTP) in Pembroke and Myers Ave WTP in Abington.

ARJWW recently received the MassDEP validated PFAS6 results for our September 2021 Hingham Street WTP Finish sample. This completes our Quarter 3 sampling. After averaging the 3 months of sampling (see the table below), our results are confirmed above the MCL for the PFAS6 Regulation (24 ng/L). Even though we sent out Public Education and Public Notification information based on the 2021 Quarter 1 results, to comply with the new drinking water regulation, we must continue to provide you with this Public Notice quarterly when necessary.

PFAS6 Results for Hingham Street WTP Finish Water

Quarterly Compliance Period	Monitoring Period	Sample Collection Date	PFAS6 Result (ng/L)	Quarterly Average (ng/L)	PFAS6 MCL (ng/L)
Quarter 1, 2021	Month 1	1/26/2021	20.95	23	20
	Month 2	2/17/2021	25.87		
	Month 3	3/31/2021	21.81		
Quarter 2, 2021	Month 1	4/26/2021	20.39	20*	20
	Month 2	5/31/2021	18.54		
	Month 3	6/24/2021	21.82		
Quarter 3, 2021	Month 1	7/30/2021	21.47	24	20
	Month 2	8/31/2021	21.86		
	Month 3	9/29/2021	29.52		
Quarter 4, 2021	Month 1	10/29/2021	**No results yet**		20
	Month 2				
	Month 3				

* The value of 20 does not exceed 20 and is not a violation of the MCL

What does this mean?

This is not an emergency. If it had been, you would have been notified within 24 hours. Although this is not an emergency, as our customer, you have a right to know what happened, what you should do, and what we did and are doing to correct this situation.

Some people who drink water containing these PFAS6 in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS6 may also elevate the risk of certain cancers.

For more information about PFAS6, see the attached fact sheet and weblinks listed below.

What do I need to do?

- ***Consumers in a sensitive subgroup*** **(pregnant or nursing women, infants and people diagnosed by their health care provider to have a compromised immune system), are advised not to consume, drink, or cook with water when the level of PFAS6 is above 20 ng/L.**
- **Consumers in sensitive subgroups** are advised to use bottled water for drinking and cooking of foods that absorb water (like pasta). A list of companies that voluntarily tested their water for PFAS and shared the results can be found on MassDEP's website at https://www.mass.gov/info-details/water-quality-standards-for-bottled-water-in-massachusetts#list-of-bottlers-.
- **For infant formula,** use bottled water or use formula that does not require adding water.
- ***For older children and adults not in a sensitive subgroup***, the 20 ng/L value is applicable to a lifetime of consuming the water. For these groups, shorter duration exposures present less risk. However, if you are concerned about your exposure while steps are being taken to assess and lower the PFAS concentration in the drinking water, use of bottled water will reduce your exposure.
- ARJWW will be installing a self-service water filling station to provide water with levels of PFAS6 below 20 ng/L to those water customers in sensitive subgroups. See **What is being done?** section below for more information.
- **Bottled water should only be used if it has been tested**. A list of companies that voluntarily tested their water for PFAS and shared the results can be found on MassDEP's website at https://www.mass.gov/info-details/water-quality-standards-for-bottled-water-in-massachusetts#list-of-bottlers-.
- Some home water treatment systems used to treat/filter individual faucets or entire homes can or may be able to lower the level of PFAS6 in drinking water. **Our public water system has not evaluated any home treatment systems or devices to determine their efficacy to remove and maintain PFAS6 below 20 ng/L and is not aware of a currently available home treatment system or a device shown to meet the Massachusetts drinking water standard for PFAS6 of 20 ng/L.** Therefore, when deciding on home water treatment and PFAS6, you should be aware of the specific information on home water treatment systems and PFAS6. See the specific information on home water treatment and PFAS6 at the links below.
- **In most situations the water can be safely used for washing foods, brushing teeth, bathing, and showering.**
- **Boiling the water will not destroy PFAS6** and will somewhat increase its level due to evaporation of some of the water.
- **If you have specific health concerns regarding exposure, you should see the Centers for Disease Control's link below and consult a health professional, such as your doctor.**

What is being done?

Abington/Rockland Joint Water Works is investigating methods of water treatment to remove the PFAS6.

- ***Immediate/short-term response***: ARJWW has determined that our original ***immediate/short-term response plan***, the Powdered Activated Carbon (PAC) application in our drinking water treatment process, has ***not*** been effective enough in the removal of PFAS6. With the approval of the MassDEP, we have discontinued the PAC addition.
- ***FILL STATION: ARJWW has installed a self-service water filling station to provide water with levels of PFAS6 below 20 ng/L to those ARJWW customers in sensitive subgroups. The fill station spigot can be found at the Abington/Rockland Joint Water Works Main Office located at 366 Centre Ave, Rockland, MA 02370. The spigot is open Monday – Friday from 8:00am – 3:00pm. Any questions regarding the fill station spigot please call: Abington/Rockland Water Department Main Office number (781) 878-0901.***
- ***Intermediate/Long - Term response:*** ARJWW continues to work with engineering consultants to review potential treatment process design and filtration vessel options for intermediate and long-term solutions to achieve PFAS6 reduction below the MCL.
- ***Please continue to check our websites for updates:*** **Abington site:** https://www.abingtonma.gov/abington-rockland-joint-water-works **Rockland site**: https://www.rockland-ma.gov/273/Water

Where can I get more information?

For more information, please contact our PFAS Team listed below. Please also refer to our attached PFAS6 Fact Sheet and the ARJWW websites for PFAS6 updates.

Kristel Cameron, Assistant Superintendent (781) 878-0901

&

Tom Royal, Primary Operator (781) 878-0901

PFAS6 FACTS:

What is PFAS? Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS, GenX, and many other chemicals. **PFAS6** refers to the sum of six PFAS compounds, including PFOA, PFOS, PFNA, PFHxS, PFDA and PFHpA that together make up the MassDEP MCL. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body – meaning they do not break down and they can accumulate over time. Although PFOA and PFOS are no longer manufactured in the United States, they are still produced internationally and can be imported in consumer goods such as carpet, leather and apparel, textiles, paper and packaging, coatings, rubber and plastics. As a result, they are widely found in the environment where they migrate to the food supply and drinking water.

PFAS can be found in:

- **Food** packaged in PFAS-containing materials, processed with equipment that used PFAS, or grown in PFAS-contaminated soil or water.
- **Commercial household products**, including stain- and water-repellent fabrics, nonstick products (e.g., Teflon), polishes, waxes, paints, cleaning products, and fire-fighting foams (a major source of groundwater contamination at airports and military bases where firefighting training occurs).
- **Workplace**, including production facilities or industries (e.g., chrome plating, electronics manufacturing, or oil recovery) that use PFAS.
- **Drinking water**, typically localized and associated with a specific facility (e.g., manufacturer, landfill, wastewater treatment plant, firefighter training facility).
- **Living organisms**, including fish, animals, and humans, where PFAS can build up and persist over time.

Because these chemicals have been used in an array of consumer products, most people have been exposed to them. Scientists have found PFOA and PFOS in the blood of nearly all the people they tested, but these studies show that the levels of PFOA and PFOS in blood have been ***decreasing***. While consumer products and food are a large source of exposure to these chemicals for most people, drinking water can be an additional source in the small percentage of communities where these chemicals have contaminated water supplies. Such contamination is typically localized and associated with a specific facility, for example, an industrial facility where these chemicals were produced or used to manufacture other products or an airfield at which they were used for firefighting.

Because PFAS6 is not well absorbed through the skin, routine showering/bathing are not a significant concern unless PFAS6 levels are very high. Shorter showers/baths, especially for children who may swallow water, or for people with severe skin conditions would limit any absorption from the water. Based on information from the Connecticut Department of Health, which is the only State to have issued guidance on the issue, water should not be used, long-term, for showering/bathing if the PFAS6 level exceeds 210 ppt.

Again, while we are currently above the 20 ng/L MCL, we are actively implementing immediate short-term and reviewing long-term solutions to reduce PFAS6 below the MCL. For perspective:

One part per million (ppm) equals 1 inch in 16 miles

One part per billion (ppb) equals 1 inch in 16,000 miles

One part per trillion (ppt) equals 1 inch in 16 million miles (approximately 600 times around the earth)

- **MassDEP Fact Sheet - Questions and Answers for Consumers** (https://www.mass.gov/media/1854351)
- **CDC ATSDR Information on PFAS for consumers and health professionals** (https://www.atsdr.cdc.gov/pfas/index.html)
- **Massachusetts Department of Public Health information about PFAS in Drinking Water** - https://www.mass.gov/service-details/per-and-polyfluoroalkyl-substances-pfas-in-drinking-water

Notice is being sent by: Abington/Rockland Joint Water Works —- System ID# 4001000 —- November 2, 2021

*We will provide public notice updates every three months until the situation is resolved.