
“THE PUDDLE”

THE NORTH KINGSTOWN DEPARTMENT OF WATER SUPPLY NEWSLETTER

September 2020

Frank Talk About PFAS, Drinking Water and Our Health

What is PFAS?

You may have heard the acronyms PFAS, PFOA and PFOS bandied about in print and online media sources in the last year or so. Perhaps you are wondering what this is all about and is it something, in our very busy lives, that warrants concern. The chemical compounds grouped together and identified as PFAS, which includes PFOA and PFOS, are a class of manmade chemicals that includes thousands of compounds, including PFOA and PFOS. These chemicals have been used since 1949 and are valued for their ability to provide a protective coating on products. Some uses include non-stick cookware, stain resistant fabrics and firefighting foam. Dental floss, cleaners, waxes, and many other products may contain PFAS.

Why is North Kingstown Water Supply Taking a Close Look at PFAS?

Like many of the public water systems in Connecticut, Massachusetts, and Rhode Island, some of these chemicals have been detected in North Kingstown’s water supply at low levels (parts per trillion) at some of our drinking water supply wells.

What is North Kingstown Water Supply Doing about this?

Although some New England states have set PFAS standards for drinking water, North Kingstown and other Rhode Island Water Suppliers have been working with State officials and the EPA, following the developing science, and exploring potential enforceable regulatory limits, potential required actions, and evaluating new water sources to possibly replace sources where PFAS has been detected.

What we know:

- Our awareness of these chemicals’ environmental presence is a result of the increased sensitivity of detection methods. Detection methods can detect these chemicals at the level of ‘parts per trillion’.
- Monitoring has detected PFAS in the environment throughout the county.
- The properties that made PFAS effective, contribute to their persistence in the environment. They are not broken down by biological and photo (light) degradation to be rendered harmless.
- PFAS have been found in the environment and in the blood of humans and animals worldwide. Most people in the United States have one or more specific PFAS in their blood, especially PFOS and PFOA.
- Some studies have shown that exposure to some PFAS may be linked to harmful health effects. Additional research is needed to better understand the health effects of PFAS exposure.
- PFAS are currently unregulated by the EPA, meaning the EPA has not established an enforceable limit on the amount of these compounds that may be present in food and water. The EPA has issued a non-enforceable lifetime health advisory of 70 part per trillion (ppt) combined exposure for these compounds. (For perspective, 70 ppt is approximately equivalent to 3.5 drops of water in an Olympic sized-swimming pool). Better understanding of the contribution of sources of exposure (food, water, air) and the relationship of PFAS concentrations in blood and tissue to health effects are being sought prior to setting regulatory limits. Many scientists agree that the best way to reduce our exposures to PFAS is to limit their use in consumer products.

What we do not know

We do not know the role in, or contribution of drinking water containing PFAS to human blood levels compared to other sources of these compounds. Nor do we know how much of these compounds (as exposure, ingestion, or blood level) poses potential health risks in humans and their companion animals, or farm animals. Neither do we know how the blending of multiple source wells in a system where not all wells have PFAS detects affect the overall concentrations in the system.

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What is being done to pursue answers and develop plans and solutions?

The results of scientific research are being evaluated as regulators work toward developing regulatory limits for PFAS. Studies are also being conducted to find the best treatment methods for removing these chemicals from our drinking water.

What should North Kingstown’s water consumers do?

Consumers can learn more about PFAS using the links below. If you want to filter your water, activated carbon filters can remove some of these compounds, but it is important to follow the manufacturer’s use and maintenance instructions. Do not boil your water – this will concentrate this kind of compound if present.

If you would like to read more: Additional information on PFAS is available at the following websites.

US Environmental Protection Agency (PFAS):

<https://www.epa.gov/pfas>

Rhode Island Department of Health (PFAS):

<https://health.ri.gov/water/about/pfas/>

Rhode Island Department of Environmental Management (Groundwater Quality Standard):

<http://www.dem.ri.gov/programs/water/quality/groundwater/>

Rhode Island Department of Environmental Management (PFOA):

<http://www.dem.ri.gov/programs/benviron/water/quality/pdf/pfoa.pdf>

National Science Foundation (NSF) (PFAS in drinking water):

<https://www.nsf.org/knowledge-library/perfluorooctanoic-acid-and-perfluorooctanesulfonic-acid-in-drinking-water>

Listing of NSF Certified products for reducing PFOA/PFOS in drinking water:

At info.nsf.org/Certified/DWTU

1. In the box next to “Product Standard” select “Drinking Water Treatment Units - Health Effects (NSF-53)”.
2. In the box next to “Product Type” you can select the specific product or leave the default “All Product Types”.
3. In the section beneath the line, click the box next to “PFOS Reduction” to return results for products certified for that claim. Note that PFOS appears in more than one section and near the bottom of the screen is available in a section specific to PFOA and PFOS.
4. At the bottom of the screen click the “Search” button.

Changes to your Water Bill

Beginning with your December water bill, you will note a small increase to two of the charges that make up your overall quarterly bill. The **Flat Charge**, which is calculated to cover the costs associated with installing and maintaining your water meter and generating and mailing your water bill, and the **Infrastructure Replacement Fee**, which is a charge based on water usage at your home or business and is calculated to fund the repair and, if necessary, replacement of the actual infrastructure, involved in getting water to your home (i.e. the pipes, the pumps, and the tanks) have increased minimally. For the average residential customer, this should equate to an increase of less than \$2.50 per month.