PFAS Frequently Asked Questions

What are PFAS?

PFAS (Per- and Polyfluoroalkyl Substances) are a large class of synthetic chemicals that are designed to be resistant to heat, water and oil. PFAS are used in fire-fighting foams and a wide range of industrial and consumer products such as stain- and water-resistant clothing, carpets, cleaning products, non-stick cookware and food packaging.

Due to their chemical structures, PFAS are resistant to decomposition in the environment and in the human bodies. Two most studied PFAS are Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS). Studies indicate that PFOA and PFOS can cause reproductive and developmental, liver and kidney, and immunological effects in laboratory animals. Although certain PFAS (including PFOA and PFOS) are no longer manufactured in the U.S., these chemicals are still produced internationally and imported into the U.S. in consumer goods.

PFAS are unregulated emerging contaminants of concern in drinking water due to a host of potential health impacts and the tendency of PFAS to accumulate in groundwater.

How do PFAS get into the drinking water?

Since PFAS are used in array of industrial and consumer products, there could be many sources of contamination in the water supplies. Common sources of PFAS include industrial facilities where PFAS are manufactured or used, wastewater, landfills and areas where fire-fighting foam was used. There are areas across the nation where PFAS have seeped into groundwater, lakes and rivers. These chemicals move easily through the ground, getting into groundwater that may be used for water supplies or for private drinking water wells.

What are limits for PFAS?

Over the past several years, the science on PFAS and their impacts to the environment and public health have prompted regulatory actions. The U.S. Environmental Protection Agency (EPA) currently has lifetime health advisory levels for four PFAS and is developing a National Drinking Water Regulation for PFOA and PFOS; EPA anticipates finalizing the rule by the end of 2023. EPA is also evaluating additional PFAS and considering regulatory actions to address groups of PFAS.

California also is in the process of establishing regulatory standards (i.e., maximum contaminant levels) for these chemicals. Currently, California has drinking water advisory levels for three PFAS and is pursuing advisory levels for six additional PFAS found throughout the state. When a contaminant is found at concentrations greater than its advisory level, certain notification requirements and actions apply.

Regulatory Advisory Levels for PFAS
parts per trillion (ppt)

PFAS	State*		EPA Lifetime Health Advisory Level**
	Notification Level	Response Level	
PFOS	6.5	40	0.02 (interim)
PFOA	5.1	10	0.004 (interim)
PFBS	500	5,000	2,000 (final)
GenX	NA	NA	10 (final)

*When a contaminant is found at concentrations greater than its advisory level, certain notification requirements and recommendations apply.

**Health advisories are non-enforceable and non-regulatory.

What are available treatment technologies to remove PFAS?

Technologies with demonstrated effectiveness to remove PFAS from drinking water include granular activated carbon filters, ion exchange and high-pressure membranes such as nanofiltration and reverse osmosis (RO) filtration. Point-of-use water filters with similar technologies are also available on the market.

Zone 7 is committed to delivering a safe and reliable water supply to our customers. All water supplied to our customers meets the regulatory standards and guidance levels set by the state and federal governments and, in almost all cases, the quality is significantly better than required.

What is Zone 7 doing about PFAS?

Zone 7 has been actively monitoring for PFAS since 2018 and **all water delivered by Zone 7 had been below the response levels (RLs) for PFAS**.

No PFAS has been detected in its treated surface water which made up majority of the total water delivered to its customers. Although some PFAS have been detected in Zone 7 groundwater wells, these wells are either below the RLs or are treated to levels below the RLs prior to entry into the distribution system. Typically, Zone 7 supplies approximately 80% treated surface water and 20% groundwater. This ratio of surface water to groundwater varies depending upon the season, hydrologic conditions and customer's location in the Tri-Valley. Zone 7 is also actively investigating the extent of PFAS across its groundwater basin and is in the process of planning and designing for additional PFAS treatment facility in anticipation of new regulations. Monitoring data, reports and project updates are available at www.zone7water.com/pfas-information

ADDITIONAL RESOURCES

State Water Board: www.waterboards.ca.gov/pfas/
U.S. Environmental Protection Agency: https://www.epa.gov/pfas
or contact Zone 7 at waterquality@zone7water.com

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