FAQ FACT SHEET

Per-Polyfluoroalkyl Substances (PFAS)





What are PFAS, PFOA, and PFOS?

Per- and Polyfluoroalkyl Substances (PFAS) are a grouping of more than 4,500 chemicals that resist heat, oils, stains and water. They have been widely used in consumer products such as carpets, clothing, fabrics for furniture, paper packaging for food, firefighting foams, and other materials like cookware designed to be waterproof, stain resistant or nonstick. Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are two common types of PFAS.

Certain PFAS chemicals (including PFOA and PFOS) are no longer manufactured in the US. However, they are still produced internationally and are imported into the US in consumer goods.



∜ What are the health effects of **PFOA and PFOS?**

PFOA is a possible human carcinogen according to the International Agency for Research on Cancer. Available studies suggest PFAS exposure can cause adverse effects in humans, including increased cholesterol, thyroid and liver disease, decreased fertility, lower birth weights, decreased vaccine response, and pregnancyinduced hypertension.



How are people exposed to PFAS?

These chemicals have been widely used for decades in industrial applications and consumer products. Most people have been exposed to these chemicals through consumer products but drinking water can be an additional source of exposure. The major sources of PFAS in water supplies are fire training/response sites, industrial sites, landfills, and wastewater treatment plants/biosolids. Because of their persistence in the environment, PFAS have the potential to accumulate in water supplies.



Are there drinking water standards for PFOA and PFOS?

State and federal lawmakers and regulators are moving toward stricter standards and guidelines for the detection, public notification, and treatment of PFOA and PFOS in drinking water.

Currently, the EPA has established a drinking water health advisory of 70 parts per trillion (ppt) for a combined concentration of PFOA and PFOS. If exceeded, EPA recommends water providers assess the contamination, inform customers, and limit exposure. EPA is working to establish drinking water regulations for PFOA and PFOS by setting an enforceable Maximum Contaminant Level.

The California State Water Resources Control Board (State Board) has established a drinking water notification level for PFOA (5.1 ppt) and PFOS (6.5 ppt). If exceeded, water providers are required to notify their governing bodies and the State Board recommends they inform customers. The State Board has also set a response level of 70 ppt for PFOA and PFOS combined. If exceeded, the State Board recommends removal of the drinking water source from service. The State Board is considering lowering the response levels for PFOA and PFOS by the end of 2019. Recent state legislation also provides for increased monitoring and consumer notifications.



Has local water been tested for PFOA and PFOS?

To better understand the occurrence of PFAS, the EPA required large public water systems to test for various PFAS, including PFOA and PFOS, between 2013 and 2015. There were no detections of PFAS in groundwater or surface water in Santa Clara County as part of this testing.

The ability to detect these chemicals at even lower levels has evolved since the EPA-required sampling. Based on limited sampling conducted since then, PFOA and PFOS have not been detected in Valley Water's imported water or treated water supplies.

PFOA and PFOS have been found in a limited number of groundwater wells in Santa Clara County. Most are shallow groundwater monitoring wells that are not used for drinking water. However, Valley Water has detected PFOA and PFOS in two of the three water supply wells we own for emergency backup supply. No water from these wells has been delivered to water retailers (or consumers), and the levels of PFOA and PFOS detected are below the notification levels set by the State Board.

The State Board has ordered testing of wells throughout the state for PFOA and PFOS to help inform potential drinking water standards. The testing will be conducted in phases and will continue into 2020. In the first phase, wells were selected based on the proximity to landfills or airports, or if they had prior detections of PFOA or PFOS. Future phases will target other potential PFAS sources like industrial sites and wastewater treatment systems. Results from this testing, which include wells in Santa Clara County, will help us better understand the presence of PFAS in local groundwater.



How can PFAS in drinking water be treated?

If PFAS is detected above State Board response levels, water providers may treat the water, remove it from service, or blend it with unaffected supplies. Treatment technologies that have shown to be effective in removing PFAS from drinking water include granular activated carbon, powdered activated carbon, high pressure membranes (reverse osmosis/nanofiltration) and ion exchange resin. More information can be found at https://www.epa.gov/pfas/treating-pfas-drinking-water and https://www.nsf.org/newsroom/pfoa-pfos-reduction-claims-requirements-added-to-nsf-standards



Are PFAS found in bottled water?

Bottled water producers are not required to test for PFAS. We recommend consumers contact bottle water producers directly for information about their product's water quality.



Are PFAS found in purified recycled water?

Valley Water is exploring the use of purified recycled water as a drought-resilient water supply for groundwater recharge or other uses. While PFAS are

present in wastewater, any purified recycled water used in Santa Clara County would be treated with multiple, proven technologies including reverse osmosis, which is effective in treating PFAS. Valley Water is carefully testing these technologies at our Silicon Valley Advanced Water Purification Center to ensure purified recycled water meets or exceeds drinking water standards and is protective of the environment.



What is Valley Water doing about PFAS?

We will continue to work with the state and with local water retailers to better understand the presence and potential sources of PFAS in local water supplies and to take action if needed to ensure a safe and reliable drinking water supply. To support this, we are exploring additional monitoring and our water quality laboratory is preparing to obtain state certification to test for PFAS in drinking water.

We take our responsibility to provide safe, clean water and to protect local groundwater very seriously. Valley Water and local water retailers use proven technologies and best practices to ensure drinking water delivered to businesses and residents meets or exceeds all state and federal drinking water standards.

Si habla español y tiene preguntas sobre el contenido de este mensaje por favor de comunicarse con José Villarreal a JVillarreal@ValleyWater.org o (408) 630-2879.

Nếu bạn nói tiếng Việt và có thắc mắc về nội dung của thông báo này, xin vui lòng liên hệ với Hoan Cutler tại HCutler@ValleyWater.org hoặc (408) 630-3135.

如果你說中文並對上述訊息有疑問, 請聯繫 Sarah Young, 電郵 SYoung@valleywater.org, 或者電話:(408) 630-2468.

Kung ang wika mo ay Tagalog at kailangan mo pa ng impormasyon, tawagan mo si Benjamin Apolo sa (408) 630-2042 o sumulat sa BApolo@ValleyWater.org.

