

# FACT SHEET

## Per- and 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, furniture fabrics, paper packaging for food, firefighting foams, and other materials including waterproof/stain resistant/nonstick cookware. 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 United States (U.S.). However, they are still produced internationally and are imported into the U.S. 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 pregnancy-induced 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, along with regulators are moving toward stricter standards and guidelines for the detection, public notification, and treatment of PFOA and PFOS in drinking water.

Currently, the Environmental Protection Agency (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.

In 2019, the State Water Resources Control Board (State Board) set a drinking water notification level for PFOA (5.1 ppt) and PFOS (6.5 ppt). If exceeded, water providers must notify their governing bodies, and the State Board recommends they inform customers. In the beginning of 2020, the State Board set the current response level at 10 ppt for PFOA and 40 ppt for PFOS. If exceeded, water providers are required to either take the water source out of service, provide treatment, or notify customers in writing.



### 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 Santa Clara Valley Water District's (Valley Water) imported water or treated water supplies.

In 2019, the State Board issued a monitoring order requiring Valley Water to test for PFAS at the Campbell Well Field. Valley Water 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.

In February 2020, Valley Water voluntarily sampled PFAS at 55 monitoring wells throughout Santa Clara County. These results and other available data indicate that PFOA and PFOS are not widely present above current State Board health-advisory levels.

Several local water retailers have conducted PFAS testing in water supply wells. To date, PFOS has been found above the notification level in eight active water supply wells in San Jose and Campbell, prompting the water retailer to discontinue use

of the wells out of an abundance of caution. Two additional wells that were out of service were also placed on standby due to PFOS. PFOA or PFOS have not been detected in any water supply wells at levels where the State Board recommends removing the water source from service (also known as the response level) in Santa Clara County.

The State Board continues to order testing of wells throughout the state for PFOA and PFOS to help inform potential drinking water standards. The first phase targeted wells near landfills or airports, or those with 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 has obtained accreditation 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 Paola Giles al [PGiles@valleywater.org](mailto:PGiles@valleywater.org) o (408) 630-2880.

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](mailto: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 Julia Tat, 電郵 [JTat@valleywater.org](mailto:JTat@valleywater.org) 或者電話: (408) 630-3168.

## CONTACT US

To find out more about PFAS or to submit questions or comments, contact **George Cook** at (408) 630-2964 or [GCook@valleywater.org](mailto:GCook@valleywater.org) or use our **Access Valley Water** customer request system at <https://deliver.com/2yukx>.



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