



Security Water District

Frequently Asked Questions about PFOA/PFOS

What kind of contamination was found in the water?

Perfluoroalkyls are a family of human-made chemicals that do not occur naturally in the environment. The two Perfluoroalkyls, which were made in the largest quantities in the U.S., are PFOA (perfluorooctanoic acid) and PFOS (perfluorooctanesulfonic acid). These compounds are found in a variety of products, such as firefighting foams, coating additives, surface protection products such for carpets and clothing, and in the commercial products Teflon™ and Scotchgard®. For most people, food is the primary source of exposure.

It was recently announced in the media that PFOA and PFOS were identified in 94 U.S. water supply sources to date including some near Security, Fountain and Widefield. Currently, the U.S. Environmental Protection Agency (EPA) or the Colorado Department of Public Health and Environment (CDPHE) do not regulate PFOAs and PFOSs. This means that water providers are not required to treat these compounds. However, the EPA imposed a provisional health advisory of 0.2 micrograms of PFOS per liter of water (0.0002 parts per million) and 0.4 µg/L (0.0004 parts per million) for PFOAs in 2009.

Where were these compounds found in El Paso County water?

EPA required water providers with 10,000 customers or more to sample for these compounds between 2013 and 2015. Security Water District complied and conducted testing in January and August of 2014 and shared that data with EPA. Only recently did Security Water learn through the media that the EPA reported that water samples taken near Security, Widefield and Fountain in 2014 did not contain PFOA that exceeded its health advisory levels. No PFOA was found in water exceeding the advisory limit. Water samples collected in four locations in Security did exceed PFOS limits with results ranging from 0.21-1.3 ug/L.

In Security, compounds were detected above the advisory level in three groundwater wells in the Windmill Gulch aquifer (see map for location of these wells). This well water is blended with millions of gallons of surface water from Pueblo Reservoir that is transported through the Fountain Valley Water Authority pipeline, and treated before it enters the drinking water supply. EPA did not report that these chemicals were not detected in Pueblo Reservoir water. As a result, the drinking water generated in this area is diluted significantly, which greatly reduces the amount of PFOS in water that is consumed. Out of an abundance of caution, however, Security Water suspended using these three wells on January 15 until further testing is conducted.

In the Widefield aquifer, all test results except one was below the provisional health advisory level for PFOAs. One sample at the treatment plant was .21 micrograms of PFOS per liter of water, which is slightly above the 0.20 micrograms per liter advisory level.

There is currently no known connection between these PFOS sampling results and the Schlage Lock PCE contamination of nearly 30 years ago. At this time, we do not know how PFOAs and PFOS entered these water sources. Security Water will be requesting assistance from the EPA and CDPHE to detect the sources of water and discuss additional testing.

What are the health effects of PFOAs and PFOS?

Public safety is the number one priority of Security Water District. We have always met and continue to meet all drinking water regulations. We want to assure our residents that according to all federal and state regulations their drinking water is safe to use for drinking, bathing, cooking and irrigation. The water is safe for consumption by children and animals as well. Please see the District's annual [Water Quality Report](http://www.securitywsd.com) for more information. (<http://www.securitywsd.com>)

Many factors must be analyzed to determine if a chemical causes a health risk. These include how much PFOS/PFOA you are exposed to (dose), how long you are exposed to them (duration), and how you are exposed (route of exposure). The EPA issues health advisories to provide water systems with information on contaminants that can cause human health effects and are known



or anticipated to occur in drinking water. While non-enforceable, the health advisories provide technical guidance on health effects, analytical methodologies and treatment technologies associated with drinking water contamination.

According to the Agency for Toxic Substances and Disease Registry (ATSDR), exposure to perfluoroalkyl compounds is widespread. Chemicals within this family were detected in 95–100% of samples of people's blood in 1999–2000 and 2003–2004. More recent monitoring data still show widespread exposure; however, the levels of these substances in people's blood appear to be declining. You may be exposed to perfluoroalkyls from the air, indoor dust, food, water, and various consumer products. Food is expected to be the primary source of exposure to perfluoroalkyls such as PFOA and PFOS for most people.

The ATSDR publishes fact sheets on compounds. For more information on Perfluoroalkyls visit <http://www.atsdr.cdc.gov/tfacts200.pdf>.

Why are we just now hearing about it? When did the contamination occur?

At this time, we do not know how or when PFOA and PFOS entered these water sources. In 2013, the EPA asked U.S. water systems that served populations of 10,000 residents or more to sample their drinking water supplies so it could measure levels of PFOA and PFOS. We complied with that request and provided the results to the EPA. Security Water District sampled water sources for these compounds two times in 2014 submitted results to the EPA. We were not notified by the EPA of any alerts asking us to take action, which is why we did not notify the public. Once we were notified of the information reported in the news stories, we suspended the use of the identified wells out of an abundance of caution. We intend to consult with the EPA and CDPHE and take new water samples. We will share this information with our customers.

Will you remove these compounds from the water?

We don't believe it is necessary to remove the compounds from the water because they occurred at low enough levels that the water dilution would have further reduced any potential health risk. While the EPA was quoted in recent media coverage saying the chemicals can be removed by installing active carbon filters in centralized facilities or in homes, we won't take any action until we have results of more recent samples and have consulted with the EPA and CDPHE.

Who is responsible for cleaning up these chemicals?

At this time, we do not know how PFOAs and PFOS entered these water sources. Until a source is identified, we will continue to monitor to ensure our drinking water meets the advisory level standards. There is no known connection to the Schlage Lock plume in which PCE were found in groundwater several decades ago. We will continue working with the EPA and CDPHE to identify possible sources and will update the public once we know more.

What are your next steps?

We are contacting the EPA and CDPHE to discuss the best approach to determining the source of these compounds. Additionally, we are conducting more sampling to assess the current conditions of the water.

What value will SDS have to our water supply and these issues?

Security is one of four southern Colorado communities that will be securing more water from Pueblo Reservoir through the Southern Delivery System (SDS) project as it comes online this year. That project is extremely beneficial to Security Water District as it adds reliability to our system and allows us to use more surface water for our communities needs now and into the future.

