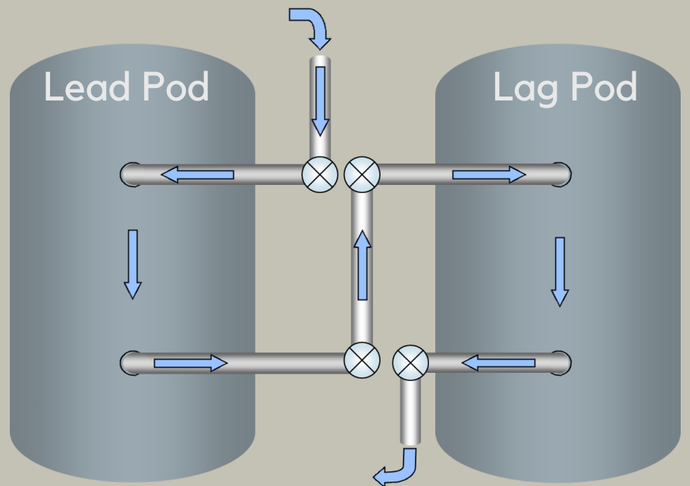
How does the GAC treatment work?

The GAC treatment unit is designed to offer reliability and redundancy. When water enters through the unit, the first filter (lead pod) removes PFAS prior to flowing into the second filter (lag pod). When the filter in the lead pod needs to be replaced, the lag pod is still able to treat the water and remove PFAS before entering the water distribution system.

Each pod has three water sampling ports located at the top, middle and bottom sections of the tank. This allows Water Operators to sample at different locations to test for PFAS.



The lag pod acts as a back-up filter.

Understanding Laboratory Results

Both the lead and lag pods are sampled at three ports located at different sections of the tank; top, middle and bottom. The purpose of sampling at multiple levels is to track the migration of the PFAS as they are removed, which allows us to accurately determine the lifespan of the media and plan for its replacement.

Sampling Point: Aga Park (Lead Pod)

		EEA Methods				
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units
375-73-5	Perfluorobutanesulfonic acid (PFBS)	537	---	2.0	< 2.0	ng/L
375-85-9	Perfluoroheptanoic acid (PFHpA)	537	---	2.0	< 2.0	ng/L
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	537	---	2.0	< 2.0	ng/L
375-95-1	Perfluorononanoic acid (PFNA)	537	---	2.0	< 2.0	ng/L
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	537	---	2.0	< 2.0	ng/L
335-67-1	Perfluorooctanoic acid (PFOA)	537	---	2.0	< 2.0	ng/L

EPA certified laboratory results dated June 1, 2018.

When test results from the top of lead tank indicate any result other than a non-detect ("non-detect" is less than 2 parts per trillion), we begin testing samples from different layers in the tank. While the test results may show detectable levels in the lead pod as the GAC media begins to break down, the lag pod results should always be at non-detectable levels. When the GAC media is replaced in the lead pod, we can continue serving safe, treated drinking water without interruption or danger of PFAS because the lag pod will remove the contaminants before entering into Fountain's drinking water system.

UTILINEWS

Last month, the United States Environmental Protection Agency (EPA) held a community engagement event on August 7th & 8th in Colorado Springs, Colorado. This was the third event hosted by the EPA in communities across the nation that have been affected by groundwater contamination, commonly referenced as Per- and Polyfluoroalkyl Substances (PFAS), also known as Perfluorinated Compounds (PFCs). The two-day event was designed to allow the EPA to hear directly from members of southern Colorado communities about their experience with the contamination, and allow utilities to express their specific needs to support their customers and communities. The event consisted of two sessions; a public listening session and a working session with utilities, state and federal agency representatives.

The listening session on August 7th included short presentations from the affected water utilities, the EPA, State Health Department, and citizen groups. On August 8th, a roundtable discussion was held to focus on identifying PFAS, communicating what we know about the contaminants to our community and finding unique solutions for each of the communities affected. Our customers and citizens shared concerns and questions about the Federal Government's plan for protecting the public from the harmful effects of PFAS. At a summit in Washington, D.C. earlier this year, the EPA announced that addressing PFAS is a national priority and outlined their four-step action plan to:

- Initiate steps to evaluate the need for a maximum contaminant level (MCL) for PFAS and will convene federal partners to examine everything known about PFAS in drinking water.
- Begin the necessary steps to propose designating PFAS as "hazardous substances" through one of the available statutory mechanisms.
- Develop groundwater cleanup recommendations for PFAS at contaminated sites.
- Take action in close collaboration with federal and state partners to develop toxicity values.

Feedback from these two sessions implored the EPA to:

- Establish MCLs at a much lower level than the current Health Advisory Level of 70 parts per trillion;
- Regulate PFAS as a group, not by individual compound;
- Designate PFAS as hazardous waste; and
- Provide additional testing and monitoring for the communities affected by the contamination.
- Develop a management plan by the end of 2018.

We recognize that our community will be addressing this contamination for years to come and there remains more work to be done. As one of the first utilities in the nation to partner with the U.S. Air Force, State, EPA and other neighboring utilities, we understand that our customers and the community at-large will ultimately benefit from our continued cooperation and collaboration with the parties responsible for overseeing public health, safety and drinking water regulations.

Curtis Mitchell, P.E.
Utilities Director

Our plan is continued transparency as we advance toward a long-term solution. This month, the Air Force Civil Engineering Center plans to obtain the necessary contracts to begin the construction of a permanent water treatment facility. This facility is expected to be constructed by 2020 and will allow all four of Fountain's municipal-owned wells to deliver safe, treated groundwater to the community.

We encourage our customers to visit our website at FountainUtilities.org for more information about Fountain's water quality. There, you will find laboratory results from our treatment units and up-to-date information regarding our groundwater treatment progress.

THE ROAD TO SAFE DRINKING WATER

2009: The EPA issued a provisional Health Advisory Level for PFOA at 400 parts per trillion (ppt) and PFOS at 200 ppt.

2013-2015: The EPA's Third Unregulated Contaminant Monitoring Rule required that Fountain test once during a two year period for several potential contaminants, including six Perfluorinated Compounds. Lab results confirmed that Fountain did not exceed existing provisional Health Advisory Levels (HALs).

Fall 2015: With less outdoor water usage, Fountain was able to stop its reliance on groundwater for the winter.

May 19, 2016: The EPA issues a HAL of 70 ppt.

April 2016: After decades of planning and years of construction, the Southern Delivery System (one of the largest water construction projects in U.S. history) began delivering surface water stored in Pueblo Reservoir to homes and business in southern Colorado.

The delivery of surface water from Pueblo Reservoir allowed Fountain to continue providing safe drinking water during the initial phase of addressing the contamination, when water demand was soon to be at its peak.

June 2016: Fountain enacts mandatory water restrictions for the first time in history to avoid the use of groundwater.

June 2017: Fountain submits a permit application to the CDPHE for the GAC treatment units. The first treatment unit is delivered and installed near the Fountain Library.

Spring 2017: Fountain confirms the acceptance of two temporary Granular Activated Carbon (GAC) groundwater treatment units from the United States Air Force Rapid Response Team. Around the same time, Fountain enters into a contract to design a permanent comprehensive groundwater treatment plant.

October 2017: Mayor Gabriel Ortega; Curtis Mitchell, Utilities Director; Troy Johnson, City Attorney; and John Trylch, Community Engagement Manager, traveled to Washington, D.C. to meet with the Assistant Deputy Secretary of the United States Air Force and Congressional delegation. Discussions at the Pentagon and Capitol Hill focused on Fountain's need for additional financial assistance, improved transparency, better communication and written agreements that outline how to work together in order to mitigate groundwater contamination.

August 2017: The second GAC treatment unit is installed near Aga Park.

January 2018: Fountain submitted design documents and other needs to the Air Force Civil Engineer Center (AFCEC). They were tasked with completing the design of the comprehensive groundwater treatment plant and obtaining the necessary contracts for construction.

March 2018: The City of Fountain and the United States Air Force executed an Environmental Services Agreement and Memorandum of Understanding. The two documents secured financial assistance for alternative water purchases, filter replacements for the two GAC treatment units, water sampling expenses and labor for groundwater treatment.

June 2018: Fountain completes testing of the GAC treatment unit at Aga Park and submits water samples to a certified laboratory authorized by the EPA to test for PFAS. Results from the laboratory test dated June 1, 2018 confirm that PFAS are non-detectable. On June 18, 2018, Fountain began distributing safe, treated groundwater to its drinking water system.

September 2018: The AFCEC awards construction contracts for the construction of Fountain's comprehensive groundwater treatment plant.

Future (2020): Fountain's comprehensive groundwater treatment plant is expected to be constructed and connected to all municipal wells. Once commissioned, the treatment plant will deliver safe, treated groundwater to the Fountain drinking water system.