

Widefield Water and Sanitation Builds \$2.5 Million Dollar PFC Treatment Plant Without Rate Increase To Customers



Widefield Water and Sanitation District's new PFC Treatment addition to its existing water treatment facility, located in the Southmoor neighborhood. A building is expected to be built over the new treatment equipment in the near future.

NEWS PHOTOS BY DANYAR VOLKOV



Influent raw water is piped into these large PFC treatment vessels.



Widefield Water and Sanitation District Water Department Manager Brandon Bernard (left) and JDS Hydro Consultants Professional Engineer Mario DiPasquale worked tirelessly the last 8 months to pilot, analyze, design and implement the Southmoor Water Treatment Plant for PFC removal. The \$2.5 million dollar system went live May 4, sending PFC free water into Widefield's distribution system, according to Bernard.

In response to the EPA lowering and combining the Health Advisory Limits on specific types of Perfluorinated Compounds (PFCs) a year ago, Widefield Water and Sanitation Districts (WWSD) recently completed construction on a new PFC Treatment facility, which was added on to its existing treatment site in the Southmoor area of Fountain.

WWSD's Water Department Manager Brandon Bernard said that even though the PFCs are unregulated and unenforceable by the EPA or State, WWSD wanted to act as fast as physically possible, so consumer confidence would be maintained.

In June, WWSD's Board of Directors gave staff the approval to move as fast as possible to get PFC Treatment piloted, designed, and constructed before high water demands of 2017 arrived.

In October, after much research, WWSD began piloting and tracking four IX resins and one GAC media to determine which would be best suited to treat WWSD's water quality.

While tracking the PFC removal of these five pilot systems, WWSD had to decide by early January, what type of vessel would house the undetermined filter media to ensure their arrival and installation by the May 1st deadline. WWSD also had to find a contractor with the ability to construct the budgeted \$2.5 million project. After an intensive evaluation and selection process, WWSD selected Velocity Plant Services on February 28.

Velocity committed to having treatment ready by May 1, despite the plant design only being 50% at the time.

Six months of pilot data was analyzed to determine which filter media would be the Best Available Technology for treating PFCs. When it was clear that IX displayed the best performance, WWSD decided to keep the analysis on-going by selecting two separate IX resins to be used in the new treatment facility.

The resin was delivered May 1, and the treatment facility was officially flowing water, free of PFCs, into the distribution system at 1:30 p.m. May 4.

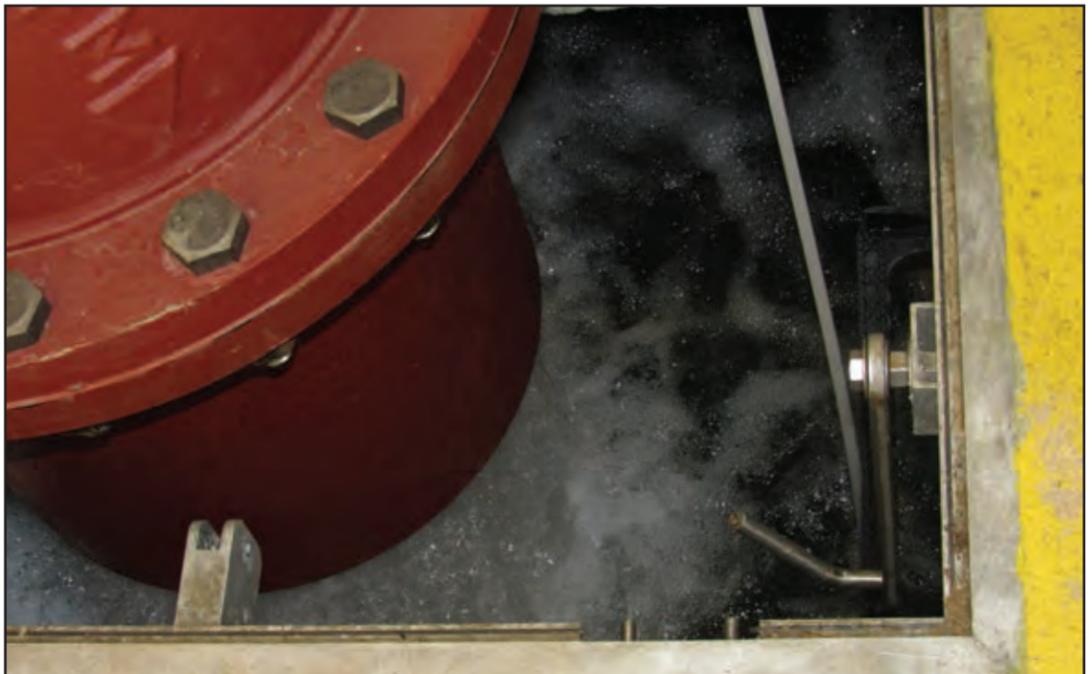
WWSD remains in communication with the Air Force regarding how it will receive \$850,000 as part of the available Rapid Response funds. Customer rates were not raised to pay for this project.



Above and below, different views of the prefilters that remove sediment from raw water brought into the water treatment system.



The effluent pipework through which the water flows after PFC treatment.



PFC free water enters the chlorine contact basin at Widefield Water and Sanitation Districts' water treatment facility.