

Contact: Eric Broce
Phone: (620) 441-4420
Fax: (620) 441-4403
ebroce@arkansascityks.gov

Public Works Department
City of Arkansas City
118 W. Central Ave.
Arkansas City, KS 67005



Press Release

Pilot study under way at Arkansas City water treatment facility

Nine-week experiment will test quality, efficiency of new treatment methods

ARKANSAS CITY, Kan. (August 28, 2015) — A pilot study for a new water treatment facility is under way now at the current Water Treatment Plant, 513 W. Washington Ave., in Arkansas City.

The pilot study, which tests over a 45-day period the treatment and filtration processes that would be used in a new plant, was approved June 16 by the City Commission of Arkansas City.

Burns & McDonnell, the primary designer of the plant, requested three bids for each of the treatment systems, then came back to the City with the best pricing available.

Hungerford & Terry and H₂O Innovations are the two companies who provided the two major components of the study — the reverse osmosis system and the Greensand Plus equipment — for amounts not to exceed \$67,891 and \$32,410, respectively.

This is the third week of the study. While analysis of the hourly and daily test samples is far from complete, the preliminary results appear promising that a higher quality of water is being produced.

Test samples of raw water, as well as filtered water from different points in the treatment process, are being collected by Water Treatment Plant personnel and sent to Accurate Environmental Labs in Stillwater, Okla., which tests the samples to ensure the treatment process is functioning correctly.

The earliest the new plant could come online is June 2017.

Unlike the current plant, which treats water with chlorine, lime and a variety of other chemicals, the proposed new plant would have much lower chemical costs.

The process being studied first uses greensand filters to draw out excess iron and manganese. Greensand is very fine sand that softens the water thanks to its chemical properties.

For immediate release

more

A side stream of water that has gone through reverse osmosis ultrafiltration — essentially removing all of the dissolved solids in the water — is then blended back into the main water stream to dilute it.

An anti-scaling agent is added to the side-stream water that travels to the reverse osmosis system, housed in a nearby trailer, in order to keep the RO membranes clear.

In the pilot study, raw water is piped in directly from the City's wells west of the Arkansas River.

Samples are taken of that water, which then is treated with the same greensand process that would be used in the new plant, only on a much smaller scale. All of the equipment is under a single tent.

The system has to be backwashed each day to make sure all of the test reads are accurate.

Once the water treatment is completed and all of the samples have been taken, the finished product is combined with raw effluent and piped into a canal that takes it to the Wastewater Treatment Facility.