

Memorandum

To: Mayors Utility Task Force and the Real Estate Council of San Antonio
Subject: Update on Dead-End Main Monitoring Program
Date: May 10, 2017
Created By: SAWS Resource Protection and Compliance Department

The purpose of this memorandum is to serve as a record and update members of the Mayors Utility Task Force and the Real Estate Council of San Antonio (RESCA) on the dead-end main (DEM) monitoring program. State regulations require that all DEMs must be flushed on a monthly basis or as needed if the chlorine residual falls below acceptable levels. Chlorine residuals must be kept above 0.2 mg/L to ensure disinfection of the water distribution from bacteria. The majority of SAWS' source water in its distribution system is groundwater. Groundwater holds a chlorine residual longer extending well over the one month flushing requirement. SAWS monitoring of DEMs has shown that chlorine residuals have remained at acceptable levels well over the one month period for flushing.

The San Antonio Water System (SAWS) has been working under a temporary flushing exception granted by the Texas Commission on Environmental Quality (TCEQ) that expires on February 9, 2018. SAWS staff traveled to TCEQ headquarters in Austin on February 16, 2017 to meet with TCEQ staff and discuss a DEM monitoring proposal specific to San Antonio. The goal was a program that would effectively protect public health in the San Antonio drinking water systems, while also considering SAWS focus on water conservation and efficiencies overall. The two agencies reviewed information and data concerning the SAWS infrastructure and water quality. SAWS recommended a quarterly monitoring program with increasing frequencies for any site that demonstrates water quality concern. TCEQ staff requested SAWS provide a written proposal to TCEQ for their consideration. The proposal was formally submitted on February 22, 2017 to TCEQ. The following is a portion of the requested monitoring submittal taken from the actual proposal:

SAWS Proposal for TCEQ consideration:

Currently, SAWS has approximately 9,800 DEM's. SAWS will monitor a minimum of 3,269 DEMs per month. Monitoring will mean visiting every unique dead end main site at least once every three months and sampling the DEM for chlorine residual.

1. If the initial chlorine residual measured is 0.3 mg/L or greater, that DEM will be scheduled to be monitored again three months later.
2. If the initial residual is less than 0.3 mg/L, then the DEM will be flushed until the chlorine residual is greater than 0.3 mg/L, and its monitoring frequency will be increased. That unique DEM will be scheduled to be monitored the following month. If a month later the same DEM point is monitored and found to have a residual less than 0.3 mg/L, then the point will be flushed until the residual is greater than 0.3 mg/L. The DEM point will be scheduled for monitoring two weeks later.

3. Any DEM on a two week or monthly monitoring frequency must demonstrate a chlorine residual of 0.3 or greater for three successive monitoring events, before that site monitoring frequency can be returned to a monthly or quarterly frequency.

Timeline

TCEQ did not provide a date whereby they would provide a formal response. TCEQ staff did indicate they wanted to come to an agreement on a program fairly soon, and SAWS outlined that this proposal would be the program SAWS would work under unless instructed differently by TCEQ. It is not known if TCEQ will issue a written response to SAWS proposal.

SAWS will submit the DEM monitoring activities and any corrective actions conducted to the TCEQ for review on a quarterly basis. It was proposed that the first quarter start on February 1, 2017 and the first quarter report for monitoring all DEMs will be submitted at the beginning of May, 2017. SAWS will submit a second quarterly results and brief TCEQ on the results at a meeting in early August, 2017. At the end of the year of monitoring, SAWS will submit to TCEQ a proposal for the Long Term Monitoring Program. Those DEMS that exhibited a low chlorine residual during the year of monitoring will remain on a high frequency monitoring schedule. Those DEMS that consistently showed high and stable chlorine residuals will have a new schedule proposed that lengthens the monitoring frequencies.

SAWS will keep the Mayor's Utility Task Force and RECSA notified of any impact on policy as a result of future meetings with TCEQ. SAWS will provide a minimum of 30 days' notice on any pending policy changes to allow time for plan modifications and evaluation of project impacts unless such changes are a result of regulations implemented due to health and safety issues.