

Mayor's Message - By Tom Gray, Village President

Village of Chatham Water Distribution System

Issue:

Some Chatham water customers have reported an accumulation of a chalklike scale in home appliance water filters and faucet aerator screens. The Village and the South Sangamon Water Commission (SSWC) are reviewing the reports and have hired a water quality firm to assist in addressing the issue. The assessment of the chalklike scale indicates that it is a calcium carbonate/lime precipitant.

Background

For more than 50 years, the Village of Chatham received water from a surface water source that passed through a lime softening treatment system. This process added lime along with other chemicals to help purify and soften the water. For the past year, the Village has received its water from a ground water source that is softened through an ion exchange system. In addition to the use of disinfecting chemicals, this process passes the water through filters and ion exchange media to purify and soften the water.

Both finished waters are high quality drinking water and fall well within Illinois Environmental Protection Agency regulations for water quality. However, the different water sources and treatment methods do yield different water chemistries.

Over the years, the Chatham water distribution system has accumulated a coating or scale on the inside of the pipes from the lime softened surface water source. For the past year, the ion exchange softened ground water has begun to strip off that scale and deposit it in the aerators and filters of end users. Neither the scale build-up nor the scale removal by the two different water chemistries is unusual or problematic.

Plan of Action

The design of the SSWC water plant did incorporate treatment processes intended to minimize and mitigate the potential of this issue arising. However, the scale deposits in the aerators and filters of some Chatham water customers has made it clear that additional action is needed.

The Commission staff will feed an NSF (National Sanitation Foundation) Certified additive to accelerate the removal of the scale from distribution water mains. This additive, along with the disinfectants already being used will penetrate and remove the scale in the distribution mains. With the initial dosage of the additive, the Village will strategically flush the distribution mains in areas where the problems seem to be concentrated to assist in removing the scale.

Timeline

The Commission has applied for a permit to use the proposed additive to the IEPA. After that permit is issued and after the Chatham ground storage tank adjacent to the Interstate 55 Frontage Road is back in service (currently being rehabilitated), the process will begin. It is estimated that the use of the additive will begin sometime during the month of June.

We will begin with a low feed rate of the additive and will gradually increase its concentration over the first four weeks of the program. During this process, residents can expect to see the same nuisance issues they've been experiencing. After the initial dosage, we will evaluate how the distribution system is doing to determine if additional treatment is needed. It is our hope that once the initial steps are completed, a low maintenance dosage will be used to guard against future de-scaling.

It is important to note that the water being supplied before, during and after this treatment process is high quality water that meets and/or exceeds all EPA drinking water standards. The process is being undertaken to accelerate and complete the removal of the existing scale on the distribution system pipes.

Who do I contact if I have additional comments or concerns?

Mr. Shane Hill, Manager, Village of Chatham Utilities at 217-483-2451 Ext 231 or by email: shill@chathamil.net.