IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER FROM THE OTTAWA WATER TREATMENT PLANT

On February 13th, 2020 we were notified by KDHE that drinking water quality samples collected 11/20/2019 and analyzed for Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA), indicate a locational running annual average (LRAA) of 64 ug/L for HAA. This exceeds the Kansas and Federal (EPA) maximum contaminant level (MCL) of 60 ug/L for HAA for public water supply systems.

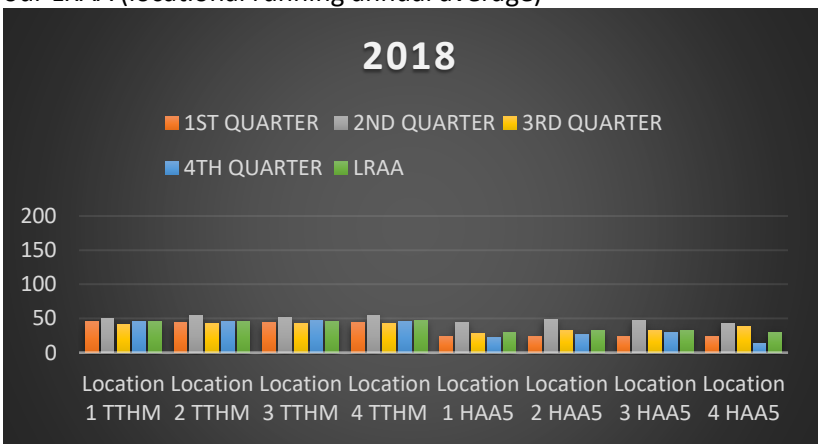
We want to ensure that every customer has the understanding that at no point was our water unsafe to drink. During the time that we developed unexpected equipment issues, KDHE was there every step of the way, guiding us and giving recommendations on how to proceed.

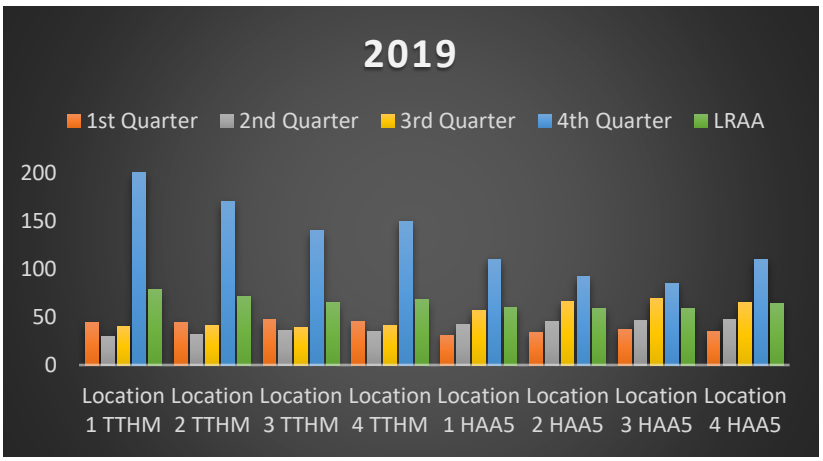
What Happened

Starting in mid 2019 we noticed that our ammonia feed system was becoming unreliable by over feeding ammonia or shutting off all together. We changed out multiple regulators and gauges per the advice of several different resources. Those changes did nothing to help our situation and it progressively became more unreliable. After consulting with professionals in the business, engineers, and KDHE it was determined our recently purchased ammonia tank was not set up to support our process. This determination led us to a decision of disinfecting with chlorine, hoping that we could resolve the situation. KDHE mentioned that we needed to get our engineers involved as this would be considered an operational change that would need to be engineered and approved. We didn't realize that the process to get approval from the state would be such a lengthy one. We initially thought the process would take a few weeks to complete. We have been working with KDHE, our engineering firm, and multiple resources for the last five months in order to get the new process approved.

During our ammonia feed issues, we had to collect two different sets of TTHM/HAA5 samples. Those samples are DBP (Disinfection By-Products) samples which we collect quarterly. KDHE advised us to collect these samples as originally planned, hoping we would be able to fix our ammonia issue. Chlorine greatly affects DBP levels in the distribution system. It is an industry standard that we not collect during times when chlorine is the only disinfectant. We collected all samples per KDHE knowing that the results would be higher than normal. KDHE stated they would work with us on determining if we would in fact receive an MCL violation for DBP's. The length of time we had to run chlorine was the determining factor in why we received the MCL violation. In September 2019 we determined the ammonia disinfection process was not safe due to instability of the system.

The graphs below will show you just how much of an impact those two sampling events had on our LRAA (locational running annual average)





In 2018 our results were normal as shown in the graph. However, if you look at 2019 you can see that something contributed to higher than normal results in quarters 3 and 4. This was directly related to using only chlorine as our disinfectant. Ammonia is used in water treatment to prolong the effectiveness of disinfection chlorine, and **reduces** the formation of disinfection by-products which could result in health effects if consumed **over many years**.

We were granted approval by KDHE on January 28, 2020 to start using our new ammonia feed system which should make our first quarter TTHM/HAA5 results back to normal. Since the EPA requires us to look at a LRAA on each sample address, we get a much lower LRAA even with the higher results. The higher results will not drop off until November 2020. With those higher numbers in play, our LRAA will remain high and possibly above the MCL until that November 2019 sampling period drops off. We anticipate our results for the first quarter of 2020 to be close to normal.

During this process our number one priorty has always been the safety of our community and our employees**. At no point was the water quality jepordized so that it was unsafe to drink**. We continue to provide the City of Ottawa, City of Princeton, and our surrounding rural water districts the highest quality water possibe, all while keeping the safety of the water our number one priority. KDHE was involved from the very start and they continue that involvement today. With months of correspondence to KDHE, Engineers, Vendors and chemical reps, we believe our system is functioning normally, we will continue to provide the highest quality water possible.

Definitions:

Chloramines: Chloramines (also known as secondary disinfection) are disinfectants used to treat drinking water and they are most commonly formed when ammonia is added to chlorine to treat drinking water. Provide **longer-lasting disinfection** as the water moves through pipes to consumers.
DBPs: Disinfection by-products (DBPs) result from chemical reactions between organic and inorganic matter in water with chemical treatment agents during the water disinfection process.
HAA5: Haloacetic acids (HAA) are a group of disinfection byproducts that form when chlorine compounds that are used to disinfect water react with other naturally-occurring chemicals in the water.
LRAA: means the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.
TTHM: Trihalomethanes (THM) are a group of four chemicals that are formed along with other disinfection byproducts when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water.

If you have any questions, please contact Jeff Oleson at 785-214-4279
Or by Mail: 101 S Hickory, PO Box 60, Ottawa, KS 66067