

Lake Iroquois Association's (LIA) Ongoing Response to Drinking Water Complaints.

DRINKING WATER ISSUES

Recently, there has been a significant increase in the number of incidents of complaints by Lake Iroquois residents regarding the discoloration and odor of their drinking water in their homes and concerns for their safety. LIA has attempted to address these complaints multiple times in the past, but there now seems to be a significant amount of concern that LIA is not taking adequate action.

LIA and ERH POSITION

LIA and ERH still believe the issues with the discoloration of water are the results of years' worth of residue that has built up in the water mains. This build-up of sediment over time is a naturally occurring process and is not unusual or uncommon. While many of these water mains are plastic, there are also several that are likely made of ductile iron from the late 1960s and early 1970s which can contribute to this build-up. In the last two years, the Illinois EPA has increased the minimum amount of combined chlorine that must be present in drinking water including at the farthest point away from the water plant. We believe this increase in chlorine content over what has been standard for the last 50 years is reacting with this organic, inorganic, and metal residue and breaking it free, causing discoloration of the water.

WATER TREATMENT PROCESS

The LIA water plant obtains water from a deep water well out of the ground which is then treated for safe distribution to the LIA community water supply and stored in the water tower until used by LIA residents. Iron in the water is removed through the use of potassium permanganate. The water goes through a sedimentation process which allows for sediment to settle out of the water. The clear water is then filtered through multiple types of media to remove dissolved items such as rust, parasites, bacteria, viruses, and chemicals. The water is then disinfected with chlorine to kill any remaining parasites, bacteria, or viruses and to protect the water from germs when it is piped to LIA homes. The water is also softened, which makes it more efficient to heat, cleans more efficiently, and promotes healthier skin and hair. The residual chlorine content must be maintained at a minimum level at the point in the water distribution system which is furthest away from the water plant. Occasionally, as the chlorine in the system is depleted, the level must be increased at the water plant to remain in compliance with the EPA standards. It is during this time that LIA residents tend to notice the chlorine smell most often.

CURRENT TESTING

There have been many comments that the drinking water should be tested more often. The drinking water produced by the water plant is tested on a daily basis for the following: Iron, Hardness, Fluoride, and Chlorine. These results are provided to the Illinois EPA which monitors the quality of the water in the reports. Additionally, a monthly water sample is submitted by ERH on behalf of LIA for testing at an Illinois EPA certified lab which is also monitored.

WHAT LIA PLANS TO DO

We plan to publish the daily and monthly testing results so that residents can see the quality and safety of the water produced by the LIA water plant. The annual consumer confidence reports which provide information on the quality of LIA drinking water have always been made available to LIA members at the annual meeting and at the office, but in the future, they will be sent annually to the entire membership. In order to increase the confidence in the safety of the LIA water supply, LIA plans to also test the water coming out of the water tower on a weekly basis to determine if there is any difference between the treated water that goes into the water tower and the water which comes out for use. We want to make sure there are no issues in the water tower.

TESTING AT PERSONAL RESIDENCES

We also want to test the water of residents within LIA as issues occur to re-assure residents that the water is safe to use and to drink. These tests will hopefully also allow us to determine what the residue is and confirm if it is likely from the water mains or elsewhere. If you experience the discoloration of your water, please make an effort to capture a sample and store it in a plastic water bottle. The bottle should be labeled with your physical address and the date it was collected. As you can collect the sample, contact LIA security at the following number and they will make arrangements for someone to pick-up the sample and deliver it to ERH for testing. **(217) 778-1543**

IDENTIFICATION OF POSSIBLE SOLUTIONS

Over the past several weeks, LIA has encouraged home owners who are experiencing problems with discoloration of their water or strong chlorine odors to contact the Illinois EPA and lodge a complaint. There is no history of issues with discolored water or strong chlorine smells after the building of the new LIA water plant up until the time that Illinois EPA changed the requirement for chlorine levels. We want EPA to know the impact their decision has made on the confidence of LIA residents in our water supply. After determining whether or not the discolored water is indeed being caused by sediment in the water mains, LIA plans to work with the Illinois EPA and ERH to determine if there are any possible solutions to eliminating the sediment or reducing the ability for the sediment to break off the lines into the water. Currently, ERH is going to work with IEPA to see if the pH balance of the water can be adjusted slightly to help prevent the chlorine from pulling any sediment off of the water lines. Any possible solutions will be presented to the LIA membership.