

Lead in Drinking Water Response Public Meeting February 5, 2024

I began the meeting by apologizing to the community for not communicating the city's efforts in addressing the public's concerns over elevated lead levels in some, (30+ residences identified) as well as I should have. My intent in scheduling a public meeting was to provide a forum where our residents had an opportunity to voice their concerns and to assure everyone that the Water Department, Staff, and City Council has and will continue to work towards a satisfactory resolution daily. I also provided an update on what steps the city has taken and a look forward in addressing the concerns of our residents over elevated lead levels, discoloration and overall water quality. In addition to replacing eight lead service lines, working with IEPA, nearly daily testing chemical treatment modifications, the city has recently retained a highly regarded expert and an engineering firm well known for their collective expertise addressing the very issues we have been dealing with. They will be assessing the entire water system/ practices and submitting a final report outlining their recommendations as described in more detail below.

Before going any further, I strongly encourage everyone to review, "Important Information About Lead In Your Drinking Water" on the city website: leroy.org and to stop by to City Hall for information from IEPA, Illinois Environmental Protection Agency, IDPH, (Illinois Department of Public Health) which include detailed information sheet from IDPH – Environmental Health Fact Sheet.

Update

The Water Department has continued to consult and work with both Chemical Engineers and Chastain & Associates, designers of the Water Plant upgrade, (completed in 2022) to eliminate the micro-filtration system with a Multi-Media/Green-Sand Filtration system. They have made and continue in making minor chemical adjustments as recommended by the engineers. These modifications seem to have made a noticeable difference in water discoloration as witnessed during the last system wide flushing. The department is now on a six-month cycle for completing a system-wide flushing of the water system. In addition, they continue to work towards reducing properties within the water supply to mitigate corrosion.

As has been noted previously, due to the change in the treatment process the, **Illinois Environmental Protection Agency, to increase our Lead and Copper sampling from 10 samples every 3 years to 40 samples every six months.** The additional sampling has made us aware of more homes that potentially have lead in their homes. The City has changed the corrosion control treatment with the intent of minimizing potential corrosion of piping and fixtures that might contribute to high levels of lead in the water. The city continues to replace lead service lines as they are identified (8) service lines have been replaced to date. Corrosion or wearing away of lead-based materials can add lead to tap water, especially if water sits for a long time in the pipes before use. Lead can enter tap water if the service line, (lateral) that connects a home to the municipal water main in the street is made of lead. Lead can also get into tap water from lead pipes in a home, or if a home has lead solder pipe joints or brass fixtures. Water leaving the plant does not contain lead nor do the water mains.

As it is in all municipalities, the Water Department is also mandated to identify lead service lines within the city. The **Initial Material Inventory** was required to be developed by April 15, 2022 and submitted to the Illinois EPA by April 15, 2023. The Complete Material Inventory is required to be submitted to the Illinois EPA no later than April 15, 2024 which is why community residents have been asked to respond via the mailing everyone received in regards to identifying your service line. Thus far there has been a great response but if you have not completed and dropped it off at city Hall, please do so.

The city has consulted with Dr. Vernon Snoeyink who's educational and professional registrations include PhD, Civil Engineering, Sanitary Engineering, and Water Resources Engineer at the University of Michigan and is a professor emeritus in civil and environmental engineering at the University of Illinois. One of Dr. Snoeyink's specialties is on lead/copper corrosion control, distribution system water quality, and post-precipitation in water distribution systems, Granulated activated carbon for water treatment systems, and lime softening optimization. Dr. Snoeyink volunteered to review the City of Le Roy's test lab results, current practices and broad overview of the distribution system. In the end it was his recommendation to bring in a team of engineers to do a complete system analysis. When asked for a recommendation, Dr. Snoeyink highly recommended Jacobs Engineering located in Wisconsin which we have done.

To begin the process, I have been providing Mr. Tony Myers, MS, Environmental Engineer, University of Illinois BS, Civil Engineering, Michigan Technological University with all the lab results, IEPA communications, map of the distribution system, etc. Tony has 38 years of water treatment experience, extensive experience in water supply/treatment projects and a contributing author on two water treatment textbooks and over 30 technical papers.

Jacobs Engineering is currently:

- Reviewing reports on the water system design and water quality issues.
- Water Treatment Plant design drawings and reports.
- Water quality information from the wells, treatment plant and distribution system.
- Map of the distribution system.
- General information on pipe material, age, size.

By the end of February, two of Jacobs's engineers will be traveling to Le Roy to review the water system, and discuss current issues and potential solutions in a meeting with city staff. During this visit they will also tour the water treatment plant and discuss distribution system operations and water quality monitoring.

Based on the information from task 1 and 2, an estimated 3 options will be developed to improve the water treatment processes. Each alternative will be accompanied with a process flow diagram and a conceptual cost estimate. Separate from the water treatment evaluation, recommendations to maintain water quality in the distribution system will be developed. This may include suggestions for unidirectional flushing along with water quality monitoring locations and parameters.

When they have completed their analysis, a report will be prepared summarizing into an engineering report. The report will include recommendations for:

- Improvements to the water treatment processes
- Distribution system flushing program
- Distribution system water quality monitoring

In closing, while Jacobs Engineering is projecting a 4-5 month schedule to complete their analysis/report, the city will continue to identify all locations with elevated levels of lead, work with Chastain & Associates engineers and coordinate/comply with all IEPA requirements. Our residents can find information/updates on the city website and at City Hall where important information handouts are available, links posted on your utility bill.