

## Development Benefits of Switching

- **Improved Material Compatibility:** Mount Vernon's current chlorine dioxide system produces a highly oxidative environment that requires the use of ductile iron or copper water lines to prevent premature degradation. Sodium hypochlorite is far less aggressive, allowing the system to safely accommodate a broader range of materials.
- **Extended Infrastructure Lifespan:** By reducing oxidative stress on the distribution system, we extend the life of our water mains, service lines, valves, and fittings, translating directly into lower long-term maintenance and replacement costs for the City.
- **Lessons from Hamilton, Ohio:** The City of Hamilton, the only other public water system in Ohio using chlorine dioxide, has documented premature failure of HDPE and PEX lines where those materials were exposed to long-term oxidizing stress. Mount Vernon's proactive change helps us avoid these same challenges.
- **Increased Flexibility in Construction Standards:** Transitioning to sodium hypochlorite would allow Mount Vernon to revise our material requirements, enabling the safe use of plastic materials such as PVC for new development and public projects without risk of accelerated deterioration.
- **Reduced Costs for the City and Developers:** Using more affordable, durable materials would lower installation and capital costs for both City projects and private developers, freeing up budget capacity for additional infrastructure work and new development opportunities.
- **Supporting Affordable Housing and Growth:** These savings ultimately extend to new homebuyers, as developers can pass on reduced infrastructure costs, helping Mount Vernon maintain housing affordability and encourage continued growth during a period of historically high home prices.

