CITY OF
HARVEY, ILLINOIS
INTEGRITY. UNITY. PRIDE.

City Of Harvey

Lead Service Line Replacement Plan

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1. INTRODUCTION

The City of Harvey, situated in Cook County, serves as a southern suburb of Chicago. Its Public Works department plays a pivotal role in maintaining and enhancing the city's infrastructure, including the community water system identified as **PWSID IL0311110**.

The Lead Service Line Replacement (LSLR) Plan is a strategic framework designed to address the critical public health and infrastructure challenges associated with lead service lines (LSLs). This plan was prepared to comply with federal and state regulations, including the U.S. Environmental Protection Agency's Lead and Copper Rule Revisions (LCRR), Lead & Copper Improvements (LCRI) and the Illinois state law 415 ILCS 5/17.12, while prioritizing public safety, equity, and environmental stewardship.

The City of Harvey recognizes the urgent need to eliminate lead exposure risks from its drinking water system and has developed this comprehensive plan to guide the replacement of all LSLs within its jurisdiction. The LSLR Plan outlines the technical, financial, operational, and community engagement strategies required to achieve full compliance and ensure a sustainable, lead-free water infrastructure.

Key Objectives:

1. **Regulatory Compliance:** Ensure adherence to the LCRI by developing and submitting comprehensive service line inventories to the Illinois Environmental Protection Agency (IEPA) by April 15, 2027.
2. **Public Health Protection:** Eliminate lead exposure risks, particularly to vulnerable populations such as children and pregnant women, by removing lead service lines from the water distribution system.
3. **Equity and Inclusion:** Prioritize replacement efforts in disadvantaged communities to ensure equitable access to safe drinking water.
4. **Infrastructure Modernization:** Replace aging lead service lines with durable, sustainable materials to enhance water quality and system reliability.
5. **Stakeholder Engagement:** Engage with the community through transparent communication, education, and active participation in decision-making processes.

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Plan Highlights:

- **Comprehensive Inventory:** Develop a detailed inventory of all service lines, identifying materials and prioritizing those requiring replacement.
- **Prioritization Strategy:** Establish a phased replacement schedule based on factors such as lead concentration levels, community demographics, and infrastructure conditions.
- **Funding and Cost Management:** Identify funding sources, including federal and state grants, loans, and partnerships, to minimize financial burdens on residents.
- **Program Execution:** Implement best practices in project management, contractor oversight, and quality assurance to ensure efficient and timely completion.
- **Monitoring and Reporting:** Continuously collect and report data to assess progress, ensure compliance, and adapt the plan based on evolving needs and feedback.

Community Impact:

The LSLR Plan represents a transformative opportunity to enhance public health, enhance trust and transparency in municipal water systems, and foster economic development through infrastructure investment. By proactively addressing lead contamination risks, the City of Harvey will ensure the long-term safety and sustainability of our water systems while building resilience against future challenges. Through this plan, the City of Harvey is committed to delivering a lead-free future for all residents, creating a legacy of health, safety, and equity for generations to come.

1.1 Location & Service Area

Harvey is geographically bordered by Dixmoor and Riverdale to the North, Riverdale and Dolton to the Northeast, Dolton and Phoenix to the East, South Holland to the East and Southeast, Markham to the South, Southwest and West and East Hazel Crest to the South and Southwest. The current service area spans approximately 6.21 square miles and serves 20,324 The total population served within this area amounts to approximately 25,000 individuals.

1.2 Population

As of the 2020 census, Harvey's population stands at 20,324, distributed across 7,217 households. Demographically, the population comprises 5.9% White, 63.3% African American, 2.5% Asian, 6.9% representing two or more races, and 29.7% Hispanic or Latino. Among these residents, 27.3% speak Spanish at home, with 31% of the population having limited

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English proficiency. Additionally, Harvey faces economic challenges, with an unemployment rate higher than the state average, standing at 14%. Furthermore, the median household income (MHI) of $40,989 is below the state average, and the poverty rate remains at 25.2%. With a significant portion of houses built before 1988, Harvey bears a Lead Service Line (LSL) burden of approximately 97%, indicating a pressing need for infrastructure improvement initiatives. Furthermore, census data highlights that only 10.7% of households have a bachelor's degree or higher, and 13% of households lack health care coverage/insurance.

1.3 Current Water Usage & Projected Expansion

In 2024, the City's average monthly residential water use was 3.22 hundred cubic feet. The boundaries of Harvey have remained largely stable over time, prospects for geographic expansion are limited due to established corporate boundaries of neighboring municipalities. With a declining population of around 20,000 in 2020 (down from 30,000 in 2000), projections indicate the population will continue to slowly contract. Water consumption is expected to remain unchanged through 2040, with no anticipated development impacting demand, as well as continued stable growth in the areas surrounding Harvey.

1.4 Existing Public Water Supply

Harvey sources its water directly from the City of Chicago (Lake Michigan), with the City of Chicago's water treatment process including phosphate-based corrosion control. The city operates a pumping facility and serves as a major water service hub for numerous communities in the Chicago Southland area. Water is pumped from Chicago to Harvey and then distributed throughout Harvey and many surrounding communities.

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2. WATER SERVICE LINE

2.1 Definition of Ownership

The ownership of the service line is defined as follows:

- **City-owned water service (Public Side):** Extending from the water main to the water shut-off valve or Buffalo Box (b-box)/curb stop (see Fig 2.1.1).
- **Property-owned water service (Private Side):** Stretching from the water shut-off from the curb stop/b-box to the water meter inside the building (see Fig 2.1.1).

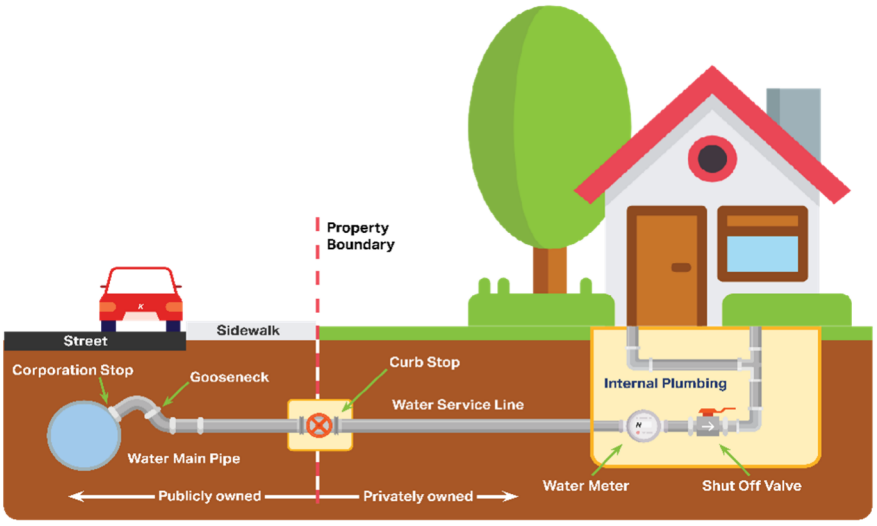

Fig 2.1.1: Service line boundaries and ownership

As per City of Harvey Code of Ordinances: Appendix for Chapter 13 – Water, Sec 3-A to Sec 3-E explains in detail the responsibilities of the city and the customer for service pipes & connection (also added as Appendix 7.2).

2.2 Definition of Service Materials

The City of Harvey adheres to the definitions of water service line materials as provided by the Illinois Environmental Protection Agency (IEPA). Table 2.2.1 outlines the classifications utilized by the city:

Service Line Materials (Public or Private)
Copper - No Lead Solder (C)
Galvanized Requiring Replacement (GRR)
Lead (L)
Cast/Ductile Iron (O)
Unknown (U)
Unknown Not Lead (UNL)

Table 2.2.1: Service Line Materials found on Harvey service line inventory.

Table 2.2.2 outlines the overall service line definitions based on what has been observed in the field and logic adopted to classify services to those definitions.

Overall Service Line Material Definition	Logic
Not Lead (NL)	If both private & public side comprise any material other than Lead & GRR, based on evidence-based record
Galvanized Requiring Replacement (GRR)	If either private or public side are composed of Galvanized Material
Lead (L)	If either private or public side are composed of Lead
Unknown (U)	If either private or public side are composed of material not identified yet

Table 2.2.2: Service Line Definitions by Ownership and Overall Service Line

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2.3 Inventory of Water Service Lines

Creating a lead service line material inventory is the first step in developing a program, and it is one of the greatest hurdles. Methods used to identify service line material by the City of Harvey are listed below. The city has completed the review of historical records, but the other methods are still underway.

- **Visual Identification:** Visual identification of service line materials is conducted by public works staff during routine field operations, including meter installation, water asset repair, meter reading, and other related activities. The staff is adequately trained to distinguish between lead, copper, and galvanized line materials.
- **Residents reporting materials:** The city urges its residents to identify and report the material used in the private side of their service line. Clear instructions for distinguishing between lead, copper, and galvanized line materials are provided, and residents are requested by the city to report the material of their service line.
- **Historical Records:** City records were utilized whenever possible to identify and map the locations of lead service lines (LSLs). This included water main tap records, meter records, documentation from maintenance and repairs, and records from water main improvement plans.
- **Building age:** Knowing the date of property construction is often highly beneficial in pinpointing potential locations of non-lead service lines. The use of lead services was banned in the state of Illinois in 1986 and the city did comply with the state ban. For inventory the city has assumed, buildings constructed after 1986 have non-lead (Not Lead) water service infrastructure.

The city has undertaken an inventory of water service line materials within its water system, as per the City of Harvey Service Line Inventory Report dated and submitted to the IEPA on 4/15/2024. The current material inventory (in Illinois EPA template) identifies:

- The total number of service lines in the community water supply (CWS) for the current year.
- The material composition of EACH service line connected to the CWS's distribution system.
- The overall service material composition based on the logic provided on table 2.2.2.

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- The count of suspected lead service lines identified since the last material inventory submission.
- The number of suspected or known lead service lines replaced since the last material inventory submission.

Overall Service Material	# of Services
Lead (L)	475
Unknown (U)	7,448
Galvanized Requiring Replacement (GRR)	15
Not Lead	261

Table 2.3.1: Service Line Inventory Summary

Of the total 8,199 service lines reported, 261 are not lead service lines, and 7,448 are composed of material not yet identified (unknown). The suspected lead service area limits are defined by the age of homes and provided in Map A below.

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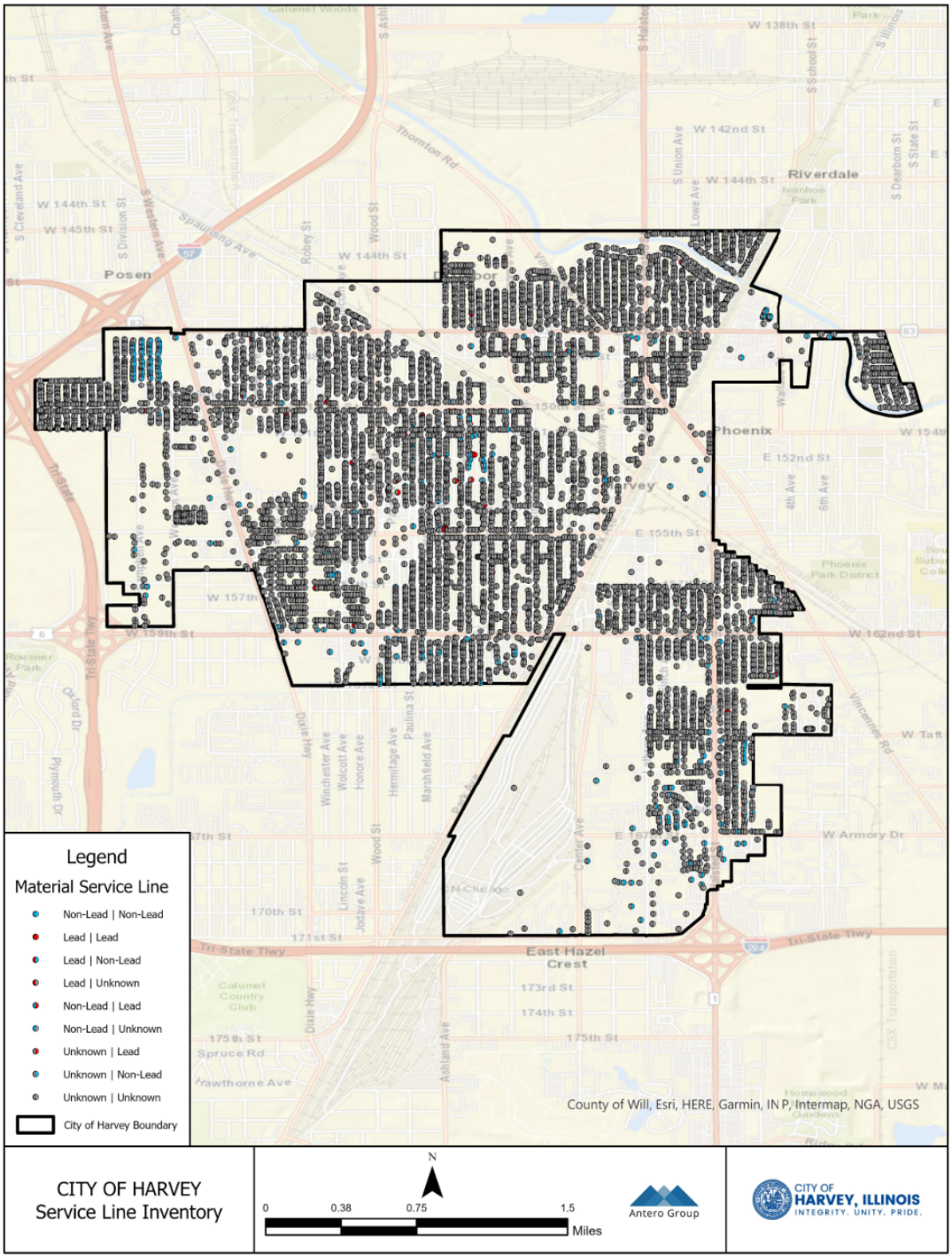
Map of Services of all materials that have been identified.

Map A: Service Inventory Map.



3. LEAD SERVICE LINE REPLACEMENT (LSLR) PROGRAM

3.1 Lead Service Line Replacement Plan

The use of lead services in the state of Illinois was banned in 1986. Therefore, while an exact inventory of all lead service lines is still being formulated, the majority of residential homes constructed before 1986 are likely to have them. With consideration of all water accounts (including commercial and residential, active, and inactive accounts), approximately 261 non-lead service lines are expected along with 7,448 unknown though suspected lead services. (Appendix 7.3 provides the addresses of lead service lines the community has replaced since 2020.)

The city is committed to removing lead service lines from its water system. The development of the new LSLR program will consider two main factors:

- **Prioritization for LSLR:** The program will prioritize the removal of lead service lines based on factors such as the location of high-risk groups, coordination with other projects within the city affecting lead service lines, efficiency, funding availability, and social justice considerations.
- **Program Duration:** Program duration will depend on factors such as available funding, the impact on water rates, and implementation challenges. A more aggressive program may necessitate quicker water rate increases but could result in overall cost savings as project costs inflate over time. However, logistical challenges, including the coordination and availability of an adequate number of work crews to simultaneously replace LSLs, need to be addressed. Previous experience suggests that depending on the construction method, replacing a lead service line can take a crew a full day, in addition to the required communication with homeowners beforehand and any necessary sampling afterward.

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3.1.1 Prioritization of LSLR

Proposed considerations for prioritizing lead service line replacement in the City of Harvey are segmented into three distinct groups:

- Areas with planned work
- Areas with emergency work
- Areas with risk factors

These categories are founded on factors influencing the ease of LSLR and the potential benefits derived from replacing specific lines. Utilizing available data, properties falling within these categories are accurately identified. The first group, areas with planned work, involves locations where concurrent infrastructure projects, such as water main replacements or water meter replacements, are scheduled. Prioritizing LSLR in tandem with these projects optimizes resources and minimizes disruption. The second group encompasses areas with emergency work, which may include properties with an emergency repair caused by aging infrastructure. The third group includes replacement of lead services from high-risk facilities such as preschools, day care centers, group day care homes, parks, playgrounds, hospitals, clinics, as well as high-risk areas identified by the community water supply. Swift replacement in these areas mitigates health risks and ensures resident safety.

Areas With Planned Work	Areas With Emergency Work	Areas with Risk Factors
Water Main Replacement	Areas with Aging Infrastructure	School & Childcare Facilities
Sewer Main Replacement		Parks & Recreational Facilities
Owner Initiated Gut Rehab		Hospitals & Clinics

Table 3.1.1.1: Prioritization of LSLR

Based on prioritization, two main LSLR programs have been developed by the City of Harvey:

1. **Capital Improvement Projects based Lead Service Line Replacement Program (CIP-LSLR)**
   Coordinating with projects that encounter underground utilities like road repairs and sewer replacement, water main replacement not only enhances opportunities for concurrent LSLRs but also minimizes costs. One such program the city has developed for addressing LSLR along with Capital projects is the CIP-LSLR Program. CIP-LSLR will focus on simultaneous work across multiple properties along a street that has a capital project such as water main or sewer main replacement. This optimizes efficiency

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by enabling the synchronized mobilization of various contractor trades and equipment. Moreover, CIP-LSLR will also help in addressing multiple properties in one trip, streamlining homeowner outreach and water quality sampling efforts. Key drivers of the CIP-LSLR selection will be dictated by the following:

a. Presence of high-risk facilities that have lead or galvanized service lines requiring replacement, or unknown service lines identified on the city's inventory. This includes facilities such as schools, playgrounds, hospitals, clinics, etc.
b. Low-income neighborhoods & disadvantaged communities.

2. **Emergency Work related Lead Service Line Replacement (EW-LSLR)**
   The EW-LSLR program empowers the City of Harvey to swiftly address LSLR instances arising from breaks or leaks on the public side of the service line (refer to Figure 2.1.1). Upon notification of a break or leak from the customer, the public works department dispatches a crew to assess the location and feasibility of repair. Subsequently, an EW-LSLR is initiated to replace the affected lead service. It is important to note that any breaks or leaks occurring on private property are not covered under this program. Although this is the case, the city will ensure that proper information is given to residents about the risks of partial LSLR and a list of registered plumbers and the funding options that are available to them if they wish to replace the private side of the lead service. Partial LSLR is strongly discouraged and will be communicated during times of emergency work, but if partial LSLR is absolutely necessary, a waiver will need to be signed (see appendix 7.4).

LSLR in licensed childcares in Harvey is conducted by the Lead Care Cook County Program in collaboration with the city. Once replacement is completed by the program, the city is notified, and the city updates the service line inventory.

3.1.2 Program Duration

The duration of the LSLR program in the City of Harvey is contingent upon several factors, primarily the availability of funding and logistical challenges associated with implementation. The estimated number of service lines that can be replaced each year is based on the assumption of work being conducted five days a week for 40 weeks per year (with no work done for 12 weeks in the winter). Given that replacing a single service line may take one to two days including full restoration back to base, the program will require multiple crews to efficiently carry out the work. Notably, the program's duration will significantly impact the necessary water rate adjustments to finance the initiative. Detailed analyses within the funding

and financing section outline the proposed rate increases under various payment timelines and homeowner subsidy levels. Currently, the city anticipates completing all LSLRs by the end of 2045, provided homeowners cooperate with the program. Achieving this timeline is crucial for ensuring the community's continued access to safe and lead-free drinking water. Table 3.1.2.1 provides a program implementation timeline, taking into consideration the unknowns in the inventory and estimating the unknowns that will require replacement.

Replacement Year	No of Replacement Targets
2026	200
2027	100
2028	100
2029	50
2030	25
Total	475

Table 3.1.2.1: Program duration

3.3 Procedure for Conducting Full Lead Service Line Replacement

The strategy for installing a new water service ensures adequate separation from existing property lines and neighboring homes. This method involves thorough assessment of utility locations and adjacent property lines. The process typically begins with locating utilities and property lines, followed by excavation to accommodate the chosen replacement technology both on private property and in the right-of-way. Installation in the right-of-way involves various steps such as tapping for the new water service, laying a copper water service line, connecting to the corporation stop, and installing necessary fixtures like curb stops and valve boxes.

If the existing lead service line is located under the slab, homeowners are advised to install a new service along the basement ceiling to ensure no buried lead pipes remain connected to the water system. Temporary water service may also be needed during installation for homeowner convenience. There are multiple approaches to installing a new service line that the city explored below:

- **Open cut**: Open cut trenching is the typical method used by plumbers, especially for properties slated for demolition and replacement. It involves digging a trench, which can cause significant exterior disruption to property owners. Interior disturbances depend on whether the basement is finished. Despite its disturbance, open cut trenching is often the most cost-effective option, particularly when restoration costs are minimal. This approach is advised based on individual circumstances.

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- **Trenchless**: Trenchless installation of water services is being explored to address concerns such as economic impact, landscape disruption, and social inconveniences associated with traditional open cut methods. Advances in trenchless technologies offer a more efficient alternative in certain situations, minimizing surface disruption and restoration time. These methods are socially appealing as they cause less destruction and require less restoration compared to open cut techniques.
    - **Standard Horizontal Directional Drilling**: Standard Horizontal Directional Drilling involves using a drill rig on the ground surface to create a tunnel underground. To reach a depth of about 5'6" below the ground surface, the drill rig head must be positioned approximately 30 feet away from the final depth point of the water service. This may require closing the road for safety. While many pipeline and cable contractors employ this method, plumbing contractors often subcontract it out as specialty work.
    - **Pipe pulling**: Pipe pulling is the most cost-effective method among trenchless options for installing water services. It involves using the path of the existing pipe, eliminating the need for additional excavation. A new water service pipe is pulled along the existing route, often with a winch or excavator bucket with a cable. The new copper service is connected to the existing lead service in the home, effectively replacing it using the borehole left by the removed lead pipe.

For this project, replacement technologies encompass both traditional open-cut and trenchless options. Regardless of the chosen technology, the proposed LSLR methodologies will ensure compliance with regulations set forth by the Illinois Environmental Protection Agency (IEPA), as well as industry standards outlined in AWWA C810-17 and the Illinois Lead service line replacement and notification act (415 ILCS 5/17.12). Construction activities will adhere to the city's Municipal Code requirements and NPDES II stormwater standards, along with the IEPA's General Permit for Construction Sites (ILR10). 45 days prior to planned LSLR, the city will provide adequate notification and education materials regarding harmful effects of lead, the procedure of LSLR, right of entry needed from the homeowner to perform the work, and waivers if homeowners refuse or waive replacement of their portion of the service (provided in Appendix 7.4). In the case of emergency work, these educational materials and waivers will be provided as soon as possible. Prior to starting replacement, precautions will be taken to shut off the water supply to the service line to prevent the release of particulate lead into the premises. After completing the connections, the contractor will flush the water from an outside connection for at least 30 minutes to remove any particles in the service line, followed by

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advising property owners to flush their interior premise plumbing as per provided instructions (Appendix 7.4).

Furthermore, in accordance with AWWA C810-17 and to comply with 415 ILCS 5/17.12, each address receiving a new service line will be provided with a Point of Use water filter meeting NSF/ANSI 42 and 53 certifications for lead reduction. These filters will have a minimum capacity of 0.5 gallons and six months of replacement cartridges or a minimum of 150 gallons of filtration capacity. These comprehensive measures ensure not only regulatory compliance but also prioritize the safety and well-being of residents during and after the lead service line replacement process.

The primary methods of water service installation in the City of Harvey are open cut and pipe pulling, as they offer the most cost-effective solutions for the city. However, in cases where installation costs are higher, such as installing a water service on a major Illinois Department of Transportation arterial street or when trenchless installation is necessary, both pit-launched and standard horizontal directional drilling methods will be considered based on the specific circumstances.

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4. COMMUNITY OUTREACH & PUBLIC ENGAGEMENT

To ensure effective community engagement, the City of Harvey's outreach program for the Lead Service Line Replacement (LSLR) initiative will employ various communication methods aimed at informing and involving homeowners. Central to the program's success is consistent and informative communication across multiple platforms, including meetings, press releases, door-to-door notifications, and social media channels. By leveraging these diverse communication channels, the program aims to raise widespread awareness about the significance of the LSLR program and the options available for homeowners to participate. Early successes of the program will be shared with the community to foster positive feedback and encourage support for the initiative. Table 4.1.1 provides detail regarding the objectives and methods for educating the public during the different phases of the LSLR program. In the case of emergency work, the communication considered "Before LSLR" will be provided immediately to the resident as soon as emergency work is identified.

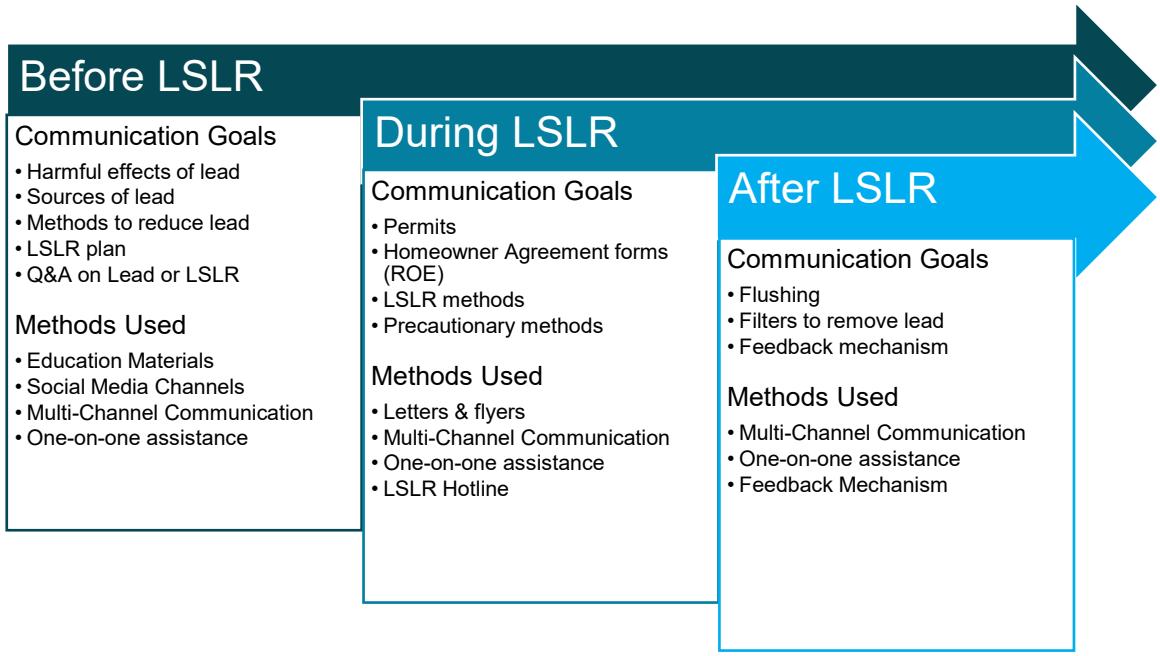

Table 4.1.1: Community Outreach by LSLR Phase

To effectively communicate the goals and requirements of the LSLR program, a comprehensive outreach & communication plan is developed, outlining key messaging, target audiences, and preferred communication methods. Emphasis will be placed on building trust and transparency with homeowners, ensuring they understand the benefits of participating in the program. Notices will be sent to homeowners at least 45 days before the commencement of planned work, with repeated notifications every two weeks until confirmation of receipt. For emergency work, notices will be sent out as soon as possible. Special attention will be given to non-English speakers, providing translated notices and instructions for accessing additional resources. As previously mentioned, the Community Outreach and Public Engagement plan will be vast, consistent, and includes:

- **Stakeholder Identification:** The city has Identified key stakeholders, including residents, local businesses, community organizations, schools, healthcare providers, and governmental agencies.
- **Educational Materials:** The city is developing comprehensive educational materials explaining the importance of LSLR, potential health risks associated with lead exposure, details of the replacement process, and available resources for assistance. The materials currently developed and used for LSLR outreach are provided in Appendix 7.4.
- **Multi-Channel Communication:** The city plans to utilize a variety of communication channels to reach different segments of the community, including:
    - Printed materials such as program brochures, flyers, door hangers and direct mail distributed to households, businesses, and public spaces.
    - Digital platforms including the city website, email newsletters, and community forums.
    - Information sessions and workshops held at community centers, schools, and other public venues.
    - Door-to-door outreach by trained community volunteers or outreach workers to engage directly with residents.
- **Social Media Channels:** The city intends to utilize its social media platforms (Facebook) to engage with residents regarding lead exposure concerns. Posts will include links to informative resources on the city's website, as well as videos and webinars explaining lead risks and the city's efforts to mitigate them. Social media will

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also be used to announce upcoming project activities, public outreach events, and success metrics such as the percentage of lead pipes replaced.

- **Language and Accessibility:** The city will ensure that all materials and communication efforts are available in multiple languages to accommodate the linguistic diversity of the community. Additionally, the city will also make information accessible to individuals with disabilities by providing alternative formats such as large print or audio versions.
- **Personalized Outreach:** The city will tailor outreach efforts to specific demographics or neighborhoods within the city, taking into account factors such as income level, age, cultural background, and housing status. Engage community leaders and influencers to help disseminate information and encourage participation.
- **Community Workshops and Events:** The city has plans to organize community workshops, town hall meetings, and informational events where residents can learn more about the LSLR program, ask questions, and provide feedback. Offer opportunities for hands-on demonstrations or tours of the replacement process and an avenue for public comment on the LSLR plans.
- **One-on-One Assistance:** The city intends to provide personalized assistance and support to residents who may have questions or concerns about the replacement program and establish a dedicated hotline or helpline staffed by knowledgeable personnel to address inquiries and provide guidance.
- **Feedback Mechanisms:** The city plans to implement feedback mechanisms such as surveys, focus groups, or public hearings to gather input from residents throughout the planning and implementation phases of the program. The city will use this feedback to adjust and make improvements as needed.
- **Collaboration and Partnerships:** The city plans to collaborate with local organizations, community groups, schools, healthcare providers, and government agencies to amplify outreach efforts and leverage existing networks and resources.
- **Ongoing Engagement:** The city will maintain ongoing communication and engagement with the community beyond the initial outreach phase. The city will provide regular updates on the progress of the replacement program, share success stories, and continue to address any concerns or issues that arise.
- **Non-Participation/Waivers:** Homeowners in the City of Harvey may not always be ready to engage with or communicate regarding the LSLR program. At present, the city lacks the authority to mandate homeowner access to private property or demand access for replacing the private side of the LSL. For those who choose not to participate, an Illinois Department of Public Health waiver form will be available (see

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appendix 7.4). Efforts to communicate will be recorded for unresponsive homeowners. Nevertheless, these households will still receive complimentary point-of-use filters along with six replacement cartridges.

5. FUNDING & FINANCING

5.1 Funding Summary

Lead service line replacement (LSLR) in the City of Harvey will be conducted by the municipality itself, and all associated costs will be borne by the city. For the successful execution of the project, the City of Harvey will necessitate funding from various external sources alongside potential rate increases. The city plans to utilize the IEPA Lead Service Line Replacement Principal Forgiveness and Environmental Impact Discount program for its multi-year project. Currently the city is awaiting project planning approval from IEPA (IEPA project plan approval will be attached in Appendix 7.5). IEPA has an annual program for funding which the City will continue to apply for and maximize that funding for the replacement program.

5.2 Accounting of Costs Associated with Replacing Lead Service Lines

The city has categorized water service replacements into two main types: partial and full replacement (Detailed cost breakdown of LSLR provided in Appendix 7.7):

- **Partial Replacement**: This involves replacing the portion of the line from either the water main to the b-box (buffalo box) or from the b-box to the water meter. The estimated cost for partial replacement is approximately $10,000 per service line covering construction engineering, program administrative expenses, restoring, and potholing.
- **Full Replacement**: This entails replacing the entire line from the water main to the house water meter. The estimated cost for full replacement is approximately $15,000 per service line covering construction engineering, program administrative expenses, restoring, and potholing.

Based on current industry standards, estimates for LSLR are as follows:

Item	Cost Estimate
Lead Service Line Replacement (Year 1)	$3,000,000
Contingency (10%)	$300,000
Construction Total	$3,300,000

Table 5.1.1: Overall Construction Cost Summary

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Project Year	Number of Services	Estimated Project Cost
Year 1	200	$3,300,000
Year 2	100	$1,300,000
Year 3	100	$1,300,000
Year 4	50	$650,000
Year 5	25	$325,000
Program Total	475	$6,875,000

Table 5.1.2: City of Harvey LSLR Program Estimated Costs

5.2.1 Measures to Encourage Diversity Participation

The City of Harvey actively promotes diversity in its hiring practices for the implementation of the LSLR plan. Adhering to the various funding agency requirements, the city requires a minimum of 25% Minority Business Enterprise and/or 5% Women Business Enterprise participation on all project bids. By establishing and maintaining these benchmarks, the city ensures equitable opportunities for minority-owned and women-owned businesses to contribute to vital infrastructure projects. This commitment not only fosters a more inclusive workforce but also enriches the local community by harnessing a diverse range of talents and perspectives in the pursuit of environmental sustainability and public health.

5.3 Water Affordability & Residential Rate Structure

5.3.1 Residential Rate Structure

Funding the LSLR plan in the City of Harvey is a crucial endeavor, requiring careful consideration of revenue sources and financial strategies. Currently the city plans to utilize the IEPA Lead Service Line Replacement Principal Forgiveness and Environmental Impact Discount program for its multi-year project The City does not currently intend, but may in the future be required to evaluate the need for water rate increases in the event that IEPA funding cannot cover the extent of full City replacements.

5.3.2 Affordability to customers

Currently, the city does not have a funding model in place for the full LSLR, including the private side. The city proposes to fund the full LSLR for its system including the private side and will continue to evaluate the ability to fund private side replacements as the project progresses.

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Comprehensive community outreach and education endeavors will heighten awareness of available assistance programs and payment options, while targeted communication campaigns will encourage residents to seek assistance as needed and promote water conservation practices. Regular monitoring and evaluation of affordability measures, along with soliciting customer feedback, will ensure alignment with community needs, as the City of Harvey remains steadfast in its commitment to equitable access to essential water services alongside the LSLR program administration.

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6. WATER QUALITY MAINTENANCE & MEASURES

After the completion of a Lead Service Line Replacement (LSLR), it is imperative for both the city and residents to implement measures to maintain proper water quality within their homes. These maintenance recommendations align closely with recent guidelines from respected organizations such as the Water Research Foundation (WRF), the Environmental Protection Agency (EPA), and the American Water Works Association (AWWA). The WRF has produced several reports focusing on water quality post-LSLR and flushing procedures, providing valuable insights into best practices.

- **Flushing Protocols:** Construction crews will initiate flushing of the new service line by opening an outside tap on the lowest level to clear any construction debris. Residents should follow specific flushing procedures, differentiated for instances following a disturbance to the lead service line and those when water has stagnated. Immediate flushing after a service line disturbance aims to remove loose particles through high-velocity water flow, following guidelines outlined in AWWA C810-17 and WRF 4584, Evaluation of Flushing to Reduce Lead Levels. Additionally, residents must perform a 30-minute flush of interior piping after a LSLR, adhering to a step-by-step procedure outlined by AWWA C810, which recommends repeating this process every two weeks for three months post-disturbance.
- **Water Filters**: Filters play a crucial role in maintaining water quality post-LSLR, as lead levels may still increase despite flushing procedures. Contractors are mandated to provide each address receiving a new service line with a Point of Use water filter meeting NSF/ANSI 42 and 53 certifications for lead reduction, ensuring a minimum capacity of 0.5 gallons and six months of replacement cartridges or a minimum of 150 gallons of filtration capacity.
- **Post Replacement Water Sampling**: Follow-up water sampling is essential to verify the effectiveness of the LSLR and ensure lead concentrations have decreased. Complementary to industry guidelines, the sampling protocol will be designed to supplement the Lead and Copper Rule (LCR) regulatory sampling of the 1st and 5th liter, providing comprehensive monitoring of water quality post-replacement.

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7. APPENDIX

Appendix 7.1: IEPA Checklist

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Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Lead Service Line Replacement Plan Checklist

PWS ID No.: IL0311110 Name: Harvey

Lead Service Line Replacement Plan Self-Assessment

This section should be completed after your plan has been developed to ensure it meets all sections required by Section 17.12 of the Environmental Protection Act.
Please certify the inclusion of each lead service line replacement requirement and note the location in the appropriate box. Failure to include any required information in the lead service line replacement plan will result in the plan be rejected.

Initials	Location (e.g. Pg. 3 Para. 6)	Please initial each box to confirm that that required section is included in the plan and include the page number and paragraph number for where that information can be found in the plan.	Citation
		The name and identification number of the community water supply.	*415 ILCS 5/17.12 (q)(1)*
		The number of service lines connected to the distribution system of the community water supply.	*415 ILCS 5/17.12 (q)(2)*
		The total number and location of suspected lead service lines connected to the distribution system of the community water supply.	*415 ILCS 5/17.12 (q)(3)*
		The total number and location of known lead service lines connected to the distribution system of the community water supply.	*415 ILCS 5/17.12 (q)(4)*
		The total number and locations of lead service lines connected to the distribution system of the community water supply that have been replaced since 2020.	*415 ILCS 5/17.12 (q)(5)*
		A proposed lead service line replacement schedule that includes one-year, 5-year, 10-year, 15-year, 20-year, 25-year, 30-year goals.	*415 ILCS 5/17.12 (q)(6)*
		An analysis of costs and financing options for replacing the lead service lines connected to the community water supply's distribution system.	*415 ILCS 5/17.12 (q)(7)*
		A detailed accounting of costs associated with replacing lead service lines and galvanized lines requiring replacement.	*415 ILCS 5/17.12 (q)(7)(A)*
		Measures to address affordability and prevent service shut-offs for customers or ratepayers.	*415 ILCS 5/17.12 (q)(7)(B)*
		Consideration of different scenarios for structuring payments between the utility and its customers over time.	*415 ILCS 5/17.12 (q)(7)(C)*
		A plan for prioritizing high risk facilities such as preschools, day care centers, group day care homes, parks, playgrounds, hospitals, and clinics, as well as high-risk areas identified by the community water supply.	*415 ILCS 5/17.12 (q)(8)*
		A map of the areas where lead service lines are expected to be found and the sequence with which those areas will be inventoried and lead service lines replaced.	*415 ILCS 5/17.12 (q)(9)*
		Measures for how the community water supply will inform the public of the plan and provide opportunity for public comment.	*415 ILCS 5/17.12 (q)(10)*
		Measures to encourage diversity in hiring in the workforce required to implement the plan as identified under subsection (n).	*415 ILCS 5/17.12 (q)(11)*
		Procedure for conducting full lead service line replacement.	*40 CFR 141.84 (b)(2)*
		Procedure for informing customers before a lead service line replacement and flushing directions to remove particulate lead form service lines and premise plumbing.	*40 CFR 141.84 (b)(3), 40 CFR 141.84 (b)(5)*

Please include a copy of this checklist when submitting the Lead Service Line Replacement Plan to the Illinois EPA.

Appendix 7.2: Ordinance for Service Pipes and Connections

Chapter 13-04
WATER SERVICE SYSTEM

Article I. General Provisions

13-04-010 Applicability.

This chapter shall apply to the combined water and sewer system, or part thereof, which is operated and maintained by the city. (Ord. 2632 § 1 (part), 1990)

13-04-020 Definitions.

For the purposes of this chapter, the following terms and phrases shall have the meanings given herein:

“Fixture” means a sink, wash basin, stationary tub, toilet, bath tub, shower stall, water tap, drinking fountain, washing device, or other device or appliance through or in which water is consumed, except devices or appliances designed and intended solely for fire protection purposes.

“Potable water” means water from a public or private supply which is approved and accepted by proper and qualified authority as suitable for human consumption.

“Service pipe” means the water supply pipe extending from the water main to the water meter.

“Shut-off box” means a device located in a public area, usually the parkway of an abutting street, inserted in the water service pipeline between the water meter and the water main and used to turn on or shut off the flow of water from the water main to the water meter.

“Water main” means the pipes located in a street, road, alley or easement through which water is distributed to all service connections. (Ord. 2632 § 1 (part), 1990)

13-04-030 Supervision of water works.

The superintendent of water shall have general supervision over the water works system of the city comprising the wells, water mains, pumping stations, grounds, buildings and appurtenances thereto. (Ord. 2632 § 1 (part), 1990)

13-04-040 Permits—Applications—Fees.

A. All applications for permits as required by the provisions of this chapter shall be made to the superintendent of water or his designee, who shall issue same; provided, such applications conform to the provisions of this code.

B. No extension of any existing water main or construction of any water main shall be undertaken unless a proper permit, if applicable, has been secured from the Illinois Environmental Protection Agency, in addition to a city permit.

C. A fee as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements, shall be applied to all permits which are taken out to cover the cost of filing. (Ord. 3494 § 2(B), 2024; Ord. 2632 § 1 (part), 1990)

13-04-050 Inspections.

All inspections required to be made in regard to permits issued under Section 13-04-040 shall be made by the duly authorized representative of the superintendent of water. It shall be the duty of every person to perform the work in accordance with said permit and in full compliance with all other applicable rules and regulations and provisions of this code, and any work rejected by the plumbing inspector shall be immediately corrected prior to the water service being turned on. (Ord. 2632 § 1 (part), 1990)

13-04-060 Potable water.

The water distribution system for any building intended or used for human habitation or occupancy shall contain and be supplied by potable water only. For the purposes of this section, all such buildings shall be deemed to have only one such

water distribution system. Every pump or hydrant used for providing a potable water supply shall be protected from surface water and contamination. (Ord. 2632 § 1 (part), 1990)

13-04-065 Use of groundwater as potable water.

A. Definitions.

“Person” is any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, or any other legal entity, or their legal representatives, agents or assigns.

“Potable water” is any water used for human or domestic consumption, including, but not limited to, water used for drinking, bathing, swimming, washing dishes or preparing foods.

B. Use of Groundwater as a Potable Water Supply Prohibited. Except for such uses or methods in existence before the effective date of the ordinance codified in this section, the use of, or attempted use of, groundwater from within the corporate limits of the city of Harvey, as a potable water supply, by the installation or drilling of wells or by any other method, is hereby prohibited. This prohibition expressly includes the city of Harvey.

C. Penalties. Any person violating the provisions of this section shall be subject to a fine as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements. (Ord. 3494 § 2(B), 2024; Ord. 3195 §§ 1—3, 2007)

13-04-070 Resale of water.

No water shall be resold or distributed by the recipient thereof from the city water supply to any premises other than that for which the original sale has been made, as evidenced by meter installation; except as may be specifically authorized by the superintendent of water in cases of emergency use or as may be permitted by intergovernmental agreement. (Ord. 2632 § 1 (part), 1990)

13-04-080 Tampering forbidden.

It is unlawful for any person, firm or corporation, not specifically authorized by the city water department, to tamper with, injure, damage or alter any part of the city water works, supply system, or any water meter or water meter seal installed therein. Any person, firm or corporation alleged to have tampered with, injured, damaged or altered any part of the city water works, supply system, or any water meter or water meter seal installed herein shall have the right to an administrative hearing.

Offenses will incur a penalty as set forth in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements. (Ord. 3494 § 2(B), 2024; Ord. 3378 § 1(B), 2019: Ord. 2632 § 1 (part), 1990)

13-04-090 Construction of mains and water pipes.

A. All extensions of water mains or construction of new water mains or service pipes shall not be undertaken unless the permit therefor has been issued pursuant to the requirements of Section 13-04-040.

B. All pipes connecting to the watermain at the parkway shall be “K” type copper pipes, unless otherwise approved by the superintendent of the water department. (Ord. 2632 § 1 (part), 1990)

13-04-100 Shut-off boxes.

Shut-off boxes shall be placed on every service pipe by the city and shall be subject to the specifications set forth in Title 15 of this code, “Buildings and Construction.” (Ord. 2632 § 1 (part), 1990)

13-04-110 Water meters.

A. No consumer shall be supplied with water from the city system until a meter with an outside reading device shall be set and ready for use, except in cases where it is impractical to so set a meter as a temporary measure. All meters used in

connection with said water system shall be supplied and installed by the city and shall be and remain the property of the city.

The actual cost to the city of furnishing and installing a meter for commercial or business service, which is larger than the standard meter for a three-quarter (3/4) inch pipe service, shall be paid by the person ordering the same immediately upon the installation and before water is turned on. The actual cost of keeping such larger meter in repair shall be paid to the city by the person ordering same or by the owner or occupant of the premises as soon as the billing therefor is presented. All out-of-date meters not in compliance with today's standards shall be updated and paid for by owner per the city of Harvey water ordinance, or risk termination of service. The person upon whose application any such larger meter is installed, or the occupant or owner of the premises where installed, shall be liable for any breakage by freezing or otherwise, or any loss or damage to said meter in any manner, and the cost of making good such damage or loss shall be paid to the city by the person upon whose application such meter was installed, or by the occupant or owner of the premises where installed, as soon as a bill therefor is presented, and the amount thereof shall be a lien against the premises in which such meter is located to the same extent and with the same effect as delinquent water charges.

Where more than one (1) meter is required to serve the customer's premises said meters shall be furnished by the owner at his cost. Said meters shall be maintained by the city but at the sole cost and expense of said owner.

B. The water meter shall be installed in such a location that it is readily accessible for replacement and reading in the opinion of the superintendent of water or his duly authorized representative.

C. The water meter shall be installed in a saddle which will hold the pipes in position even without the meter in place. (Ord. 3392, 2020: Ord. 2632 § 1 (part), 1990)

13-04-120 Correction of water leaks.

It shall be the responsibility of the water customer to correct and repair all water leaks occurring from the shut-off box connection to the water meter, at his own expense, where the water department determines that such water leak warrants corrective action. (Ord. 2632 § 1 (part), 1990)

13-04-130 Fire hydrants.

A. No person, firm or corporation shall open or draw water from any city or other fire hydrant or plug, or interfere in any manner therewith, without the prior permission of the superintendent of water and fire chief, except in the case of a fire or similar emergency.

B. Any person, firm or corporation may be permitted by the superintendent of water and fire chief to make special connections with street water mains in order to obtain private hydrants and standpipes for use in the case of fire. No charge shall be made for such permit, or for water used for fire purposes, but all such work in connection with such fire system shall be done under the direction of the water department and fire chief. Such private facilities shall be maintained in good working order by the owner of the premises where they are located, and shall be readily available and open to inspections by the city at all times. (Ord. 2632 § 1 (part), 1990)

13-04-140 Excavations.

Excavations, and the backfilling thereof, shall conform to all applicable provisions of the this code. (Ord. 2632 § 1 (part), 1990)

13-04-150 Plumbing regulations.

A. All work performed under the provisions of this chapter shall also conform to the provisions of Title 15 of this code, and shall be performed by a licensed plumber or other qualified professional, as appropriate.

B. All new water services shall be metered and constructed in accordance with the applicable codes of the city. New services will include but are not limited to water service in new construction of all types.

C. Flushing of sanitary sewers with potable water shall be performed through the use of a high velocity type sewer jet.

D. 1. Flow Rates. In all new construction and in all repair and/or replacement of water using fixtures, only fixtures not exceeding the following flow rates and/or water usage shall be installed. These ratings are based on a pressure at the fixture of forty (40) to fifty (50) psi.

Water closets, tank type	3.5 gal. per flush
Water closets, flushometer type	3.0 gal. per flush
Urinals, tank type	3.0 gal. per flush
Urinals, flushometer type	3.0 gal. per flush
Shower heads	3.0 gal. per minute
Lavatory, sink faucets	3.0 gal. per minute

2. Lavatories for Public Use. In addition to the requirements in subdivision (D)(1) of this section, in all new construction and in all repair and/or replacement of fixtures, faucets of lavatories located in restrooms intended for public use shall be of metering or self closing type.

3. Car Wash Installation. In all new construction and replacement of fixtures, car wash installations shall be equipped with a recycling system on the wash water unit and the rinse cycle unit.

E. Air Conditioning Installation. In all new construction and remodeling involving installation of air conditioning, shall be of the closed system type. (Ord. 2632 § 1 (part), 1990)

Article II. Water Service

13-04-160 Requests for service.

Requests for water service shall be made to the water department, at which time all pertinent information will be taken and a time for water turn-on established.

A. The owner of all houses, buildings and properties used for human occupancy, employment, recreation or other purposes located within the city and abutting any street, alley or right-of-way in which there is now located a water main of the village, is required, at his own expense, to install a water service line and to connect or tap on to the water main of the city. The water service line shall be installed and connected to the plumbing facilities of the premises in accordance with the provisions of this chapter and the provisions of Title 15 of this code, within ninety (90) days after date of official notice to do so, provided that said water main of the city is within one hundred (100) feet of the property line upon which the premises are located.

B. Upon connection to the city water system, all wells shall be properly capped, sealed and disconnected from the domestic water supply.

C. Requests for water service shall be made to the water department, at which time all pertinent information will be taken and a time for water turn-on established. (Ord. 2632 § 1 (part), 1990)

13-04-170 New service connections.

A. 1. No service pipes shall be installed or connected to the water mains of the city system without a permit for each such installation or connection. Application for such permit shall be made to the building department and shall be signed by the owner or tenant of the premises involved, and by the plumbing contractor by whom the work is to be performed. Such

applications shall be made on forms furnished by the city and shall state the size and location of the tap and shut-off box required, the size and composition of the service pipe to be used, a description of the property to be served, and the location upon said property of the service pipe and water meter to be installed therein.

2. If the building department shall find that the application conforms to the provisions of this chapter, and upon the receipt of a fee as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements, it shall issue a permit for such work.

B. All work shall conform to specifications set forth in Title 15 of this code, including the size and composition of the service pipe and related fittings, and the manner of laying same.

C. All excavations in connection with the installation of service pipe shall be performed in accordance with the standards and requirements of the applicable provisions of this code.

D. Before commencing the installation of any service pipe hereunder, the contractor, or owner or tenant of the premises, shall notify the building department at least twenty-four (24) hours in advance of commencing such work.

E. No excavation performed in connection with such work shall be backfilled before the installation has been inspected and approved by the building department. At such time of inspection the completed service pipe, water meter and related fittings shall be subjected to a pressure test at city pressure; each such installation shall sustain the existing city pressure for a period of not less than fifteen (15) minutes without leakage before being approved.

F. Upon satisfactory completion of the inspection and testing of such work, and upon satisfactory backfilling of all excavations made in connection with such work, the building department shall notify the water department that the water service system is satisfactory.

G. The filing of an application for a permit pursuant to subsection (A) of this section shall be deemed consent by the owner or tenant of the premises involved to entry upon such premises by employees of the water department for the purpose of making such inspection. (Ord. 3494 § 2(B), 2024; Ord. 2632 § 1 (part), 1990)

13-04-180 Tapping mains.

A. 1. Where new service pipes require the tapping of water mains and the installation of shut-off boxes, it shall be the responsibility of the person obtaining water service, at his own expense, to provide proper excavating to the water main, to backfill same, and to restore the street area to its original condition, including repaving where necessary.

2. It shall be the responsibility of the person obtaining service to make such tap-ons, install the shut-off box, and furnish all materials regarding same. Such work will be made subject to inspection by the water department.

3. All work shall conform to specifications set forth in Title 15 of this code.

B. The applicant for a permit pursuant to this chapter shall also, as a condition prerequisite to the issuance of a permit for connection to the water facilities of the city, pay a connection charge and a local facilities charge as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements. (Ord. 3494 § 2(B), 2024; Ord. 2632 § 1 (part), 1990)

13-04-190 Repair and replacement.

All repairs and replacements of service pipes from the shut-off box to the building shall be made by and at the expense of the owner of the premises served, and shall require full compliance with all the regulations and requirements of this code, including permits. The city may, in case of emergency, repair any service pipes; and if this is done, the cost of such repair work shall be repaid to the city by the owner of the premises served. However, the city shall be responsible for the repair of service pipes from the tap to the shut-off box. (Ord. 2632 § 1 (part), 1990)

13-04-200 Terminating service.

A. Water service may be terminated where any person, firm or corporation violates any ordinance, rule or regulation of plumbing requirements. Termination of service shall occur in accordance with the procedures set forth in Section 13-04-280.

B. The foregoing shall be in addition to general penalties which may be imposed for violations of this chapter. (Ord. 2632 § 1 (part), 1990)

Article III. Water Rates, Billing and Collection

13-04-205 Water, sewer and refuse bill of rights.

There shall be established a water, sewer and refuse bill of rights. The water, sewer and refuse bill of rights shall be as follows:

A. The city of Harvey shall provide you with a clear and complete explanation of all items on your bill.

B. The city of Harvey may refer you to programs that may be able to assist you with paying your water and sewer bill.

C. The city of Harvey shall provide you with a written notice of pending disconnection of service for nonpayment prior to disconnection of service. The notice of pending disconnection shall be issued by certified or registered mail no sooner than thirty (30) days after nonpayment. The notice of pending disconnection shall be issued in compliance with Section 13-04-280 of this code.

D. The city of Harvey shall not disconnect service for nonpayment on any Saturday or Sunday or any holiday observed by the city, unless the city is open to accept payment and restore service on those days.

E. The city of Harvey shall not disconnect service for nonpayment when the National Weather Service for Harvey has issued a freeze warning or excessive heat warning as of eight a.m. on the day of the scheduled disconnection.

F. The city of Harvey shall not disconnect your service for nonpayment for a period of thirty (30) days when you provide a written notice from a medical doctor licensed to practice in the state of Illinois certifying that disconnection of service would create a life-threatening situation for you or another permanent resident of your household.

G. The city of Harvey shall not disconnect service for nonpayment because a former occupant, not of the same household, failed to pay a prior bill.

H. The city of Harvey shall allow you to designate another person to receive all information regarding your service including notices regarding past due bills and disconnection of service.

I. The city of Harvey shall restore your service by the following day after making the required payments when your services have been disconnected for nonpayment.

J. The city of Harvey shall issue a credit, in the amount of twenty-five (25) percent of the current waste disposal rate, to all households with a current zero balance, if there is an interruption in trash pickup due to the city of Harvey’s failure to pay for waste disposal services. (Ord. 3378 § 1(A), 2019)

13-04-210 Rates and billing.

Rates and charges for water supplied to consumers and users of said water works and water supply system shall be billed monthly, bimonthly or quarterly in accordance with the application of the user and shall be payable upon being mailed. The owner of the real estate, the occupant thereof or the user of the water service, shall be jointly and severally liable for the water supplied to such premises and this service is furnished to the premises by the city solely upon the condition that the owner of the real estate, occupant and user of the water service are jointly and severally liable therefor to the city. All bills for water supplied shall be payable within fifteen (15) days after mailing thereof. If payment of the full amount of the bill is not made within that period, then a penalty as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements, shall be added thereto. (Ord. 3494 § 2(B), 2024; Ord. 2632 § 1 (part), 1990)

13-04-220 Deposit.

A. No water and sewer service shall be provided to any applicant for water service without payment of a deposit of the sum of money as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements, as security for payment of any such bills:

B. Said deposit shall remain with the department until said service has been discontinued and all bills due the city shall have been paid. Upon the failure of the user to pay any accrued charges, the amount placed on deposit or the amount due and owing (whichever is less) shall be forfeited after the department has given a five-day notice in writing to the user. (Ord. 3494 § 2(B), 2024; Ord. 2632 § 1 (part), 1990)

13-04-230 Construction meter deposit.

Whenever a construction meter is used in Harvey a deposit as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements, shall be placed with the water department. Cost of water will be deducted from deposit and the balance returned to depositor upon return of meter. (Ord. 3494 § 2(B), 2024; Ord. 2632 § 1 (part), 1990)

13-04-240 Schedule of rates.

All water supplied to customers and users thereof, upon, along and from the waterworks or water supply system for all public and private purposes shall be supplied through meter only, and the water rates to be charged therefor shall be and are hereby fixed in accordance with the following schedule:

A. Residents of the City. Effective January 1, 1992, water rates shall be as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements.

B. The rate to be charged nonresidents of the city shall be as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements, except where the city has executed binding intergovernmental agreements with other municipalities, in which case the rates established pursuant to said agreements shall be controlling.

1. The water rates to be charged to the Village of Hazel Crest shall be as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements.

2. The water rates to be charged to the Village of Homewood shall be as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements.

3. The water rates to be charged to the Village of Posen shall be as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements.

4. The water rates to be charged to the Village of East Hazel Crest shall be as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements.

5. The water rates to be charged to the Village of Phoenix shall be: Monthly Rate as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements.

6. The water rates to be charged to the Village of Dixmoor shall be as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements.

C. In the event that water is shut off for default in the payment of water charges, the user shall be charged a fee as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements, for each meter used to have water turned on. This fee shall be in addition to any delinquent charges. (Ord. 3494 § 2(B), 2024; Ord. 2763A § 1, 1991; Ord. 2632 § 1 (part), 1990; Ord. 2606 §§ 1-6, 1989)

13-04-250 Fees for specialized water department services.

Fees for specialized water department services shall be as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements. (Ord. 3494 § 2(B), 2024; Ord. 2632 § 1 (part), 1990)

13-04-270 Delinquent bills.

In the event the charges for water supplied are not paid within thirty (30) days after issuance of the bill for which such water service has been supplied, such charges shall be deemed and are declared to be delinquent. (Ord. 2632 § 1 (part), 1990)

13-04-280 Shutting off water.

Immediately upon the delinquency of a statement for water charges, the superintendent of the water department or his designee shall notify the customer prior to termination of service. Said notice of termination shall include the proposed date of termination and a brief description of the procedure for challenging the termination, as set forth in this section.

A. The superintendent of the water department or his designee shall send notice to the customer prior to termination of service by certified or registered mail. Said notice of termination shall set forth the proposed date of termination and notify the customer that he has ten (10) days within which to challenge termination of service as being unjustified by written notice to the superintendent of the water department.

B. The superintendent of the water department, or his designee, upon receipt of a customer's challenge to termination of service, shall schedule a hearing on the challenge. The superintendent or his designee shall hold the hearing and render a final decision thereon. The customer may be present at the hearing with counsel, may cross-examine witnesses, may offer witnesses and evidence, and may present defenses to the termination. All testimony shall be taken under oath.

C. In the event a decision to terminate service is rendered, the customer may appeal said decision to the superintendent based upon the record at the hearing and said superintendent shall render a decision thereon.

D. The superintendent shall have the power to terminate service after compliance with the provisions of this section.

E. The water shall not be turned on again until all arrearages, both as to water charges and sewer rentals, together with any respective penalties, shall have been paid or a schedule of payments shall have been approved by the superintendent, in his discretion. There shall be paid, prior to renewal of water service after disconnection by the superintendent for delinquency or at the request of the user, a charge to cover the cost of shutting off and turning on the water as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements. For the purposes of this section a user is a person from the same family, located at the same address. In the event that the renewal of such water service is after the regular working hours of the water department or on a holiday or weekend, an additional fee as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements, shall be charged to cover the cost of overtime pay for city employees for turning on the water. No water service shall be restored without payment of all outstanding charges and penalties. (Ord. 3494 § 2(B), 2024; Ord. 3378 § 1(C), 2019; Ord. 2971 § 1, 1996; Ord. 2632 § 1 (part), 1990)

13-04-290 Lien on real estate.

A. Delinquent water charges or sewer charges shall be a lien on the premises, as provided by law. Whenever a statement for either water or sewer service remains unpaid sixty (60) days after it has been rendered and thereby has become delinquent, the superintendent of the water department may file with the Recorder of Deeds of Cook County (or with the Registrar of Titles of Cook County where the real estate in question is registered under the Torrens system) a notice of the lien claim. This notice shall contain the legal description of the premises served, the date on which the water or sewer charges became delinquent, the amount of the unpaid statement, including penalties and costs, and an assertion that the city claims a lien for this amount as well as for the amount of all charges subsequent to the period covered by this statement.

B. The failure of the superintendent of the water department to record or register such lien claim or to mail such notice to such owner, or the failure of such owner to receive such notice, shall not affect the right of the city to maintain a civil action for unpaid, delinquent water charges or sewer charges. (Ord. 2632 § 1 (part), 1990)

13-04-300 Foreclosure of lien.

A. Real estate subject to a lien for unpaid, delinquent water charges or sewer charges shall be sold for nonpayment of the same, and the proceeds of such sale shall be applied to pay such charges or rentals, after deducting costs, as is the case in the foreclosure of statutory liens. Such foreclosures shall be made in equity in the name of the city.

B. The corporation counsel is authorized and directed to institute such proceedings, in the name of the city, in any court of competent jurisdiction, against any real estate as above provided and to seek recovery of all delinquent charges, costs and reasonable attorneys' fees. (Ord. 2632 § 1 (part), 1990)

13-04-310 Duty to render bills.

It is made the duty of the superintendent of the water department to render bills for water supplied to consumers and users of the water works or water supply system and for all rates and charges in connection therewith and to collect all moneys due thereon. (Ord. 2632 § 1 (part), 1990)

13-04-320 Disposition of revenues.

All revenues and monies derived from the operation of the waterworks or water supply system shall be held by the superintendent of the water department and kept separate and apart from the sewerage funds and separate and apart from all other funds and all of said money without any deduction whatever, shall be deposited into the water fund not more than ten days after receipt of the same, or at more frequent intervals as may from time to time be directed by the council. (Ord. 2632 § 1 (part), 1990)

13-04-330 System of accounts.

The superintendent of water shall cause to be maintained a proper system of accounts and shall keep proper books, records and accounts in which complete and correct entries shall be made of all transactions relative to the waterworks or water supply system, and at regular and annual intervals he shall cause to be made an audit by an independent auditing concern of the books to show the receipts and disbursements of the waterworks or water supply system. (Ord. 2632 § 1 (part), 1990)

13-04-340 Inaccessible water meters.

A person, fine or corporation that receives water from the city shall allow city officials access to its inside water meter in order to determine the amount of water usage, at least annually. In the event that the inside water meter is not readily accessible, the customer shall be responsible for arranging to meet with city officials during normal business hours to provide access to the meter. In the alternative, a customer may, at his own expense and upon approval by the superintendent of the water department, locate the water meter at a convenient location outside the premises served. (Ord. 2632 § 1 (part), 1990)

Article IV. Water Conservation Regulations

13-04-350 Emergency conservation.

During any period of time when the overall demands upon the water supply system is so great as to endanger the public health, safety and welfare, the mayor is authorized to declare an emergency and to issue emergency water conservation regulations, limiting or prohibiting use of water from the water mains for the sprinkling, watering, or irrigation of shrubbery, trees, lawns, grass, ground covers, plants, vines, gardens, vegetables, flowers or for any other purpose, published in regulations to be issued by the mayor. (Ord. 2632 § 1 (part), 1990)

13-04-360 Lawn sprinkling unlawful—Time period designation.

It is unlawful for any person, business or corporation to use water for the sprinkling or irrigation of lawns, gardens, trees or vegetation on any day of the week or weekends between the hours of seven a.m. to eight p.m. between May 15th and September 15th. (Ord. 2702 § 1 (part), 1991)

13-04-370 Temporary water usage bans—Authorization.

The city may further limit the times water may be used for outside purposes, including a complete ban on the use of water for such purposes, at such times as weather conditions or other emergency conditions make such action necessary. The

superintendent of water shall have the authority to issue such a temporary ban for a period not to exceed ten days. A ban exceeding ten days may only be authorized by the city council. (Ord. 2702 § 1 (part), 1991)

13-04-380 Exceptions to regulations.

The city recognizes that certain exigent circumstances may arise that require the use of water not consistent with the ordinance codified in this article. Such exigent circumstances may include freshly installed sod or new home construction. If such exigent circumstances arise, the prospective water user may request authority to use water in contravention of the ordinance codified in this article by submitting a letter to the superintendent of water requesting a permit to do so. If circumstances are such that an exception is warranted, the superintendent of water may grant a permit allowing the applicant to use water in contravention of the ordinance codified in this article. No such permit issued by the superintendent of water granting an exception to the ordinance codified in this article shall exceed ten calendar days. Water use in contravention of the ordinance codified in this article which exceeds ten calendar days must be approved by the city council. (Ord. 2702 § 1 (part), 1991)

13-04-390 Applicability of regulations.

The ordinance codified in this article shall apply to any person, firm or corporation connected to the city water system even if such connection is outside the city limits of the city. (Ord. 2702 § 1 (part), 1991)

13-04-400 Violation of water conservation regulations—Penalty.

Any person, firm or corporation who violates any provision of the ordinance codified in this article or of any further provisions restricting the use of water for such purposes shall, upon conviction thereof, be fined as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements. Each day a violation continues shall be deemed a separate and distinct offense. (Ord. 3494 § 2(B), 2024; Ord. 2702 § 1 (part), 1991)

Article V. Enforcement

13-04-410 Enforcement authority.

The superintendent of the water department, with the assistance of such other departments, officers and employees, as may be required, shall have the authority to enforce the provisions of this chapter and all regulations issued hereunder, including the discontinuance of water service in the event of a violation hereof. (Ord. 2632 § 1 (part), 1990)

13-04-420 Violations—Penalties.

Any person violating the provisions of those sections of this chapter pertaining to connection to the water system, maintenance of water meters, and tampering with or obstructions to the system shall, upon conviction thereof, be fined as laid out in Chapter 3-01, Fees, Fines, Insurance and Guarantee Requirements. Each day a violation shall continue shall be deemed to be a separate and distinct offense. The corporation counsel, when so authorized by the city council, shall seek recovery in an action at equity or law or damages sustained to the water system by reason of such tampering. (Ord. 3494 § 2(B), 2024; Ord. 2632 § 1 (part), 1990)

APPENDIX TO TITLE 13[1]

CITY OF HARVEY REGULATIONS IMPLEMENTING THE CITY'S CROSS-CONNECTION CONTROL ORDINANCE

Section 1 Cross-Connection Control —General Policy

A. Purpose. The purpose of these Rules and Regulations is:

1. To protect the public water supply system from contamination or pollution by isolating within the customer's water system contaminants or pollutants which could backflow through the service connection into the public water supply system.

2. To promote the elimination or control of existing cross-connections, actual or potential, between the public or consumer's potable water system and nonpotable water systems, plumbing fixtures and sources or systems containing substances of unknown or questionable safety.

3. To provide for the maintenance of a continuing program of cross-connection control which will prevent the contamination or pollution of the public and consumer's potable water systems.

B. Application. These Rules and Regulations shall apply to all premises served by the public potable water supply system of the City of Harvey.

C. Policy. The owner or official custodian shall be responsible for protection of the public water supply system from contamination due to backflow or back-siphonage of contaminants through the customer's water service connection. If, in the judgment of the Superintendent of Water or his authorized representative, an approved backflow prevention device is necessary for the safety of the public water supply system, the Superintendent of Water shall give notice to the consumer to install such approved backflow prevention at each service connection to the premises. The consumer shall immediately install such approved device or devices at his own expense; failure, refusal or inability on the part of the consumer to install such device or devices immediately shall constitute grounds for discontinuing water service to the premises until such device or devices have been installed. The consumer shall retain records of installation, maintenance, testing and repair as required in Section 5D(4) below for a period of at least five (5) years. The Superintendent of Water may require the consumer to submit a cross-connection inspection report to the City of Harvey to assist in determining whether or not service line protection will be required. All cross-connection inspections shall be conducted by a Cross-Connection Control Device Inspector certified by the Illinois Environmental Protection Agency.

Section 2 Definitions.

A. The following definitions shall apply in the interpretation and enforcement of these regulations.

1. "Fixed proper air gap" means the unobstructed vertical distance through the free atmosphere between the water discharge point and the flood level rim of the receptacle.

2. "Agency" means Illinois Environmental Protection Agency.

3. "Approved" means backflow prevention devices or methods approved by the Research Foundation for Cross-Connection Control of the University of Southern California, Association of State Sanitary Engineers, American Water Works Association, American National Standards Institute or certified by the National Sanitation Foundation.

4. "Auxiliary water system" means any water source or system on or available to the premises other than the public water supply system and includes the water supplied by the system. These auxiliary waters may include water from another purveyor's public water supply system; or water from a source such as wells, lakes, or streams, or process fluids, or used water. These waters may be polluted or contaminated or objectionable or constitute a water source or system over which the water purveyor does not have control.

5. "Backflow" means the flow of water or other liquids, mixtures, or substances into the distribution pipes of a potable water system from any source other than the intended source of the potable water supply.

6. "Backflow prevention device" means any device method, or type of construction intended to prevent backflow into a potable water system. All devices used for backflow prevention in Illinois must meet the standards of the Illinois Plumbing Code and the Illinois Environmental Protection Agency.

7. "Consumer" or "Customer" means the owner, official custodian or person in control of any premises supplied by or in any manner connected to a public water system.

8. "Consumer's water system" means any water system located on the customer's premises. A building plumbing system is considered to be a customer's water system.

9. “Contamination” means an impairment of the quality of the water by entrance of any substance to a degree which could create a health hazard.

10. “Cross-connection” means any physical connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other a substance of unknown or questionable safety or quality, whereby there may be a flow from one system into the other.

Direct cross-connection means a cross-connection formed when a water system is physically joined to a source of unknown or unsafe substance.

Indirect cross-connection means a cross-connection through which a unknown substance can be forced, drawn by vacuum or otherwise introduced into a safe potable water system.

11. “Double check valve assembly” means an assembly composed of single, independently acting check valves approved under ASSE Standard 1015. A double check valve assembly must include tight shutoff valves located at each end of the assembly and suitable connections for testing the water-tightness of each check valve.

12. “Health hazard” means any condition, device or practice in a water system or its operation resulting from a real or potential danger to the health and well-being of consumers. The word “severe” as used to qualify “health hazard” means a hazard to the health of the user that could be expected to result in death or significant reduction in the quality of life.

13. “Inspection” means a plumbing inspection to examine carefully and critically all materials, fixtures, piping and appurtenances, appliances and installations of a plumbing system for compliance with requirements of the Illinois Plumbing Code, 77 Ill. Adm. Code 890 as well as any applicable City Ordinances.

14. “Non-potable water” means water not safe for drinking, personal, or culinary use as determined by the requirements of 35 Ill. Adm. Code 604.

15. “Plumbing” means the actual installation, repair, maintenance, alteration or extension of a plumbing system by any person. Plumbing includes all piping, fixtures, appurtenances and appliances for a supply of water for all purposes, including without limitation lawn sprinkler systems, from the source of a private water supply on the premises or from the main in the street, alley or at the curb to, within and about any building or buildings where a person or persons live, work or assemble. Plumbing includes all piping, from discharge of pumping units to and including pressure tanks in water supply systems. Plumbing includes all piping, fixtures, appurtenances and appliances for a building drain and a sanitary drainage and related ventilation system of any building or buildings where a person or persons live, work or assemble from the point of connection of such building drain to the building sewer or private sewage disposal system five feet beyond the foundation walls.

16. “Pollution” means the presence of any foreign substance (organic, inorganic, radiological or biological) in water that tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water.

17. “Potable water” means water which meets the requirements of 35 III. Adm. Code 604 for drinking, culinary, and domestic purposes.

18. “Potential Cross-Connection” means fixture or appurtenance with threaded hose connection, tapered spout, or other connection which would facilitate extension of the water supply line beyond its legal termination point.

19. “Process fluid(s)” means any fluid or solution which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, pollution, or system hazard if introduced into the public or a consumer’s potable water system. This includes but is not limited to:

a. polluted or contaminated waters;

b. process waters;

c. used waters originating from the public water supply system which may have deteriorated in sanitary quality;

d. cooling waters;

e. questionable or contaminated natural waters taken from wells, lakes, streams, or irrigation systems;

f. chemicals in solution or suspension;

g. oils, gases, acids, alkalis and other liquid and gaseous fluids used in industrial or other processes, or for fire fighting purposes;

20. “Public water supply” means all mails, pipes and structures through which water is obtained and distributed to the public, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use and which serve at least 15 service connections or which regularly serve at least 25 persons at least 60 days per year. A public water supply is either a “community water supply” or a “non-community water supply”.

21. “Reduced pressure principle backflow prevention device” means a device containing a minimum of two independently acting check valves together with an automatically operated pressure differential relief valve located between the two check valves and approved under ASSE Standard 1013. During normal flow and at the cessation of normal flow, the pressure between these two checks shall be less than the supply pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the check valves at less than the supply pressure. The unit must include tightly closing shutoff valves located at each end of the device, and each device shall be fitted with properly located test cocks.

22. “Service connection” means the opening, including all fittings and appurtenances, at the water main through which water is supplied to the user.

23. “Survey” means the collection of information pertaining to a customer’s piping system regarding the location of all connections to the public water supply system and must include the location, type and most recent inspection and testing date of all cross-connection control devices and methods located within that customer’s piping system. The survey must be in written form, and should not be an actual plumbing inspection.

24. “System hazard” means a condition through which an aesthetically objectionable or degrading material not dangerous to health may enter the public water supply system or a consumer’s potable water system.

25. “Used water” means any water supplied by a public water supply system to a consumer’s water system after it has passed through the service connection and is no longer under the control of the water supply official custodian.

26. “Water purveyor” means the owner or official custodian of a public water system.

Section 3 Water System.

A. The water system shall be considered as made up of two parts: the public water supply system and the consumer’s water system.

B. The public water supply system shall consist of the source facilities and the distribution system, and shall include all those facilities of the potable water system under the control of the Superintendent of Water up to the point where the consumer’s water system begins.

C. The source shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the public water supply distribution system.

D. The public water supply distribution system shall include the network of conduits used to deliver water from the source to the consumer’s water system.

E. The consumer’s water system shall include all parts of the facilities beyond the service connection used to convey water from the public water supply distribution system to points of use.

Section 4 Cross-Connection Prohibited.

A. Connections between potable water systems and other systems or equipment containing water or other substances of unknown or questionable quality are prohibited except when and where approved cross-connection control devices or methods are installed, tested and maintained to insure proper operation on a continuing basis.

B.

1. No physical connection shall be permitted between the potable portion of a supply and any other water supply not of equal or better bacteriological and chemical quality as determined by inspection and analysis by the Agency.

2. There shall be no arrangement or connection by which an unsafe substance may enter a supply.

Section 5 Survey and Investigations.

A. The consumer's premises shall be open at all reasonable times to the approved cross-connection control device inspector for the inspection of the presence or absence of cross-connections within the consumer's premises, and testing, repair and maintenance of cross-connection control devices within the consumer's premises.

B. On request by the Superintendent of Water, or his authorized representative, the consumer shall furnish information regarding the piping system or systems or water use within the customer's premises. The consumer's premises shall be open at all reasonable times to the Superintendent of Water for the verification of information submitted by the consumer to the public water supply custodian regarding cross-connection inspection results.

C. It shall be the responsibility of the water consumer to arrange periodic surveys of water use practices on his premises to determine whether there are actual or potential cross-connections to his water system through which contaminants or pollutants could backflow into his or the public potable water system. All cross-connection control or other plumbing inspections must be conducted in accordance with Ill. Rev. Stat. 1987, Ch. 111, par. 1101(1).

D. It is the responsibility of the water consumer to prevent backflow into the public water system by ensuring that:

1. All cross-connections are removed; or approved cross-connection control devices are installed for control of backflow and back-siphon-age.

2. Cross-connection control devices shall be installed in accordance with the manufacturer's instructions.

3. Cross-connection control devices shall be inspected at the time of installation and at least annually by a person approved by the Agency as a cross- connection control device inspector (CCCDI). The inspection of mechanical devices shall include physical testing in accordance with the manufacturer's instructions.

4. Testing and Records

1. Each device shall be tested at the time of installation and at least annually or more frequently if recommended by tire manufacturer.

2. Records submitted to the community public water supply shall be available for inspection by Agency personnel in accordance with M. Rev. Stat. 1987, Ch. 111 1/2, par. 1004(e).

3. Each device shall have a tag attached listing the date of most recent test, name of the CCCDI, and type and date of repairs.

4. A maintenance log shall be maintained and include:

A. date of each test;

B. name and approval number of person performing the test;

C. test results;

D. repairs or servicing required;

E. repairs and date completed; and

F. servicing performed and date completed.

Section 6 Where protection is Required.

A. An approved backflow device shall be installed on all connections to the public water supply as described in the Plumbing Code, 77 M. Adm. Code 890 and the Agency's regulations 35 Ill. Mm. Code 680. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises, where in the judgment of the Superintendent of Water, actual or potential hazards to the public water supply system exist.

B. An approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises where the following conditions exist:

1. Premises having an auxiliary water supply, unless such auxiliary supply is accepted as an additional source by the Superintendent of Water and the source is approved by the Illinois Environmental Protection Agency.

2. Premises on which any substance is handled which can create an actual or potential hazard to the public water supply system. This shall include premises having sources or systems containing process fluids or waters originating from the public water supply system which are no longer under the sanitary control of the Superintendent of Water.

3. Premises having internal cross-connections that, in the judgment of the Superintendent of Water and/or the Cross-Connection Control Device Inspector, are not correctable or intricate plumbing arrangements which make it impractical to determine whether or not cross-connections exist.

4. Premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete cross-connection survey.

5. Premises having a repeated history of cross-connections being established or re-established.

C. An approved backflow device shall be installed on all connections to the public water supply as described in the Plumbing Code, 77 Ill. Adm. Code 890 and the Agency's regulations 35 M. Adm. Code 653. In addition, an approved backflow prevention device shall be installed on each service line to a consumer's water system serving, but not necessarily limited to, the following types of facilities unless the Superintendent of Water determines that no actual or potential hazard to the public water supply system exists:

1. Hospitals, mortuaries, clinics, nursing homes.

2. Laboratories.

3. Piers, docks, waterfront facilities.

4. Sewage treatment plants, sewage pumping stations or storm water pumping stations.

5. Food or beverage processing plants.

6. Chemical plants

7. Metal plating industries.

8. Petroleum processing or storage plants.

9. Radioactive material processing plants or nuclear reactors.

10. Car washes.

11. Pesticide, or herbicide or extermination plants and trucks.

12. Farm service and fertilizer plants and trucks.

Section 7 Type of Protection Required.

A. The type of protection required under Sections 6.1, 6.2, and 6.3 of these regulations shall depend on the degree of hazard which exists as follows:

1. An approved fixed proper air gap separation shall be installed where the public water supply system may be contaminated with substances that could cause a severe health hazard.

2. An approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention assembly shall be installed where the public water supply system may be contaminated with a substance that could cause a system or health hazard.

3. An approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention assembly or a double check valve assembly shall be installed where the public water supply system may be polluted with substances that could cause a pollution hazard not dangerous to health.

B. The type of protection required under Section 6.4 and 6.5 of these regulations shall be an approved fixed proper air gap separation or an approved reduced pressure principle backflow prevention device.

C. Where a public water supply or an auxiliary water supply is used for a fire protection system, reduced pressure principle backflow preventers shall be installed on fire safety systems connected to the public water supply when:

1. The fire safety system contains antifreeze, fire retardant or other chemicals;

2. Water is pumped into the system from another source; or

3. Water flows by gravity from a non-potable source; or water can be pumped into the fire safety system from any other source;

4. There is a connection whereby another source can be introduced into the fire safety system.

D. All other fire safety systems connected to the potable water supply shall be protected by a double check valve assembly on metered service lines and a double detector check valve assembly on unmetered service lines.

Section 8 Backflow Prevention Devices.

A. All backflow prevention devices or methods required by these rules and regulations shall be approved by the Research Foundation for Cross-Connection Control of the University of Southern California, American Water Works Association, American Society of Sanitary Engineering, or American National Standards Institute or certified by the National Sanitation Foundation to be in compliance with applicable industry specification.

B. Installation of approved devices shall be made in accordance with the manufacturer’s instructions. Maintenance as recommended by the manufacturer of the device shall be performed. Manufacturer’s maintenance manual shall be available on-site.

Section 9 Inspection and Maintenance.

A. It shall be the duty of the consumer at any premises on which backflow prevention devices required by these regulations are installed to have inspections, tests, maintenance and repairs made in accordance with the following schedule or more often where inspections indicate a need or are specified in manufacturer’s instructions.

1. Fixed proper air gap separations shall be inspected to document that a proper vertical distance is maintained between the discharge point of the service line and the flood level rim of the receptacle at the time of installation and at least annually thereafter. Corrections to improper or by-passed air gaps shall be made within 24 hours.

2. Double check valve assemblies shall be inspected and tested at time of installation and at least annually thereafter, and required service performed within five (5) days.

3. Reduced pressure principle backflow prevention assemblies shall be tested at the time of installation and at least annually or more frequently if recommended by the manufacturer, and required service performed within five (5) days.

B. Testing shall be performed by a person who has been approved by the Agency as competent to service the device. Proof of approval shall be in writing.

C. Each device shall have a tag attached listing the date of most recent test or visual inspection, name of tester, and type and date of repairs.

D. A maintenance log shall be maintained and include:

1. date of each test or visual inspection;

2. name and approval number of person performing the test or visual inspection;

3. test results;

4. repairs or servicing required;

5. repairs and date completed; and

6. servicing performed and date completed.

E. Whenever backflow prevention devices required by these regulations are found to be defective, they shall be repaired or replaced at the expense of the consumer without delay as required by Section 9A.

F. Backflow prevention devices shall not be bypassed, made inoperative, removed or otherwise made ineffective without specific authorization by the Superintendent of Water.

Section 10 Booster Pumps.

A. Where a booster pump has been installed on the service line to or within any premises, such pump shall be equipped with a low pressure cut-off device designed to slut-off the booster pump when the pressure in the service line on the suction side of the pump drops to 20 psi or less.

B. It shall be the duty of the water consumer to maintain the low pressure cut-off device in proper working order and to certify to the Superintendent of Water, at least once a year, that the device is operable.

REGULATIONS APPROVED BY ORDINANCE NO. 2767, the 9th day of March, 1992.

Appendix 7.3: Lead Service Line Replacements Complete as of 2020

Address	Date of Competition	Type of LSLR

Appendix 7.4: Outreach Packet

Know the Facts

Accessible Version: http://www.cdc.gov/nceh/lead/docs/know-the-facts.html

Protect Your Child from Lead Exposure

Exposure to even small amounts of lead can harm your child. Children younger than 6 years of age are most vulnerable to lead poisoning. If you are pregnant or breastfeeding, lead can harm your baby. This fact sheet provides information that can help you protect your child from lead exposure.

FACT: Lead exposure can cause lifelong health problems.

Lead exposure harms several body systems including the brain, nervous, and reproductive systems and results in

- Developmental and growth delays
- Hearing and speech problems
- Difficulty learning and paying attention
- Serious illness and death

More information is available on the Health Effects of Lead Exposure web page.

FACT: A blood lead test is the best way to know if your child has been exposed to lead.

Most children exposed to lead do not appear to be sick. Talk to your child's healthcare provider about getting a blood lead test. For children ages 1–5 years, consider getting them tested for lead if they

- Live in a home built before 1978
- Receive Medicaid services
- Are an immigrant, refugee, or adopted from another country (Please note that CDC recommends all refugee children be tested upon arrival and several months after resettling into their new home. For more information on lead exposure regarding refugees and newcomer persons, visit the Refugees and Other Newcomer Persons web page.)
- Live near a known source of lead, such as a lead smelter or mine.

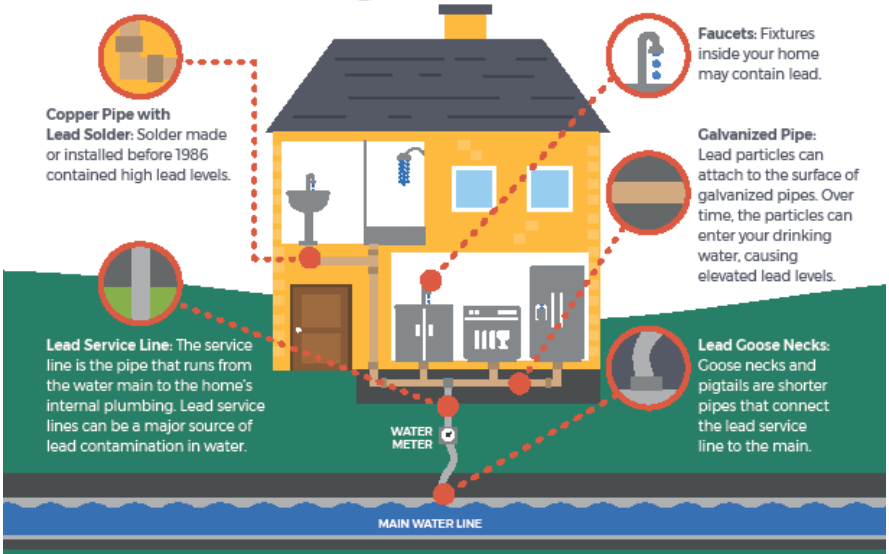
Based on your child's blood lead level, your healthcare provider can recommend what to do next. Visit CDC's Recommended Actions Based on Blood Lead Level web page for more information.

CS 331003A 06/07/2022

EPA

CONCERNED ABOUT LEAD IN YOUR DRINKING WATER?

Sources of **LEAD** in Drinking Water



Copper Pipe with Lead Solder: Solder made or installed before 1986 contained high lead levels.

Faucets: Fixtures inside your home may contain lead.

Galvanized Pipe: Lead particles can attach to the surface of galvanized pipes. Over time, the particles can enter your drinking water, causing elevated lead levels.

Lead Service Line: The service line is the pipe that runs from the water main to the home's internal plumbing. Lead service lines can be a major source of lead contamination in water.

Lead Goose Necks: Goose necks and pigtails are shorter pipes that connect the lead service line to the main.

Reduce Your Exposure To Lead

Use only cold water for drinking, cooking and making baby formula. *Boiling water does not remove lead from water.*

Regularly clean your faucet's screen (also known as an aerator).

Consider using a water filter certified to remove lead and know when it's time to replace the filter.

Before drinking, flush your pipes by running your tap, taking a shower, doing laundry or a load of dishes.

To find out for certain if you have lead in drinking water, **have your water tested.**

Replace Your Lead Service Line

Water systems are required to replace lead service lines if a water system cannot meet EPA's Lead Action Level through optimized corrosion control treatment.

Replacement of the lead service line is often the responsibility of both the utility and homeowner.

Homeowners can contact their water system to learn about how to remove the lead service line.

Identify Other Lead Sources In Your Home

Lead in homes can also come from sources other than water. If you live in a home built before 1978, you may want to have your paint tested for lead. **Consider contacting your doctor to have your children tested if you are concerned about lead exposure.**

For more information, visit: **epa.gov/safewater**

Are You Pregnant?

PREVENT LEAD POISONING

START NOW

Lead poisoning is caused by breathing in or swallowing items contaminated with lead. Lead can pass from a mother to her unborn baby. The good news is that **lead poisoning is preventable.**

Too much lead in your body can

- Put you at risk for miscarriage.
- Cause your baby to be born too early or too small.
- Hurt your baby's brain, kidneys, and nervous system.
- Cause your child to have learning or behavior problems.

Lead can be found in

- Paint and dust in older homes, especially dust from renovation or repairs.
- Candy, cosmetics, glazed pots, and some traditional medicines and spices from other countries.
- Certain jobs such as auto refinishing, construction, and plumbing.
- Toys and jewelry.
- Soil and drinking water from lead pipes, faucets, and plumbing fixtures.

CS 322304-A

IDPH
ILLINOIS DEPARTMENT OF PUBLIC HEALTH

525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • www.dph.illinois.gov

WAIVER OF COMPLETE LEAD SERVICE LINE REPLACEMENT

You are receiving this form because your property has been identified by your community water supply (CWS) as being served by a lead service line or galvanized service line located downstream of lead and you are refusing to allow the community water supply (CWS) to replace your entire service line.

The purpose of this form is to provide you, the property owner, with information necessary to make an informed decision about replacing your service line. In accordance with the Lead Service Line Replacement and Notification Act, Public Act 102-0613, the owner or operator of your CWS is required to replace your lead service line in its entirety, including any portion of the service line running on private property and within the building's plumbing at the first shut-off valve or 18 inches inside the building, whichever is shorter. If you deny the CWS the ability to perform a complete lead service line replacement, then you, the property owner, must sign this waiver form in accordance with 415 ILCS 5/17.12 (ff)(1)(D) and 17.12 (ii).

The following items should be considered by property owners regarding lead service line replacement:

- ***Lead service lines and galvanized service lines downstream of lead can be significant contributors of lead contamination in drinking (tap) water through the corrosion of these materials.*** Service lines are pipes that carry drinking water from the CWS water main to a home or building. A study published by American Water Works Association (AWWA) Water Research Foundation (2008) "Contributions of Service Line and Plumbing Fixtures to Lead and Copper Rule Compliance Issues" (Sandvig et al, 2008) estimates that 50% – 75% of lead in drinking water comes from lead service lines.
- ***Lead is a toxic metal that is harmful to human health even at low exposure levels.*** Young children are particularly vulnerable to lead. The adverse health effects of lead exposure include damage to the brain and nervous system, slowed growth and development, learning and behavior problems, hearing and speech problems, lower IQ, decreased ability to pay attention, and underperformance in school. Please see the CDC's website, https://www.cdc.gov/nceh/lead/prevention/health-effects.htm for additional information regarding health effects of lead.
- ***Partial lead service line replacements can increase lead levels for long periods of time.*** Partial lead service line replacement means replacement of only a portion of a lead service line or a galvanized service line downstream of lead. Following a partial lead service line replacement, lead levels increase and construction activities such as digging and cutting release particulate lead. Particulate lead is a concern because the lead content can be very high. Additionally, new materials from partial lead service line replacements can increase corrosion or create galvanic corrosion.
- ***Property owners of nonresidential properties or properties operating as rental property have responsibilities under the Lead Service Line Replacement and Notification Act after denial of complete lead service line replacement.*** In accordance with 415 ILCS 5/17.12 (ff), owners of nonresidential buildings or a residence operating as a rental property shall be responsible for installing and maintaining certified point-of-use filters for the reduction of lead (NSF/ANSI Standard 53) and

WAIVER OF COMPLETE LEAD SERVICE LINE REPLACEMENT

Sections 1, 2, and 3 must be completed by the CWS prior to providing the form to the property owner.

SECTION 1: COMMUNITY WATER SUPPLY INFORMATION	
CWS Name	ID Number
Phone	Email
CWS Mailing Address	
CWS City	Zip Code
SECTION 2: SERVICE LINE ACTIVITY INFORMATION	
□ Emergency Repair □ Planned Replacement	Date of Activity
SECTION 3: AFFECTED PROPERTY	
Street Address	
City	Zip Code

Sections 4 and 5 must be completed by the owner of the affected building identified above and returned to the community water supply.

SECTION 4: Property Owner Information	
Full Name (First Name Last Name)	
Phone	Email
SECTION 5: DENIAL OF COMPLETE LEAD SERVICE LINE REPLACEMENT	
□ By signing this waiver, I acknowledge that I am the property owner of the affected property located at the address listed in Section 3 of this form and I have been informed by the CWS that my property has a lead service line. I have read and understand the information provided within this waiver regarding the hazards of lead in drinking water, partial lead service line replacement, and Illinois laws about responsibilities of property owners for providing filters, disclosing the presence of lead water service lines, and requirements for child care facilities.	
□ By signing this waiver, I acknowledge that I am waiving the community water supply's requirement to replace my lead service line in its entirety. I acknowledge that this waiver will result in a partial lead service line replacement and it may be unsafe to drink, cook with, or otherwise consume water from the tap, unless it has been filtered with a filter certified to meet NSF/ANSI Standard 53 and 42.	
Signature	Date

All parties should retain a copy of this form for their records. The Community Water Supply must also provide notification to IDPH using the electronic forms located at https://dph.illinois.gov/topics-services/environmental-health-protection/lead-in-water.html.

particulates (NSF/ANSI Standard 42) at all plumbing fixtures intended to supply water for the purposes of drinking, food preparation, or making baby formula until such time that the property owner has affected the remaining portions of the lead or galvanized service line to be replaced.

- ***Unsafe conditions and knowledge of the remaining lead piping must be disclosed appropriately.*** Waiver or denial of complete replacement of a lead service line may create unsafe concentrations of lead and/or unsafe conditions relating to the remaining lead water pipe. If the property is a residential real property as defined by the Residential Real Property Disclosure Act (765 ILCS 77/5), appropriate disclosure shall be made at any transfer of sale, exchange, installment land sale contract, assignment of beneficial interest, lease with an option to purchase, ground lease, or assignment of ground lease.
- ***Service lines are plumbing and are required to be replaced by individuals authorized by the Plumbing License Law (225 ILCS 320/3).*** Service lines are plumbing as defined by the Plumbing License Law (225 ILCS 320/3). As plumbing, service lines are required to be repaired, replaced, and installed by authorized individuals and in accordance with the requirements of the Illinois Plumbing Code (77 Ill. Adm. Code 890).
- ***If the property is operating as a childcare operation, there are additional requirements regarding lead in drinking water under Department of Family and Children Services (DCFS) licensing standards.*** Under DCFS licensing standards, changes in water profile including changes to the water service line require retesting of the drinking water for presence of lead. Where lead is detected at or above DCFS's action level, a mitigation plan to reduce the concentration of lead is required.

More information about lead in drinking water and the effects of lead can be found at IDPH's website: https://dph.illinois.gov.

In consideration of the above information, IDPH strongly recommends you allow your CWS to replace your lead service line in its entirety. If you choose to waive and deny a complete lead service line replacement at your property, this form must be completed and returned to your CWS. Sections 1,2, and 3 of this form are to be completed by the CWS and Sections 4 and 5 of this form are to be completed by, you, the property owner of the affected property.

PLACEHOLDER

Right of Entry and Release for Lead Service Line Replacement and Water Meter Installation Letter from Harvey

PLACEHOLDER

For Notice of Free Lead Service Line Replacement Letter/Notification from Harvey

Appendix 7.5: IEPA Project Plan Approval

PLACEHOLDER

For Illinois EPA Project Approved Plan Letter from Harvey

Appendix 7.6: Ordinance Amending Water Service Rates and Charges

<table>
<tr><td>12-26-080</td><td>Annual Recurring Fee for Small Wireless Facilities in Municipality Right of Way</td><td>$200.00 per utility pole</td></tr>
<tr><td>TITLE 13</td><td>Public Services</td><td></td></tr>
<tr><td>13-04-040(C)</td><td>Water Main Permit Application Fee</td><td><s>$25.00</s> $60.00 non-refundable application fee + $150.00 permit fee</td></tr>
<tr><td>13-04-170(A)(2)</td><td>New Water Service Connection Application Fee</td><td><s>$15.00</s> $60.00 non-refundable</td></tr>
<tr><td>13-04-180(B)(2)</td><td>Water Connection Charges</td><td><table><tr><th>Type of Water Connection</th><th>Total Fee Charge</th></tr><tr><td>three-fourth-inch pipe service</td><td><s>$175.00</s> $600.00</td></tr><tr><td>one-inch pipe service</td><td><s>$225.00</s>$600.00</td></tr><tr><td>pipe service in excess of one inch</td><td><s>$300.00 plus cost of meter</s>$600.00</td></tr></table></td></tr>
<tr><td>13-04-210</td><td>Unpaid Water Bill Penalty</td><td>10% of unpaid amount</td></tr>
<tr><td>13-04-220(A)</td><td>Water Service Deposit Requirement</td><td><table><tr><th>Type of User</th><th>Deposit Amount</th></tr><tr><td>Residential Users</td><td>$100.00</td></tr><tr><td>Commercial Users (except High Volume Commercial Users)</td><td><s>$125.00</s> $500.00</td></tr><tr><td>High Volume Commercial Users</td><td><s>$225.00</s> $500.00</td></tr><tr><td>Industrial Users</td><td><s>$300.00</s>$500.00</td></tr><tr><td>Government Users</td><td><s>$200.00</s>$500.00</td></tr></table></td></tr>
<tr><td>13-04-230</td><td>Construction Meter Deposit Required</td><td>$100.00</td></tr>
<tr><td>13-04-240(A)</td><td>Harvey Resident Water Rate Schedule</td><td><table><tr><th colspan="2">Water Rates for City of Harvey</th></tr><tr><td>First 3,000 cu. ft.</td><td>$1.54 per hundred cu. ft.</td></tr><tr><td>Next 7,000 cu. ft.</td><td>$1.44 per hundred cu. ft.</td></tr><tr><td>Greater than 10,000 cu. ft.</td><td>$1.27 per hundred cu. ft.</td></tr></table></td></tr>
<tr><td>13-04-240(B)</td><td>Water Rates to Non-Residents and Municipalities Without Intergovernmental Agreements</td><td>150% resident rate</td></tr>
<tr><td>13-04-240(B)(1)</td><td>Hazel Crest Water Rate Schedule</td><td><table><tr><th colspan="2">Water Rates for Village of Hazel Crest</th></tr><tr><td>First 3,000 cu. ft.</td><td>$1.11 per hundred cu. ft.</td></tr><tr><td>Next 7,000 cu. ft.</td><td>$1.04 per hundred cu. ft.</td></tr><tr><td>Greater than 10,000 cu. ft.</td><td>$1.00 per hundred cu. ft.</td></tr></table></td></tr>
</table>

13-04-240(B)(2)	Homewood Water Rate Schedule	Water Rates for Village of Homewood	
		All usage	$0.83 per hundred cu. ft.
13-04-240(B)(3)	Posen Water Rate Schedule	Water Rates for Village of Posen	
		All usage	$1.23 per hundred cu. ft.
13-04-240(B)(4)	East Hazel Crest Water Rate Schedule	Water Rates for Village of East Hazel Crest	
		First 3.000 cu. ft.	$1.47 per hundred cu. ft.
		Next 7.000 cu. ft.	$1.35 per hundred cu. ft.
		Greater than 10.000 cu. ft.	$1.26 per hundred cu. ft.
13-04-240(B)(5)	Phoenix Water Rate Schedule	Water Rates for Village of Phoenix	
		First 3.000 cu. ft.	$1.45 per hundred cu. ft.
		Next 7.000 cu. ft.	$1.35 per hundred cu. ft.
		Greater than 10.000 cu. ft.	$1.27 per hundred cu. ft.
13-04-240(B)(6)	Dixmoor Water Rate Schedule	Water Rates for Village of Dixmoor	
		First 3.000 cu. ft.	$1.45 per hundred cu. ft.
		Next 7.000 cu. ft.	$1.35 per hundred cu. ft.
		Greater than 10.000 cu. ft.	$1.27 per hundred cu. ft.
13-04-240(C)	Water Bill Default Restart Fee	~~$10.00~~ **$75.00 next business day /$150.00 same day**	
13-04-250	Relocation of Meter to Parkway Fee	$100.00 **$300.00**	
13-04-250	Commercial or Industrial Meter Testing Fee	Invoiced cost to city **+ 10%**	
13-04-280(E)	Water Shutoff Restart Fee	~~$25.00~~ **$75.00 next business day /$150.00 same day**	
13-04-280(E)	Water Shutoff Restart Fee for Holidays, After Hours, and Weekends	~~$40.00~~ **$200.00**	
13-08-50(B)	Permit Required for Private Sewage Disposal System	Private Sewage Disposal System Permit and Inspection Fee Schedule	
		Industrial building	~~$250~~ **$500.00**
		Commercial building	~~$150~~ **$300.00**
		Single-Family home	~~$50.00~~ **$75.00**
		Multifamily residential building	~~$50.00~~ **$100.00** for the first unit plus ~~$25.00~~ **$50.00** for each additional residential unit

13-08-130(C)	Building Sewer Permits —Classes —Fees	Building Sewer Permit and Inspection Fee Schedule	
		Industrial building	~~$250~~ **$500.00**
		Commercial building	~~$150~~ **$300.00**
		Single-Family home	~~$50.00~~ **$75.00**
		Multifamily residential building	~~$50.00~~ **$100.00** for the first unit plus ~~$25.00~~ **$50.00** for each additional residential unit
13-08-440	Basic User Charge for Water Consumption	$0.16 per 100 cu. ft. of water	
13-08-440	Fixed Maintenance User Charge	$0.15 per month per user	
13-08-470(A)	Monthly User Charge	$0.15 per month	
13-08-470(B)	Water Usage Rate Charge	$0.16 per 100 cu. ft. of water	
13-12-050	Discontinuance of Service Reconnection Fee	$500.00	
13-14-010(C)	Temporary Utility Permit Fee	$50.00	
13-14-010(G)	Occupancy Without Permit Penalty	~~$500.00~~ **$1000**	
TITLE 15	**Buildings and Construction**		
15-02-010(C)	Housing Cost Fee Schedule; Court Costs	First Appearance: $75.00 plus fine Second Appearance: $100.00 plus fine Third Appearance: $150.00 plus fine	
15-02-010(C)	Housing Cost Fee Schedule; Lien Release Costs	9% interest, Cook County filing fee, and $200.00 administrative fee	
15-40-050	Point of Sale Permit Fees for Residential Units	1 and 2 Residential Units: ~~$75.00~~ **$100.00** 3+ Residential Units: ~~$75.00~~ **$100.00** plus ~~$25.00~~ **$50.00** per additional unit All Commercial Units: $150.00	
15-48-070	Public Safety Registration Certificate Annual Fee	$150.00	
15-60-190	Filing Fees for Excavation Permits	As set forth by ordinance or as deemed necessary for specific projects.	

Appendix 7.7: Itemized LSLR Cost

Item No	Items	Unit	Quantity	Unit Price	Total
1	Preliminary Inspection	Hour	600		
2	Exploratory Excavation	Each	200		
3	Inlet Filters	Each	15		
4	Full Lead Water Service Replacement, ¾” (Short) B Box	Each	15		
5	Full Lead Water Service Replacement, ¾” (Long) B Box	Each	15		
6	Full Lead Water Service Replacement, 1” (Short) B Box	Each	15		
7	Full Lead Water Service Replacement, 1” (Long) B Box	Each	15		
8	Full Lead Water Service Replacement, 1-1/2" (Short) B Box	Each	3		
9	Full Lead Water Service Replacement, 1-1/2” (Long) B Box	Each	3		
10	Partial Lead Water Service Replacement ¾” Public Side (Short) B Box	Each	15		
11	Partial Lead Water Service Replacement, ¾” Public Side (Long) B Box	Each	15		
12	Partial Lead Water Service Replacement, ¾” Private Side B Box	Each	15		
13	Partial Lead Water Service Replacement, 1” Public Side (Short) B Box	Each	10		
14	Partial Lead Water Service Replacement, 1” Public Side (Long) B Box	Each	10		
15	Partial Lead Water Service Replacement, 1” Private Side B Box	Each	10		
16	Partial Lead Water Service Replacement, 1-1/2” Public Side (Short) B Box	Each	2		
17	Partial Lead Water Service Replacement, 1-1/2” Public Side (Long) B Box	Each	2		
18	Partial Lead Water Service Replacement, 1-1/2” Private Side B Box	Each	2		
19	Lead Filter Pitcher with Six Months of Filter Cartridges	Each	155		
20	Trench Backfill	CU YD	2500		
21	Domestic Water Service Boxes to be Adjusted	Each	50		
22	Domestic Water Service Box to be Replaced	Each	20		
23	Sanitary Sewer Service Adjustment	Each	20		

Item No	Items	Unit	Quantity	Unit Price	Total
24	Combination Curb and Gutter Removal	Foot	250		
25	Sidewalk Removal	SQ FT	4000		
26	Driveway Pavement Removal	SQ YD	550		
27	Non-special Waste Disposal	CU YD	100		
28	Combination Curb and Gutter Replacement	Foot	250		
29	Portland Cement Concrete Sidewalk 5 inch, Special	SQ FT	4000		
30	Hot Mix Asphalt Driveway Pavement, 4”	SQ YD	250		
31	Hot Mix Asphalt Driveway Pavement, 6”	SQ YD	100		
32	Portland Cement Concrete Driveway Pavement, 7 Inch	SQ YD	100		
33	Portland Cement Concrete Driveway Pavement, 8 Inch	SQ YD	100		
34	Class D Patches, 6 Inch	SQ YD	500		
35	Class D Patches, 8 Inch	SQ YD	200		
36	Grading and Shaping Ditches	Foot	500		
37	Sodding (Complete)	SQ YD	3500		
38	Relocate Water Meter and Valve	Each	5		