



Initial Lead Service Line Replacement Plan

Village of Carpentersville
April 2024



This Initial Lead Service Line Replacement Plan is based on the best available information at the time of its writing. It is recognized that, based on the requirements of the Lead Service Line Replacement and Notification Act, the Community Water System will have the opportunity to update the Plan in 2025 and 2026, prior to submitting the Final Lead Service Line Replacement Plan, which is due before April 15, 2027.

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Appendix A LSLRNA Regulation

INITIAL LEAD SERVICE LINE REPLACEMENT PLAN

Village of Carpentersville

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The development of the Initial Lead Service Line Replacement Plan is a joint effort by Village Staff and EEI.

Abbreviations and Acronyms

ARPA	American Rescue Plan Act
ANSI	American National Standards Institute
CDC	Centers for Disease Control and Prevention
CWS	Community Water System
GIS	Geographic Information System
IDPH	Illinois Department of Public Health
IEPA	Illinois Environmental Protection Agency
LCR	Lead and Copper Rule
LSL	lead service line
LSLR	lead service line replacement
LSLRNA	Lead Service Line Replacement and Notification Act
NSF	National Science Foundation
PPB	parts per billion
SDWA	Safe Drinking Water Act
SLSL	suspected lead service line
SRF	State Revolving Fund
USEPA	United States Environmental Protection Agency

1 Background

1.1 History of Lead Plumbing Regulations

Lead pipes were commonly used in homes built in the early 20th century, as lead was a less expensive and more durable option than iron. Concerns about lead poisoning through water distribution systems contributed to the creation of the United States Environmental Protection Agency's (USEPA) Safe Drinking Water Act (SDWA) in 1986. The SDWA prohibited the use of pipes, solder or flux that were not "lead free" in public water systems or plumbing in facilities providing water for human consumption. At the time, "lead free" was defined as solder and flux with no more than 0.2% lead and pipes containing no more than 8% lead content.

In 1991, the USEPA published the Lead and Copper Rule (LCR). This regulation set guidelines for the concentration of lead and copper permitted in public drinking water by collecting regular samples of the consumer's tap. The LCR established an action level of 15.0 parts per billion (ppb) for lead based on the 90th percentile level of tap water samples. This means that no more than 10 percent of samples can be above the action level. The action level is the concentration of lead in tap water which, if exceeded, triggers treatment or other requirements that a water system must follow. If lead levels are found above the action levels, it does not signal a violation but can trigger additional requirements. The USEPA has since further enacted the Revised Lead and Copper Rule Revisions, and has proposed the Lead and Copper Rule Improvements, which, among other mandates, lowers the action level to 10.0 ppb for lead based on the 90th percentile level of samples and aims for 100% lead pipe replacement within 10 years.

1.2 State of Illinois Regulatory Background

Responding to concerns of lead in drinking water, in 2017 the Illinois General Assembly passed Public Act 99-0922. Among requirements such as a mandate to test for lead in drinking water supplied to schools, this created a statewide comprehensive material service line inventory database that required community water systems (CWSs) to inventory their service lines and submit the inventory to the Illinois Environmental Protection Agency (IEPA) annually until the inventory is complete.

In 2021, the Illinois General Assembly further declared that there is no safe level of exposure to lead, as found by the United States Environmental Protection Agency and the Centers for Disease Control and Prevention, and that water service lines composed of lead can transmit the harmful substance to the drinking water supply. According to the 2018 Service Line Material Inventory published by the IEPA, the State of Illinois was estimated to have over 680,000 known lead-based service lines still in operation. The General Assembly concluded that for the general health, safety and welfare of its residents, all lead service lines in Illinois should be removed from drinking water supplies.

As a result, the General Assembly passed the Lead Service Line Replacement and Notification Act (LSLRNA) (Public Act 102-0613), and Governor Pritzker signed the Act with an effective date of January 1, 2022. The purpose of the Act, found in Appendix A, is to require the owners and operators of community water supplies to:

- develop, implement, and maintain a comprehensive water service line material inventory and a comprehensive lead service line replacement plan;
- provide notice to occupants of potentially affected buildings before any construction or repair work on water mains or lead service lines and request access to potentially affected buildings before replacing lead service lines; and,
- prohibit partial lead service line replacements, except as authorized by the Act.

1.3 Material Inventory (Subsections (g) and (h) of the LSLRNA)

The LSLRNA requirements for the comprehensive water service line material inventory furthers the inventory from Public Act 99-0922 and includes the identification of:

- (1) the total number of service lines connected to the community water supply's distribution system;
- (2) the materials of construction of each service line connected to the community water supply's distribution system;
- (3) the number of suspected lead service lines that were newly identified in the material inventory for the community water supply after the community water supply last submitted a service line inventory to the Agency; and
- (4) the number of suspected or known lead service lines that were replaced after the community water supply last submitted a service line inventory to the Agency, and the material of the service line that replaced each lead service line.

When identifying the materials of construction under Paragraph (2) above, the owner or operator of the community water supply shall to the best of the owner's or operator's ability identify the type of construction material used on the customer's side of the curb stop, meter, or other line of demarcation and the community water supply's side of the curb stop, meter, or other line of demarcation (see Exhibit 1-1).

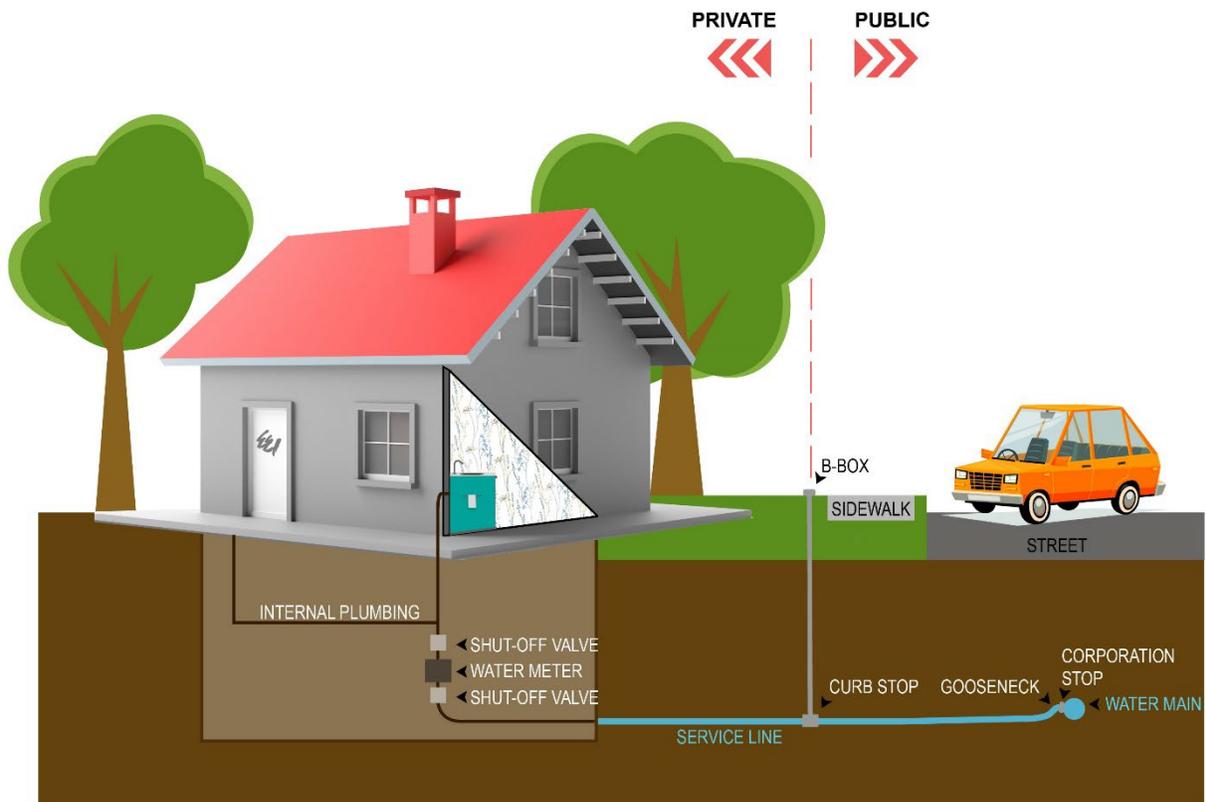
In addition, the LSLRNA requires the owner or operator of a community water supply to:

- (1) prioritize inspections of high-risk areas identified by the community water supply and inspections of high-risk facilities, such as preschools, day care centers, day care homes, group day care homes, parks, playgrounds, hospitals, and clinics, and confirm service line materials in those areas and at those facilities;
- (2) review historical documentation, such as construction logs or cards, as-built drawings, purchase orders, and subdivision plans, to determine service line material construction;
- (3) when conducting distribution system maintenance, visually inspect service lines and document materials of construction;

- (4) identify any time period when the service lines being connected to its distribution system were primarily lead service lines, if such a time period is known or suspected; and
- (5) discuss service line repair and installation with its employees, contractors, plumbers, other workers who worked on service lines connected to its distribution system, or all the above.

Exhibit 1-1. Typical Water Service Components

The below exhibit depicts relative components of a water service line located between the Village's water main to a property owner's internal water piping.



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1.4 Lead Service Line Replacement Plan (Subsections (p) and (q) of the LSLRNA)

The LSLRNA also requires every owner or operator of a community water supply that has known or suspected lead service lines to:

- (1) create a plan to:
 - (A) replace each lead service line connected to its distribution system; and
 - (B) replace each galvanized service line connected to its distribution system, if the galvanized service line is or was connected downstream to lead piping; and,
- (2) electronically submit, by April 15, 2024, its initial lead service line replacement plan to the Agency;
- (3) electronically submit by April 15 of each year after 2024 until April 15, 2027, an updated lead service line replacement plan to the Agency for review; the updated replacement plan shall account for changes in the number of lead service lines or unknown service lines in the material inventory;
- (4) electronically submit by April 15, 2027, a complete and final replacement plan to the Agency for approval; the complete and final replacement plan shall account for all known and suspected lead service lines documented in the final material inventory; and
- (5) post on its website a copy of the plan most recently submitted to the Agency or may request that the Agency post a copy of that plan on the Agency's website.

The lead service line replacement plan must include the following:

- (1) the name and identification number of the community water supply;
- (2) the total number of service lines connected to the distribution system of the community water supply;
- (3) the total number of suspected lead service lines connected to the distribution system of the community water supply;
- (4) the total number of known lead service lines connected to the distribution system of the community water supply;
- (5) the total number of lead service lines connected to the distribution system of the community water supply that have been replaced each year beginning in 2020;
- (6) a proposed lead service line replacement schedule that includes one-year, 5-year, 10-year, 15-year, 20-year, 25-year, and 30-year goals;

- (7) an analysis of costs and financing options for replacing the lead service lines connected to the community water supply's distribution system, which shall include, but shall not be limited to:
 - (A) a detailed accounting of costs associated with replacing lead service lines and galvanized lines that are or were connected downstream to lead piping;
 - (B) measures to address affordability and prevent service shut-offs for customers or ratepayers; and
 - (C) consideration of different scenarios for structuring payments between the utility and its customers over time; and
- (8) a plan for prioritizing high-risk facilities, such as preschools, day care centers, day care homes, group day care homes, parks, playgrounds, hospitals, and clinics, as well as high-risk areas identified by the community water supply;
- (9) 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;
- (10) measures for how the community water supply will inform the public of the plan and provide opportunity for public comment; and,
- (11) measures to encourage diversity in hiring in the workforce required to implement the plan.

2 Lead Service Line Replacement Plan

2.1 Overview of the Community Water System

The Village of Carpentersville (CWS ID No. IL0890200) provides water to approximately 38,000 residential and business customers. The source of the Village's drinking water is a shallow bedrock aquifer. Based on data reported in 2023, the Village pumps an average of 2.4 million gallons of water per day supplied by four wells and one water treatment plant which uses aeration, filtration, and cation exchange for treatment. Chlorine gas, fluoride, and polyphosphate are added to the finished water, the latter of which has been added since 1991 to inhibit corrosion, scale, and biofilm, to reduce lead and copper levels in the distribution system.

The Village's distribution system contains five water storage tanks that have a storage capacity of 5.4 million gallons. In addition to the storage tanks, the Village also maintains three water interconnections with neighboring communities in the event of an emergency, two booster pump stations, four pressure zones, 120 miles of water main, 1,600 fire hydrants, 1,400 valves, and nearly 11,000 water meters.

Established in 1851, the Village of Carpentersville developed gradually over the course of 100 years due to a lack of direct rail connections to Chicago, despite supporting a robust manufacturing industry. It wasn't until the 1950s when its population grew exponentially with the construction of the Meadowdale subdivision and also the Northwest Tollway, resulting in a 1,044% increase from 1950 to 1960. Construction and historical records indicate that most, if not all, of those residences constructed during this time and afterwards, have copper water service lines. Thus, the area of known and suspected lead service lines in the Village remains concentrated in the heart of the Village known locally as Old Town, centered along the Fox River and near the downtown area.

2.2 Material Inventory Summary, Subsection (q)(1) – (5)

The Village has been compliant with completing and submitting the service line material inventory to the IEPA every year since the Illinois Environmental Protection Act was amended in 2017 to require annual service line material inventories. A summary of the material inventoried from 2017 through 2023 is presented in Table 2-1. The Village has continually reviewed historical documentation, as-built drawings, subdivision plans, and made observations in the field to determine service line material construction. These efforts were made during 2022 through 2024 through resident surveys, in-person inspections. As a result, the accuracy and detail of the inventory has improved over time.

The Village utilizes the Illinois EPA Service Line Material Inventory Template as the basis for its Lead Service Line (LSL) Material Inventory. The most current version of the Village's Material Inventory is posted on the Village's website at: <https://www.cville.org/509/Lead-Service-Line-Replacement-Info>. The Village also maps its material inventory with a geographic information system (GIS). A current map in the classifications of Lead, Suspected Lead, Non-Lead, and Replaced Lead is shown as Exhibit 2-1.

Table 2-1. Service Line Material Inventory Summary

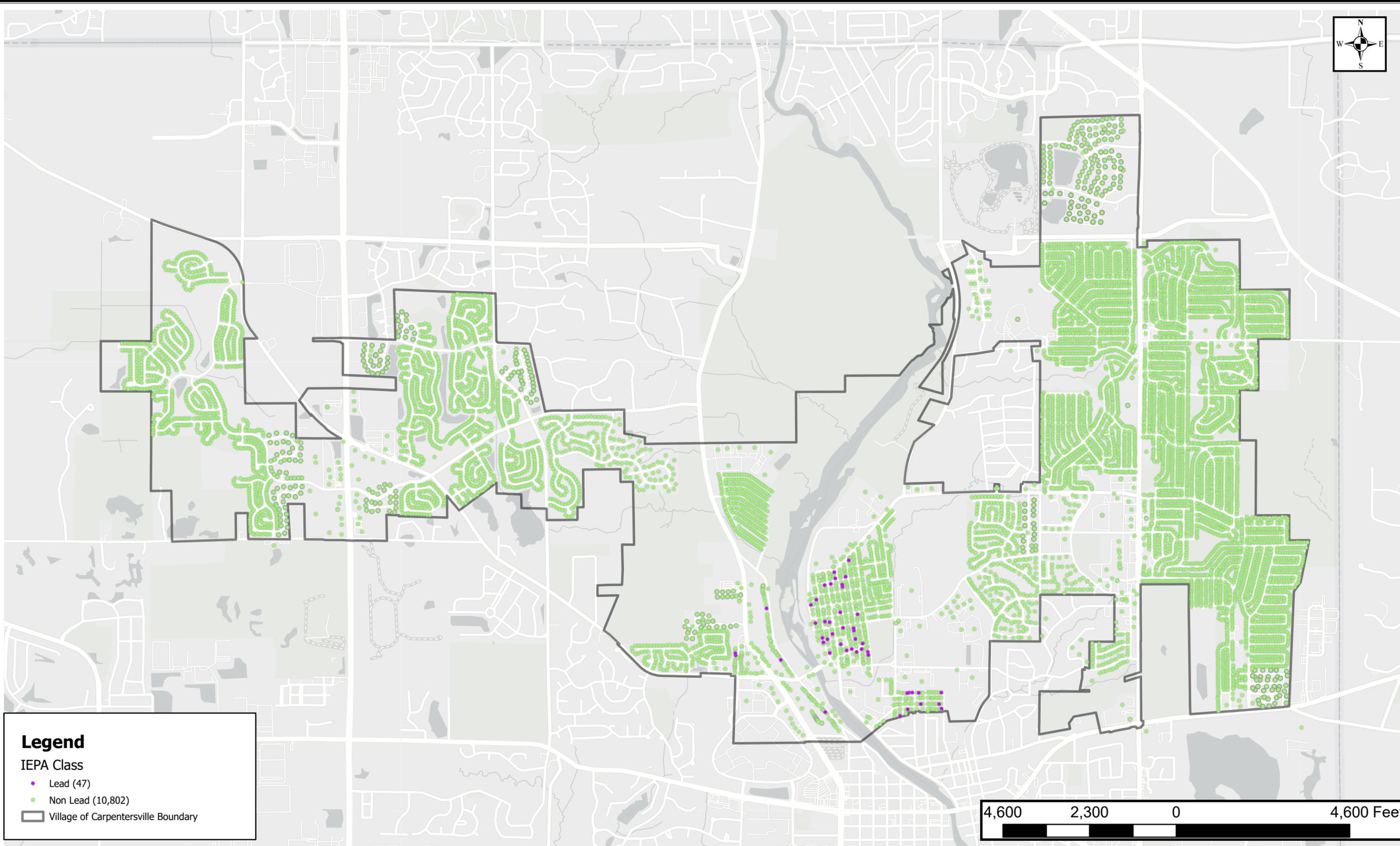
The information in this table reflects the Service Line Material Inventory submitted annually to the Illinois EPA by the Village of Carpentersville (CWS ID No. IL0890200).

	2017	2018	2019	2020	2022	2023
Wholesale Connections	1	1	1	1	1	1
Retail Connections	10,543	10,544	10,544	10,544	10,927	10,849
Lead	615	194	209	209	6	47
Copper/Lead Solder	0	0	0	0	0	5,262
Copper/Non-Lead Solder	9,929	9,931	9,942	9,942	6,782	5,539
Galvanized*	0	3	4	4	0	
Galvanized Requiring Replacement						0
Galvanized Not Requiring Replacement						1
Plastic	0	0	0	0	0	0
Unknown Material	0	413	389	389	3,872	0
Unknown Not Lead	0	0	0	0	4	0
Cast/Ductile Iron or Transite	0	1	1	1	264	282
Service Lead Replaced	0	0	27	0	4	188

* In 2023, "Galvanized" is no longer a requested field. Instead, it has been split into "Galvanized Requiring Replacement" and "Galvanized Not Requiring Replacement." If a galvanized service is or has ever been connected downstream to lead, it should be classified as "Galvanized Requiring Replacement."

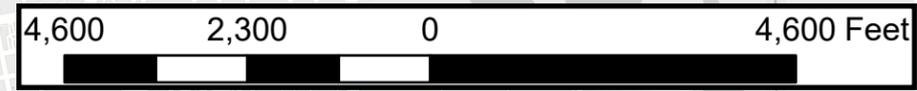
2.3 LSL Replacement Goals, Subsection (q)(6)

The Village of Carpentersville has replaced both the Village-owned and privately-owned portion of water service lines when lead is encountered during water main construction or maintenance and repair operations. However, it began a focused plan of replacement starting in 2023. Per the schedule of replacing the known and suspected LSLs (SLSLs) connected to the Village's distribution system as presented in Table 2-2, the Village anticipates complete replacement of all LSLs and SLSLs by the end of 2025. The table lists the number of LSLs and SLSLs either as completed or expected to be replaced beginning with 2019. A map showing the location of the service lines to be replaced is available under Section 2.6.



Legend

- IEPA Class
- Lead (47)
- Non Lead (10,802)
- ▭ Village of Carpentersville Boundary



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LEAD SERVICE LINE REPLACEMENT (LSLR)
 VILLAGE OF CARPENTERSVILLE, ILLINOIS

**EXHIBIT 2-1
 MATERIAL SERVICE INVENTORY MAP**

Table 2-2. Schedule for Lead Service Line Replacement

Planned replacement of Lead Service Lines to meet the regulatory requirement.

Years After Final Plan	Reporting Year	Submittal Date	Number of LSLs and SLSLs		
			Beginning	Replaced	Ending
	2019	4/15/2020	607	27	598
	2020	4/15/2021	598	0	598
	2022	4/15/2023	598	4	3,878
	2023	4/15/2024	413	188	210
	2024	4/15/2025	210	163	47
	2025	4/15/2026	47	47	0

Note: Italicized numbers are planned

2.4 Financial Analysis, Subsection (q)(7)

There are several factors that control the cost associated with replacing lead service lines including cost of materials, construction methods, extent of replacement, availability of qualified contractors, demand, and competition. The Village has estimated the cost of replacing lead service lines using bid results from its first construction contract as a basis.

The Bid Value of Cost per Service Replaced in 2023 was approximately \$19,000, although that estimate included 259 full replacements, 53 partial replacements, and also accounted for external restoration and inside foundation or slab restoration.

2.4.1 Affordability

For the replacements in 2023 and 2024, the Village used a State Revolving Fund (SRF) loan with principal forgiveness and American Rescue Plan Act (ARPA) funds to finance complete replacement of lead service lines to allow for a zero-dollar cost to customers. The Village is still determining its options for the completion of future LSL and SLSL replacements, but regardless of the source of the funds, it will continue to cover the cost of replacement for residents.

2.5 Prioritizing High Risk Facilities, Subsection (q)(8)

The Village recognizes that some facilities, such as preschools, day care centers, day care homes, group day care homes, parks, playgrounds, hospitals, and clinics, may represent an increase in lead exposure to children, who are the most susceptible to the effects of lead. According to the Center for Disease Control and Prevention, children less than six years old are at a higher risk of lead exposure. This is because their bodies are rapidly developing and more susceptible to lead intake, if exposed.

Although the Village has sought to identify lead service lines that serve such facilities, to date the Village has not identified any such facilities as having lead service lines.

2.6 Service Line Replacement Map, Subsection (q)(9)

The map presented as Exhibit 2-2 shows the approximate locations of LSLs and SLSLs to be replaced. The Village is in the process of determining the sequence of areas in need of replacement. Sequencing will depend on many factors, including but not limited to planned street resurfacing projects, water main replacement projects, responses from homeowners regarding permission to construct, and bundling lead service line replacement (LSLR) areas together to ensure projects are cost-effective and efficient. The Village is working on developing criteria for efficient and equitable replacements.

2.7 Public Engagement, Subsections (q)(10) and (p)(5)

The Lead Service Line Replacement Plan will be presented to the Village Board during a regular Village Board meeting, if necessary (i.e., there are LSLs remaining to be replaced as of December 31, 2026). The Plan will be included in the meeting agenda packet and residents will be given an opportunity to comment on the Plan during the meeting.

In addition, if necessary, the Village will post the Plan on its website. The posting will provide instructions on how residents can submit comments regarding the Plan to the Village. Comments received will be considered during the implementation or future updates of the Plan.

2.8 Construction, Subsection (q)(11)

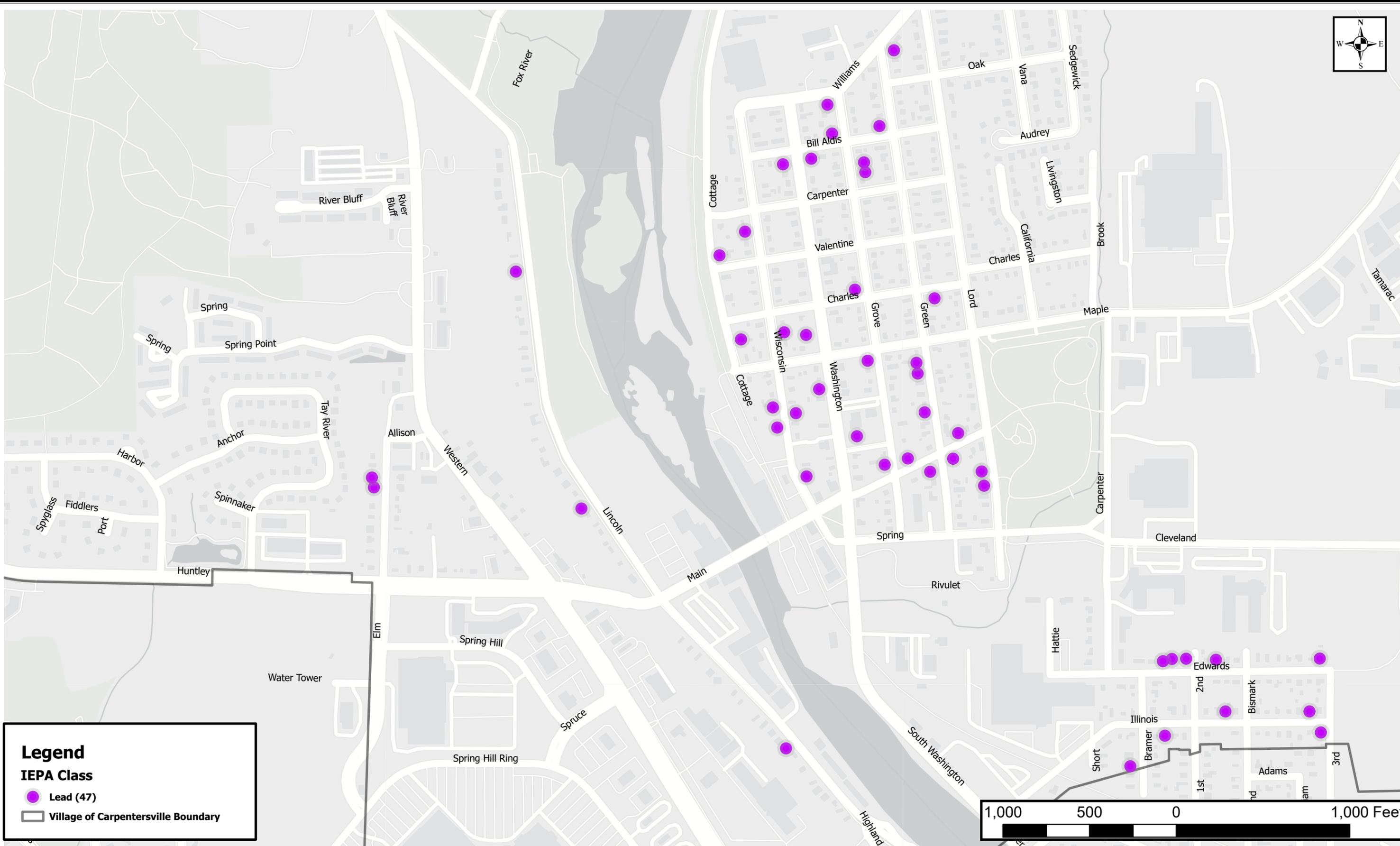
The Village has been proactive in replacing LSLs during emergencies or as part of a planned program. As such, the replacement process and procedures have been developed, continue to improve, and are receptive to change. Information on construction policies and procedures are as follows.

2.8.1 Measures to Encourage Diversity in Hiring in the Workforce, Subsections (n) and (q)(11)

Since the Village utilized an SRF Loan and ARPA funds to finance the first phase of LSL replacement, language on diversity hiring had already been included in contract documents for Contract A. Therefore, the Village has already made a good faith effort to utilize contracts and vendors owned by disadvantaged businesses, with plans that further continue to hire diversity in the workforce.

2.8.2 Procedures for Conducting Lead Service Line Replacement

Prior to replacement, the Village will provide fliers or door hangers to all impacted residents. The materials provided will inform residents that a temporary water shutoff will be occurring as a result of the LSLR work. Paperwork will include contact information for the resident engineer and an employee from Public Works should the homeowner have any questions.



Legend

IEPA Class

- Lead (47)
- Village of Carpentersville Boundary



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LEAD SERVICE LINE REPLACEMENT (LSLR)
 VILLAGE OF CARPENTERSVILLE, ILLINOIS

EXHIBIT 2-2
MAP OF LEAD SERVICES TO BE REPLACED

When conducting LSLR, the Village's contractor will utilize one of the three common methods: open cut excavation, trenchless methods, or lead extraction. The exact method of replacement will vary depending on site constraints or available equipment. Whenever possible, the Village will avoid open cut excavation and opt for a less disruptive method such as directional drilling or lead extraction. It has been indicated that open cut excavation will be considered as a last resort option after all other methods have been exhausted or only if the construction circumstances warrant its use.

In the event of an emergency repair where a partial service replacement is being completed (either main to curb stop or curb stop to meter) and lead is discovered on the other side of the service, additional measures must be taken to ensure compliance with Illinois regulations. Currently, regulations do not allow for partial replacements, so if the remainder of the lead service to be removed is on the private side, the resident will either have to allow for the replacement of the private side of the service or sign a waiver indicating they are opting out of the program. Removal of the remaining lead service line must be completed within 30 days of the initial repair or partial replacement of the lead service line. The Village will also supply the resident with drinking water filters certified to NSF/ANSI 53 and NSF/ANSI 42 standards for the reduction of lead and particulate.

After the replacement of the lead service, the line is properly flushed, the resident is notified of restoration, and any landscaping restoration services as necessary are completed. Notification must also be provided to the Illinois Department of Public Health (IDPH) if a full lead service line replacement could not be completed due to refusal of entry or denial by the property owner.

More detailed information on the three methods of LSLR replacement are as follows:

2.8.2.1 Open Cut Excavation

Open cut excavation is a conventional approach that requires the saw cutting and/or breaking of service materials and excavation of soil from the corporation stop at the water main along the entire length of the service line that is being replaced. In this technique, safety precautions are taken since underground utilities may not have been properly located. The excavation equipment operated in the open-cut replacement method are scaled appropriately to accommodate the entire depth of the hole. Safety measures are then implemented taking into consideration both the resident's property and any nearby pedestrian and/or vehicular traffic. Upon proper exposure and identification of the service line, the existing pipe is next disconnected from the main as well as the private side of the connection. With the newly installed service line properly connected to the main and private side, the new material is expected to meet the requirements of the Safe Drinking Water Act and other federal regulations for potable water systems. Select bedding and/or designated fill material, in conjunction with the surface treatment, is set to comply with all applicable requirements. The new service line placement should reduce or eliminate the possibility of settling beyond the allowable limit along the excavation path.

2.8.2.2 Trenchless Method

A trenchless lead service line replacement method involves the use of equipment to install a new service line in a new location while abandoning the old pipe in place, such as directional drilling.

Trenchless methods require minimal excavation, and typically require an excavation of two access pits: one at the water main to make the new connection, and the other at the property line to install the new curb stop. Additional access pits may be required, but excavation is generally kept to a minimum without requiring an open cut along the new service line. In order to accomplish this, various machines are used including horizontal directional drills, where a machine drills the path of the new water service from the point of connection through the foundation, or a pneumatic hammer where the machine creates pulses underground to create a path for the new water service. With both of these machines, the new water service pipe is retracted through the new path to set the service in place. Soil conditions may dictate which machine is viable, and open cutting may be required if bedrock is encountered. Trenchless methods are not viable options in every service line replacement instance.

2.8.2.3 Lead Extraction

An additional method of replacing lead service lines without cutting an open trench is lead extraction, otherwise known as pipe pulling or pipe splitting. Pipe pulling removes and extracts the existing pipe while simultaneously replacing it with a new pipe. Alternatively, pipe splitting leaves the existing pipe in the ground but enables the new pipe to be installed along the original route as it divides and separates the original pipe. Both methods require access pits to be excavated at the curb stop and the water main, and the service line is disconnected at the point of replacement. A cable is then fed through the existing service line and a mechanical device is attached to the cable at one end. For pipe pulling, the mechanical device serves as an anchor and the lead pipe is removed from the ground when the cable is pulled. Upon removal, new replacement pipe is attached to the mechanical device and pulled into the ground simultaneously. During pipe splitting, the mechanical device attaches to the replacement pipe and the cable pulls the new pipe within the old one, bursting it open and depositing the new pipe along the original route. Both methods are less invasive, but soil conditions and pipe conditions such as bends or encrustation can act as impediments to this straightforward replacement. The Village has indicated that it will not utilize this form of replacement, but this policy could change in subsequent years.



APPENDIX A

Lead Service Line Replacement and Notification Act

Public Act 102-0613

Section 1. This Act may be referred to as the Lead Service Line Replacement and Notification Act.

Section 5. The Department of Commerce and Economic Opportunity Law of the Civil Administrative Code of Illinois is amended by adding Section 605-870 as follows:

(20 ILCS 605/605-870 new)

Sec. 605-870. Low-income water assistance policy and program.

Subsection (a)

The Department shall by rule establish a comprehensive low-income water assistance policy and program that incorporates financial assistance and includes, but is not limited to, water efficiency or water quality projects, such as lead service line replacement, or other measures to ensure that residents have access to affordable and clean water. The policy and program shall not jeopardize the ability of public utilities, community water supplies, or other entities to receive just compensation for providing services. The resources applied in achieving the policy and program shall be coordinated and efficiently used through the integration of public programs and through the targeting of assistance. The rule or rules shall be adopted within 180 days after receiving an appropriation for the program.

Subsection (b)

Any person who is a resident of the State and whose household income is not greater than an amount determined annually by the Department may apply for assistance under this Section in accordance with rules adopted by the Department. In setting the annual eligibility level, the Department shall consider the amount of available funding and may not set a limit higher than 150% of the poverty guidelines updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2).

Subsection (c)

Applicants who qualify for assistance under subsection (b) shall, subject to appropriation from the General Assembly and availability of funds by the Department, receive assistance as provided under this Section. The Department, upon receipt of moneys authorized under this Section for assistance, shall commit funds for each qualified applicant in an amount determined by the Department. In determining the amounts of assistance to be provided to or on behalf of a qualified applicant the Department shall ensure that the highest amounts of assistance go to households with the greatest water costs in relation to household income. The Department may consider factors such as water costs, household size, household income, and region of the State when determining individual household benefits. In adopting rules for the administration of this Section, the Department shall ensure that a minimum of one-third of the funds for the program are available for benefits to eligible households with the lowest incomes

and that elderly households, households with persons with disabilities, and households with children under 6 years of age are offered a priority application period.

Subsection (d)

Application materials for the program shall be made available in multiple languages.

Section 10. The State Finance Act is amended by adding Section 5.938 as follows:

(30 ILCS 105/5.938 new)

Sec. 5.938. The Lead Service Line Replacement Fund.

Section 15. The Environmental Protection Act is amended by adding Section 17.12 as follows:

(415 ILCS 5/17.12 new)

Sec. 17.12. Lead service line replacement and notification.

Subsection (a)

The purpose of this Act is to: (1) require the owners and operators of community water supplies to develop, implement, and maintain a comprehensive water service line material inventory and a comprehensive lead service line replacement plan, provide notice to occupants of potentially affected buildings before any construction or repair work on water mains or lead service lines, and request access to potentially affected buildings before replacing lead service lines; and (2) prohibit partial lead service line replacements, except as authorized within this Section.

Subsection (b)

The General Assembly finds and declares that:

- (1) There is no safe level of exposure to heavy metal lead, as found by the United States Environmental Protection Agency and the Centers for Disease Control and Prevention.
- (2) Lead service lines can convey this harmful substance to the drinking water supply.
- (3) According to the Illinois Environmental Protection Agency's 2018 Service Line Material Inventory, the State of Illinois is estimated to have over 680,000 lead-based service lines still in operation.
- (4) The true number of lead service lines is not fully known because Illinois lacks an adequate inventory of lead service lines.

- (5) For the general health, safety and welfare of its residents, all lead service lines in Illinois should be disconnected from the drinking water supply, and the State's drinking water supply.

Subsection (c)

In this Section:

"Advisory Board" means the Lead Service Line Replacement Advisory Board created under subsection (x).

"Community water supply" has the meaning ascribed to it in Section 3.145 of this Act.

"Department" means the Department of Public Health.

"Emergency repair" means any unscheduled water main, water service, or water valve repair or replacement that results from failure or accident.

"Fund" means the Lead Service Line Replacement Fund created under subsection (bb).

"Lead service line" means a service line made of lead or service line connected to a lead pigtail, lead gooseneck, or other lead fitting.

"Material inventory" means a water service line material inventory developed by a community water supply under this Act.

"Noncommunity water supply" has the meaning ascribed to it in Section 3.145 of the Environmental Protection Act.

"NSF/ANSI Standard" means a water treatment standard developed by NSF International.

"Partial lead service line replacement" means replacement of only a portion of a lead service line.

"Potentially affected building" means any building that is provided water service through a service line that is either a lead service line or a suspected lead service line.

"Public water supply" has the meaning ascribed to it in Section 3.365 of this Act.

"Service line" means the piping, tubing, and necessary appurtenances acting as a conduit from the water main or source of potable water supply to the building plumbing at the first shut-off valve or 18 inches inside the building, whichever is shorter.

"Suspected lead service line" means a service line that a community water supply finds more likely than not to be made of lead after completing the requirements under paragraphs (2) through (5) of subsection (h).

"Small system" means a community water supply that regularly serves water to 3,300 or fewer persons.

Subsection (d) – Initial and complete material inventory

An owner or operator of a community water supply shall:

- (1) develop an initial material inventory by April 15, 2022 and electronically submit by April 15, 2023 an updated material inventory electronically to the Agency; and
- (2) deliver a complete material inventory to the Agency no later than April 15, 2024, or such time as required by federal law, whichever is sooner. The complete inventory shall report the composition of all service lines in the community water supply's distribution system.

Subsection (e) – Agency review of final inventory

The Agency shall review and approve the final material inventory to it under subsection (d).

Subsection (f) – Inventory extension

If a community water supply does not submit a complete inventory to the Agency by April 15, 2024 under paragraph (2) of subsection (d), the community water supply may apply for an extension to the Agency no less than 3 months prior to the due date. The Agency shall develop criteria for granting material inventory extensions. When considering requests for extension, the Agency shall, at a minimum, consider:

- (1) The number of service connections in a water supply; and
- (2) The number of service lines of an unknown material composition.

Subsection (g) – Material inventory requirements

A material inventory prepared for a CWS under subsection (d) shall identify:

- (1) the total number of service lines connected to the community water supply's distribution system;
- (2) the materials of construction of each service line connected to the community water supply's distribution system;
- (3) the number of suspected lead service lines that were newly identified in the material inventory for the community water supply after the community water supply last submitted a service line inventory to the Agency; and

- (4) the number of suspected or known lead service lines that were replaced after the community water supply last submitted a service line inventory to the Agency, and the material of the service line that replaced each lead service line.

When identifying the materials of construction under paragraph (2) of this subsection, the owner or operator of the community water supply shall to the best of the owner's or operator's ability identify the type of construction material used on the customer's side of the curb box, meter, or other line of demarcation and the community water supply's side of the curb box, meter, or other line of demarcation.

Subsection (h) – Completing the material inventory

In completing a material inventory under subsection (d), the owner or operator of a community water supply shall:

- (1) prioritize inspections of high-risk areas identified by the community water supply and inspections of high-risk facilities, such as preschools, day care centers, day care homes, group day care homes, parks, playgrounds, hospitals, and clinics, and confirm service line materials in those areas and at those facilities;
- (2) review historical documentation, such as construction logs or cards, as-built drawings, purchase orders, and subdivision plans, to determine service line material construction;
- (3) when conducting distribution system maintenance, visually inspect service lines and document materials of construction;
- (4) identify any time period when the service lines being connected to its distribution system were primarily lead service lines, if such a time period is known or suspected; and
- (5) discuss service line repair and installation with its employees, contractors, plumbers, other workers who worked on service lines connected to its distribution system, or all of the above.

Subsection (i) – Homeowner refusal to identify service line

The owner or operator of each community water supply shall maintain records of persons who refuse to grant access to the interior of a building for purposes of identifying the materials of construction of a service line. If a community water supply has been denied access on the property or to the interior of a building for that reason, then the community water supply shall attempt to identify the service line as a suspected lead service line, unless documentation is provided showing otherwise.

Subsection (j) – LSL identification notification

If a community water supply identifies a lead service line connected to a building, the owner or operator of the community water supply shall attempt to notify the owner of the building and all

occupants of the building of the existence of the lead service line within 15 days after identifying the lead service line, or as soon as is reasonably possible thereafter. Individual written notice shall be given according to the provisions of subsection (jj).

Subsection (k) – Service lines disconnected from distribution system

An owner or operator of a community water supply has no duty to include in the material inventory required under subsection (d) information about service lines that are physically disconnected from a water main in its distribution system.

Subsection (l) – Posting the material inventory

The owner or operator of each community water supply shall post on its website a copy of the most recently submitted material inventory or alternatively may request that the Agency post a copy of that material inventory on the Agency's website.

Subsection (m) – No requirement to unearth while inventorying

Nothing in this Section shall be construed to require service lines to be unearthed for the sole purpose of inventorying.

Subsection (n) – DBE efforts

When an owner or operator of a community water supply awards a contract under this Section, the owner or operator shall make a good faith effort to use contractors and vendors owned by minority persons, women, and persons with a disability, as those terms are defined in Section 2 of the Business Enterprise for Minorities, Women, and Persons with Disabilities Act, for not less than 20% of the total contracts, provided that:

- (1) contracts representing at least 11% of the total projects shall be awarded to minority-owned businesses, as defined in Section 2 of the Business Enterprise for Minorities, Women, and Persons with Disabilities Act;
- (2) contracts representing at least 7% of the total projects shall be awarded to women-owned businesses, as defined in Section 2 of the Business Enterprise for Minorities, Women, and Persons with Disabilities Act; and
- (3) contracts representing at least 2% of the total projects shall be awarded to businesses owned by persons with a disability.

Owners or operators of a community water supply are encouraged to divide projects, whenever economically feasible, into contracts of smaller size that ensure small business contractors or vendors shall have the ability to qualify in the applicable bidding process, when determining the ability to deliver on a given contract based on scope and size, as a responsible and responsive bidder.

When a contractor or vendor submits a bid or letter of intent in response to a request for proposal or other bid submission, the contractor or vendor shall include with its responsive documents a utilization plan that shall address how compliance with applicable good faith requirements set forth in this subsection shall be addressed.

Under this subsection, "good faith effort" means a community water supply has taken all necessary steps to comply with the goals of this subsection by complying with the following:

- (1) Soliciting through reasonable and available means the interest of a business, as defined in Section 2 of the Business Enterprise for Minorities, Women, and Persons with Disabilities Act, that have the capability to perform the work of the contract. The community water supply must solicit this interest within sufficient time to allow certified businesses to respond.
- (2) Providing interested certified businesses with adequate information about the plans, specifications, and requirements of the contract, including addenda, in a timely manner to assist them in responding to the solicitation.
- (3) Meeting in good faith with interested certified businesses that have submitted bids.
- (4) Effectively using the services of the State, minority or women community organizations, minority or women contractor groups, local, State, and federal minority or women business assistance offices, and other organizations to provide assistance in the recruitment and placement of certified businesses.
- (5) Making efforts to use appropriate forums for purposes of advertising subcontracting opportunities suitable for certified businesses.

The diversity goals defined in this subsection can be met through direct award to diverse contractors and through the use of diverse subcontractors and diverse vendors to contracts.

Subsection (o)

An owner or operator of a community water supply shall collect data necessary to ensure compliance with subsection (n) no less than semi-annually and shall include progress toward compliance of subsection (n) in the owner or operator's report required under subsection (t-5). The report must include data on vendor and employee diversity, including data on the owner's or operator's implementation of subsection (n).

Subsection (p) - Plan

Every owner or operator of a community water supply that has known or suspected lead service lines shall:

- (1) Create a plan to:
 - (A) replace each lead service line connected to its distribution system; and

- (B) replace each galvanized service line connected to its distribution system, if the galvanized service line is or was connected downstream to lead piping; and
- (2) electronically submit, by April 15, 2024 its initial lead service line replacement plan to the Agency;
 - (3) electronically submit by April 15 of each year after 2024 until April 15, 2027 an updated lead service line replacement plan to the Agency for review; the updated replacement plan shall account for changes in the number of lead service lines or unknown service lines in the material inventory described in subsection (d);
 - (4) electronically submit by April 15, 2027 a complete and final replacement plan to the Agency for approval; the complete and final replacement plan shall account for all known and suspected lead service lines documented in the final material inventory described under paragraph (3) of subsection (d); and
 - (5) post on its website a copy of the plan most recently submitted to the Agency or may request that the Agency post a copy of that plan on the Agency's website.

Subsection (q)

Each plan required under paragraph (1) of subsection (p) shall include the following:

- (1) the name and identification number of the community water supply;
- (2) the total number of service lines connected to the distribution system of the community water supply;
- (3) the total number of suspected lead service lines connected to the distribution system of the community water supply;
- (4) the total number of known lead service lines connected to the distribution system of the community water supply;
- (5) the total number of lead service lines connected to the distribution system of the community water supply that have been replaced each year beginning in 2020;
- (6) a proposed lead service line replacement schedule that includes one-year, 5-year, 10-year, 15-year, 20-year, 25-year, and 30-year goals;
- (7) an analysis of costs and financing options for replacing the lead service lines connected to the community water supply's distribution system, which shall include, but shall not be limited to:
 - (A) a detailed accounting of costs associated with replacing lead service lines and galvanized lines that are or were connected downstream to lead piping;

- (B) measures to address affordability and prevent service shut-offs for customers or ratepayers; and
- (C) consideration of different scenarios for structuring payments between the utility and its customers over time; and
- (8) a plan for prioritizing high-risk facilities, such as preschools, day care centers, day care homes, group day care homes, parks, playgrounds, hospitals, and clinics, as well as high-risk areas identified by the community water supply;
- (9) 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;
- (10) measures for how the community water supply will inform the public of the plan and provide opportunity for public comment; and
- (11) measures to encourage diversity in hiring in the workforce required to implement the plan as identified under subsection (n).

Subsection (r)

The Agency shall review final plans submitted to it under subsection (p). The Agency shall approve a final plan if the final plan includes all of the elements set forth under subsection (q) and the Agency determines that:

- (1) the proposed lead service line replacement schedule set forth in the plan aligns with the timeline requirements set forth under subsection (v);
- (2) the plan prioritizes the replacement of lead service lines that provide water service to high-risk facilities, such as preschools, day care centers, day care homes, group day care homes, parks, playgrounds, hospitals, and clinics, and high-risk areas identified by the community water supply;
- (3) the plan includes analysis of cost and financing options; and
- (4) the plan provides documentation of public review.

Subsection (s)

An owner or operator of a community water supply has no duty to include in the plans required under subsection (p) information about service lines that are physically disconnected from a water main in its distribution system.

Subsection (t)

If a community water supply does not deliver a complete plan to the Agency by April 15, 2027, the community water supply may apply to the Agency for an extension no less than 3 months

prior to the due date. The Agency shall develop criteria for granting plan extensions. When considering requests for extension, the Agency shall, at a minimum, consider:

- (1) the number of service connections in a water supply; and
- (2) the number of service lines of an unknown material composition.

(t-5)

After the Agency has approved the final replacement plan described in subsection (p), the owner or operator of a community water supply shall submit a report detailing progress toward plan goals to the Agency for its review. The report shall be submitted annually for the first 10 years, and every 3 years thereafter until all lead service lines have been replaced. Reports under this subsection shall be published in the same manner described in subsection (l). The report shall include at least the following information as it pertains to the preceding reporting period:

- (1) The number of lead service lines replaced and the average cost of lead service line replacement.
- (2) Progress toward meeting hiring requirements as described in subsection (n) and subsection (o).
- (3) The percent of customers electing a waiver offered, as described in subsections (ii) and (jj), among those customers receiving a request or notification to perform a lead service line replacement.
- (4) The method or methods used by the community water supply to finance lead service line replacement.

Subsection (u)

Notwithstanding any other provision of law, in order to provide for costs associated with lead service line remediation and replacement, the corporate authorities of a municipality may, by ordinance or resolution by the corporate authorities, exercise authority provided in Section 27-5 of the Property Tax Code and Sections 8-3-1, 8-11-1, 8-11-5, 8-11-6, 9-1-1 et seq., 9-3-1 et seq., 9-4-1 et seq., 11-131-1, and 11-150-1 of the Illinois Municipal Code. Taxes levied for this purpose shall be in addition to taxes for general purposes authorized under Section 8-3-1 of the Illinois Municipal Code and shall be included in the taxing district's aggregate extension for the purposes of Division 5 of Article 18 of the Property Tax Code.

Subsection (v)

Every owner or operator of a community water supply shall replace all known lead service lines, subject to the requirements of subsection (ff), according to the following replacement rates and timelines to be calculated from the date of submission of the final replacement plan to the Agency:

- (1) A community water supply reporting 1,200 or fewer lead service lines in its final inventory and replacement plan shall replace all lead service lines, at an annual rate of no less than 7% of the amount described in the final inventory, with a timeline of up to 15 years for completion.
- (2) A community water supply reporting more than 1,200 but fewer than 5,000 lead service lines in its final inventory and replacement plan shall replace all lead service lines, at an annual rate of no less than 6% of the amount described in the final inventory, with a timeline of up to 17 years for completion.
- (3) A community water supply reporting more than 4,999 but fewer than 10,000 lead service lines in its final inventory and replacement plan shall replace all lead service lines, at an annual rate of no less than 5% of the amount described in the final inventory, with a timeline of up to 20 years for completion.
- (4) A community water supply reporting more than 9,999 but fewer than 99,999 lead service lines in its final inventory and replacement plan shall replace all lead service lines, at an annual rate of no less than 3% of the amount described in the final inventory, with a timeline of up to 34 years for completion.
- (5) A community water supply reporting more than 99,999 lead service lines in its final inventory and replacement plan shall replace all lead service lines, at an annual rate of no less than 2% of the amount described in the final inventory, with a timeline of up to 50 years for completion.

Subsection (w)

A community water supply may apply to the Agency for an extension to the replacement timelines described in paragraphs (1) through (5) of subsection (v). The Agency shall develop criteria for granting replacement timeline extensions. When considering requests for timeline extensions, the Agency shall, at a minimum, consider:

- (1) the number of service connections in a water supply; and
- (2) unusual circumstances creating hardship for a community.

The Agency may grant one extension of additional time equal to not more than 20% of the original replacement timeline, except in situations of extreme hardship in which the Agency may consider a second additional extension equal to not more than 10% of the original replacement timeline.

Replacement rates and timelines shall be calculated from the date of submission of the final plan to the Agency.

Subsection (x)

The Lead Service Line Replacement Advisory Board is created within the Agency. The Advisory Board shall convene within 120 days after the effective date of this amendatory Act of the 102nd General Assembly.

The Advisory Board shall consist of at least 28 voting members, as follows:

- (1) the Director of the Agency, or his or her designee, who shall serve as chairperson;
- (2) the Director of Revenue, or his or her designee;
- (3) the Director of Public Health, or his or her designee;
- (4) fifteen members appointed by the Agency as follows:
 - (A) one member representing a statewide organization of municipalities as authorized by Section 1-8-1 of the Illinois Municipal Code;
 - (B) two members who are mayors representing municipalities located in any county south of the southernmost county represented by one of the 10 largest municipalities in Illinois by population, or their respective designees;
 - (C) two members who are representatives from public health advocacy groups;
 - (D) two members who are representatives from publicly-owned water utilities;
 - (E) one member who is a representative from a public utility as defined under Section 3-105 of the Public Utilities Act that provides water service in the State of Illinois;
 - (F) one member who is a research professional employed at an Illinois academic institution and specializing in water infrastructure research;
 - (G) two members who are representatives from nonprofit civic organizations;
 - (H) one member who is a representative from a statewide organization representing environmental organizations;
 - (I) two members who are representatives from organized labor; and
 - (J) one member representing an environmental justice organization; and
- (5) ten members who are the mayors of the 10 largest municipalities in Illinois by population, or their respective designees.

No less than 10 of the 28 voting members shall be persons of color, and no less than 3 shall represent communities defined or self-identified as environmental justice communities.

Advisory Board members shall serve without compensation, but may be reimbursed for necessary expenses incurred in the performance of their duties from funds appropriated for that purpose. The Agency shall provide administrative support to the Advisory Board.

The Advisory Board shall meet no less than once every 6 months.

Subsection (y)

The Advisory Board shall have, at a minimum, the following duties:

- (1) advising the Agency on best practices in lead service line replacement;
- (2) reviewing the progress of community water supplies toward lead service line replacement goals;
- (3) advising the Agency on other matters related to the administration of the provisions of this Section;
- (4) advising the Agency on the integration of existing lead service line replacement plans with any statewide plan; and
- (5) providing technical support and practical expertise in general.

Subsection (z)

Within 18 months after the effective date of this amendatory Act of the 102nd General Assembly, the Advisory Board shall deliver a report of its recommendations to the Governor and the General Assembly concerning opportunities for dedicated, long-term revenue options for funding lead service line replacement. In submitting recommendations, the Advisory Board shall consider, at a minimum, the following:

- (1) the sufficiency of various revenue sources to adequately fund replacement of all lead service lines in Illinois;
- (2) the financial burden, if any, on households falling below 150% of the federal poverty limit;
- (3) revenue options that guarantee low-income households are protected from rate increases;
- (4) an assessment of the ability of community water supplies to assess and collect revenue;

- (5) variations in financial resources among individual households within a service area; and
- (6) the protection of low-income households from rate increases.

Subsection (aa)

Within 10 years after the effective date of this amendatory Act of the 102nd General Assembly, the Advisory Board shall prepare and deliver a report to the Governor and General Assembly concerning the status of all lead service line replacement within the State.

Subsection (bb)

The Lead Service Line Replacement Fund is created as a special fund in the State treasury to be used by the Agency for the purposes provided under this Section. The Fund shall be used exclusively to finance and administer programs and activities specified under this Section and listed under this subsection.

The objective of the Fund is to finance activities associated with identifying and replacing lead service lines, build Agency capacity to oversee the provisions of this Section, and provide related assistance for the activities listed under this subsection.

The Agency shall be responsible for the administration of the Fund and shall allocate moneys on the basis of priorities established by the Agency through administrative rule. On July 1, 2022 and on July 1 of each year thereafter, the Agency shall determine the available amount of resources in the Fund that can be allocated to the activities identified under this Section and shall allocate the moneys accordingly.

Notwithstanding any other law to the contrary, the Lead Service Line Replacement Fund is not subject to sweeps, administrative charge-backs, or any other fiscal maneuver that would in any way transfer any amounts from the Lead Service Line Replacement Fund into any other fund of the State.

Subsection (cc)

Within one year after the effective date of this amendatory Act of the 102 General Assembly, the Agency shall design rules for a program for the purpose of administering lead service line replacement funds. The rules must, at minimum, contain:

- (1) the process by which community water supplies may apply for funding; and
- (2) the criteria for determining unit of local government eligibility and prioritization for funding, including the prevalence of low-income households, as measured by median household income, the prevalence of lead service lines, and the prevalence of water samples that demonstrate elevated levels of lead.

Subsection (dd)

Funding under subsection (cc) shall be available for costs directly attributable to the planning, design, or construction directly related to the replacement of lead service lines and restoration of property.

Funding shall not be used for the general operating expenses of a municipality or community water supply.

Subsection (ee)

An owner or operator of any community water supply receiving grant funding under subsection (cc) shall bear the entire expense of full lead service line replacement for all lead service lines in the scope of the grant.

Subsection (ff)

When replacing a lead service line, the owner or operator of the community water supply shall replace the service line in its entirety, including, but not limited to, any portion of the service line (i) running on private property and (ii) within the building's plumbing at the first shut-off valve. Partial lead service line replacements are expressly prohibited. Exceptions shall be made under the following circumstances:

- (1) In the event of an emergency repair that affects a lead service line or a suspected lead service line, a community water supply must contact the building owner to begin the process of replacing the entire service line. If the building owner is not able to be contacted or the building owner or occupant refuses to grant access and permission to replace the entire service line at the time of the emergency repair, then the community water supply may perform a partial lead service line replacement. Where an emergency repair on a service line constructed of lead or galvanized steel pipe results in a partial service line replacement, the water supply responsible for commencing the repair shall perform the following:
 - (A) Notify the building's owner or operator and the resident or residents served by the lead service line in writing that a repair has been completed. The notification shall include, at a minimum:
 - (i) a warning that the work may result in sediment, possibly containing lead, in the buildings water supply system;
 - (ii) information concerning practices for preventing the consumption of any lead in drinking water, including a recommendation to flush water distribution pipe during and after the completion of the repair or replacement work and to clean faucet aerator screens; and

- (iii) information regarding the dangers of lead to young children and pregnant women.
- (B) Provide filters for at least one fixture supplying potable water for consumption. The filter must be certified by an accredited third-party certification body to NSF/ANSI 53 and NSF/ANSI 42 for the reduction of lead and particulate. The filter must be provided until such time that the remaining portions of the service line have been replaced with a material approved by the Department or a waiver has been issued under subsection (ii).
- (C) Replace the remaining portion of the lead service line within 30 days of the repair, or 120 days in the event of weather or other circumstances beyond reasonable control that prohibits construction. If a complete lead service line replacement cannot be made within the required period, the community water supply responsible for commencing the repair shall notify the Department in writing, at a minimum, of the following within 24 hours of the repair:
- (i) an explanation of why it is not feasible to replace the remaining portion of the lead service line within the allotted time; and
 - (ii) a timeline for when the remaining portion of the lead service line will be replaced.
- (D) If complete repair of a lead service line cannot be completed due to denial by the property owner, the community water supply commencing the repair shall request the affected property owner to sign a waiver developed by the Department. If a property owner of a nonresidential building or residence operating as rental properties denies a complete lead service line replacement, the property owner shall be responsible for installing and maintaining point-of-use filters certified by an accredited third-party certification body to NSF/ANSI 53 and NSF/ANSI 42 for the reduction of lead and particulate at all fixtures intended to supply water for the purposes of drinking, food preparation, or making baby formula. The filters shall continue to be supplied by the property owner until such time that the property owner has affected the remaining portions of the lead service line to be replaced.
- (E) Document any remaining lead service line, including a portion on the private side of the property, in the community water supply's distribution system materials inventory required under subsection (d).

For the purposes of this paragraph (1), written notice shall be provided in the method and according to the provisions of subsection (jj).

- (2) Lead service lines that are physically disconnected from the distribution system are exempt from this subsection.

Subsection (gg)

Except as provided in subsection (hh), on and after January 1, 2022, when the owner or operator of a community water supply replaces a water main, the community water supply shall identify all lead service lines connected to the water main and shall replace the lead service lines by:

- (1) identifying the material or materials of each lead service line connected to the water main, including, but not limited to, any portion of the service line (i) running on private property and (ii) within the building plumbing at the first shut-off valve or 18 inches inside the building, whichever is shorter;
- (2) in conjunction with replacement of the water main, replacing any and all portions of each lead service line connected to the water main that are composed of lead; and
- (3) if a property owner or customer refuses to grant access to the property, following prescribed notice provisions as outlined in subsection (ff).

If an owner of a potentially affected building intends to replace a portion of a lead service line or a galvanized service line and the galvanized service line is or was connected downstream to lead piping, then the owner of the potentially affected building shall provide the owner or operator of the community water supply with notice at least 45 days before commencing the work. In the case of an emergency repair, the owner of the potentially affected building must provide filters for each kitchen area that are certified by an accredited third-party certification body to NSF/ANSI 53 and NSF/ANSI 42 for the reduction of lead and particulate. If the owner of the potentially affected building notifies the owner or operator of the community water supply that replacement of a portion of the lead service line after the emergency repair is completed, then the owner or operator of the community water supply shall replace the remainder of the lead service line within 30 days after completion of the emergency repair. A community water supply may take up to 120 days if necessary due to weather conditions. If a replacement takes longer than 30 days, filters provided by the owner of the potentially affected building must be replaced in accordance with the manufacturer's recommendations. Partial lead service line replacements by the owners of potentially affected buildings are otherwise prohibited.

Subsection (hh)

For municipalities with a population in excess of 1,000,000 inhabitants, the requirements of subsection (gg) shall commence on January 1, 2023.

Subsection (ii)

At least 45 days before conducting planned lead service line replacement, the owner or operator of a community water supply shall, by mail, attempt to contact the owner of the potentially affected building serviced by the lead service line to request access to the building and permission to replace the lead service line in accordance with the lead service line replacement plan. If the owner of the potentially affected building does not respond to the

request within 15 days after the request is sent, the owner or operator of the community water supply shall attempt to post the request on the entrance of the potentially affected building.

If the owner or operator of a community water supply is unable to obtain approval to access and replace a lead service line, the owner or operator of the community water supply shall request that the owner of the potentially affected building sign a waiver. The waiver shall be developed by the Department and should be made available in the owner's language. If the owner of the potentially affected building refuses to sign the waiver or fails to respond to the community water supply after the community water supply has complied with this subsection, then the community water supply shall notify the Department in writing within 15 working days.

Subsection (jj)

When replacing a lead service line or repairing or replacing water mains with lead service lines or partial lead service lines attached to them, the owner or operator of a community water supply shall provide the owner of each potentially affected building that is serviced by the affected lead service lines or partial lead service lines, as well as the occupants of those buildings, with an individual written notice. The notice shall be delivered by mail or posted at the primary entranceway of the building. The notice may, in addition, be electronically mailed. Written notice shall include, at a minimum, the following:

- (1) a warning that the work may result in sediment, possibly containing lead from the service line, in the building's water;
- (2) information concerning the best practices for preventing exposure to or risk of consumption of lead in drinking water, including a recommendation to flush water lines during and after the completion of the repair or replacement work and to clean faucet aerator screens; and
- (3) information regarding the dangers of lead exposure to young children and pregnant women.

When the individual written notice described in the first paragraph of this subsection is required as a result of planned work other than the repair or replacement of a water meter, the owner or operator of the community water supply shall provide the notice not less than 14 days before work begins. When the individual written notice described in the first paragraph of this subsection is required as a result of emergency repairs other than the repair or replacement of a water meter, the owner or operator of the community water supply shall provide the notice at the time the work is initiated. When the individual written notice described in the first paragraph of this subsection is required as a result of the repair or replacement of a water meter, the owner or operator of the community water supply shall provide the notice at the time the work is initiated.

The notifications required under this subsection must contain the following statement in the Spanish, Polish, Chinese, Tagalog, Arabic, Korean, German, Urdu, and Gujarati: "This notice contains important information about your water service and may affect your rights. We

encourage you to have this notice translated in full into a language you understand and before you make any decisions that may be required under this notice."

An owner or operator of a community water supply that is required under this subsection to provide an individual written notice to the owner and occupant of a potentially affected building that is a multi-dwelling building may satisfy that requirement and the requirements of this subsection regarding notification to non-English speaking customers by posting the required notice on the primary entranceway of the building and at the location where the occupant's mail is delivered as reasonably as possible.

When this subsection would require the owner or operator of a community water supply to provide an individual written notice to the entire community served by the community water supply or would require the owner or operator of a community water supply to provide individual written notices as a result of emergency repairs or when the community water supply that is required to comply with this subsection is a small system, the owner or operator of the community water supply may provide the required notice through local media outlets, social media, or other similar means in lieu of providing the individual written notices otherwise required under this subsection.

No notifications are required under this subsection for work performed on water mains that are used to transmit treated water between community water supplies and properties that have no service connections.

Subsection (kk)

No community water supply that sells water to any wholesale or retail consecutive community water supply may pass on any costs associated with compliance with this Section to consecutive systems.

Subsection (ll)

To the extent allowed by law, when a community water supply replaces or installs a lead service line in a public right-of-way or enters into an agreement with a private contractor for replacement or installation of a lead service line, the community water supply shall be held harmless for all damage to property when replacing or installing the lead service line. If dangers are encountered that prevent the replacement of the lead service line, the community water supply shall notify the Department within 15 working days of why the replacement of the lead service line could not be accomplished.

Subsection (mm)

The Agency may propose to the Board, and the Board may adopt, any rules necessary to implement and administer this Section. The Department may adopt rules necessary to address lead service lines attached to noncommunity water supplies.

Subsection (nn)

Notwithstanding any other provision in this Section, no requirement in this Section shall be construed as being less stringent than existing applicable federal requirements.

Subsection (oo)

All lead service line replacements financed in whole or in part with funds obtained under this Section shall be considered public works for purposes of the Prevailing Wage Act.