

# Lead Service Line Replacement Plan

## Corporation of Shepherdstown

PWSID #: WV3301933

May 28, 2025

New Plan  Revised Plan Date:

### 1. Plan Certification

*I have verified and certify the information listed in this Plan is true and accurate to the best of my knowledge and belief:*



Plan Preparer Signature

5/30/25


Date

Jeff Ekstrom, PE

Plan Preparer Name (Print)

Engineer/Consultant

Title



Waterworks Administrative Representative Signature

5-28-25

Date

Charles Coe

Waterworks Administrative Representative Name (Print)

Chief Operator/Public Works Director

Title

## 2. General Water System Information

System Name: Corporation of Shepherdstown	PWSID: 3301933
Total Number of Service Connections: 1,847	
Number of Lead Service Lines: 0	
Number of Lead Status Unknown Service Lines: 0	
Number of Galvanized Requiring Replacement Service Lines: 422	
Number of Non-lead Service Lines: 1,425	
Total Population Served: 4,300	

### 2a. Contact Information

#### System owner contact information:

Name: James Gatz	Title: Mayor
Phone: 304-876-2506	Email: jgatz@shepherdstown.us

#### Licensed operator contact information

Name: Charles Coe	Title: Chief Operator/Public Works Director
Phone: 304-876-2394	Email: ccoe@shepherdstown.us

#### Plan preparer contact information

Name: Jeff Ekstrom	Title: Engineer/Consultant
Phone: 304-343-5300	Email: jeffe@ghosheng.com

This template meets the requirements for a lead service line replacement plan in accordance with 40 CFR § 141.84 b and the Lead and Copper Rule Revisions. The Lead and Copper Rule Improvements propose to require a lead service line replacement plan in 2027; however, WVDH ODW recommends that community and non-transient non-community (NTNC) waterworks with one or more lead, galvanized requiring replacement, or lead status unknown service lines should prepare a lead service line replacement plan for October 2024. The purpose of the plan is to prepare the waterworks for the eventuality that a lead service line will need replacement, even if the replacement is not planned or scheduled.

This plan should be updated when new information becomes available regarding the replacements, identification of lead service lines, changing priorities, contract expirations, or changes in staff.

### 3. Responsible Parties

List names, titles, and details for the following:

1. Creating and maintaining the Lead Service Line Replacement Plan: Ghosh Engineers, Inc. – Engineer/Consultant
2. Identification of lead service lines: Ghosh Engineers, Inc. – Engineer/Consultant
3. Maintenance of service line inventory: Ghosh Engineers, Inc. – Engineer/Consultant
4. Construction oversight: Ghosh Engineers, Inc. – Engineer/Consultant
5. Funding: Ghosh Engineers, Inc. – Engineer/Consultant
6. Public Outreach Coordinator: Charles Coe, Chief Operator
7. Maintaining the online inventory updates: Charles Coe, Chief Operator
8. Resubmission of the Lead Service Line Replacement Plan: Ghosh Engineers, Inc. – Engineer/Consultant
9. Other:

### 4. Service Line Inventory Development and Maintenance

**Strategy for identifying service lines of unknown materials (40 CFR 141.84(b)(1))**

Check all applicable boxes. When completed, include completion date.

We do not have service lines of unknown material within our water system's service area

Type of Review	Completion Date
<input checked="" type="checkbox"/> Building and plumbing codes	10/10/2024
<input checked="" type="checkbox"/> County and municipal ordinances	10/10/2024
<input checked="" type="checkbox"/> Historical building records and permits on each service connection	10/10/2024
<input checked="" type="checkbox"/> Distribution system maps and record drawings	10/10/2024
<input checked="" type="checkbox"/> Most recent approved LCR material survey	10/10/2024
<input checked="" type="checkbox"/> Ongoing updating of service line materials during normal operations	10/10/2024
<input checked="" type="checkbox"/> Capital improvement plans and/or master plans for distribution system development	10/10/2024
<input checked="" type="checkbox"/> Utility records including meter installation records, customer complaint investigations and field activity records	10/10/2024
<input checked="" type="checkbox"/> Utility construction standards, standard details, and standard operating procedures	10/10/2024
<input checked="" type="checkbox"/> Other documentation which indicates and/or confirms the location of lead service lines: description of documentation	10/10/2024
<input checked="" type="checkbox"/> Community survey	10/10/2024
<input checked="" type="checkbox"/> Contacts within the water system, municipal office, or other local officials	10/10/2024
<input type="checkbox"/> Survey results from area plumbers	
<input checked="" type="checkbox"/> Documented interviews of residents - letters, phone survey, personal contact, etc.	10/10/2024
<input checked="" type="checkbox"/> Visual inspection	10/10/2024
<input checked="" type="checkbox"/> Customer self-identification	10/10/2024

<input type="checkbox"/> CCTV Inspection	
<input type="checkbox"/> Scratch Test	
<input type="checkbox"/> Lead solder test	
<input type="checkbox"/> Excavation – Vacuum	
<input type="checkbox"/> Excavation – Mechanical	
<input type="checkbox"/> Water quality sampling (specify protocol)	
<input type="checkbox"/> Predictive modeling	
<input type="checkbox"/> Other: (describe)	

### 5. Replacement Schedule Development and Replacement Considerations

**5a. Methods used to identify the prioritization of lead service line replacements** (use numbers to indicate the level of priority, with “1” being the highest priority. Indicate items not used with “NA”.) (40 CFR § 141.84(b)(6))

<p><b>_4_ Disadvantaged consumers*</b></p> <p><b>_3_ Known lead service lines*</b></p> <p><b>_1_ Sensitive populations*</b></p> <p><b>_5_ Proximity to high lead results*</b></p> <p><b>_NA_ Previous partial replacement*</b></p> <p><b>_6_ Areas that receive many water quality complaints*</b></p> <p><b>_NA_ Overburdened Communities*</b></p> <p><b>_2_ Licensed childcare centers*</b></p> <p>___ Areas with no service lines of unknown material</p> <p>___ Areas where all service lines are of unknown material</p> <p>___ Areas where pipe replacements are already being conducted</p> <p>___ Previous participation in PbCu sampling</p> <p>___ Areas with high density of children</p> <p><b>*Prioritization strategy must include, but is not limited to, known lead service lines and lead service line replacement for disadvantaged consumers and sensitive populations.</b></p>	<p>___ Age of current water main</p> <p>___ Proximity to other known contaminants</p> <p>___ System pressure grade line</p> <p>___ Ownership</p> <p>___ LSLs close to interconnections with a wholesaler which utilizes corrosion control treatment</p> <p>___ Areas of source water or treatment changes</p> <p>___ Areas where all residents have agreed to participate in the program</p> <p>___ Service lines containing lead only on the water system side</p> <p>___ Service lines containing lead only on the property owner side</p> <p>___ Predictive modeling results</p>
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Infants, young children, and pregnant women are the most vulnerable to lead exposure.

**5b. Explanation of how the system is prioritizing replacement locations using the methods identified above and how the schedule will be implemented. Example: The prioritization of the replacements is focused on identifying areas with sensitive populations such as daycares and preschools. Past sampling events have shown that these areas also have high lead results. By focusing replacement on these areas first, we are addressing the areas where lead contamination has the most adverse impacts on the health of those who drink the water.**

*The prioritization of the replacements is focused on identifying areas with sensitive populations such as daycares and preschools. Past sampling events have shown that these areas also have high lead results. By focusing replacement on these areas first, we are addressing the areas where lead contamination has the most adverse impacts on the health of those who drink the water.*

**5c. Coordination with Property Owners**

What portion of the service line is owned by the waterworks?	<input type="checkbox"/> The waterworks owns the entire service line (main to house)	<input checked="" type="checkbox"/> The waterworks owns a portion of the service line (main to curb stop or meter)	<input type="checkbox"/> The waterworks does not own any portion of the service line
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If the waterworks does not own the entire service line, will the community create an ordinance which mandates the replacement of all lead service lines, regardless of ownership?  Yes  No

How will the system conduct public outreach regarding its lead service line replacement program? Provide links to all publicly available materials.

Town Hall Meetings, mailings, door hangers

How will the system solicit property owner/customer's approval to replace lead service lines?

Town Hall Meetings / Customer Survey

Provide a summary of any legal requirements or anticipated obstacles. For example: prior to replacing the property-owner portion of a lead service line, a contract between the water system, contractor and property-owner must be signed and executed through the following process.

Prior to replacing the property-owner portion of a lead service line, a contract between the water system, contractor and property-owner must be signed and executed through the following process.

In the event of a property owner/customer's refusal to replace the service line the water system will:

- Document the incident.
- Continue to contact the property owner/customer each year for participation and continue to document all outreach efforts.
- When applicable, inform the property owner/customer refused to replace their portion of the lead service line; and therefore, the lead service line in its entirety must remain.

#### 5d. Coordination with Municipalities & WVDOT

How will the water system work with local municipalities in our service area and WVDOT to coordinate replacement efforts to minimize costs, impacts on roads, and neighborhood disturbances?

- Not applicable
- By meeting with municipalities on a  monthly  bi-monthly basis
- By meeting with WVDOT on a  monthly  bi-monthly basis
- By participating in public meetings
- By attending council meetings
- By developing an outreach program with the municipalities/local authorities
- Other:

#### 5e. Disposal of Lead Service Lines

How will the water system take steps to make sure all lead service lines removed are disposed of properly?

- By ensuring that the contractors remove them to an appropriate facility/scrapyard for disposal.
- By keeping records of the scrap sale ticket and receipts on file for our records.

#### 5f. Emergency Replacement

What steps will the water system take in the event an emergency replacement is necessary?

- By having materials, staff resources, and procedures in place to replace the service line.
- By replacing the line as part of the emergency repair.
- By documenting the service line materials if they are made known and replacing at a later date.

### 6. Financing

#### 6a. Lead Service Line Replacement Financing (40 CFR § 141.84(b)(7))

Will the water system need to have approval from another agency or governing body prior to beginning replacements (due to budgetary issues)?

- Yes
- No

If yes, explain: WV Bureau of Public Health for a permit.

List financial approvals, if any, that will need to be obtained before beginning replacements:

#### How will replacements be funded?

DWTRF Lead Service Line Replacement

How will the utility address customer owned portions of service lines that are owned by customers who are unable to pay to replace the portion they own? (40 CFR § 141.84(b)(7))

Unknown at this time

Is the water system government owned?  Yes  No

- If yes, will the property owner be responsible for a portion of the replacement cost?  Yes  No
- If yes, what amount?

Does the water system intend to utilize the resources available through the Drinking Water State Revolving Fund (DWSRF)?  Yes  No

- If yes, which funding does the system intend to utilize?

### 6b. Setting Aside Funds for Mailings and Other Future Costs

*Our water system will ensure that there are adequate funds to cover the cost of lead service line replacement activities by:*

- Securing and setting aside funds on a yearly basis to cover the additional costs of certified mailing associated with each phase of replacement.
- Securing and setting aside funds for any outreach costs associated with replacements.
- Securing and setting aside funds for customer samples following an LSL replacement.
- Securing and setting aside funds for filter pitchers and replacements provided following an LSL replacement.
- Making sure that there is adequate funding set aside if additional staffing is needed.
- Securing and setting aside funds if additional lead service lines and galvanized requiring replacement service lines are identified and must be replaced.

## 7. LSL Replacement Procedure

(40 CFR § 141.84(b)(2))

- We will comply with ANSI/AWWA C810-17 Replacement and Flushing of Lead Service Lines.
- We will use alternative procedures, attached in Appendix C.

## 8. Notification Requirements

### Consumer Notification

- We will notify owners and non-owner customers of plans to conduct a full or partial service line replacement at least 45 days in advance (40 CFR § 141.84(b)(3)):
  - Using Template 5.
  - Using our own template (attached in Appendix D).
- We will use ODW template letters for the following notifications:
- We will use our own template letters for the following notifications (attached in Appendix D):
  - Public Education.
  - Lead Risk Mitigation.
  - Annual notifications of LSLs – each year customers who still have an LSL must receive a notification.
  - Annual notifications of galvanized requiring replacement service lines – required every year.
  - Annual notifications of service lines with unknown materials – required every year.

## 9. Lead Risk Mitigation Procedures

Event	Pitcher or Filter Program	Sample	Flushing Instructions	Consumer Notification Template	Public Education
Full LSL Replacement	Yes	Yes	Yes	Template 1	Yes
Partial LSL Replacement	Yes	Yes	Yes	Template 1	Yes
Emergency LSL Replacement	Yes	Yes	Yes	Template 1	Yes
Customer notifies utility of intent to replace LSL in advance	Yes	No	Yes	Template 4	Yes
Customer notifies utility of LSL replacement after completion	Yes	No	Yes	Template 4	Yes
Disturbance of a LSL, GSR or Unknown Service Line	No	No	Yes	Template 2	No
Disturbance of a LSL, GSR or Unknown Service Line from replacement of a water meter, meter setter, gooseneck, pigtail or connector	Yes	No	No	Template 3	Yes

**Pitcher or Filter Requirements** – The waterworks must provide the consumer with a pitcher filter or point-of-use device certified by an American National Standards Institute (ANSI) accredited certifier to reduce lead, six months of replacement cartridges, and instructions for use before the affected service line is returned to service. If the affected service line serves more than one residence or non-residential building (e.g., a multi-unit building), the waterworks must provide a filter, six months of replacement cartridges and use instructions to every residence in the building.

**Sample Requirements** – The waterworks must offer to collect a follow-up tap sample between three months and six months after completion of a full or partial LSL replacement. The waterworks must provide the results of the sample to the customer as soon as practicable, but no later than 3 calendar days after the waterworks learns of the tap monitoring results.

**Flushing Instructions** – The waterworks must provide information about service line flushing before the affected service line is returned to service. These instructions are for the customer to flush the service line and premise plumbing of particulate lead.

**Consumer Notification Templates** -The waterworks must notify customers of the risk of elevated lead levels, provide public education materials, and provide flushing instructions before returning a service line to service following a replacement or disturbance. The templates address the required elements.

**10. Lead Service Line Replacement Goal Rate (40 CFR § 141.84(b)(4))**

In the event of a lead trigger level exceedance:

- The waterworks serves 10,000 persons or less. A lead service line replacement goal rate is not required.
- The waterworks serves more than 10,000 persons. The waterworks must recommend a lead service line replacement goal rate.

The waterworks proposes a lead service line replacement goal rate of \_\_\_% per year.

To calculate the number of service line replacements applicable to the goal rate, the replacement rate must be applied to the sum of known lead and galvanized requiring replacement service lines when the system first exceeds the trigger level plus the number of lead status unknown service lines in the beginning of each year of a system's annual goal lead service line replacement program.

$$[\text{Required LSL Replacements}] = [\text{Replacement Goal Rate (\%)}] \times [\text{LSL}_{\text{TL}} + \text{GSR}_{\text{TL}} + \text{Unknown}_{\text{Year}}]$$

**11. APPENDIX *Check all that apply and are enclosed***

- Appendix A: Flushing by the utility immediately after lead service replacement
- Appendix B: Instructions for customer flushing following a lead service replacement (40 CFR § 141.84(b)(5))
- Appendix C: Replacement of lead service lines (If provided by water utility)
- Appendix D: Consumer notification templates
- Appendix E: Notification templates (If developed by water utility)

## Appendix A

### Flushing by the utility immediately after lead service replacement

After all connections have been completed, the utility will flush the water from an outside connection (such as hose-bib or hose leading from the house side of the meter installation) to remove any particles in the service line and near point-of-entry. The flushing is best done, if possible and practical, before the meter is connected in the service using a "jumper" or straight pipe in place of the meter. The straight pipe will allow for a higher velocity flush and protects the meter from potential damage from lead pipe and other construction-related fragments. Flush at full velocity for at least 10 minutes. If the meter was replaced with a "jumper," it may be reconnected in the service after utility flushing. Following completion of flushing by the utility, the customer shall flush the interior premise plumbing as described in Appendix B.

Before the service line is returned to service, the water utility provides a copy of Appendix B, *Instructions for Customer Flushing*.

## Appendix B

### Instructions for customer flushing following a lead service replacement

After a service line is replaced, the customer should flush all interior premise plumbing before using the water again. Subsequent flushing by the customer should be done once every two weeks for three months or at other intervals based on monitoring results if available. Utilities may want to encourage best times to flush based on water demand and operations (for example, when neighbors' water usage is low, e.g., midmorning to dinner time or late at night). **Customers shall be advised to not use hot water in the premise plumbing until initial flushing is completed to prevent sedimentation of lead particles in premise hot water tanks.**

#### Instructions for customers.

1. Find all the faucets that will drain, including the basement and all floors in your house.
2. Remove aerators and screens whenever possible, including the shower heads, from all faucets you plan to flush.
3. Include the laundry tubs, outdoor hose-bibs, bathtubs, and showers as flushing points.
4. After all the aerators are removed, open the faucets in the basement or lowest floor in the house. Leave all faucets running at highest rate possible, using cold water.
5. After the faucets are all open in lowest floor, open the faucets on next highest floor of the house. Continue until faucets are open on all floors.
6. After all faucets are opened, leave the water running for at least 30 minutes.
7. After 30 minutes, turn off the first faucet you opened and continue to turn off other faucets in the same order you turned them on.
8. Clean aerators/screens at each faucet. You may need to replace aerators/screens if too old or worn. To clean aerators, cover the drain in your sink to prevent any aerator parts from falling into the drain, then unscrew the aerator and separate each part. Remove any small particles on the screen, soak the parts in white vinegar for a few minutes, and scrub the parts with a brush. After cleaning, put the aerator parts back together and screw the aerator back onto the faucet.

# Consumer Notice Template 1

## Full or Partial Lead Service Line Replacement

We completed a replacement, and we are required to provide this information.  
Corporation of Shepherdstown  
Charles Coe – (304)-876-2394

### Flush your service line prior to use

After a service line is replaced, the customer should flush all interior premise plumbing before using the water again. Subsequent flushing should be done once every two weeks for three months or at other intervals based on monitoring results if available. **Do not use hot water in the premise plumbing until initial flushing is completed to prevent sedimentation of lead particles in premise hot water tanks.**

### Instructions for customer flushing:

1. Find all the faucets that will drain, including in the basement and on all floors in your house.
2. Remove aerators and screens whenever possible, including the shower heads, from all faucets you plan to flush.
3. Include the laundry tubs, hose-bibs, bathtubs, and showers as flushing points.
4. After all the aerators are removed, open the faucets in the basement or lowest floor in the house. Leave all faucets running at highest rate possible, using cold water.
5. After the faucets are all open in lowest floor, open the faucets on next highest floor of the house. Continue until faucets are open on all floors.
6. After all faucets are opened, leave the water running for at least 30 minutes.
7. After 30 minutes, turn off the first faucet you opened and continue to turn off other faucets in the same order you turned them on.
8. Clean aerators/screens at each faucet. You may need to replace aerators/screens if too old or worn. To clean aerators, cover the drain in your sink to prevent any aerator parts from falling into the drain, then unscrew the aerator and separate each part. Remove any small particles on the screen, soak the parts in white vinegar for a few minutes, and scrub the parts with a brush. After cleaning, put the aerator parts back together and screw the aerator back onto the faucet.

### Filter

We are required to provide consumers with a pitcher filter or point-of-use device certified by an American National Standards Institute (ANSI) accredited certifier to reduce lead, six months of replacement cartridges and instructions for use.

### Health effects of lead

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Lead is a common metal that has been in many consumer products but is now known to be harmful to human health if ingested or inhaled. It can be found in lead-based paint, air, soil, household dust, food, some types of pottery, and drinking water. Lead is rarely found in natural sources of water such as rivers, lakes, wells, or springs.

### Steps you can take to reduce exposure to lead in drinking water:

- **Run your water before use.** Daily, allow the water to run at the tap for 5 minutes to flush water through the service line and plumbing in the house before using it for drinking or cooking. Taking a shower, running the dishwasher, or flushing the toilet will also flush your lines.
- **Use cold water for drinking, cooking, and preparing baby formula.** Do not cook with or drink water from the hot water tap as lead dissolves more easily into hot water. **Do not use water from the hot water tap to make baby formula.**
- **Clean your aerator.** Regularly clean your faucet's screen (also known as an aerator). Sediment, debris, and lead particles can collect in your aerator. If lead particles are caught in the aerator, lead can get into your water.
- **Do not boil water to remove lead.** Boiling water does not remove lead.
- **Obtain an NSF (National Sanitation Foundation) Certified home water treatment device** that is certified to remove lead.
- **Identify and replace plumbing fixtures** containing lead and any copper piping with lead solder.

- **Check home wiring.** Water service lines are sometimes used to ground electrical lines. The wiring in your home or building may be attached to your water service line or elsewhere in your plumbing. If you have a lead service line, this can accelerate its corrosion. Have a licensed electrician check your wiring.
- **Get your child tested.** Contact your local health department or healthcare provider to find out how you can get your child's blood tested for lead if you are concerned about exposure.

## Consumer Notice 2

### Disturbance to a Known or Potential Service Line Containing Lead

There was a disturbance to your service line  
Corporation of Shepherdstown  
Charles Coe – (304)-876-2394

#### Potential for elevated lead levels in drinking water.

Following a disturbance to your service line, such as operating a valve or changing your water meter, there is potential for elevated lead levels in your drinking water. Please review the following information.

#### Flush your service line prior to use.

After a service line is replaced, the customer should flush all interior premise plumbing before using the water again. **Do not use hot water in the premise plumbing until initial flushing is completed to prevent sedimentation of lead particles in premise hot water tanks.**

#### Instructions for customer flushing:

1. Find all the faucets that will drain, including the basement and all floors in your house.
2. Remove aerators and screens whenever possible, including the shower heads, from all faucets you plan to flush.
3. Include the laundry tubs, hose-bibs, bathtubs, and showers as flushing points.
4. After all the aerators are removed, open the faucets in the basement or lowest floor in the house. Leave all faucets running at highest rate possible, using cold water.
5. After the faucets are all open in lowest floor, open the faucets on next highest floor of the house. Continue until faucets are open on all floors.
6. After all faucets are opened, leave the water running for at least 30 minutes.
7. After 30 minutes, turn off the first faucet you opened and continue to turn off other faucets in the same order you turned them on.
8. Clean aerators/screens at each faucet. You may need to replace aerators/screens if too old or worn. To clean aerators, cover the drain in your sink to prevent any aerator parts from falling into the drain, then unscrew the aerator and separate each part. Remove any small particles on the screen, soak the parts in white vinegar for a few minutes, and scrub the parts with a brush. After cleaning, put the aerator parts back together and screw the aerator back onto the faucet.

#### Steps you can take to reduce exposure to lead in drinking water:

- **Run your water before use.** Daily, allow the water to run at the tap for 5 minutes to flush water through the service line and plumbing in the house before using it for drinking or cooking. Taking a shower, running the dishwasher, or flushing the toilet will also flush your lines.
- **Use cold water for drinking, cooking, and preparing baby formula.** Do not cook with or drink water from the hot water tap as lead dissolves more easily into hot water. **Do not use water from the hot water tap to make baby formula.**
- **Clean your aerator.** Regularly clean your faucet's screen (also known as an aerator). Sediment, debris, and lead particles can collect in your aerator. If lead particles are caught in the aerator, lead can get into your water.
- **Do not boil water to remove lead.** Boiling water does not remove lead.
- **Obtain an NSF (National Sanitation Foundation) Certified home water treatment device** that is certified to remove lead.
- **Identify and replace plumbing fixtures** containing lead and any copper piping with lead solder.
- **Check home wiring.** Water service lines are sometimes used to ground electrical lines. The wiring in your home or building may be attached to your water service line or elsewhere in your plumbing. If you have a lead service line, this can accelerate its corrosion. Have a licensed electrician check your wiring.
- **Get your child tested.** Contact your local health department or healthcare provider to find out how you can get your child's blood tested for lead if you are concerned about exposure.

# Consumer Notice Template 3

## Disturbance to a Known or Potential Service Line Containing Lead

There was a disturbance to your service line from replacement of a water meter, water meter setter, gooseneck, pigtail, or connector

Corporation of Shepherdstown  
Charles Coe – (304)-876-2394

### Potential for elevated lead levels in drinking water

Following a disturbance to your service line from replacement of a water meter, water meter setter, gooseneck, pigtail, or connector on the service line, there is potential for elevated lead levels in your drinking water. Please review the following information.

### Filters

We are required to provide consumers with a pitcher filter or point-of-use device certified by an American National Standards Institute (ANSI) accredited certifier to reduce lead, six months of replacement cartridges and instructions for use.

### Health effects of lead

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Lead is a common metal that has been in many consumer products but is now known to be harmful to human health if ingested or inhaled. It can be found in lead-based paint, air, soil, household dust, food, some types of pottery, and drinking water. Lead is rarely found in natural sources of water such as rivers, lakes, wells, or springs.

### Steps you can take to reduce exposure to lead in drinking water

- **Run your water before use.** Daily, allow the water to run at the tap for 5 minutes to flush water through the service line and plumbing in the house before using it for drinking or cooking. Taking a shower, running the dishwasher, or flushing the toilet will also flush your lines.
- **Use cold water for drinking, cooking, and preparing baby formula.** Do not cook with or drink water from the hot water tap as lead dissolves more easily into hot water. **Do not use water from the hot water tap to make baby formula.**
- **Clean your aerator.** Regularly clean your faucet's screen (also known as an aerator). Sediment, debris, and lead particles can collect in your aerator. If lead particles are caught in the aerator, lead can get into your water.
- **Do not boil water to remove lead.** Boiling water does not remove lead.
- **Obtain an NSF (National Sanitation Foundation) Certified home water treatment device** that is certified to remove lead.
- **Identify and replace plumbing fixtures** containing lead and any copper piping with lead solder.
- **Check home wiring.** Water service lines are sometimes used to ground electrical lines. The wiring in your home or building may be attached to your water service line or elsewhere in your plumbing. If you have a lead service line, this can accelerate its corrosion. Have a licensed electrician check your wiring.
- **Get your child tested.** Contact your local health department or healthcare provider to find out how you can get your child's blood tested for lead if you are concerned about exposure.

## Consumer Notice Template 4

### Customer Lead Service Line Replacement

Utility notified of intent to replace customer's portion of an LSL.  
Utility notified of completed replacement of customer's portion of an LSL.  
We are required to provide this information.  
Corporation of Shepherdstown  
Charles Coe – (304)-876-2394

#### Flush your service line prior to use

After a service line is replaced, the customer should flush all interior premise plumbing before using the water again. Subsequent flushing should be done once every two weeks for three months or at other intervals based on monitoring results if available. **Do not use hot water in the premise plumbing until initial flushing is completed to prevent sedimentation of lead particles in premise hot water tanks.**

#### Instructions for customer flushing:

1. Find all the faucets that will drain, including the basement and all floors in your house.
2. Remove aerators and screens whenever possible, including the shower heads, from all faucets you plan to flush.
3. Include the laundry tubs, hose-bibs, bathtubs, and showers as flushing points.
4. After all the aerators are removed, open the faucets in the basement or lowest floor in the house. Leave all faucets running at highest rate possible, using cold water.
5. After the faucets are all open in lowest floor, open the faucets on next highest floor of the house. Continue until faucets are open on all floors.
6. After all faucets are opened, leave the water running for at least 30 minutes.
7. After 30 minutes, turn off the first faucet you opened and continue to turn off other faucets in the same order you turned them on.
8. Clean aerators/screens at each faucet. You may need to replace aerators/screens if too old or worn.

#### Filter

We are required to provide consumers with a pitcher filter or point-of-use device certified by an American National Standards Institute (ANSI) accredited certifier to reduce lead, six months of replacement cartridges and instructions for use.

#### Health effects of lead

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Lead is a common metal that has been in many consumer products but is now known to be harmful to human health if ingested or inhaled. It can be found in lead-based paint, air, soil, household dust, food, some types of pottery, and drinking water. Lead is rarely found in natural sources of water such as rivers, lakes, wells, or springs.

#### Steps you can take to reduce exposure to lead in drinking water

- **Run your water before use.** Daily, allow the water to run at the tap for 5 minutes to flush water through the service line and plumbing in the house before using it for drinking or cooking. Taking a shower, running the dishwasher, or flushing the toilet will also flush your lines.
- **Use cold water for drinking, cooking, and preparing baby formula.** Do not cook with or drink water from the hot water tap as lead dissolves more easily into hot water. **Do not use water from the hot water tap to make baby formula.**
- **Clean your aerator.** Regularly clean your faucet's screen (also known as an aerator). Sediment, debris, and lead particles can collect in your aerator. If lead particles are caught in the aerator, lead can get into your water.
- **Do not boil water to remove lead.** Boiling water does not remove lead.
- **Obtain an NSF (National Sanitation Foundation) Certified home water treatment device** that is certified to remove lead.
- **Identify and replace plumbing fixtures** containing lead and any copper piping with lead solder.
- **Check home wiring.** Water service lines are sometimes used to ground electrical lines. The wiring in your home or building may be attached to your water service line or elsewhere in your plumbing. If you have a lead service line, this can accelerate its corrosion. Have a licensed electrician check your wiring.

- **Get your child tested.** Contact your local health department or healthcare provider to find out how you can get your child's blood tested for lead if you are concerned about exposure.

## **Consumer Notice Template 5**

### **Planned Lead Service Line Replacement**

We plan to complete your lead service line, and we are required to provide this information.

Corporation of Shepherdstown  
Charles Coe – (304)-876-2394  
Planned replacement date: [date]

[Use for partial service line replacement:]

#### **Planned Partial Lead Service Line Replacement**

We plan to partially replace a lead service line (e.g., replace only the portion of a lead service line owned by the water utility) in coordination with planned infrastructure work. We will replace the lead service line from the water main to the water meter.

#### **Notice Required**

We must provide this notice to the owner of the affected service line, or the owner's authorized agent, as well as non-owner resident(s) served by the affected service line at least 45 days prior to the replacement.

#### **Health effects of lead**

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Lead is a common metal that has been in many consumer products but is now known to be harmful to human health if ingested or inhaled. It can be found in lead-based paint, air, soil, household dust, food, some types of pottery, and drinking water. Lead is rarely found in natural sources of water such as rivers, lakes, wells, or springs.

#### **Customer Portion of the Service Line**

The customer or property owner is responsible for maintaining the portion of the service line from the water meter to the home or building (customer service line). As part of the planned infrastructure work, you may work with us to replace the customer service line at the same time as utility service line. The water utility is not required to bear the cost of replacement of the customer service line. Please contact us at the phone number above to learn more about replacement of the customer service line.

[Use for Full Service Line Replacements:]

#### **Planned Full Lead Service Line Replacement**

We plan to complete a full replacement of a lead service line (i.e., replace entire lead service). We will replace the lead service line from the water main to the home or building.

#### **Notice Required**

We must provide this notice to the owner of the affected service line, or the owner's authorized agent, as well as non-owner resident(s) served by the affected service line at least 45 days prior to the replacement.

#### **Health effects of lead**

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Lead is a common metal that has been in many consumer products but is now known to be harmful to human health if ingested or inhaled. It can be found in lead-based paint, air, soil, household dust, food, some types of pottery, and drinking water. Lead is rarely found in natural sources of water such as rivers, lakes, wells, or springs.

#### **Customer Portion of the Service Line**

The customer or property owner is responsible for maintaining the portion of the service line from the water meter to the home or building (customer service line). Before proceeding with the work, we must establish an agreement. Please contact us at the phone number above to learn more about replacement of the customer service line.