

Exhibit No.:

Issues:	AAO Lead Line Replacements
Witness:	Bruce W. Aiton
Exhibit Type:	Surrebuttal
Sponsoring Party:	Missouri-American Water Company
Case No.:	WU-2017-0296
Date:	September 14, 2017

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WU-2017-0296

SURREBUTTAL TESTIMONY

OF

BRUCE W. AITON

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

**2BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

<u>IN THE MATTER OF THE APPLICATION OF) MISSOURI-AMERICAN WATER COMPANY FOR) AN ACCOUNTING ORDER CONCERNING MAWC's) LEAD SERVICE LINE REPLACEMENT PROGRAM.)</u>	CASE NO. WU-2017-0296
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AFFIDAVIT OF BRUCE W. AITON

Bruce W. Aiton, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Rebuttal Testimony of Bruce W. Aiton"; that said testimony and schedules were prepared by him and/or under his direction and supervision; that if inquiries were made as to the facts in said testimony and schedules, he would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of his knowledge.



Bruce W. Aiton

State of Missouri

County of St. Louis

SUBSCRIBED and sworn to

Before me this 8th day of August 2017.



Notary Public

My commission expires:



**SURREBUTTAL TESTIMONY
BRUCE W. AITON
MISSOURI-AMERICAN WATER COMPANY
CASE NO. WU-2017-0296**

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SURREBUTTAL TESTIMONY

BRUCE W. AITON

I. INTRODUCTION

1 **Q. Please state your name and business address.**

2 A. My name is Bruce Aiton, and my business address is 727 Craig Rd., Creve Couer, MO
3 63141.

4
5 **Q. By whom are you employed and in what capacity?**

6 A. I am employed by Missouri-American Water Company (“MAWC” or the “Company”)
7 as Director of Engineering.

8
9 **Q. Are you the same Bruce Aiton that filed direct and rebuttal testimony in this**
10 **matter (WU-2017-0296)?**

11 A. Yes

12

13

II. PURPOSE

14 **Q. What is the purpose of your surrebuttal testimony in this proceeding?**

15 A. My surrebuttal testimony further supports the Company’s request for an Accounting
16 Authority Order related to replacement of customer-owned lead service lines.
17 Specifically, I will address the rebuttal testimony of Office of the Public Counsel
18 (“OPC”) witness Geoff Marke regarding the cost and estimated quantity of service lines
19 affected by this issue, and issues that may be encountered in the future during line

1 replacements. I will also respond to the rebuttal of Missouri Public Service
2 Commission staff (“Staff”) witness James Merciel as it relates to the Company’s future
3 approach to this issue.
4

5 **III. ESTIMATED COST AND QUANTITY**

6 **Q. On pages 14-16 of his rebuttal testimony, OPC witness Marke suggests that**
7 **MAWC’s estimate that it has approximately 30,000 lead service lines in its systems**
8 **“is likely understated” given his review of an AWWA study. Do you agree that**
9 **MAWC’s estimate is “likely understated”?**

10 A. No. While MAWC’s estimate of lead service lines may not be perfect, it is based on
11 existing data from the Company’s tap cards and field experience.¹ In making his
12 allegation, OPC witness Marke references a 2016 AWWA journal article titled
13 “National Survey of Lead Service Line Occurrence.” This National Survey is based on
14 more general information that has been extrapolated to an estimate for the entire state.
15 It is necessarily far less precise than a review of historical data and field experience
16 across the MAWC systems. In his surrebuttal testimony, Company witness Gary
17 Naumick further discusses why OPC witness Marke’s use of this National Survey to
18 estimate lead service lines is not sound.
19

20 **Q. OPC witness Marke disagrees with MAWC’s original estimate of \$3,000 to \$5,500**
21 **average cost for lead service line replacements. (Marke Reb., p. 17) How would**
22 **you respond to the issues OPC witness Marke raises in this regard?**

¹ See Aiton Direct Testimony, p. 9, and Aiton Rebuttal Testimony, p. 2.

1 A. While it is true that it can be difficult to accurately estimate the cost to replace lead
2 service lines (“LSLs”),² MAWC and its vendors who do pipe replacement and service
3 line replacement every day as a core part of the business remain the best source to
4 estimate these costs. MAWC has continued to refine the cost to replace service lines,
5 based on a small number of lines that have been replaced this year and revised quotes
6 from vendors.

7
8 **Q. What additional information has the Company received since that initial**
9 **estimate?**

10 A. The Company has experienced costs greater than the original estimated average cost of
11 \$3,000-\$5,500 for some replacements. These more costly replacements, however,
12 represent longer and more difficult excavations than expected on average. Also, since
13 providing its original estimate, MAWC has engaged in a bidding process seeking bids
14 from vendors to establish costs for service line replacements in St Louis County. The
15 vendor pricing for lead service line replacements in St. Louis County is attached as
16 **Schedule BA-SR1**. It shows an estimated price of \$5,817 based on a 60’ service line
17 and includes a \$1,500 allowance for rock excavation. If no rock is encountered, the
18 estimated price would be \$4,317. The actual price will vary up or down from this
19 estimate depending on the circumstances of each replacement, but it is in the range of
20 the Company’s original estimate.

21

² See Marke Rebuttal, p.17, ll.10-11.

1 **Q. Based upon your additional experience and the result of the bidding process, have**
2 **you adjusted your estimate of the average per service line cost for the replacement**
3 **plan?**

4 A. Yes, somewhat. We now believe that the total price for LSL replacements may result
5 in a slightly higher average cost than the original estimated average cost of \$3,000 to
6 \$5,500. Based on refined estimates and experience, the Company believes the
7 estimated average cost across all the replacements will be approximately \$6,000.

8
9 **IV. FUTURE ACTIONS**

10 **Q. Staff witness Merciel suggests that if the AAO is not granted, MAWC will “likely**
11 **only complete a partial LSL replacement as needed for the specific project.”³ Will**
12 **this be the result if MAWC does not receive approval of the AAO?**

13 A. This is certainly not the Company’s preference, as MAWC strongly believes that the
14 removal of LSLs is important to avoid the risk of potential exposure to lead through
15 drinking water. Initially, rather than performing partial lead service line replacements,
16 MAWC may likely try to avoid areas with LSLs and postpone main replacement
17 projects with known LSLs to avoid increasing the risk of potential exposure to lead
18 associated with a partial replacement. However, there is a downside related to this as
19 delaying main replacement projects can increase the number of main breaks and leaks
20 over time. This can be costly and disruptive to customers and the community. Planned
21 pipe replacements are much less costly on a unit cost basis than the costs of increasing
22 pipe breaks, service disruptions, property damages, health risks from potential drinking

³ See Merciel Rebuttal, p.6, 9-10.

1 water contamination exposure during pipe breaks, related community opportunity costs
2 related to community health and economic development, and the steep increase in
3 future pipe replacements resulting from prior deferrals of the replacements. In addition,
4 MAWC's works with other entities when pipelines need to be relocated due to work by
5 other utilities, state and local roadway projects and redevelopment. Considering the
6 level of coordination normally needed for the various types of infrastructure upgrades
7 by the Company, the Commission should be aware that there could be a wider potential
8 impact if the AAO is not granted.

9

10 **Q. Please elaborate on the other issues that can arise if MAWC does not have a clear**
11 **path for customer-owned lead service line replacement?**

12 A. MAWC will be faced with multiple dilemmas beyond merely postponing main
13 replacement projects. For example, in situations where the Company normally
14 coordinates with municipalities' road construction projects and MAWC is aware of
15 LSLs in the construction area, MAWC will be forced to decide whether to replace its
16 main in conjunction with that road construction project. If it chooses not to do so
17 because of the risk associated with partial replacements, the ultimate main replacement
18 will likely come at a greater cost, and inconvenience, to its customers. If MAWC
19 instead chooses to move forward at the time of construction, it would be forced to
20 perform partial replacements that are known to increase the risk of potential exposure
21 to lead through drinking water. Neither is an optimal outcome. Similar situations
22 could arise when other underground utilities (gas, electric, sewer, telecom, storm
23 sewers), railroad entities and other stakeholders perform work in these areas and

1 request MAWC relocate its water mains. MAWC would not likely have time to resolve
2 such a situation without impacting the schedule of other entities.

3
4 **Q. If MAWC delays its work in the situation described above, does that avoid the**
5 **risk for customers?**

6 A. No. Customers have a similar risk related to service lines that may be disturbed through
7 the work of other utilities as well. For example telephone, electric, or cable companies
8 directionally drilling in new cable can also disturb the lead service pipe and may or
9 may not require relocation by the Company.

10 Ultimately, the risk to the public is only lowered if we are able to replace these lines
11 and remove the source of the potential exposure.

12
13 **Q. OPC witness Marke identifies several concerns that OPC has with MAWC's**
14 **communications, testing and prioritization. (Marke Reb., p. 21-22) How does**
15 **MAWC plan to address the various issues raised by OPC witness Marke?**

16 A. MAWC was aware and had considered most of the questions raised by OPC witness
17 Marke. Attached as Schedules BA-SR2 and BA-SR3 are a process flow chart and
18 communication materials that illustrate how MAWC will go about addressing many of
19 these questions. MAWC crews and contractors regularly work in excavations where
20 they encounter different and often unexpected conditions. Some are very small and
21 inconsequential, like working around the neighborhood "trash day," while others take
22 more thought. These situations are dealt with effectively every day.

1 **Q. How does MAWC plan to address LSLs as part of its main replacement project**
2 **prioritization process?**

3 A. On an annual basis, MAWC prioritizes main replacement projects on a state-wide basis.
4 Factors considered in the prioritization process include the frequency of main breaks
5 and customer complaints associated with existing line, the hydraulic flow and pressure
6 adequacy of the existing line, and the primary consequences or impacts on the system
7 and the community of additional line failures. The Company also considers the type
8 and number of customers affected by failures in the line in question and the potential
9 to coordinate with municipalities and other utilities in joint improvement projects. We
10 plan to overlay the known lead service line locations with the above priority areas and
11 working to replace all known lead service lines within a ten-year timeframe.

12
13 **Q. Does this conclude your surrebuttal testimony at this time?**

14 A. Yes, it does.

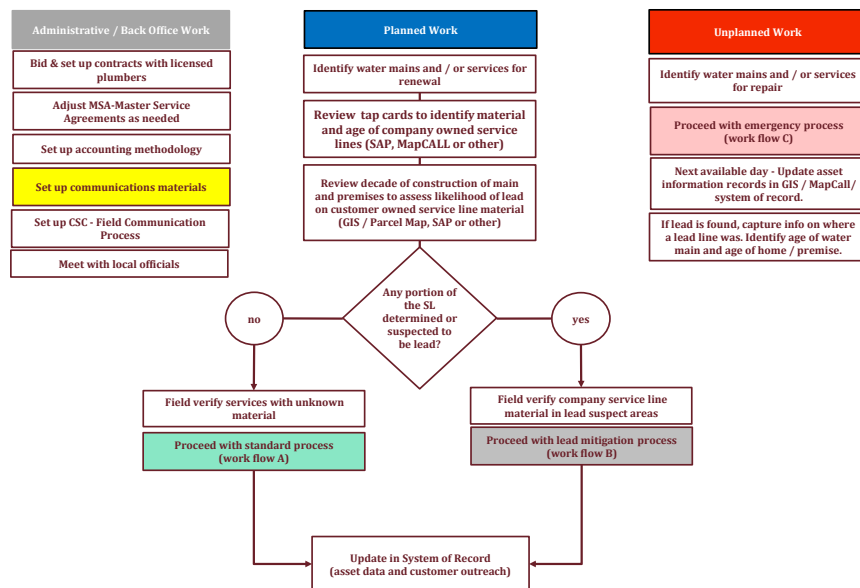
SCHEDULE A - ALL ST. LOUIS COUNTY

CBA - 2017 LEAD SERVICE LINES

Item	Description	UoM	Excel Utility
1	Tap Hole, Tap Main Line, Destroy Existing Tap	EA	\$ 729.50
2A	Install 1" Copper Service Line (Includes removal of any existing service line material).	LF	\$ 19.00
2B	Install 1" HDPE Service Line (Includes removal of any existing service line material).	LF	\$ 16.00
3	Install Stop Box	EA	\$ 437.75
4	Install Meter Pit, and Meter Setter (3/4" Setter - MOAW to Install Meter)	EA	\$ 672.91
5	Core Drill Foundation (Includes Grouting of Old Service)	EA	\$ 157.56
6	Removal of existing Meter Box and Meter Setter (Removal of existing meter box to include removal of lid and ring and backfill.	EA	\$ 190.89
7	Rock Excavation Adder	LF	\$ 150.00
8	Water Sampling (Include Delivery to Lab)	EA	\$ 364.00
9	Temporatrty Paving, Hot / Cold Patch. The contract price shall include the furnishing and installation of temporary bituminous material in accordance with Specification Section 2610, Part 3.01, or as otherwise required by Federal, State or Local Authorities. By approval only when contacted on an emergency basis. Pricing includes material and labor for Installation.	YD3	\$ 235.89
10	Non-native granular backfill. Provide, Deliver, Place & Compact Rock Base - backfill, non-naitive soil, Local DOT / Code required (up to 1 1/2" stones, AASHTO #57)	TON	\$ 25.00
11	Sampled QTY Per Service	QTY	
12	Tap Hole, Tap Main Line, Destroy Existing Tap	1	\$ 729.50
13	Install 1" Copper Service Line (Includes removal of any existing service line material).	60	\$ 1,140.00
14	Install 1" HDPE Service Line (Includes removal of any existing service line material).	0	\$ -
15	Install Stop Box	1	\$ 437.75
16	Install Meter Pit, and Meter Setter (3/4" Setter - MOAW to Install Meter)	1	\$ 672.91
17	Core Drill Foundation (Includes Grouting of Old Service)	1	\$ 157.56
18	Removal of existing Meter Box and Meter Setter (Removal of existing meter box to include removal of lid and ring and backfill.	1	\$ 190.89
19	Rock Excavation Adder	10	\$ 1,500.00
20	Water Sampling (Include Delivery to Lab)	2	\$ 728.00
21	Temporatrty Paving, Hot / Cold Patch. The contract price shall include the furnishing and installation of temporary bituminous material in accordance with Specification Section 2610, Part 3.01, or as otherwise required by Federal, State or Local Authorities. By approval only when contacted on an emergency basis. Pricing includes material and labor for Installation.	1	\$ 235.89
22	Non-native granular backfill. Provide, Deliver, Place & Compact Rock Base - backfill, non-naitive soil, Local DOT / Code required (up to 1 1/2" stones, AASHTO #57)	1	\$ 25.00
23	TOTAL ESTIMATED PRICING PER SERVICE LINE		\$ 5,817.50

Water Main / Service Line Renewal

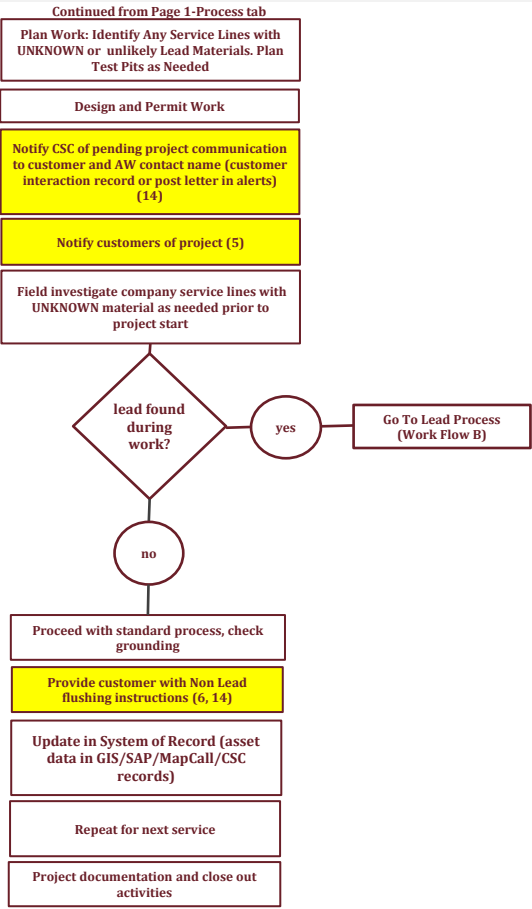
Basic Work flow
v. 05.18.17



Customer Communication Steps	
1	Customer Information Packet: Lead Service Line Replacement Offer
2	Customer Release Form: Customer allows AW to test pit on private property for unknown material or suspect LSL
3	Doorhanger - service line assessment result
4	Release Form: Customer signs to allow AW to work on private property / Customer accepts or declines LSLR offer
5	Customer Letter: Water main renewal project letter
6	Doorhanger: Flushing Instructions - Non Lead
7	Flushing Instructions - Lead & case of bottled water
8	Contractor Flyer: Grounding info
9	Contractor Flyer: Sample information packet with sample bottle (customer version included in 6 above)
10	Customer Letter: Sample result letter
11	Door Hanger: Reminder to collect 72-Hour Post Work sample
12	Customer Discussion: Premise Plumbing Issue- use lead fact sheet
13	Customer Discussion: Emergency partial performed - full replacement pending / use lead fact sheet & discuss filter
14	Customer interaction record - local company process
15	Lead Fact Sheet
16	Code Red Script - optional

Water Main / Service Line Renewal (lead unlikely)

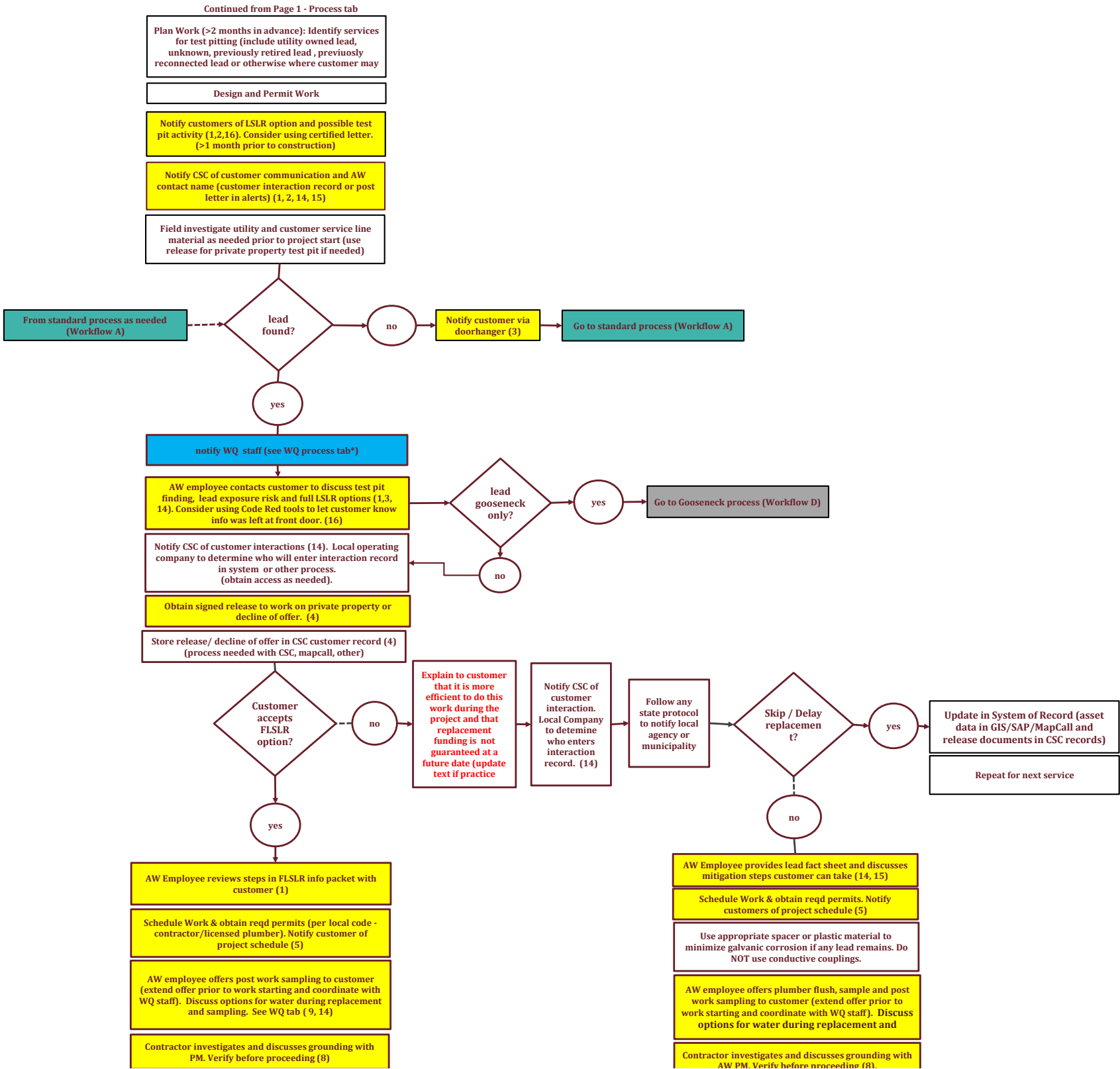
Workflow A
v. 05.18.17



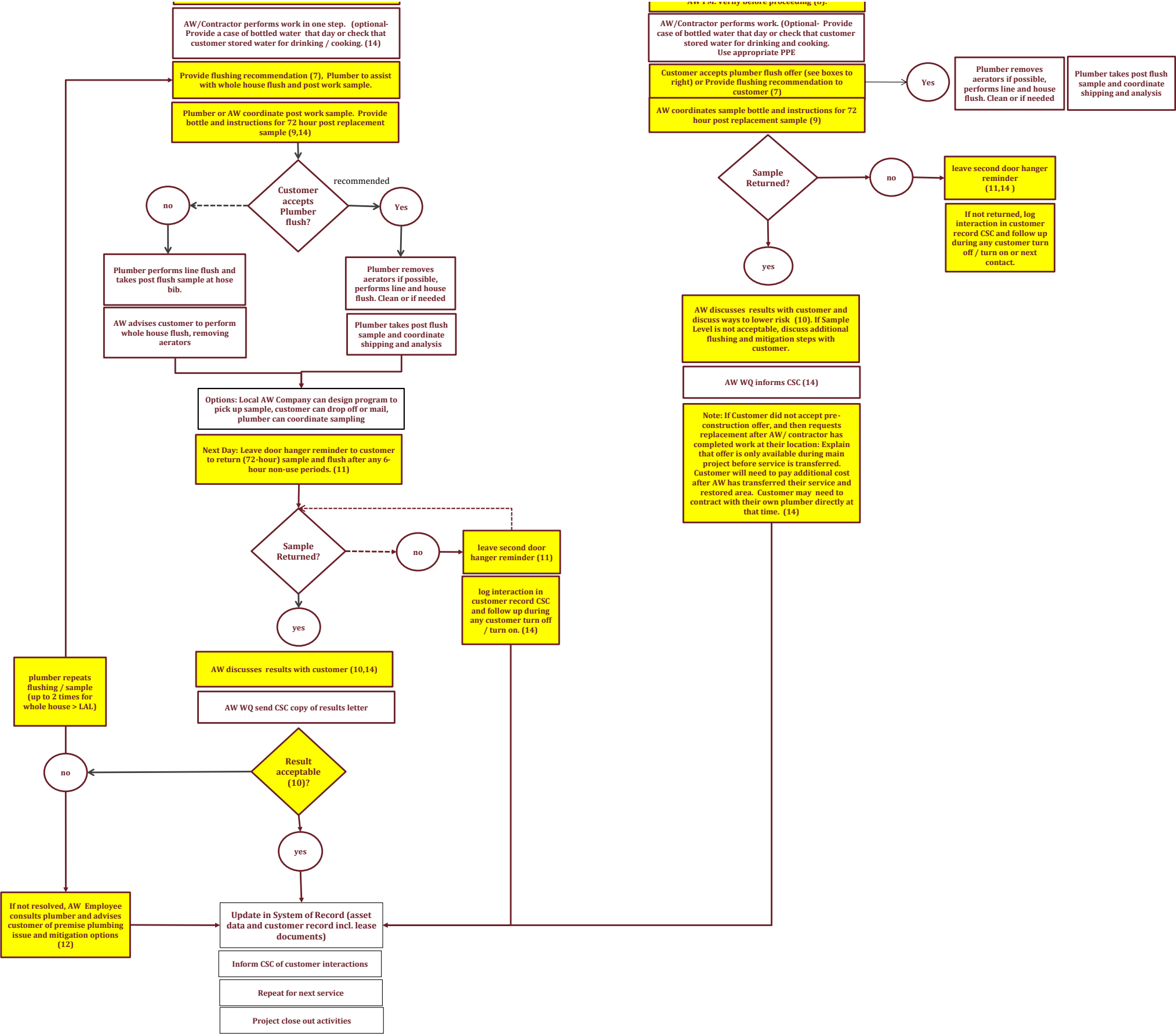
Customer Communication Steps
1 Customer Information Packet: Lead Service Line Replacement Offer
2 Customer Release Form: Customer allows AW to test pit on private property for unknown material or suspect LSL
3 Doorhanger - service line assessment result
4 Release Form: Customer signs to allow AW to work on private property / Customer accepts or declines LSLR offer
5 Customer Letter: Water main renewal project letter
6 Doorhanger: Flushing Instructions - Non Lead
7 Flushing Instructions - Lead & case of bottled water
8 Contractor Flyer: Grounding info
9 Contractor Flyer: Sample information packet with sample bottle (customer version included in 6 above)
10 Customer Letter: Sample result letter
11 Door Hanger: Reminder to collect 72-Hour Post Work sample
12 Customer Discussion: Premise Plumbing Issue- use lead fact sheet
13 Customer Discussion: Emergency partial performed - full replacement pending / use lead fact sheet & discuss filter
14 Customer interaction record - local company process
15 Lead Fact Sheet
16 Code Red Script - optional

Water Main / Service Line Renewal - Lead Services Likely or Possible

Workflow B
v. 05.18.17

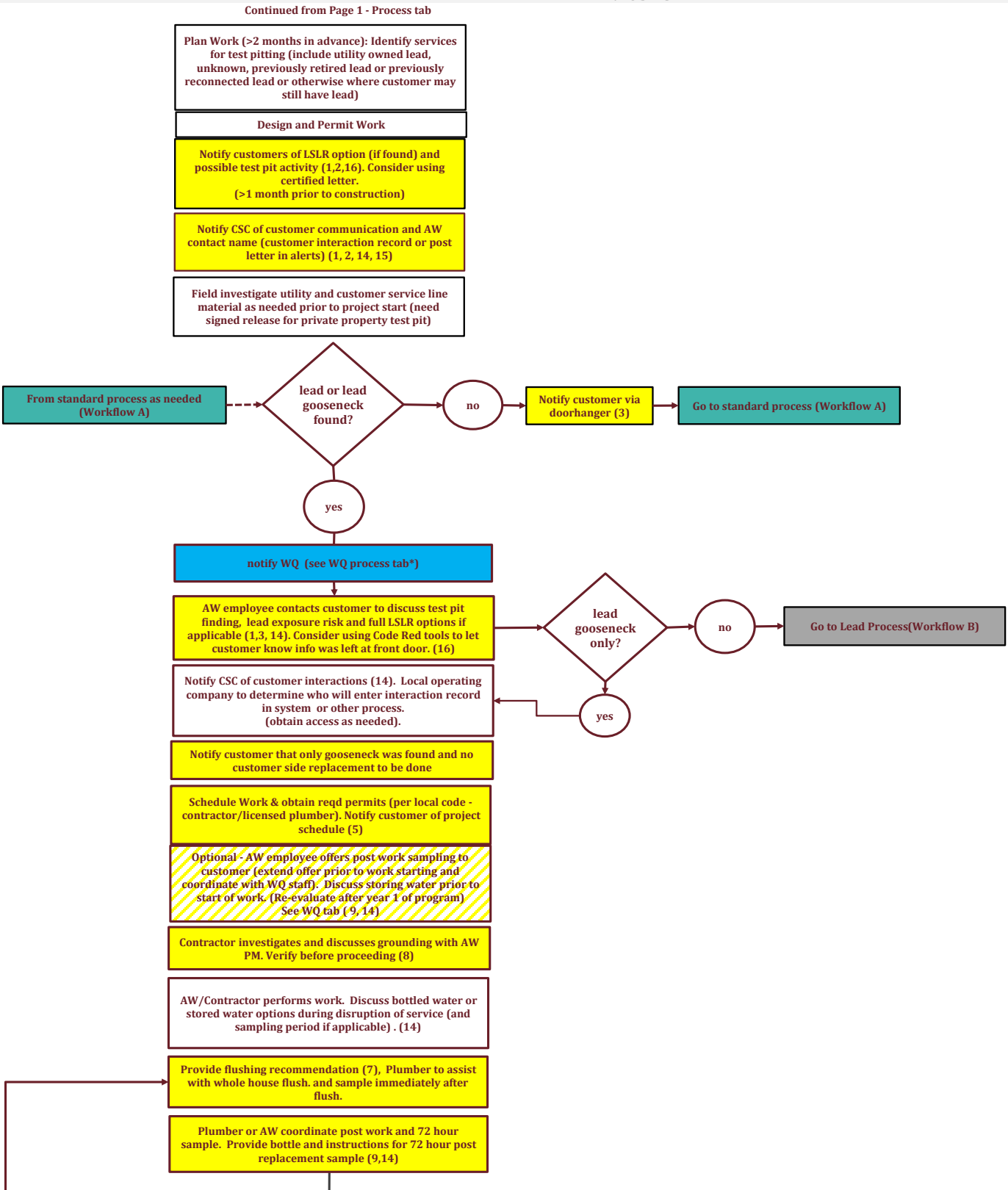


Customer Communication Steps	
1	Customer Information Packet: Lead Service Line Replacement Offer
2	Customer Release Form: Customer allows AW to test pit on private property for unknown material or suspect LSL
3	Doorhanger - service line assessment result
4	Release Form: Customer signs to allow AW to work on private property / Customer accepts or declines LSLR offer
5	Customer Letter: Water main renewal project letter
6	Doorhanger: Flushing Instructions - Non Lead
7	Flushing Instructions - Lead & case of bottled water
8	Contractor Flyer: Grounding info
9	Contractor Flyer: Sample information packet with sample bottle (customer version included in 6 above)
10	Customer Letter: Sample result letter
11	Door Hanger: Reminder to collect 72-Hour Post Work sample
12	Customer Discussion: Premise Plumbing Issue- use lead fact sheet
13	Customer Discussion: Emergency partial performed - full replacement pending / use lead fact sheet & discuss filter
14	Customer interaction record - local company process
15	Lead Fact Sheet
16	Code Red Script - optional

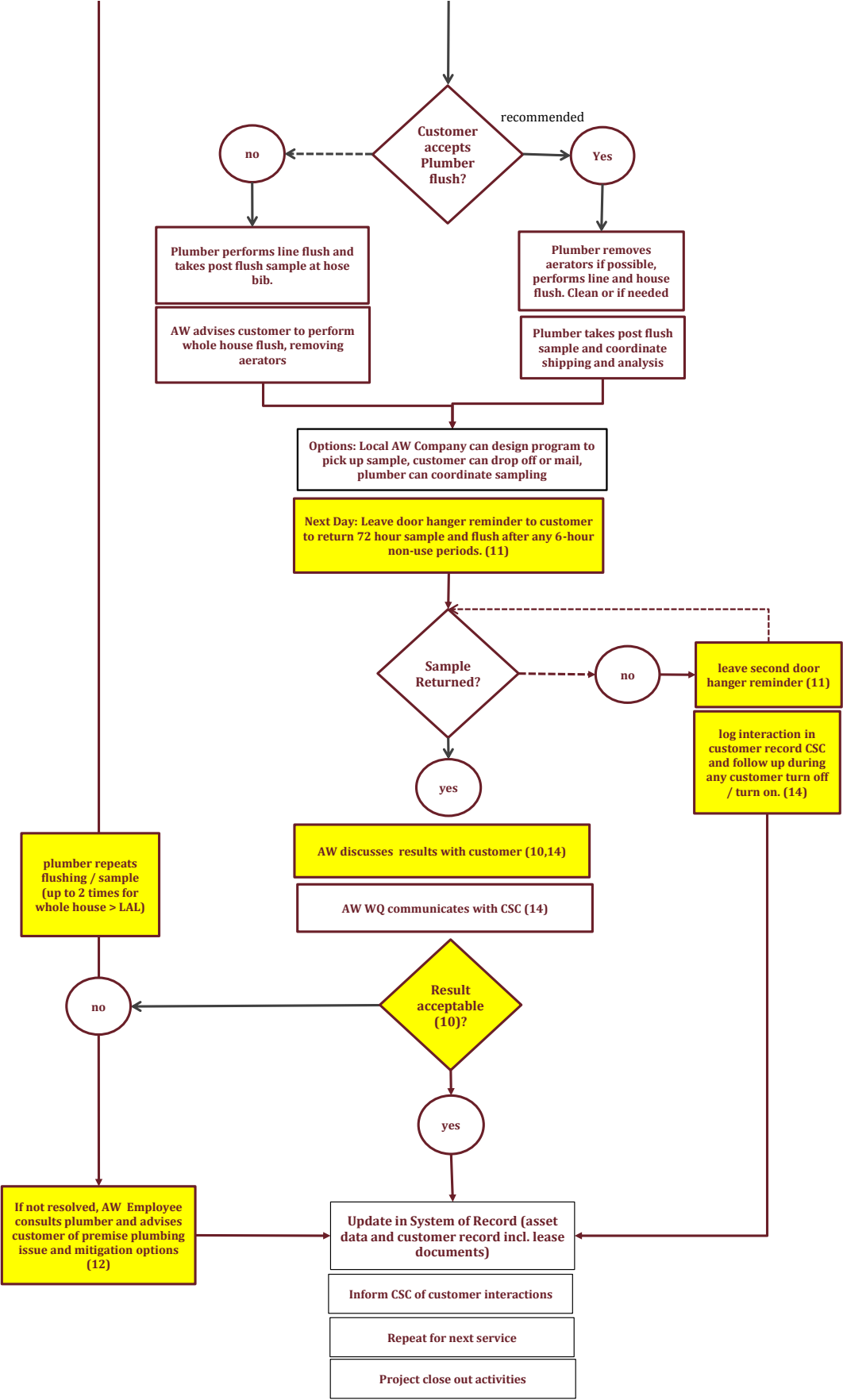


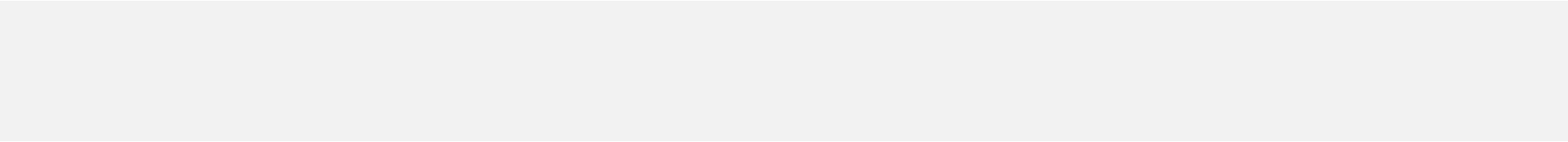
Water Main / Service Line Renewal - Lead Gooseneck Likely or Possible

Workflow B - suspect gooseneck only
v. 05.18.17



Customer
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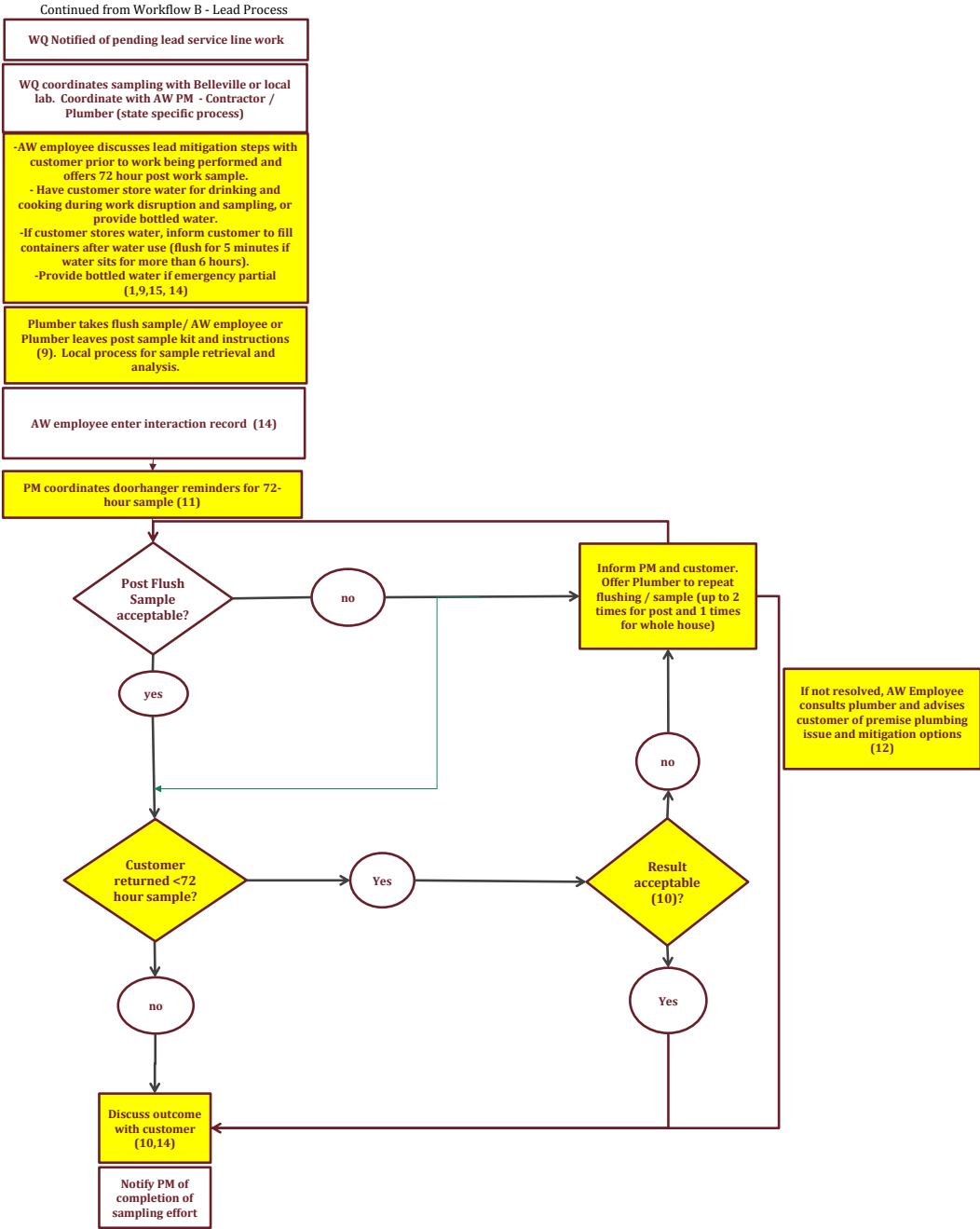




Communication Steps
Customer Information Packet: Lead Service Line Replacement Offer
Customer Release Form: Customer allows AW to test pit on private property for unknown material or suspect LSL
Doorhanger - service line assessment result
Release Form: Customer signs to allow AW to work on private property / Customer accepts or declines LSLR offer
Customer Letter: Water main renewal project letter
Doorhanger: Flushing Instructions - Non Lead
Flushing Instructions - Lead & case of bottled water
Contractor Flyer: Grounding info
Contractor Flyer: Sample information packet with sample bottle (customer version included in 6 above)
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Customer Discussion: Premise Plumbing Issue- use lead fact sheet
Customer Discussion: Emergency partial performed - full replacement pending / use lead fact sheet & discuss filter
Customer interaction record - local company process
Lead Fact Sheet
Code Red Script - optional

Water Main / Service Line Renewal - Water Quality Staff Workflow

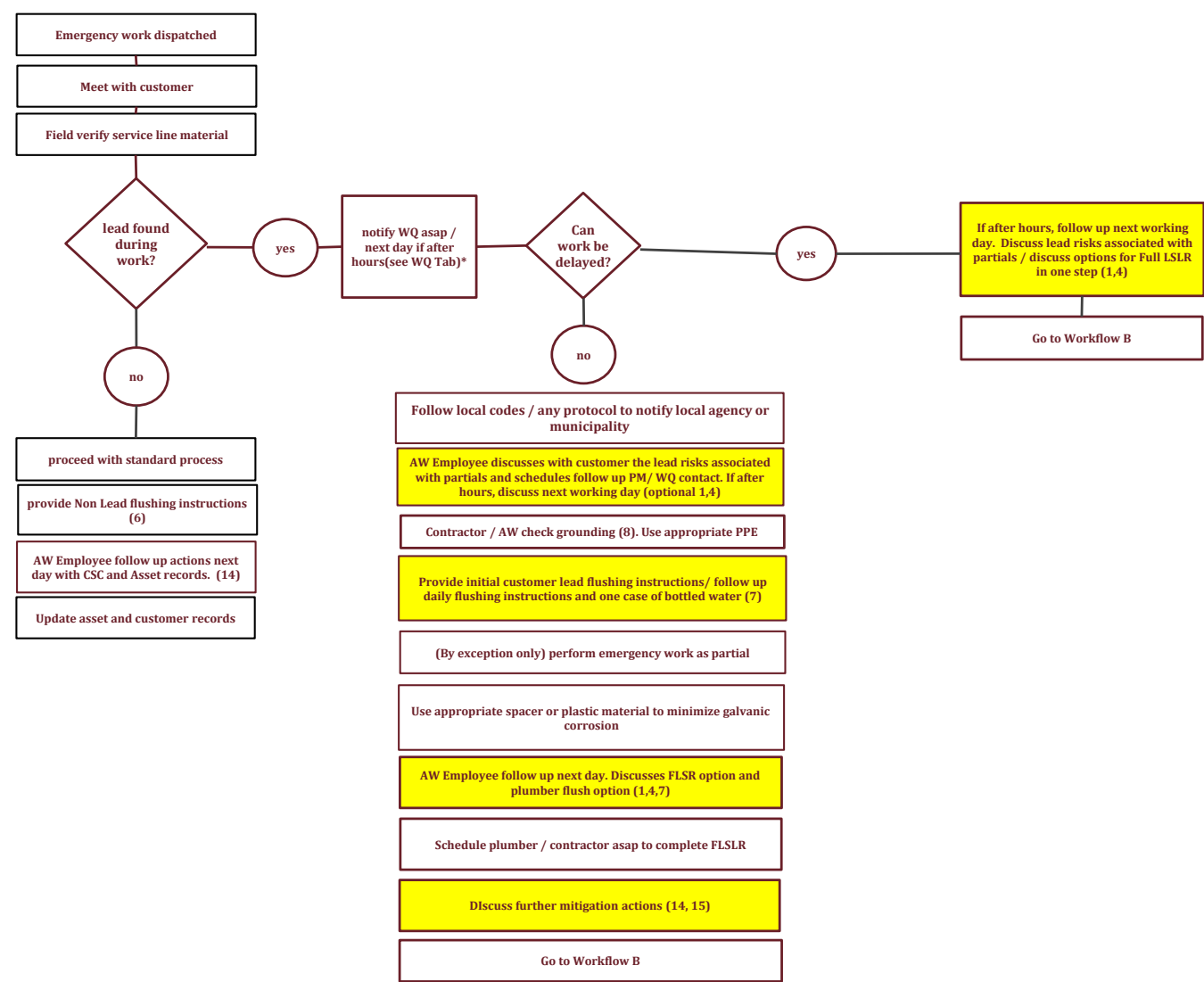
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Customer Communication Steps	
1	Customer Information Packet: Lead Service Line Replacement Offer
2	Customer Release Form: Customer allows AW to test pit on private property for unknown material or suspect LSL
3	Doorhanger - service line assessment result
4	Release Form: Customer signs to allow AW to work on private property / Customer accepts or declines LSLR offer
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13	Customer Discussion: Emergency partial performed - full replacement pending / use lead fact sheet & discuss filter
14	Customer interaction record - local company process
15	Lead Fact Sheet
16	Code Red Script - optional

Emergency Work (unknown material)

Workflow C



Customer CommunicationSteps	
1	Customer Information Packet: Lead Service Line Replacement Offer
2	Customer Release Form: Customer allows AW to test pit on private property for unknown material or suspect LSL
3	Doorhanger - service line assessment result
4	Release Form: Customer signs to allow AW to work on private property / Customer accepts or declines LSLR offer
5	Customer Letter: Water main renewal project letter
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12	Customer Discussion: Premise Plumbing Issue- use lead fact sheet
13	Customer Discussion: Emergency partial performed - full replacement pending / use lead fact sheet & discuss filter
14	Customer interaction record - local company process
15	Lead Fact Sheet
16	Code Red Script - optional

FREQUENTLY ASKED QUESTIONS

Why am I receiving this information?

The water infrastructure in your street is being upgraded. If any portion of the service line from the water main to your house is made of lead, we can replace it during this work.

Why should I participate in this program?

Your decision to replace an old lead service line is an important one. The U.S. Centers for Disease Control (CDC) and the U.S. Environmental Protection Agency (EPA) recommend replacing the entire lead service line rather than only replacing a portion of the line. Because replacing only a portion of the lead service line can potentially increase the exposure to lead through drinking water, your entire service line should be replaced.

What is included?

An entire new water service line would be installed from the new water main to a valve inside your house (limited up to 5 feet inside your house). If there is no existing valve, we will install one as needed. In addition, if your household electric system is grounded through your lead service line, we will have a certified electrician check your electric system to make sure it's grounded properly.

How will this be funded?

As part of this project, we will cover a portion, and in some cases all, of the costs related to replacing the customer-owned portion of the lead service line. If there are any costs that you would be responsible for, we would provide you with an advanced estimate for your approval. Note: Home improvements/modifications are not covered.

How long will this take?

Generally, an entire new service line can be installed in one day. Additional time may be needed if obstacles, such as other underground piping, are in the way.

Do I need to be home?

You will need to be home for part of the work. To remove the entire lead service line, we will need to access your existing customer-owned service line as it enters your house. You also will need to be home to flush your plumbing.

How do you install a new water service line?

There are several construction methods that may be considered. Our contractor will evaluate the options and provide the best approach.

Will my water service be turned off during this work?

A short, temporary disruption may occur as we transition your water service from the old lead service line to the new service line. We will make every effort to minimize any disruption.

Why do I need to flush my household plumbing after replacement of the service line?

Flushing of your household plumbing can remove any pipe scale that broke loose during construction. Pipe scale can contain lead so it is important to flush it out.

If I choose to participate, when can you schedule this work?

We need to perform this work as we are upgrading the water main in your street. We will contact you to schedule a time that works for you. Normal hours are from 7 a.m. to 7 p.m.

Are my local officials aware of this work?

Yes. We are coordinating this work with your local municipality. They can also help direct questions to us.

Can I use a filter to remove lead instead of replacing the lead service line?

While using filters rated to remove lead can be effective if properly maintained, removing the entire lead service line pipe will remove a source of lead and help to minimize your risk of exposure to lead in drinking water.

If I'm not ready to replace my service line now, will you cover any costs if I replace it later?

At this time, this program is only offered when we are upgrading our water mains. If you decide to replace your service line at a later date, we can not guarantee that we could cover the costs. You may need to pay to have a plumber and an electrician perform the work.

My household plumbing is lead. Will you replace that as well?

No, this project will only replace lead water service lines from the water main to the first valve within your household, up to 5 feet.

About Lead

Missouri American Water regularly tests for lead in drinking water at our treatment facilities and at representative sites in the distribution system, and we comply with drinking water standards. For more information, visit missouriamwater.com. Under **Water Quality**, select **Water Quality Reports**.

What steps can I take to minimize my exposure to lead?

1. If you have a lead service line, replace it.
2. Flush your tap before drinking or cooking with water, if the water in the faucet has gone unused for more than six hours. The longer the water lies dormant in your household's plumbing, the more lead it might contain. Flush your tap with cold water for 30 seconds to two minutes before using.
3. Remove and clean the aerators or strainers from each faucet periodically.
4. Visit our website for more tips.
5. NSF International created a Consumer Guide to NSF Certified Lead Filtration Devices for Reduction of Lead in Drinking Water. Visit www.nsf.org/info/leadfiltrationguide for more information.



IMPORTANT NOTICE ABOUT YOUR WATER SERVICE AND LEAD SERVICE LINES

Missouri American Water will be upgrading the water infrastructure along your street in the near future. While we're there, if the utility-owned or customer-owned portion of the service line (see diagram) is made of lead or lined with lead, we'd like to work with you to replace it.

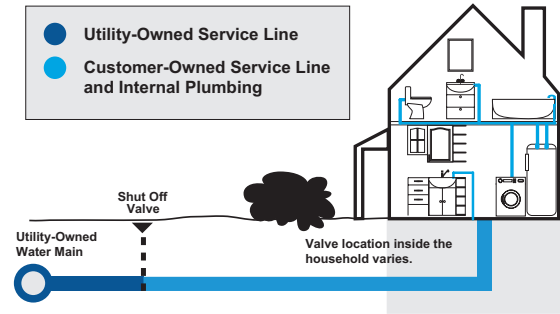
Best of all, we'll cover a portion, and in some cases all, of the costs to replace your service line.

Replacing any lead service lines now helps manage the risk of exposure to lead in drinking water.

Please review the enclosed information and contact us as soon as possible, because we need your input on this important project impacting your water service.

Name _____
Phone _____

Utility-owned vs. Customer-owned portion of the service line



Note: This diagram is a generic representation. Variations may apply.

Please allow us to replace your service line at this time if it's made of lead.

Here's what to expect...



Call us.

Contact us, and we will explain the process and answer your questions.



Agree to have your service line checked.

We can check to see if your line is lead while we are working on your street.

First, we'll need your approval.



We'll check your line.

With your approval, our contractor will check to see if your service line is made of lead or lined with lead.

This may involve our contractor obtaining a mark out of underground utilities and checking your home electrical system grounding.

In addition, we may need to dig one to two small diameter test pits over your existing service line to determine your service line material.



We'll let you know if your line is lead.

We will inform you if lead pipe is found.

And, if it is, we'll need your approval to replace it. Replacing the entire service line at this time can help you better manage your risk of exposure to lead in drinking water.



Agree to have your lead service line replaced.

First, we'll meet with you to discuss the project specifics and how to prepare the work area.

Then, before we can proceed, the property owner must sign and return a release to allow our contractor to work on your property.



We'll replace the entire service line.

Our contractor will install a new water service line. This generally can be done in one day.

Any needed lawn, driveway or sidewalk restoration work may take additional days, but there's no need for you to be home while we complete the restoration.



Flush your plumbing.

Your household plumbing will need to be flushed to remove any pipe scale that may have come loose during construction.

This step should be completed BEFORE you consume tap water or use hot water. This also is a good time to clean aerators

We'll provide you with printed instructions for initial and ongoing maintenance flushing. Our contractor will be available to assist you with the initial flush.



We'll collect a water sample.

When the work is completed, we will schedule a time to collect a water sample.

Once available, we will inform you of the results.

See FAQs on the back for more information.



LEARN MORE

CALL US

Contact our project manager at the number provided on the front page. Customers can also contact our Customer Service Center at 1-866-430-0820, M-F, 7 a.m.–7 p.m. For emergencies, we're available 24/7.

ONLINE

Tips on what you can do to reduce the potential for lead exposure are attached and can be found online at missouriamwater.com. Under Water Quality, select Water Quality Reports.

For more information on drinking water in general: Call the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

Note: We are not selling any services in this program.

CHECK YOUR WATER SERVICE LINE MATERIAL



Customer elects for Company to investigate Customer's water service line material to determine if it is eligible for Lead Service Line Replacement¹: ☐ CHECK HERE

The undersigned customer(s), whose name(s) appear in the signature block at the bottom of this page (the "Customer") grants to Missouri-American Water Company ("the Company") and to its approved contractors and/or subcontractors a license to enter upon Customer's property at the address shown below ("Property") for the purpose of investigating the Customer's service line material at the front of the Property to determine if it is eligible for Lead Service Line Replacement. This investigation will be at no cost to Customer.

PROPERTY ADDRESS: _____ City _____ State _____ Zip _____

The Customer represents that the Customer is/are the sole owner(s) of the Property at the address shown above and has/have sole authority to agree to this License.

The term of this license shall be six (6) months following the date set forth below.

The Company or its approved contractors and/or subcontractors will make up to three small test borings in the Customer's yard near the Company meter or valve installation ("Installation") or along the service line in the Customer's front property. The Company will determine the location and size of the test borings and review with the Customer prior to work being performed.

Upon completion of the work necessary to check the service line material, the Company will restore the Customer's Property as nearly as practicable to its former condition. The Company warrants the workmanship of its restoration of the test boring holes for a period of 2 months following the date set forth below, with the Company's liability limited to the cost of repairing the surface above the test boring. Restoration may include filling in boring hole with soil, applying grass seed or mulch, or patching concrete. Limits of restoration will be discussed with the Customer prior to work being performed.

THE CUSTOMER ACKNOWLEDGES THAT HE/SHE HAS RECEIVED THE "LEAD" FACT SHEETS PROVIDED BY THE COMPANY.

IN CONSIDERATION FOR PERFORMING THE WORK TO INVESTIGATE THE CUSTOMER SERVICE LINE AT THE COMPANY'S COST AND THE COMPANY'S AGREEMENT TO PROVIDE A 2-MONTH LIMITED WORKMANSHIP WARRANTY, THE CUSTOMER AGREES TO INDEMNIFY, RELEASE AND HOLD HARMLESS THE COMPANY AND ITS AFFILIATES AND AGENTS FROM AND AGAINST ALL CLAIMS, LIABILITY AND COSTS ("CLAIMS") RESULTING FROM ACTS AND OMISSIONS OF THE COMPANY AND/OR ITS APPROVED SUBCONTRACTORS IN INVESTIGATING THE CUSTOMER SERVICE LINE.

CUSTOMER

Signature _____

Signature _____

Print Name _____

Print Name _____

Date _____

Date _____

¹ Lead Service Line Replacement may include replacing all or portions of the domestic water service line if it is made of lead pipe or a ferrous-based material capable of retaining lead particles. The service line is defined as the pipe extending from the connection at the water main to the first shut off valve inside the Customer's premise, or as otherwise feasible due to safety constraints. This work is limited to up to 5 feet within the Customer's premise and does not include improvements to the Customer's premise plumbing. Additional details can be found in the pamphlet entitled "Important Notice about Your Water Service and Lead Service Lines."

CHECK YOUR WATER SERVICE LINE MATERIAL



Customer does not permit the Company to investigate Customer's water service line material for the purpose of determining if it is eligible for Lead Service Line Replacement: ☐ CHECK HERE

Customer Acknowledgement

The undersigned customer(s), whose name(s) appear(s) in the signature block shown below (the "Customer"), who receives water service provided by the Company to the residence at the Property address listed below, acknowledges that Customer has been informed by the Company that the Customer's water service line, which connects the Customer's residence to a Company water main at the front of the Property, may be made of lead pipe. The Customer does not permit the Company to

investigate the Customer's water service line to determine if it is eligible for LEAD SERVICE LINE REPLACEMENT¹. The Customer acknowledges that it has received and read the "Important Notice About Your Water Service" and "Lead Fact Sheet" provided by the Company.

PROPERTY ADDRESS: _____ City _____ State _____ Zip _____

CUSTOMER

Signature _____

Signature _____

Print Name _____

Print Name _____

Date _____

Date _____

¹ Lead Service Line Replacement may include replacing all or portions of the domestic water service line if it is made of lead pipe or a ferrous-based material capable of retaining lead particles. The service line is defined as the pipe extending from the connection at the water main to the first shut off valve inside the Customer's premise, or as otherwise feasible due to safety constraints. This work is limited to up to 5 feet within the Customer's premise and does not include improvements to the Customer's premise plumbing. Additional details can be found in the pamphlet entitled "Important Notice about Your Water Service and Lead Service Lines."



SERVICE LINE ASSESSMENT RESULTS

Dear Valued Customer,

Thank you for allowing us to take a closer look at your service line. We care about our customers and believe this is an important step in assessing your household's exposure to lead. **Here's what we found when we checked your customer-owned service line:**

- ☐ **We'd like to talk to you about replacing your service line, because it appears to be made of lead pipe.**
Replacing your lead service line now helps to manage your exposure to lead. Please contact us at the number below.
- ☐ **Your service line does NOT appear to be made of lead pipe.** We will proceed with connecting your existing service line to the new water main after the new main is installed.
- ☒ **BEFORE USING WATER FOR DRINKING OR COOKING:**
Your household plumbing will need to be flushed to remove any pipe scale that may have come loose in the process of checking your service line. Pipe scales may contain lead. To flush your line, please remove the aerator on the faucet(s) used for drinking or cooking, and run the water for 5 minutes before use. Then, clean and replace the aerators on the faucet(s).

We'll provide you with further details about the main replacement improvement as we get closer to the start of the project. If you have questions in the meantime, please contact our customer service center at the number provided below.

Date: ____/____/20____

Time: _____ a.m. / p.m.

MO.SLR.3 09-2017



MISSOURI
AMERICAN WATER

CUSTOMER SERVICE

HOURS OF OPERATION: M-F, 7 a.m. to 7 p.m.
FOR EMERGENCIES: We're available 24/7.

1-866-430-0820





RESULTADOS DE LA EVALUACIÓN DE LA TUBERÍA DE SERVICIO

Estimado y preciado cliente:

Gracias por permitirnos revisar más detenidamente su tubería de servicio. Nuestros clientes son valiosos para nosotros y creemos que este es un paso importante para evaluar la exposición al plomo en su hogar. **Cuando revisamos la tubería de servicio que es de su propiedad, observamos lo siguiente:**

- ☐ **Nos gustaría hablar con usted sobre el reemplazo de su tubería de servicio, ya que parece ser una tubería de plomo.** Reemplazar la tubería de servicio de plomo ahora ayudará a controlar su exposición al plomo. Comuníquese con nosotros al número que se indica a continuación.
- ☐ **Su tubería de servicio NO parece ser una tubería de plomo.** Procederemos a conectar la tubería de servicio existente a la nueva tubería de agua principal una vez que esta se haya instalado.
- ☒ **ANTES DE UTILIZAR AGUA PARA BEBER O COCINAR:** Será necesario que purgue las tuberías de su hogar para eliminar cualquier residuo que pudiera haberse desprendido mientras se revisaba la tubería de servicio. Los residuos de las tuberías podrían contener plomo. Para purgar la tubería, retire el aireador de los grifos utilizados para beber o cocinar y deje correr el agua durante 5 minutos antes de usar. Luego, limpie y vuelva a colocar los aireadores de los grifos. We'll provide you with further details about the main replacement improvement as we get closer to the start of the project. If you have questions in the meantime, please contact our customer service center at the number provided below.

Fecha: ____/____/20____

Hora: _____ a.m. / p.m.



MISSOURI
AMERICAN WATER

CUSTOMER SERVICE

HORARIOS DE ATENCIÓN:

De lunes a viernes de 7 a. m. a 7 p. m.

PARA EMERGENCIAS:

Estamos disponibles las 24 horas, los 7 días a la semana.

1-866-430-0820



LEAD WATER SERVICE LINE REPLACEMENT



Customer elects for Company to replace Customer's lead water service line:

☐ CHECK HERE.

The undersigned customer(s), whose name(s) appear in the signature block at the bottom of this page (the "Customer") grants to Missouri-American Water Company ("Company") and to its approved contractors and/or subcontractors a license to enter upon Customer's property at the address shown below ("Property") for the purpose of connecting Customer's residence to a Company water main at the front of the Property, at no cost to Customer.

PROPERTY ADDRESS: _____ City _____ State _____ Zip _____

Customer represents that Customer is/are the sole owner(s) of the Property at the address shown above and has/have sole authority to agree to this License.

The term of this license shall be six (6) months following the date set forth below.

Company or its approved contractors and/or subcontractors will install the Company service line from the water main to a Company meter or valve installation ("Installation") at Customer's front Property line. Company will determine the location of the Installation. Company's service line and the Installation will be owned and maintained by Company.

Company or its approved contractors and/or subcontractors will install a Customer connecting line from the Installation to Customer's residence. The Customer connecting line is currently and will continue to be owned and maintained by Customer.

Upon completion of the work necessary to effect the new connection, Company will restore Customer's Property as nearly as practicable to its former condition. Company warrants the workmanship of its installation of the Customer service line for a period of 12 months following the date set forth below, with Company's liability limited to the cost of repairing or replacing the Customer service line.

CUSTOMER ACKNOWLEDGES THAT CUSTOMER HAS RECEIVED THE "IMPORTANT NOTICE ABOUT YOUR WATER" AND "LEAD" FACT SHEETS PROVIDED BY COMPANY.

IN CONSIDERATION FOR PERFORMING THE WORK TO INSTALL THE CUSTOMER SERVICE LINE AT COMPANY'S COST AND THE COMPANY'S AGREEMENT TO PROVIDE A 12-MONTH LIMITED WORKMANSHIP WARRANTY, CUSTOMER AGREES TO INDEMNIFY, RELEASE AND HOLD HARMLESS COMPANY AND ITS AFFILIATES AND AGENTS FROM AND AGAINST ALL CLAIMS, LIABILITY AND COSTS ("CLAIMS") RESULTING FROM ACTS AND OMISSIONS OF COMPANY AND/OR ITS APPROVED SUBCONTRACTORS IN INSTALLING THE CUSTOMER SERVICE LINE.

CUSTOMER

Signature _____

Signature _____

Print Name _____

Print Name _____

Date _____

Date _____

COMPANY: MISSOURI-AMERICAN WATER COMPANY

Signature _____

Print Name _____

Date _____

MO.SLR.4 09-2017

LEAD WATER SERVICE LINE REPLACEMENT



Customer does NOT elect for Company to replace Customer's lead water service line: ☐ CHECK HERE.

Customer Acknowledgement

The undersigned customer(s), whose name(s) appear(s) in the signature block shown below (the "Customer"), who receives water service provided by the Company to the residence at the Property address listed below, acknowledges that Customer has been informed by Company that Customer's water service line, which connects Customer's residence to a Company water main at the front of the Property, is made of lead pipe. Customer acknowledges that it elects not to permit the Company to replace Customer's water service line. Customer acknowledges that it has received and read the "Important Notice About Your Water" and "Lead Fact Sheet" provided by Company.

PROPERTY ADDRESS: _____ City _____ State _____ Zip _____

CUSTOMER

Signature _____

Print Name _____

Date _____

Signature _____

Print Name _____

Date _____

MO.SLR.4 09-2017

WE ARE INVESTING IN YOUR NEIGHBORHOOD

Main Replacement Project to Start Soon



At Missouri American Water, we're committed to providing our customers with safe, reliable water service. This requires investing in our treatment and distribution systems, and one of these projects is about to take place near you. The project involves replacing aging water main and fire hydrants along the pipeline route (see reverse for information about service lines).

Project Overview

- Install, disinfect, test and place new main into service
- Transfer customers to the new main
- Perform final paving and any restoration of concrete, driveway, grass and landscaping

Service Impacts: What to Expect

While we interconnect the new main to distribution system: Customers may experience a temporary service interruption while this work is performed. Customers may also experience a slight discoloration of water. If this happens, run the water until it is clear.

Once the new main is installed: We'll return to connect customers to the new main. Typically there is a 30- and 60-minute interruption of service while the contractor performs this work. We'll attempt to notify customers 24 hours in advance. **We'll also notify you on the day we transfer service with further instructions on how to flush your household plumbing prior to using water. It is important that you read and follow these instructions.** If you're not home, we'll leave the instructions at your front door.

Our crews will work as quickly as possible to shorten the length of these temporary inconveniences. We appreciate your patience and understanding during this project.

ABOUT THE PROJECT

INVESTMENT	<input type="text"/>
WHAT	<input type="text"/>
WHERE	<input type="text"/>
WHEN	<input type="text"/>
WORK HOURS	<input type="text"/>
PROJECT CONTACT	<input type="text"/>



SAFETY IS KEY! SLOW DOWN IN WORK ZONES!

Your safety, as well as the safety of your neighbors and our workers is important to us! We work hard to keep our jobsites safe, and we appreciate your efforts to slow down and use caution around the construction site.



QUESTIONS?

Call our project contact listed to the left.

We can also be reached at our Customer Service Center at
1-866-430-0820
Hours: 7 a.m.-7 p.m.
For emergencies:
We're available 24/7

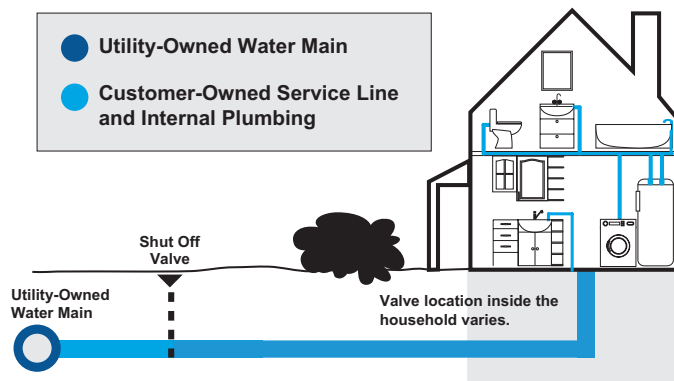
MO.SLR.5 09-2017



Quality, care and value delivered in every drop.

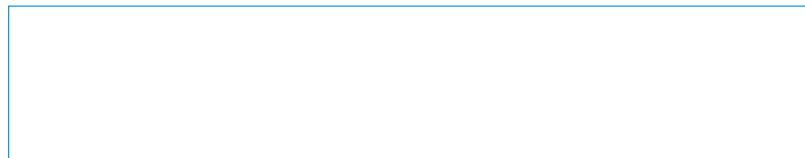


Utility-owned vs. Customer-owned



Please note: This diagram is a generic representation. Variations may apply.

Traffic and Accessibility



Noise

Our contractor will take measures to minimize noise levels; however, there will be some unavoidable noise associated with this project. We appreciate your understanding of any inconvenience that this may cause.

Site Maintenance

The project site will be maintained and cleaned each day before contractors have completed work.

How should we reach you in an emergency?

Missouri American Water uses a high-speed mass notification system called “CodeRED” to keep customers informed about water-related emergencies and notifications. Log on to our online self-service portal, My Account (www.amwater.com/myaccount) to make sure your contact information is up to date. While you’re there, tell us how you prefer to receive your alerts and notifications: phone; text and phone; and/or email.

** Standard text, data and phone rates may apply.*



Important Information About Your Service Lines

Customer-owned service line:

This portion of the service line is the responsibility of the property owner. It extends from the company shut off valve to and including the inside plumbing.

WHEN WE TRANSFER YOUR SERVICE LINE TO THE NEW MAIN, we’ll notify you that day with further instructions on how to flush your household plumbing prior to using the water.

If you’re not home, we’ll leave the instructions at your front door.

Do you know what your service line is made of?

Over the years, plumbers have used many different materials, including copper, PVC, lead and others. One way to find out what your service line is made of is to contact a licensed plumber. If we find lead during the course of our main replacement project, we’ll contact you to discuss replacing your service line. Replacing lead service lines reduces your potential exposure to lead. To learn more, visit missouriamwater.com. Under Water Quality, select Lead and Drinking Water.



WE ARE INVESTING IN YOUR NEIGHBORHOOD

Main Replacement Project to Start Soon



At Missouri American Water, we’re committed to providing our customers with safe, reliable water service. This requires investing in our treatment and distribution systems, and one of these projects is about to take place near you. The project involves replacing aging water main, as well as utility-owned service lines and fire hydrants along the pipeline route (see reverse for more information about service lines).

Project Overview

- Install, disinfect, test and place new main into service
- Replace utility-owned service lines and transfer customers to the new main
- Perform final paving and any restoration of concrete, driveway, grass and landscaping

Service Impacts: What to Expect

While we interconnect the new main to distribution system: Customers may experience a temporary service interruption while this work is performed. Customers may also experience a slight discoloration of water. If this happens, run the water until it is clear.

Once the new main is installed: We'll return to connect customers to the new main. This may involve replacing the utility-owned service line. If we're replacing the utility-owned service line at your property, typically there is a 30- and 60-minute interruption of service while the contractor connects the new service line. We'll attempt to notify customers 24 hours in advance. **We'll also notify you on the day the service line is replaced with further instructions on how to flush your household plumbing prior to using water. It is important that you read and follow these instructions.** If you're not home, we'll leave the instructions at your front door.

Our crews will work as quickly as possible to shorten the length of these temporary inconveniences. We appreciate your patience and understanding during this project.

ABOUT THE PROJECT

INVESTMENT	<input type="text"/>
WHAT	<input type="text"/>
WHERE	<input type="text"/>
WHEN	<input type="text"/>
WORK HOURS	<input type="text"/>
PROJECT CONTACT	<input type="text"/>



**SAFETY IS KEY!
SLOW DOWN IN
WORK ZONES!**

Your safety, as well as the safety of your neighbors and our workers is important to us! We work hard to keep our jobsites safe, and we appreciate your efforts to slow down and use caution around the construction site.



QUESTIONS?

Call our project contact listed to the left.

We can also be reached at our Customer Service Center at 1-866-430-0820
Hours: 7 a.m.-7 p.m.
For emergencies: We're available 24/7

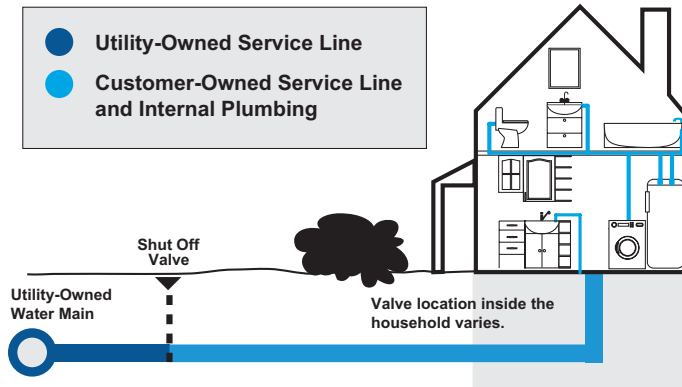
MO.SLR.5 09-2017



Quality, care and value delivered in every drop.

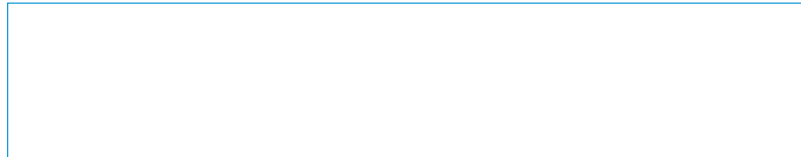


Utility-owned vs Customer-owned portion of the service line



Please note: This diagram is a generic representation. Variations may apply.

Traffic and Accessibility



Noise

Our contractor will take measures to minimize noise levels; however, there will be some unavoidable noise associated with this project. We appreciate your understanding of any inconvenience that this may cause.

Site Maintenance

The project site will be maintained and cleaned each day before contractors have completed work.

How should we reach you in an emergency?

Missouri American Water uses a high-speed mass notification system called “CodeRED” to keep customers informed about water-related emergencies and notifications. Log on to our online self-service portal, My Account (www.amwater.com/myaccount) to make sure your contact information is up to date. While you’re there, tell us how you prefer to receive your alerts and notifications: phone; text and phone; and/or email.

** Standard text, data and phone rates may apply.*



Important Information About Service Lines

There are two components of a service line.

Utility-owned portion of the service line: This is the portion of the service line that extends from the company’s main in the street to the company shut off valve (generally located near the curb).

Customer-owned portion of the service line: This portion of the service line is the responsibility of the property owner. It extends from the company shut off valve to and including the inside plumbing.

IF WE ARE REPLACING THE UTILITY-OWNED SERVICE LINE SERVING YOUR PROPERTY, we’ll notify you on the day the service line is replaced with further instructions on how to flush your household plumbing prior to using the water.

If you’re not home, we’ll leave the instructions at your front door.

Do you know what your service line is made of?

Over the years, plumbers have used many different materials, including copper, PVC, lead and others. One way to find out what your service line is made of is to contact a licensed plumber. If we find lead during the course of our main replacement project, we’ll contact you to discuss replacing your service line. Replacing lead service lines reduces your potential exposure to lead. To learn more, visit missouriamwater.com. Under Water Quality, select Lead and Drinking Water.





IT'S TIME TO FLUSH YOUR WATER LINE

Dear Valued Customer,

Today, we replaced the utility-owned portion of the water service line from the company's main in the street to the company shut off valve (generally located near the curb). Some sediment or debris may have come loose during removal of the pipe.

Our contractor flushed the new service line using your outside faucet. **Now, we'll need you to flush your household plumbing BEFORE you consume tap water or use hot water. For example, this includes drinking, cooking, making baby formula, filling pet bowls, or using icemakers, filtered water dispensers or appliances requiring water.**

Flushing Your Plumbing in Three Simple Steps

1. Remove faucet aerator on your kitchen faucet, and if applicable, bypass any home treatment unit.
2. Fully open the cold water tap and let the water run for at least 5 minutes. Monitor tap and drain to prevent overflows.
3. Clean and replace the faucet aerator.

For more information on your water quality, call us or visit us online at **www.missouriamwater.com**. Under Water Quality, select Water Quality Reports.

Date: ____/____/20____

Time: _____ a.m. / p.m.

MO.SLR.6 09-2017



MISSOURI
AMERICAN WATER

CUSTOMER SERVICE

HOURS OF OPERATION: M-F, 7 a.m. to 7 p.m.
FOR EMERGENCIES: We're available 24/7.

1-866-430-0820





ES HORA DE PURGAR LA TUBERÍA DEL AGUA

Estimado preciado cliente,

El día de hoy, reemplazamos la porción de la tubería del servicio de agua que es propiedad de los servicios públicos, y que va de la tubería principal de la compañía en la calle a la válvula de paso de la compañía (generalmente ubicada cerca de la acera). Es posible que se haya desprendido algo de sedimento y escombros durante el cambio de la tubería.

El contratista usó su grifo exterior para purgar la nueva tubería de servicio. **Ahora usted debe purgar la tubería de su casa ANTES de consumir el agua del grifo, o utilizar agua caliente. Por ejemplo, el agua para tomar, cocinar, preparar fórmula para bebés, llenar los platos de agua para las mascotas, o utilizar las máquinas de hielo, los dispensadores de agua filtrada o los electrodomésticos que requieran agua.**

Purgue la tubería en tres sencillos pasos

1. Retire el aireador del grifo de la cocina, y de ser el caso, evite cualquier unidad de tratamiento de agua para el hogar.
2. Abra completamente el grifo de agua fría y deje que el agua corra por lo menos 5 minutos. Vigile el grifo y el desagüe para evitar que el agua se desborde.
3. Limpie y vuelva a colocar el aireador del grifo.

Para más información sobre la calidad del agua, llámenos o visítenos en línea en www.missouriamwater.com. En la pestaña de Water Quality (calidad del agua), seleccione Water Quality Reports (informes de calidad del agua).

Fecha: ____/____/20____

Hora: _____ a.m. / p.m.



MISSOURI
AMERICAN WATER

CUSTOMER SERVICE

HORARIOS DE ATENCIÓN:

De lunes a viernes de 7 a. m. a 7 p. m.

PARA EMERGENCIAS:

Estamos disponibles las 24 horas, los 7 días a la semana.

1-866-430-0820



IMPORTANT NOTICE ABOUT YOUR WATER

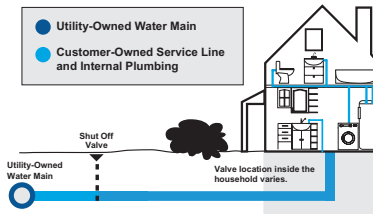


Dear Valued Customer,

Today, we replaced the following at your property:

- ☐ the customer-owned portion of the service line, which contained lead.

Your household plumbing will need to be flushed to remove any pipe scale that may have come loose during construction. Pipe scales may contain lead.



Please note: This diagram is a generic representation. Variations may apply.

Please take the following steps to minimize your exposure to any scale that may have been released.

Immediate Household Flushing Instructions

You should flush your household plumbing BEFORE you consume tap water or use hot water. For example, this includes drinking, cooking, making baby formula, filling pet bowls, or using icemakers, filtered water dispensers or appliances requiring water.

1. Start by finding the closest available cold water tap to where the water line comes into the home (such as an outside hose bib or laundry/utility sink). If using outside faucet, please use hose to safely direct water away from your home.
2. Remove faucet aerator, and if applicable, bypass any home treatment unit. Then fully open the cold water tap and let the water run for at least 30 minutes.

Next, flush the remainder of your household plumbing as follows¹:

3. Find all the faucets that will drain properly into a basin, tub, shower or laundry tub. Be careful to monitor all taps and drains to prevent overflows.
4. Remove faucet aerators and screens wherever possible from all cold water

taps that you plan to flush in the home (and remove any filter devices).

5. Beginning in the lowest level of the home, fully open the cold water taps throughout the home.
6. Let the water run for at least 30 minutes at the last tap you opened (top floor).
7. Turn off each tap starting with the taps in the highest level of the home. Clean and replace the aerators on faucets.

Be sure to run cold water in bathtubs, showers and faucets, and monitor all taps and drains to prevent overflows.

Daily and Monthly Maintenance for Six Months

Other steps to help manage your exposure include:

- **DAILY (for six months):** Each morning or any time the water in the faucet has gone unused for more than six hours, flush your tap for 30 seconds to two minutes before using any water for drinking, cooking or making infant formula.
- **MONTHLY (for six months):** Remove and clean your faucet aerators.

¹Source: American Water Works Association (AWWA)

There are other steps you can take to protect yourself and your family from lead in tap water, regardless of whether you have a lead service line. Plumbing fixtures like faucets, valves and solder can contain small amounts of lead, so flushing can help reduce lead exposure. Visit our website for more information. Please note: homeowners are responsible for their home plumbing.

FOR MORE INFORMATION

For Questions About Lead:

Contact the Customer Service Center at 1-866-430-0820. Please request a water quality follow-up.

For Questions About Construction:

() _____

For all other inquiries:

Customer Service Center
1-866-430-0820
Hours: M-F, 7 a.m.–7 p.m.
For emergencies, we're available 24/7.

Missouri American Water meets all drinking water standards related to lead. Basic information about lead, the steps we take—along with tips on what you can do—to reduce the potential for lead exposure, are attached and can be found online at missouriamwater.com. Under Water Quality, select Water Quality Reports.

LEARN MORE

EPA's Safe Drinking Water Hotline
1-800-426-4791

National Lead Information Center: 1-800-424-LEAD

Date: _____

Time: _____ a.m. / p.m.

MO.STL.SLR.7 09-2017

NOTIFICACIÓN IMPORTANTE SOBRE EL AGUA



Estimado preciado cliente,

El día de hoy, reemplazamos lo siguiente en su propiedad:

- ☐ la parte de la tubería de servicio que es propiedad del cliente y que contenía plomo.

Será necesario que purgue las tuberías de su casa para eliminar cualquier partícula que se haya podido desprender de las tuberías durante el arreglo. Las partículas de las tuberías pudieran contener plomo.



Tenga en cuenta lo siguiente: Este diagrama es una representación genérica. Pueden existir variantes.

Se le ruega que siga las siguientes instrucciones para minimizar su exposición a cualquier partícula que pudiera haberse desprendido.

Instrucciones para purgar inmediatamente las tuberías del hogar

Debe purgar la tubería de su casa ANTES de consumir el agua del grifo, o utilizar agua caliente. Por ejemplo, el agua para tomar, cocinar, preparar fórmula para bebés, llenar los platos de agua para las mascotas, o utilizar las máquinas de hielo, los dispensadores de agua filtrada o los electrodomésticos que requieran agua.

1. Para empezar localice el grifo de agua fría más cercano a la tubería por donde llega el agua a su casa (puede ser la toma para la manguera afuera de su casa, o la toma para la lavadora/el lavadero). Si utiliza un grifo localizado afuera, dirija la manguera en sentido opuesto de su casa.
2. Retire el aireador del grifo, y de ser el caso, evite cualquier unidad de tratamiento de agua para el hogar. Luego, abra completamente el grifo de agua fría y deje que el agua corra por lo menos 30 minutos.

Después, purgue el resto de la plomería de su hogar de la siguiente forma¹:

3. Busque todos los grifos que puedan drenarse debidamente en el lavamanos, la tina, ducha o el lavadero de la lavandería. Vigile todos los grifos y desagües para evitar que el agua se desborde.
4. De ser posible, retire los aireadores y las rejillas de todos los grifos de agua fría que

vaya a purgar en su casa (y retire cualquier dispositivo de filtros).

5. Empezado en el piso más bajo en su casa, abra completamente los grifos de agua fría en toda la casa.
6. Deje que el agua corra por lo menos 30 minutos a partir del momento en que abrió el último grifo (en el piso superior).
7. Cierre cada grifo empezando con los que están ubicados en el piso superior de su casa. Limpie y vuelva a colocar los aireadores de los grifos.

Asegúrese de dejar correr el agua en las bañeras, duchas, y los grifos, y vigile todas las salidas de agua y los desagües para evitar desbordes de agua.

Mantenimiento diario y mensual durante seis meses

Otros pasos para ayudar a controlar la exposición son:

- **DIARIAMENTE (durante seis meses):** Todas las mañanas o toda vez que no se haya usado el agua del grifo durante más de seis horas, purgue el grifo de 30 segundos a dos minutos antes de usar el agua para tomar, cocinar o preparar fórmula para bebés.
- **MENSUALMENTE (durante seis meses):** Retire y limpie los aireadores de los grifos.

¹Fuente: Asociación Estadounidense de Obras Hidráulicas (American Water Works Association o AWWA)

Existen otras medidas que puede tomar para protegerse a usted y a su familia del plomo en el agua potable, independientemente de que tenga o no tuberías de plomo. La fontanería como por ejemplo los grifos y las válvulas y la soldadura pueden contener pequeñas cantidades de plomo, por tanto purgar las tuberías puede ayudar a reducir la exposición al plomo. Para más información, visite nuestra página web. Le rogamos que tenga en cuenta que los propietarios son responsables por la plomería de sus hogares.

PARA MÁS INFORMACIÓN

Para preguntas sobre el plomo:

Comuníquese con el Centro de Servicio al Cliente al 1-866-430-0820 Solicite un control de la calidad del agua.

Para preguntas sobre la reparación:

()

Para cualquier otra pregunta:

Centro de Atención al Cliente
1-866-430-0820
Horarios: De lunes a viernes de 7 a.m. a 7 p.m. Para casos de emergencia, estamos disponibles las 24 horas del día los 7 días de la semana.

Missouri American Water cumple con todos los estándares de agua potable en lo que respecta al plomo. A continuación se adjunta información básica sobre el plomo, las medidas que tomamos, junto con consejos de lo que usted puede para reducir la posible exposición al plomo, esta información también puede encontrarse en línea en **missouriamwater.com**. En la pestaña de Water Quality (calidad del agua), seleccione Water Quality Reports (informes de calidad del agua).

MÁS INFORMACIÓN

Línea de ayuda de Agua Potable Segura de la USEPA:
1-800-426-4791

National Lead Information Center [Centro Nacional de Información acerca del Plomo]: 1-800-424-LEAD

Fecha: _____

Hora: _____ a.m. / p.m.

IMPORTANT NOTICE ABOUT YOUR WATER

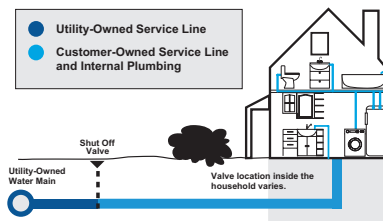


Dear Valued Customer,

Today, we replaced the following at your property:

- ☐ the utility-owned portion of the service line, which contained lead.
- ☐ the customer-owned portion of the service line, which contained lead.

Your household plumbing will need to be flushed to remove any pipe scale that may have come loose during construction. Pipe scales may contain lead.



Please note: This diagram is a generic representation. Variations may apply.

Please take the following steps to minimize your exposure to any scale that may have been released.

Immediate Household Flushing Instructions

You should flush your household plumbing BEFORE you consume tap water or use hot water. For example, this includes drinking, cooking, making baby formula, filling pet bowls, or using icemakers, filtered water dispensers or appliances requiring water.

1. Start by finding the closest available cold water tap to where the water line comes into the home (such as an outside hose bib or laundry/utility sink). If using outside faucet, please use hose to safely direct water away from your home.
2. Remove faucet aerator, and if applicable, bypass any home treatment unit. Then fully open the cold water tap and let the water run for at least 30 minutes.

Next, flush the remainder of your household plumbing as follows¹:

3. Find all the faucets that will drain properly into a basin, tub, shower or laundry tub. Be careful to monitor all taps and drains to prevent overflows.
4. Remove faucet aerators and screens wherever possible from all cold water

taps that you plan to flush in the home (and remove any filter devices).

5. Beginning in the lowest level of the home, fully open the cold water taps throughout the home.
6. Let the water run for at least 30 minutes at the last tap you opened (top floor).
7. Turn off each tap starting with the taps in the highest level of the home. Clean and replace the aerators on faucets.

Be sure to run cold water in bathtubs, showers and faucets, and monitor all taps and drains to prevent overflows.

Daily and Monthly Maintenance for Six Months

Other steps to help manage your exposure include:

- **DAILY (for six months):** Each morning or any time the water in the faucet has gone unused for more than six hours, flush your tap for 30 seconds to two minutes before using any water for drinking, cooking or making infant formula.
- **MONTHLY (for six months):** Remove and clean your faucet aerators.

¹Source: American Water Works Association (AWWA)

There are other steps you can take to protect yourself and your family from lead in tap water, regardless of whether you have a lead service line. Plumbing fixtures like faucets, valves and solder can contain small amounts of lead, so flushing can help reduce lead exposure. Visit our website for more information. Please note: homeowners are responsible for their home plumbing.

FOR MORE INFORMATION

For Questions About Lead:

Contact the Customer Service Center at 1-866-430-0820. Please request a water quality follow-up.

For Questions About Construction:

() _____

For all other inquiries:

Customer Service Center
1-866-430-0820
Hours: M-F, 7 a.m.–7 p.m.
For emergencies, we're available 24/7.

Missouri American Water meets all drinking water standards related to lead. Basic information about lead, the steps we take—along with tips on what you can do—to reduce the potential for lead exposure, are attached and can be found online at missouriamwater.com. Under Water Quality, select Water Quality Reports.

LEARN MORE

EPA's Safe Drinking Water Hotline
1-800-426-4791

National Lead Information Center: 1-800-424-LEAD

Date: _____

Time: _____ a.m. / p.m.

MO.SLR.7 09-2017

NOTIFICACIÓN IMPORTANTE SOBRE EL AGUA



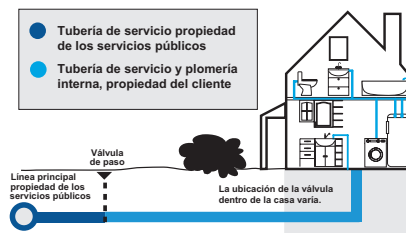
Estimado preciado cliente,

El día de hoy, reemplazamos lo siguiente en su propiedad:

- ☐ la parte de la tubería de servicio que es propiedad de los servicios públicos y que contenía plomo.
- ☐ la parte de la tubería de servicio que es propiedad del cliente y que contenía plomo.

Será necesario que purgue las tuberías de su casa para eliminar cualquier partícula que se haya podido desprender de las tuberías durante el arreglo. Las partículas de las tuberías pudieran contener plomo.

Se le ruega que siga las siguientes instrucciones para minimizar su exposición a cualquier partícula que pudiera haberse desprendido.



Tenga en cuenta lo siguiente: Este diagrama es una representación genérica. Pueden existir variantes.

Instrucciones para purgar inmediatamente las tuberías del hogar

Debe purgar la tubería de su casa ANTES de consumir el agua del grifo, o utilizar agua caliente. Por ejemplo, el agua para tomar, cocinar, preparar fórmula para bebés, llenar los platos de agua para las mascotas, o utilizar las máquinas de hielo, los dispensadores de agua filtrada o los electrodomésticos que requieran agua.

- Para empezar localice el grifo de agua fría más cercano a la tubería por donde llega el agua a su casa (puede ser la toma para la manguera afuera de su casa, o la toma para la lavadora/el lavadero). Si utiliza un grifo localizado afuera, dirija la manguera en sentido opuesto de su casa.
- Retire el aireador del grifo, y de ser el caso, evite cualquier unidad de tratamiento de agua para el hogar. Luego, abra completamente el grifo de agua fría y deje que el agua corra por lo menos 30 minutos.

Después, purgue el resto de la plomería de su hogar de la siguiente forma¹:

- Busque todos los grifos que puedan drenarse debidamente en el lavamanos, la tina, ducha o el lavadero de la lavandería. Vigile todos los grifos y desagües para evitar que el agua se desborde.
- De ser posible, retire los aireadores y las rejillas de todos los grifos de agua fría que

vaya a purgar en su casa (y retire cualquier dispositivo de filtros).

- Empezado en el piso más bajo en su casa, abra completamente los grifos de agua fría en toda la casa.
- Deje que el agua corra por lo menos 30 minutos a partir del momento en que abrió el último grifo (en el piso superior).
- Cierre cada grifo empezando con los que están ubicados en el piso superior de su casa. Limpie y vuelva a colocar los aireadores de los grifos.

Asegúrese de dejar correr el agua en las bañeras, duchas, y los grifos, y vigile todas las salidas de agua y los desagües para evitar desbordes de agua.

Mantenimiento diario y mensual durante seis meses

Otros pasos para ayudar a controlar la exposición son:

- DIARIAMENTE (durante seis meses):** Todas las mañanas o toda vez que no se haya usado el agua del grifo durante más de seis horas, purgue el grifo de 30 segundos a dos minutos antes de usar el agua para tomar, cocinar o preparar fórmula para bebés.
- MENSUALMENTE (durante seis meses):** Retire y limpie los aireadores de los grifos.

¹Fuente: Asociación Estadounidense de Obras Hidráulicas (American Water Works Association o AWWA)

Existen otras medidas que puede tomar para protegerse a usted y a su familia del plomo en el agua potable, independientemente de que tenga o no tuberías de plomo. La fontanería como por ejemplo los grifos y las válvulas y la soldadura pueden contener pequeñas cantidades de plomo, por tanto purgar las tuberías puede ayudar a reducir la exposición al plomo. Para más información, visite nuestra página web. Le rogamos que tenga en cuenta que los propietarios son responsables por la plomería de sus hogares.

PARA MÁS INFORMACIÓN

Para preguntas sobre el plomo:

Comuníquese con el Centro de Servicio al Cliente al 1-866-430-0820 Solicite un control de la calidad del agua.

Para preguntas sobre la reparación:

()

Para cualquier otra pregunta:

Centro de Atención al Cliente
1-866-430-0820
Horarios: De lunes a viernes de 7 a.m. a 7 p.m. Para casos de emergencia, estamos disponibles las 24 horas del día los 7 días de la semana.

Missouri American Water cumple con todos los estándares de agua potable en lo que respecta al plomo. A continuación se adjunta información básica sobre el plomo, las medidas que tomamos, junto con consejos de lo que usted puede para reducir la posible exposición al plomo, esta información también puede encontrarse en línea en **missouriamwater.com**. En la pestaña de Water Quality (calidad del agua), seleccione Water Quality Reports (informes de calidad del agua).

MÁS INFORMACIÓN

Línea de ayuda de Agua Potable Segura de la USEPA:
1-800-426-4791

National Lead Information Center [Centro Nacional de Información acerca del Plomo]: 1-800-424-LEAD

Fecha: _____

Hora: _____ a.m. / p.m.

Lead Service Line Replacement & Electrical Grounding



ATTENTION CONTRACTORS

Before retiring a lead water service line:

1. Have an electrician check the premise electrical grounding and bonding.
2. DO NOT connect copper pipe to lead through conductive fittings. Any remaining lead pipe can CORRODE due to galvanic corrosion if connected to other metal pipe and fittings.
3. Always use proper Personal Protective Equipment (PPE) to prevent shocks and other hazards.
4. Discuss any needed upgrades to grounding with the project manager.

Lead water service pipes may have been used as part of the premise's electrical grounding system. This is of special concern whenever a lead water service line will be replaced. You should have a professional electrician determine the location and adequacy of the premise electrical grounding system.

REMEMBER TO ALWAYS USE PROPER PPE.

If the customer chose NOT to have their lead service line replaced:

All LEAD water service line pipe should be removed if possible during water infrastructure improvement projects that include service line work.

If it is not possible to remove the entire lead service line pipe or if the plumbing inside the premise is lead, the plumbing contractor should avoid creating galvanic corrosion of lead materials, such as connecting copper pipe to lead pipe through conductive couplings.

If any portion of a lead service line will remain, the contractor should:

1. Use non-conductive pipe for drinking water applications, or
2. if copper is used for the new portion of the water service line, use a plastic spacer or dielectric union (couplings which join together pipes of different metals preventing electrolysis).

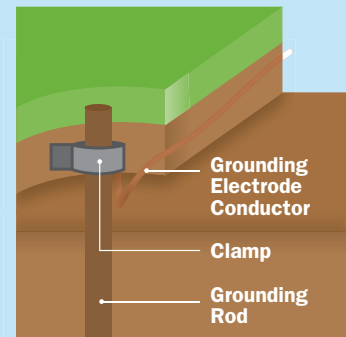
These options can lower the risk of lead corrosion, but may no longer make a reliable grounding option for the electrical system. In these cases, please have the electrician suggest an alternative means of grounding if needed.

The contractor should check the local codes and the premise's electrical grounding and bonding before retiring a lead water service pipe on public property, private property or both.

Please note that internal premise plumbing is not part of the utility's work. Customers may also want to consult a plumber to check their internal premise plumbing and fixtures.

Check Your Premise Electrical Grounding

Electrical grounding directs dangerous electrical charges away from the home and into the ground. Lightning strikes and static electricity charges are the two most common types of damaging electrical charges.



Historically, a home's metallic water service may have provided a safe ground for the electrical system as it's pipes typically extend at least 10 feet underground from the point where the pipes enter the home to the main water line.

Questions? Call

Name _____

Phone _____

MO.SLR.8 09-2017

Water Sampling Process for Lead



FILL WITH COLD



FILL OUT LABEL



SAMPLE 1

Company/Plumber takes water sample

WHEN: After whole house flush

Our company/plumber will collect a cold water sample from the kitchen tap AFTER conducting the whole house flush. Please let us know if you have a home water treatment unit, pressure reducing valve or filter attached to the plumbing system or faucet before sampling.

Sampling Instructions for Company/Plumber

1. Gently open the kitchen cold water tap and fill the bottle to the top.
2. Turn off water and tightly cap the sample bottle.
3. Fill out the bottle label: Check Plumber Box and complete Address, Sample Location, Collect Date, and Collect Time.
4. Deliver the sample to the project manager on the same day it is collected or as otherwise directed.

SAMPLE 2

Customer takes water sample

WHEN: Between 8 to 72 hours after service line is replaced

If requested by the customer, we'll analyze a second water sample for free. This sample should be collected within 72 hours (3 days) of the repair if possible.

Sampling Instructions for the Customer

1. AFTER water has sat motionless for AT LEAST 6 HOURS, gently open the kitchen cold water tap and fill the sample bottle to the top. This can be done first thing in the morning or after returning home from work, etc. NOTE: If a water treatment unit or filter is attached to the plumbing system or faucet, please remove the filter or bypass the unit before sampling.
2. Turn off water and tightly cap the sample bottle.
3. Fill out the bottle label: Check Customer Box and complete Address, Sample Location, Collect Date, and Collect Time.
4. Call us to pick up your water sample.

Name _____
Phone _____

5. We'll contact you with the results as soon as they are available.

MO.SLR.9 09-2017

Proceso de obtención de la muestra de agua



**RELLENE
CON AGUA
FRÍA**



**COMPLETE
LA ETIQUETA**



MUESTRA 1

La compañía/el plomero toma una muestra de agua

CUÁNDO: Después de la purga del agua de toda la casa.

Nuestra compañía/el plomero recolectará una muestra de agua fría del grifo de la cocina DESPUÉS de realizar la purga del agua en toda la casa. Antes de que se tome la muestra, infórmenos si en su casa hay alguna unidad de tratamiento de agua, válvula reductora o filtro fijados al sistema de tuberías o al grifo.

Instrucciones de obtención de la muestra para la compañía/el plomero

1. Abra lentamente el grifo de agua fría de la cocina y rellene la botella hasta el tope.
2. Cierre el grifo y cierre bien la tapa de la botella de muestra.
3. Complete la etiqueta de la botella: marque la casilla Plomero y complete la dirección, la ubicación de la muestra, la fecha de recolección y la hora de recolección.
4. Entregue la muestra al gerente de proyecto el mismo día de la recolección o según se le indique.

MUESTRA 2

El cliente obtiene la muestra de agua

CUÁNDO: Entre las 8 y las 72 horas posteriores al reemplazo de la tubería de servicio.

Si el cliente lo solicita, analizaremos una segunda muestra de agua sin costo. Esta muestra debería recolectarse en un plazo de 72 horas (3 días) después de la reparación si es posible.

Instrucciones de obtención de la muestra para el Cliente

1. DESPUÉS de que el agua se asiente sin movimiento durante AL MENOS 6 HORAS, abra lentamente el grifo de agua fría de la cocina y rellene la botella de muestra hasta el tope. Esto puede hacerse temprano en la mañana o después de regresar a su casa del trabajo, etc. **TENGA EN CUENTA LO SIGUIENTE:** Si hay una unidad de tratamiento de agua o filtro fijado al sistema de tuberías o al grifo, retire el filtro u omita el uso de la unidad antes de obtener la muestra.
2. Cierre el grifo y cierre bien la tapa de la botella de muestra.
3. Complete la etiqueta de la botella: marque la casilla Cliente y complete la dirección, la ubicación de la muestra, la fecha de recolección y la hora de recolección.
4. Llámenos para que recojamos la muestra de agua.

Nombre _____
Teléfono _____

5. Nos comunicaremos con usted cuando estén disponibles los resultados.



72-HOUR WATER SAMPLE REMINDER

We haven't received your call to pick up your second water sample, so we thought we'd check to make sure you are still interested. If you are, the sample should be collected within 72 hours (3 days) of the repair using the kit that was provided. If you have any questions or need a replacement kit, please contact us at the number listed below.

Sampling Instructions for the Customer

1. AFTER water has sat motionless for AT LEAST 6 HOURS, gently open the kitchen cold water tap and fill the sample bottle to the top. This can be first thing in the morning or after returning home from work, etc. NOTE: If a water treatment unit or filter is attached to the plumbing system or faucet, please remove the filter or bypass the unit before sampling.
2. Turn off water and tightly cap the sample bottle.
3. Fill out the bottle label: Check Customer Box and complete Address, Sample Location, Collect Date, and Collect Time.
4. Call us to pick up your water sample.

Name _____
Phone _____

LEARN MORE

For more information on your water quality and ways to reduce your exposure to lead, call us or visit us online at **www.missouriamwater.com**. Under Water Quality, select Lead and Drinking Water.

Date: ____/____/20____ Time: _____ a.m. / p.m.

PA.SLR.10 09-2017



MISSOURI
AMERICAN WATER

CUSTOMER SERVICE

HOURS OF OPERATION: M-F, 7 a.m. to 7 p.m.
FOR EMERGENCIES: We're available 24/7.

1-866-430-0820



RECORDATORIO DE LA MUESTRA DE AGUA DE 72 HORAS

No hemos recibido su llamado para recoger la segunda muestra de agua, solo queremos asegurarnos de que todavía está interesado. Si lo está, la muestra debe obtenerse el kit que se proporcionó en un plazo de 72 horas (3 días) a partir de la reparación. Si tiene preguntas o necesita un kit de repuesto, comuníquese con nosotros al número de teléfono más abajo.

Instrucciones de obtención de la muestra para el Cliente

1. DESPUÉS de que el agua se asiente sin movimiento durante AL MENOS 6 HORAS, abra lentamente el grifo de agua fría de la cocina y rellene la botella de muestra hasta el tope. Esto puede hacerse temprano en la mañana o después de regresar a su casa del trabajo, etc. TENGA EN CUENTA LO SIGUIENTE: Si hay una unidad de tratamiento de agua o filtro fijado al sistema de tuberías o al grifo, retire el filtro u omita el uso de la unidad antes de obtener la muestra.
2. Cierre el grifo y cierre bien la tapa de la botella de muestra.
3. Complete la etiqueta de la botella: marque la casilla Cliente y complete la dirección, la ubicación de la muestra, la fecha de recolección y la hora de recolección.
4. Llámenos para que recojamos la muestra de agua.

Nombre _____

Teléfono _____

MÁS INFORMACIÓN

Para más información sobre la calidad del agua y formas de reducir la exposición al plomo, llámenos o visítenos en línea en **www.missouriamwater.com**. En la pestaña de Water Quality (calidad del agua), seleccione Lead and Drinking Water (plomo y agua potable).

Fecha: ____/____/20____ Hora: _____ a.m. / p.m.



MISSOURI
AMERICAN WATER

SERVICIO AL CLIENTE

HORARIOS DE ATENCIÓN: De lunes a viernes de 7 a. m. a 7 p. m.

PARA EMERGENCIAS: Estamos disponibles las 24 horas, los 7 días de la semana.

1-866-430-0820



LEAD

The most common source of lead in tap water is the plumbing in your home



MISSOURI
AMERICAN WATER

Missouri American Water regularly tests for lead in drinking water and has taken steps to minimize levels through improvements in corrosion control.

Although these tests indicate that lead is not an issue in the treated water leaving our facility, lead and/or copper levels in some homes and businesses might be detected due to customer use of lead pipes, lead solder and molded metal faucets in household plumbing.

Health effects associated with high levels of lead

The U.S. Environmental Protection Agency (EPA) sets standards related to lead in drinking water. Lead levels that exceed these standards could cause serious damage to the brain, kidneys, nervous system and red blood cells. The greatest risk, even with short-term exposure, is to young children and pregnant women.

Assessing your exposure to lead

Lead levels in drinking water are more likely to be higher if:

- your home or water system has lead pipes or has a lead service line
- a partial replacement of the lead service lines serving your home is performed
- your home has copper pipes with lead solder
- your home was built before 1986 AND
- you have soft or acidic water
- water sits in the pipes for several hours

Minimizing your exposure

You cannot see, smell or taste lead, and boiling water will not remove lead. Although our water is treated to minimize the risk of lead, you can reduce your household's exposure to lead in drinking water by following these simple steps:

- **Flush your tap before drinking or cooking with water, if the water in the faucet has gone unused for more than six hours.** The longer the water lies dormant in your home's plumbing, the more lead it might contain. Flush your tap with cold water for 30 seconds to two minutes before using. To conserve water, catch the running water and use it to water your plants.
- **Try not to cook with or drink water from the hot water faucet.** Hot water has the potential to contain more lead than cold water. When you need hot water, heat cold water on the stove or in the microwave.
- **Clean faucet aerators.** Routinely remove and clean all faucet aerators.
- **Remove loose solder and debris from plumbing.** In newly-constructed homes or homes in which the plumbing was recently replaced, remove the strainers from each faucet and run the water for 3 to 5 minutes. When replacing or working on pipes, be sure to use lead-free materials.
- **Look for the "Lead Free" Label.** When replacing or installing fixtures, look for the "lead free" label.
- **See information on page 2 related to home treatment devices.**

(Continued)

Have lead pipes, fixtures or solder?

BEFORE USING WATER FOR DRINKING OR COOKING

If water goes unused for more than 6 hours, run water for 30 seconds to 2 minutes before use.



For more information

Missouri American Water Customer Service Center:
1-866-430-0820
M-F, 7 a.m. - 7 p.m.

Check us out online
missouriamwater.com

For more information on drinking water standards:
Contact the
EPA Hotline at
1-800-426-4791





FREQUENTLY ASKED Q AND A

Is lead in water regulated and does Missouri American Water comply with standards?

Yes and yes. The EPA's lead standard is an action level that requires treatment modifications if lead test results exceed 15 parts per billion (ppb) in more than 10 percent of first draw samples taken from household taps.

Missouri American Water regularly tests for lead at the end of its treatment process. Testing has shown that lead is not an issue in the water exiting any of our water treatment facilities.

We also conduct tests in our distribution system in accordance with the EPA regulatory requirements. For more information on your system, visit missouriamwater.com to view the latest consumer confidence report. Under the **Water Quality** menu, select **Water Quality Reports**.

Does that mean I do not have lead in my water?

Not necessarily. You might have lead in your drinking water if your household plumbing system has lead pipes or if lead solder was used in the joints of copper pipes.

Homes built before 1930 are more likely to have lead plumbing systems. Lead pipes are dull grey color and scratch easily revealing a shiny surface. Lead solder used to join copper pipes is a silver or grey color. If your house was built before January 1986, you are more likely to have lead-soldered joints. If you do, the chance of the lead leaching into your drinking water is greater when water has been standing in the pipes for many hours, overnight for example.

Lead kits that test for the presence of lead in solder are available at some hardware stores.

Should I flush my faucets every morning before using it to drink or use for food prep?

Yes. See Minimizing Your Exposure.

How can I tell if my water contains too much lead?

You can have your water tested for lead. Since you cannot see, taste or smell lead dissolved in water, testing is the only sure way of knowing.

Do I need a home treatment device for lead?

The need for a home treatment device is a customer-specific decision. Missouri American Water takes steps to reduce the potential for lead to leach from your pipes into the water. This is accomplished by adding a corrosion inhibitor or by reducing the acidity of the water leaving our treatment facilities. Certain home treatment devices, such as water softeners for example, might increase lead levels in your water.

Always consult the device manufacturer for information on treatment device maintenance and potential impacts to your drinking water or household plumbing.

NSF International created a Consumer Guide to NSF Certified Lead Filtration Devices for Reduction of Lead in Drinking Water. Visit www.nsf.org/info/leadfiltrationguide for more information.

Will electrical grounding increase my lead levels?

Possibly. If grounding wires from electrical systems are attached to household plumbing, corrosion and lead exposure may be greater. Customers can choose to pay to have an electrician check the house wiring.

Getting your water tested for lead

Missouri American Water does not provide testing for lead for individual customers who request it. Customers can choose to have their water tested at their cost at a certified laboratory.

For more information

If you are still concerned about elevated levels and want to find out where you can have your water tested by a certified laboratory:

- **Contact EPA's Safe Drinking Water Act Hotline:**
1-800-426-4791
- **Visit Missouri Department of Natural Resources online at**
www.dnr.mo.gov

missouriamwater.com



09-2017

Visit us online at www.missouriamwater.com



**We need
to discuss
important
information
about your
water service.**

**PLEASE
CONTACT US**

Contact

Phone



**MISSOURI
AMERICAN WATER**

We need to discuss important information about your water service.



Please contact us.

Contact _____
Phone _____

Please contact us.
See other side for contact information.

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