

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

FILED²

MAY 3 2018

AFFIDAVIT OF GEOFF MARKE

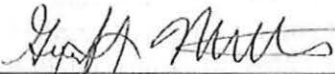
Missouri Public
Service Commission

STATE OF MISSOURI)
) SS.

COUNTY OF COLE)

COMES NOW GEOFF MARKE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Initial Brief of the Office of the Public Counsel*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.




Geoff Marke
Chief Economist

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 30th day March, 2018.



JERENE A. BUCKMAN
My Commission Expires
August 23, 2021
Cole County
Commission #13754037



Jerene A. Buckman
Notary Public

My Commission expires August 23, 2021.

OPC Exhibit No. 231
Date 5-2-18 Reporter _____
File No. WR-2017-0285

MEMORANDUM

To: Missouri Public Service Commission Official Case File,
Case No. WR-2017-0285

From: Geoff Marke, Chief Economist
Missouri Office of the Public Counsel

Subject: Lead Line Replacement Reporting Requirements

Date: March 30, 2018

During the evidentiary hearing in this case, Chairman Hall asked OPC witness Dr. Geoff Marke to identify reporting that would be in the public interest as it relates to lead service line replacement. After Dr. Marke gave an initial response, Chairman Hall suggested that OPC and other parties could expand on suggested reporting requirements, in their post-hearing briefs.

The transcript of the exchange is as follows:

Chairman Hall: Okay. Moving on to the lead service line replacement component of this larger program, what type of reporting would OPC recommend the Commission require? And I understand that you've got concerns with how they're operating the program now. You've got an alternative. Putting that aside, what type of reporting would it be in the public interest for the company to provide on an ongoing basis on this program from your perspective?

Dr. Marke: Post test results I think would be a good start. Right now the company's proposing to do two post test results following a lead service line replacement, so one several hours after, after they go through a flushing, and then again 72 hours later. I would—in the discussions with Washington University, they had some more nuanced perspective on that, but I would say that the testing results would be helpful, if this is indeed, you know, a fear as it's being portrayed. If I could have just a second.

Chairman Hall: Well, if you would prefer, maybe in your post-hearing briefs and any party that was interested could provide that information, what type of reporting requirements the Commission should require if this program is authorized.¹

OPC's expansion on this initial response is as follows:

Replacing potable water lead service lines raises public health, science, technical, and legal issues, and should not be viewed simply as a linear engineering exercise. The potential health, economic and regulatory implications are far-reaching, unprecedented, and ultimately beyond the scope of the Commission's appropriate purview. To date, in Missouri necessary stakeholders are absent and an open, honest dialogue has been stunted. Given the depth of potential negative outcomes and risks, OPC firmly believes this is an issue for the Missouri legislature to address.

¹ WR-2017-0285: *Transcript of the Proceedings* March 6, 2017. p. 503, 5-25 & p. 502, 1-6.

In the current circumstances with Missouri American Water Company, there are a number of hurdles that make it challenging to suggest reporting requirements. Those hurdles include, but are not limited to, the following:

- No detailed Missouri American Water Plan or stated policy on record addressing:
 - Prioritization of service lines
 - Disclosure and communication to customers
 - Inventory and record keeping
 - Coordination with municipal and other utilities
 - 3rd party contracts
 - Lead service lines partially replaced during the 15+ years of ISRS-related main replacements in St. Louis County
 - Treatment of hazardous waste material and soil contamination;
- No Federal law customer-owned on lead line replacements:
 - The American Water Works Association (“AWWA”) challenged the EPA and won a 1994 DC Circuit Court ruling and thus revising the Lead and Copper Rule in 2000 on the issue of lead service line responsibility on the customer premise.
 - Company is in compliance with the EPA’s Lead and Copper Rule;
- No Missouri law on lead service line replacements;
- No Missouri Public Service Commission rules on lead service line replacements;
- No Missouri Public Service Commission affiliate transaction rules for a large water utility:
 - Parent company has nonregulated affiliate water service line insurance repair program; and
- Continued Missouri American Water Company violation of its Missouri Public Service Commission-approved tariff.

Regardless of the foregoing hurdles, OPC offers as background the utility lead service line replacements found in Indiana’s statute (the only tangible example OPC could locate articulating lead service line requirements), a brief discussion on reporting requirements in place per the Commission’s own rules regarding natural gas pipe replacement; and then makes recommendations specific to Missouri American Water Company’s proposal.

Reporting precedence for other American Water Operations: Indiana

Indiana Statutory Requirements:

- Water utility must first obtain approval from the commission of the water utility’s plan.
- Specific, statutory conditions to be included in said plan include the following:
 1. The availability of grants or low interest loans and how the water utility plans to use available grants or low interest loans to help the water utility finance or reduce the cost of the customer lead service line improvements for the water utility and the water utility’s customers, including any arrangements for the customer to receive available grants or financing directly.

2. A description of how the replacement of customer owned lead service lines will be accomplished in conjunction with distribution system infrastructure replacement projects.
 3. The estimated savings in costs per service line that would be realized by the water utility replacing the customer owned portion of the lead service lines versus the anticipated replacement costs if customers were required to replace the customer owned portion of the lead service lines.
 4. The number of lead mains and lead service lines estimated to be part of the water utility's system.
 5. A range for the number of customer owned lead service lines estimated to be replaced annually.
 6. A range for the total feet of lead mains estimated to be replaced annually.
 7. The water utility's proposal for addressing the costs of unusual site restoration work necessitated by structures or improvements located above the customer owned portion of the lead service lines.
 8. The water utility's proposal for:
 - a. communicating with the customer the availability of the water utility's plan to replace the customer owned portion of the lead service line in conjunction with the water utility's replacement of the utility owned portion of the lead service line; and
 - b. documenting the customer's consent or lack of consent to replace the customer owned portion of the lead service line.
 9. The water utility's proposal concerning whether the water utility or the customer will be responsible for future replacement or repair of the portion of the new service line corresponding to the previous customer owned lead service line.
 10. The estimated total cost to replace all customer owned portions of the lead service lines within or connected to the water utility's system and an estimated range for the annual cost to be incurred by the water utility under the water utility's plan.
- Costs in excess of the commission approved water utility plan are not eligible for the ratemaking treatment

Status to Date:

- Indiana American Water filed its plan to the Indiana Utility Regulatory Commission in Cause Number 45043 on 1/29/2018 which included the Direct Testimony of Gary M. Verdouw (see GM-1).
- Evidentiary hearing is scheduled to begin on May 7, 2018

Existing reporting precedence for pipe replacement: Missouri gas utilities

4 CSR 240-40 – Gas Utilities and Gas Safety Standards, include 61 pages of rules and standards that Missouri gas utilities need to adhere to in regards to the replacement of pipes in the utility's distribution system, affiliate transactions, reporting requirements, minimum filing requirements, safety standards, accounting treatment, excavation practices, integrity management plans, etc...

The Commission's robust rules regarding the state's natural gas utilities pipe replacement is a stark contrast to what the Commission requires for water utilities; however, much of the regulatory oversight offered in the Commission's natural gas utilities pipeline replacement rules could serve as a template for lead service line replacement moving forward.

Specific recommendations for reporting requirements regarding Missouri American Water's proposal:

If the Commission elects to move forward with full lead line replacement, OPC recommends that Missouri American Water be required to populate, and make available to the public, a geographic information system "GIS" that is easily accessible on the Company's website and updated monthly. The reported GIS data should include, at a minimum, the following:

- Historical work done to date (since ISRS has been in effect);
- Planned work to be conducted with estimated dates;
- Explicit location of lead, copper, galvanized iron, etc... service lines (per Company's existing records);²
- Updating of Company's existing records (e.g., observation and tracking of the type of customer-owned service line in course of repair and maintenance to company-owned line);
- Lead and Copper Rule test results, per system, per date; and
- Results of Company's post replacement service line lead water testing results

The Company should also be required to file annual status reports to the Commission and the Office of Public Counsel providing in detail the following information:

- Planned vs realized expenditures;
- Planned vs emergency site repairs;
- # of customers who had a service line replaced and also carried/acquired an insurance "protection plan" and/or any other service through the Company's non-regulated affiliates
- 3rd party costs;
- Individual costs for each site;
- # of refusals and properties passed over;
- # of non-responsive customers;
- Modifications and improvements to the Company's written plan;
- Coordinate with other state and local agencies to monitor the impact of the program on blood lead levels (if any) for participants in the program;
- Results of Company's post replacement service line lead water testing results
- Lessons learned and/or a strength, weakness, opportunity and threat ("SWOT") analysis to better inform the Commission of progress to date; and
- Explanation for how future water system acquisition will impact plans moving forward.

² Public Counsel believes that disclosure will have the unintended consequence of impacting home and resale values as well as commercial operations (e.g., restaurants, etc..., see also, Flint, Michigan). Because of that risk (and other explicit risks), OPC has advocated for any dialogue on the issue; preferably with subject matter experts that have to date been absent. OPC's pilot provides the framework for that dialogue and consideration for issues ultimately best intended for the Missouri Legislature.

FILED
January 29, 2018
INDIANA UTILITY
REGULATORY COMMISSION

Petitioner's Exhibit No. 1

INDIANA-AMERICAN WATER COMPANY, INC.

INDIANA UTILITY REGULATORY COMMISSION

CAUSE NO. 45043

DIRECT TESTIMONY

OF

GARY M. VERDOUW

ON

CUSTOMER LEAD SERVICE LINE REPLACEMENT PROGRAM

SPONSORING ATTACHMENT GMV-1 AND ATTACHMENT GMV-2

INDIANA-AMERICAN WATER COMPANY, INC.

Cause No. _____

Direct Testimony of Gary M. VerDouw

I. WITNESS BACKGROUND

1

2

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

4 A. My name is Gary M. VerDouw and my business address is 727 Craig Road, Saint Louis,
5 Missouri 63141.

6

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

8 A. I am employed by American Water Works Service Company (“Service Company”) as
9 Director, Rates and Regulatory, for Indiana-American Water Company (“Indiana
10 American” or the “Company”) and Michigan American Water Company. The Service
11 Company is a subsidiary of American Water Works Company, Inc. (“American Water”)
12 that provides support services to American Water’s subsidiaries, including Indiana
13 American.

14

15 **Q. Please summarize your educational and professional qualifications.**

16 A. I graduated from the University of Mary in Bismarck, North Dakota in 1981 with a
17 Bachelor of Science degree in Business Administration. I returned to the University of
18 Mary and completed a second major in Accounting in May of 1988. I have attended the
19 Utility Rate Seminar sponsored by the National Association of Regulatory Utility

1 Commissioners (“NARUC”) Water Committee. I am also a member of the American
2 Water Works Association (“AWWA”).

3
4 **Q. Please outline your business experience.**

5 A. I began my employment in February of 1981 when I was hired as Reconciliation and
6 Funds Administrator for the North Dakota State Treasurer’s Office. In December of
7 1981, I was hired as a Field Accountant for ANG Coal Gasification Company, promoted
8 to Accounts Payable Supervisor in 1982 and then to Cash Manager in 1984, where I
9 oversaw daily cash management of over \$1.5 billion in secured debt and over \$400
10 million in daily cash balances. In January, 1988, I was hired as Business Manager for
11 Capital Electric Cooperative, Inc. My responsibilities there included the supervision and
12 oversight of all accounting, finance, billing, budget, insurance, human resources, cash
13 management, rate studies, and other functions for a growing electric distribution
14 cooperative that currently serves over 20,000 consumers. In February, 2005, I accepted
15 the position of Senior Financial Analyst – Rates and Regulations with the Service
16 Company. I was promoted to Manager of Rates and Regulation in April of 2008, and to
17 Director of Rates – Eastern Division in January 2011. In November of 2011, I was
18 named Director of Rates for the newly created Central Division and in January 2016, I
19 was named to my current position, where I am responsible for all rate and regulatory
20 issues for American Water subsidiary operations in the states of Indiana and Michigan.

21
22 **Q. Have you testified before any regulatory agencies with respect to regulatory**
23 **matters?**

1 A. Yes. I have testified in numerous regulatory proceedings before the Indiana Utility
2 Regulatory Commission (“IURC”, or the “Commission”), the Kentucky Public Service
3 Commission, the Tennessee Regulatory Authority, the Iowa Utilities Board, the Missouri
4 Public Service Commission, the Public Utilities Commission of Ohio, and the Illinois
5 Commerce Commission.

6

7 **Q. Please describe the business of Indiana American.**

8 A. Indiana-American is an operating public utility incorporated under the laws of the State
9 of Indiana, with its principal office and place of business located at 153 North Emerson
10 Avenue in Greenwood, Johnson County, Indiana. The Company provides residential,
11 commercial, industrial and municipal water utility service, including sale for resale, and
12 public and private fire service to approximately 300,000 customers in and around the
13 State of Indiana. In addition, the Company provides sewer utility service in two of its
14 districts.

15

16 **II. PURPOSE OF TESTIMONY**

17

18 **Q. What is the purpose of your testimony in this Cause?**

19 A. The purpose of my testimony is to sponsor and testify in support of the Indiana American
20 Water Company Customer Lead Service Line Replacement Plan (“Plan”). The Plan is
21 required under House Enrolled Act No. 1519 before a water utility can petition the
22 Indiana Utility Regulatory Commission for recovery of and on the investments made for
23 customer lead service line replacements. Indiana House Enrolled Act No. 1519 was
24 signed into law by Indiana Governor Eric Holcomb on April 20, 2017, and made

1 effective as of July 1, 2017. The Customer Lead Service Line Replacement Plan that has
2 been prepared by Indiana American Water is made part of my testimony as Attachment
3 GMV-1.

4
5 Indiana American is also requesting that an addendum to its Rules and Regulations
6 relative to disconnected services be approved in conjunction with the Plan, which is made
7 part of my testimony as Attachment GMV-2.

8
9 **III. INDIANA HOUSE ENROLLED ACT 1519**

10
11 **Q. Please explain Indiana House Enrolled Act 1519 as it relates to lead service line**
12 **replacement.**

13 **A.** On April 20, 2017, Indiana Governor Eric Holcomb signed House Enrolled Act No. 1519
14 into law, with the legislation made effective on July 1, 2017. House Enrolled Act No.
15 1519 contains, among other items, the addition of a new chapter to the Indiana Code – IC
16 8-1-31.6 – which establishes a process for water utilities to obtain the authority to replace
17 customer owned lead service lines and recover a return of and on the investments made to
18 replace these lines, even though the lines are not owned by the utility.

19
20 **Q. What does IC 8-1-31.6-5(a) state?**

21 **A.** IC 8-1-31.6-5(a) states: “Before a water utility may seek to include customer lead service
22 line improvements as eligible infrastructure improvements for purposes of IC 8-1-31, the
23 water utility must first obtain approval from the commission of the water utility’s plan for
24 the customer lead service line improvements. To seek approval of the water utility’s plan

1 for the customer lead service line improvements, the water utility shall file with the
2 commission a petition and case-in-chief, including the information set forth in section 6
3 of this chapter.”
4

5 **Q. Does IC 8-1-31.6 provide specific items that are to be included in a utility’s plan for**
6 **the customer lead service line improvements?**

7 A. Yes it does. IC 8-1-31.6(6) includes ten specific items that must be addressed in a water
8 utility’s plan for customer lead service line improvements.
9

10 **Q. Does the Company’s Customer Lead Service Line Replacement Plan address each**
11 **of the ten items included in IC 8-1-31.6-6?**

12 A. Yes it does. The Plan addresses each of the ten items included in IC 8-1-31.6-6 in their
13 own separate section. Each specific IC 8-1-31.6-6 code is cited and addressed as part of
14 the Plan.
15

16 **IV. CUSTOMER LEAD SERVICE LINE REPLACEMENT PLAN**

17
18 **Q. Please describe Attachment GMV-1.**

19 A. Attachment GMV-1 is the Customer Lead Service Line Replacement Plan that has been
20 prepared by Indiana American Water as required under House Enrolled Act 1519. The
21 Plan document is designed to be the document that is followed when replacing customer
22 owned lead service lines under House Enrolled Act 1519.
23

24 **Q. Were individuals outside of the Company consulted as part of the Plan?**

1 A. Yes. Indiana American personnel met with Commission Staff and Indiana Office of
2 Utility Consumer Counselor (“OUCC”) staff and the Indiana Consumer Counselor to
3 explain the Plan and to receive their feedback in an effort to ensure the Plan is responsive
4 to the questions they had. The Company also met with James McGoff, the Indiana
5 Finance Authority (“IFA”) Director of Environmental Programs, in developing the Plan
6 relative to availability of grants and/or low interest loans. Various contractors were also
7 contacted and bids were received to compare the cost of replacing lead service lines
8 individually or as part of a contract that included the replacement of a number of lead
9 service lines.

10

11 **Q. How many lead service lines does Indiana American estimate could be installed on**
12 **the Indiana American distribution system?**

13 A. A review of the Company’s available historic service records indicates that 50,748 lead
14 service lines from the distribution main to the property line may have been present at one
15 time at the addresses identified. As the Company further researches the old service
16 record addresses and determines the current state of the premises, it is anticipated that the
17 number of lead services originally identified from these records will be reduced because a
18 number of these premises may no longer have service or may have been redeveloped with
19 a new address and a new non-lead service line. Indiana American could also discover an
20 additional number of lead services through field investigations of both the Company
21 owned portion of the service lines and the customer owned portion of the service lines.
22 Indiana American has limited information about the portion of service line owned by the
23 customer. It is possible that a service line from the distribution main to the house could

1 be all non-lead, all lead, or partial lead with either the customer owned portion being lead
2 or the Company owned portion being lead. This is further described in Section 4 of the
3 Plan.

4
5 **Q. IC 8-1-31.6-6(a)(5) requires the utility to provide a range of customer owned lead**
6 **service lines to be replaced annually. Indiana American addresses this requirement**
7 **in Section 5 of its Plan. What time range did Indiana American include in the Plan**
8 **to complete the customer owned lead service lines replacement?**

9 A. As stated in Section 2 of the Plan, Indiana American's intent with the Plan is to prioritize
10 replacement in conjunction with main replacement and relocation projects using the
11 Company's prioritization model previously reviewed in prior filings with the IURC.
12 Leaking or damaged service lines will be replaced as soon as possible in line with
13 traditional leak repair activity. Lead service lines on mains not at the end of their useful
14 life and not scheduled for replacement will be replaced at the time most efficient for
15 allocation of resources, minimization of mobilization costs, and with consideration of
16 community disturbance. Indiana American Water will not be accomplishing customer
17 lead service line replacements at an individual customer's request; rather, the
18 replacements will be accomplished according to this Plan. Using this methodology to
19 complete the customer owned lead service line replacements, Indiana American is
20 estimating that it will complete all customer lead service line replacements by the end of
21 2041, or within 24 years. However, for purposes of this Plan, Indiana American is
22 providing a range of time for completion of all customer owned lead service lines of
23 anywhere from ten years to 24 years.

1

2 **Q. Why has Indiana American provided such a wide range of time to complete the**
3 **customer owned lead service line replacements as required in IC 8-1-31.6-6(a)(5)?**

4 A. There are a number of conditions that could affect the timeframe for completion of
5 customer owned lead line replacement. The lead service line completion timeline will be
6 most affected by the availability of contractors to complete the lead service line
7 replacements. Most of the lead service lines are generally concentrated in the Company's
8 Northwest Indiana service district; as such, the capacity and availability of qualified
9 contractors will influence the timeframe for completing the replacement of all lead
10 service lines. In addition, the timeframe will be affected by the availability of lower
11 interest or no interest financing; the availability of additional capital investment funds
12 from other sources; changes in main replacement scheduling; the opportunity to take
13 advantage of contractors already mobilized to complete additional lead service line
14 replacements in the area; and the impact on customers, including but not limited to
15 service cost and local street impacts and closings, among other things. We intend to
16 replace lead service lines as quickly as is practical and as efficiently as possible, but the
17 actual timeframe could vary widely as many of these and other variables are outside of
18 the Company's control. Hence, that is why our range is so broad.

19

20 **V. ADDENDUM TO SECTION 4 OF INDIANA AMERICAN'S RULES AND**
21 **REGULATIONS**

22

23 **Q. Does the Plan include any other items besides the ten specific requirements included**
24 **in IC 8-1-31.6-6?**

1 A. Yes it does. In addition, Indiana American is proposing an Addendum to Section 4 of its
2 Rules and Regulations to create a new Section 4.4 (included as Attachment GMV-2) as
3 part of this Plan to address premise locations that have been disconnected and inactive for
4 a period of twenty-four consecutive months or that have been physically disconnected
5 from the Company's mains.

6

7 **Q. Why is Indiana American seeking this change in its Rules and Regulations?**

8 A. Indiana American has a number of premises where lead service lines are believed to exist
9 that have not been connected for service for twenty-four months or more -- in essence, no
10 customer exists for these services. As part of this Plan, Indiana American is proposing
11 that an Addendum to Section 4 (new Section 4.4) of the Company's Rules and
12 Regulations be approved by the Commission. The proposed Addendum is attached to this
13 Plan as Attachment GMV-2 for consideration and approval. Section 4.4 states that any
14 premise (account) with a lead service line that is or becomes inactive for a period of
15 twenty-four consecutive months or that has been physically disconnected from the
16 Company's mains will not be eligible for service reconnection unless and until the
17 customer replaces the customer portion of the lead service line. Indiana American would
18 install a new non-lead service line to the property and require the property owner to
19 install the customer owned portion of the service line that meets current building code
20 and Indiana American standards before new water service is connected. The customer
21 would also be subject to a connection fee per Indiana American's approved tariffs.

22

1 Indiana American views the action of House Enrolled Act 1519 to replace customer
2 owned lead service lines to be in the best interests of its existing customer base, and does
3 not feel that disconnected accounts (i.e., no customer exists) should be included in the
4 customer replacement. However, if there is interest in connecting an account that has
5 been inactive or vacant for a period of more than 24 months, Indiana American looks to
6 ensure that the lines providing water to that service meet today's standards and thus do
7 not utilize any existing lead lines.

8
9 **Q. What would Indiana American do if the Addendum of Section 4.4 of Indiana**
10 **American's Rules and Regulations is not approved at this time?**


11 **A.** If a customer requests to reconnect a service that has not been connected for service for
12 twenty-four months or more, and Indiana American is not given such authority as
13 requested in the Addendum included as Attachment GMV-2, the connection would be
14 made and service started once the property owner is provided educational materials and
15 executes an acknowledgement of the knowledge of the lead service line. The
16 acknowledgment would stipulate that the property owner disclose the lead service line
17 information to any residents served by the service line, and to anyone who purchases the
18 property from them.

19
20 **Q. Does this conclude your direct testimony?**

21 **A.** Yes, at this time.

VERIFICATION

I, Gary M. VerDouw, American Water Works Service Company, Inc., Director, Rates and Regulatory, for Indiana-American Water Company, Inc., affirm under penalties of perjury that the foregoing representations are true and correct to the best of my knowledge, information and belief.


Gary M. VerDouw
Gary M. VerDouw



I N D I A N A
A M E R I C A N W A T E R

Customer Lead Service Line Replacement Plan
For Submission and Approval
To the Indiana Utility Regulatory Commission
As Required Under House Enrolled Act No. 1519
As Signed Into Law by Indiana Governor Eric Holcomb
On April 20, 2017

Submitted: January, 2018

Customer Lead Service Line Replacement Plan For Submission and Approval January, 2018



Introduction

Indiana American Water Company ("Indiana American", or "the Company") is submitting this plan for the replacement of customer-owned lead service lines pursuant to recent Indiana legislation ("Customer Lead Service Line Replacement Plan" or the "Plan").¹ The Plan includes replacement of customer-owned lead service lines in conjunction with main replacement and relocation projects using the Company's prioritization model previously reviewed in prior filings with the Indiana Utility Regulatory Commission ("IURC", or "Commission"). Leaking or damaged service lines will be replaced as soon as possible in line with traditional leak repair activity. Lead service lines on mains not at the end of their useful life and not scheduled for replacement will be replaced at the time most efficient for allocation of resources, minimization of mobilization costs, and with consideration of community disturbance. The Company plans to disconnect lead service lines that have not been active for a period of 24 consecutive months.

The Plan will allow Indiana American to accelerate the replacement of lead service lines that are still in use by focusing on those lines. State and/or federal funding for replacement programs are uncertain at this time, but will be utilized to accelerate replacement under the plan, as available.

Background

The United States Environmental Protection Agency's ("U.S. EPA") October, 2016 "Lead and Copper Rule Revisions White Paper" points out:

"It is important to recognize that LSLR ("lead service line replacement") presents substantial economic, legal, technical and environmental justice challenges. First, it is costly. Estimated costs for LSLRs range from \$2,500 to more than \$8,000 per line, suggesting an estimated cost of eliminating all 6.5 to 10 million LSLs nationwide ranging from 16 to 80 billion dollars. Potential costs may be disproportionately borne by specific low-income localities, such as Detroit, which has an estimated 100,000 LSLs and where 40 percent of the population is below the poverty line. Second, LSLs are often partially or totally owned by private homeowners. Under the current LCR ("Lead and Copper Rule"), public water systems are responsible for replacement of LSL or the portion of the LSL it owns. This is typically the portion of the line from the water main to the property line."

"To the extent water systems rely on homeowners to pay for replacement of privately owned portions of lines, there are concerns about consumer's ability to pay and the possibility that lower-income homeowners will be unable to replace lines, resulting in disparate levels of protection."

The Indiana General Assembly has therefore set State policy to facilitate Lead Service Line Replacement ("LSLR") in its 2017 session.

¹ On April 20, 2017, Indiana Governor Eric Holcomb signed House Enrolled Act No. 1519 into law, with the legislation made effective on July 1, 2017. House Enrolled Act No. 1519 contains, among other items, the addition of a new chapter to the Indiana Code – IC 8-1-31.6, which establishes a process for water utilities to obtain the authority to replace customer owned lead service lines and recover a return of and on the investments made to replace these lines, even though the lines are not owned by the utility.

**Customer Lead Service Line Replacement Plan
For Submission and Approval
January, 2018**



Statutory Consideration for Plan

IC 8-1-31.6-5(a) states:

“Before a water utility may seek to include customer lead service line improvements as eligible infrastructure improvements for purposes of IC 8-1-31, the water utility must first obtain approval from the commission of the water utility’s plan for the customer lead service line improvements. To seek approval of the water utility’s plan for the customer lead service line improvements, the water utility shall file with the commission a petition and case-in-chief, including the information set forth in section 6 of this chapter.”

IC 8-1-31.6-6 includes ten specific items that must be addressed in a water utility’s plan for customer lead service line improvements. Each of these ten items are listed below. The plan prepared by and for Indiana American addresses each of these specific items.

1. **Availability of grants or low interest loans.** *(See Page 4 of the Plan for details)*
IC 8-1-31.6-6(a)(1): The availability of grants or low interest loans and how the water utility plans to use available grants or low interest loans to help the water utility finance or reduce the cost of the customer lead service line improvements for the water utility and the water utility’s customers, including any arrangements for the customer to receive available grants or financing directly.

2. **How the replacement of customer owned lines will be accomplished.** *(See Page 5 of the Plan for details)*
IC 8-1-31.6-6(a)(2): A description of how the replacement of customer owned lead service lines will be accomplished in conjunction with distribution system infrastructure replacement projects.

3. **Estimated savings for replacement of customer owned lead service lines by Indiana American as compared to the customer cost to replace an individual customer owned lead service line.** *(See Page 7 of the Plan for details)*
IC 8-1-31.6-6(a)(3): The estimated savings in costs per service line that would be realized by the water utility replacing the customer owned portion of the lead service lines versus the anticipated replacement costs if customers were required to replace the customer owned portion of the lead service lines.

4. **Estimated number of lead mains and lead service lines that are part of Indiana American’s utility system.** *(See Page 9 of the Plan for details)*
IC 8-1-31.6-6(a)(4): The number of lead mains and lead service lines estimated to be part of the water utility’s system.

5. **A range of the number of customer owned lead service lines estimated to be replaced annually.** *(See Page 10 of the Plan for details)*
IC 8-1-31.6-6(a)(5): A range of the number of customer owned lead service lines to be replaced annually.

6. **A range for the total feet of lead mains estimated to be replaced annually.** *(See Page 12 of the Plan for details)*
IC 8-1-31.6-6(a)(6): A range for the total feet of lead mains estimated to be replaced annually.
7. **Indiana American's proposal for addressing unusual site restoration costs.** *(See Page 13 of the Plan for details)*
IC 8-1-31.6-6(a)(7): The water utility's proposal for addressing the costs of unusual site restoration work necessitated by structures or improvements located above the customer owned portion of the lead service lines.
8. **Indiana American's communication and documentation proposal.** *(See Page 16 of the Plan for details)*
IC 8-1-31.6-6(a)(8): The water utility's proposal for:
 - (A) communicating with the customer the availability of the water utility's plan to replace the customer owned portion of the lead service line in conjunction with the water utility's replacement of the utility owned portion of the lead service line; and
 - (B) documenting the customer's consent or lack of consent to replace the customer owned portion of the lead service line.
9. **Indiana American's proposal for future ownership of the customer owned lead service line.** *(See Page 19 of the Plan for details)*
IC 8-1-31.6-6(a)(9): The water utility's proposal concerning whether the water utility or the customer will be responsible for future replacement or repair of the portion of the new service line corresponding to the previous customer owned lead service line.
10. **Estimated total cost and estimated annual cost range to replace customer owned lead service lines.** *(See Page 20 of the Plan for details)*
IC 8-1-31.6-6(a)(10): The estimated total cost to replace all customer owned portions of the lead service lines within or connected to the water utility's system and an estimated range for the annual cost to be incurred by the water utility under the water utility's plan.

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1. Availability of Grants or Low Interest Loans

IC 8-1-31.6-6(a)(1): The availability of grants or low interest loans and how the water utility plans to use available grants or low interest loans to help the water utility finance or reduce the cost of the customer lead service line improvements for the water utility and the water utility's customers, including any arrangements for the customer to receive available grants or financing directly.

Indiana American will continuously monitor availability of grants and low interest loans for which it may be eligible and will take appropriate action to seek such funding that would reduce the total cost of lead service line replacement and accelerate implementation of the plan. The Company will invest its capital to execute the plan and schedule outlined herein; as grants or low interest loans become available, they will be used to accelerate the plan.

Pursuit of Low Interest Loans and/or Grants through the Indiana Finance Authority

The Indiana Finance Authority ("IFA") is the authority that is responsible for the receipt and distribution of low interest and/or grant funds for the State of Indiana. The mission of the IFA is to oversee State-related debt issuance and provide efficient and effective financing solutions to facilitate state, local government, and business investment in Indiana. Indiana American is eligible for available low interest loan funds, grant funds and State Revolving Fund ("SRF") Loan Program funds through the IFA.

The SRF Program provides low interest loans for projects that improve drinking water infrastructure. The program's mission is to provide eligible entities with the lowest interest rates possible on financing of such projects while protecting public health and the environment. The Company will pursue available SRF funding which would lower the total cost of implementing this LSLR plan and accelerate its execution. The Company will be proactive in discussing the priority of this work with the IFA, recognizing that this work will be ranked with other requests for funding and funding is limited.

The IFA is seeking authorization from the EPA to expand its funding sources and mechanisms, which could include funds pursuant to the Water Infrastructure Finance and Innovation Act of 2014, also known as "WIFIA". WIFIA is a federal credit program administered by the EPA for eligible water and wastewater infrastructure projects. Eligible borrowers include Drinking Water SRF programs. Should this funding become available to the IFA, and should its use lower the total cost of implementing the plan and accelerate its execution, then the Company will pursue such funding.

The IFA has also developed a loan offer for utilities and municipalities that increases the debt, but lowers the overall interest rate significantly below the SRF rate. This provides more funding while maintaining the required debt service level. Should this type of loan be available, lower the total cost of implementing the plan, and accelerate its execution, then the Company will pursue such funding.

The Company will pursue all of these options for which it may be or may become eligible, as well as any others that may become available and which will lower the total cost of implementing the plan and accelerate its execution.

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2. How the Replacement of Customer Owned Lead Service Lines will be accomplished

IC 8-1-31.6-6(a)(2): A description of how the replacement of customer owned lead service lines will be accomplished in conjunction with distribution system infrastructure replacement projects.

Indiana American's Plan for LSLRs includes three LSLR categories:

1. LSLRs completed in conjunction with main replacement and relocation projects.
2. LSLRs completed for leaking or damaged service lines.
3. LSLRs completed on mains not at the end of their useful life and not scheduled for replacement.

The plan is to prioritize replacement in conjunction with main replacement and relocation projects using the Company's prioritization model previously reviewed in prior filings with the IURC. Leaking or damaged service lines will be replaced as soon as possible in line with traditional leak repair activity. Lead service lines on mains not at the end of their useful life and not scheduled for replacement will be replaced at the time most efficient for allocation of resources, minimization of mobilization costs, and with consideration of community disturbance. Indiana American Water will not be accomplishing customer lead service line replacements at an individual customer's request; rather, the replacements will be accomplished according to this Plan. The Company will consider special situations that might arise in the prioritization and scheduling of lead service line replacements; such as supporting documentation from the Indiana Department of Health that links a premise to higher lead levels from other sources, or a U.S. Department of Housing and Urban Development (HUD) lead remediation program.

In addition, Indiana American is proposing an Addendum to Section 4 of its Rules and Regulations² (new Section 4.4, a copy of which is included as Attachment GMV-2 to the Direct Testimony of Gary M. VerDouw in support of this Plan, which testimony is incorporated herein and made a part of this Plan) to address premise locations that have been disconnected and inactive for a period of twenty-four consecutive months or that have been physically disconnected from the Company's mains. The three LSLR approaches and the proposed Addendum to the Company's Rules and Regulations are explained further below.

LSLRs completed in conjunction with main replacement and relocation projects

Indiana American has created and implemented a Geographic Information System (GIS) based prioritization model for identifying pipeline replacement investment needs. The model prioritizes pipeline replacement needs through identification of service risks associated with pipe failure risks. Indiana American budgets and plans these pipe replacements on a continuing basis. Indiana American also budgets for and completes unscheduled main replacements because it knows from operating experience that pipes that are not initially planned for replacement will fail during the year and will require replacement of segments of those pipes to enable

² Indiana-American Water Company, Inc. Rules and Regulations Applicable to Water Service, I.U.R.C. W-15, Effective March 30, 2015.

continuing service to customers. Indiana American also relocates pipe when the pipes are affected by projects planned by governments and other entities.

LSLRs will include the Company owned portion of the service line, and the customer owned portion of the service line if the customer agrees to the replacement of their line on their property. If a customer refuses to have Indiana American replace the customer owned portion of the service line, the refusal will be documented as discussed in Section 8 (3) below. If a customer refuses the offer of replacing the lead service line on their property, Indiana American will proceed with replacing the Company owned portion of the service line and will connect the new service to the existing service at the customer property line. Indiana American will communicate with the customer about lead and drinking water with the same methods and materials as described in Section 8 of this Plan. The communications include information about lead and drinking water, health effects, exposures to lead, flushing recommendations, ways to minimize exposure to lead, testing for lead, frequently asked questions, and further contact information.

LSLRs completed for leaking or damaged service lines

Indiana American will complete LSLRs for leaking or damaged service lines. LSLRs will include the Company owned portion of the service line, and the customer owned portion of the service line if the customer agrees to the replacement of their line on their property. If a customer refuses to have Indiana American replace the customer owned portion of the service line, the refusal will be documented as discussed in Section 8 (3) below.

LSLRs completed on mains not at the end of their useful life and not scheduled for replacement

Some distribution system pipes are not at the end of their useful life and are not presently contemplated to be replaced within the Company nearer term view - at least within the next ten years, and likely longer depending on pipe condition. Indiana American is planning to complete LSLRs on these mains (without replacing the mains themselves), including the Company owned portion of the service line and the customer owned portion of the service line if the customer agrees to the replacement of their line on their property. If a customer refuses to have Indiana American replace the customer owned portion of the service line, the refusal will be documented as discussed in Section 8 (3) below.

Disconnection of lead services lines from distribution mains at properties that have not been a customer for 24 consecutive months or more

Indiana American has a number of premises where lead service lines exist that have not been connected for service for twenty-four months or more – in essence, no customer exists for these services. As part of this Plan, Indiana American is proposing that an Addendum creating a new Section 4.4 of the Company's Rules and Regulations be approved by the Commission. The proposed Addendum is attached as Attachment GMV-2 to the Direct Testimony of Gary M. VerDouw which is incorporated into this Plan for consideration and approval. The Addendum states that any premise (account) with a lead service line that is or becomes inactive for a period of twenty-four consecutive months or that has been physically disconnected from the Company's mains will not be eligible for service reconnection unless and until the customer replaces the customer portion of the lead service line. Indiana American would install a new non-lead service line to the property and require the property owner to install the customer owned portion of the service line that meets current building code and Indiana American standards before new water service is connected. The customer would also be subject to a connection fee per Indiana American's approved tariff.

If a customer requests to reconnect a service that has not been connected for service for twenty-four months or more, and Indiana American is not given such authority to amend its rules with the Addendum as requested above, the connection would be made and service started once the property owner is provided educational

materials and executes an acknowledgement of the knowledge of the lead service line. The acknowledgment would stipulate that the property owner disclose the lead service line information to any residents served by the service line, and to anyone who purchases the property from them.

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3. Estimated Savings for Replacement of Customer Owned Lead Service Lines by Indiana American Water as Compared to Customer Cost to Replace Individual Customer Owned Lead Service Line

IC 8-1-31.6-6(a)(3): The estimated savings in costs per service line that would be realized by the water utility replacing the customer owned portion of the lead service lines versus the anticipated replacement costs if customers were required to replace the customer owned portion of the lead service lines.

Estimated Savings from Indiana American Managed LSLRs compared with Home Owner Managed LSLRs

As explained below, savings of 25% to 30%, on average, are estimated to be realized from Indiana American managed LSLR work compared with home owner managed LSLR. In addition, scheduling and coordinating activities in a scenario of home owner managed work to ensure full service line replacements in conjunction with the Company's main replacement program would likely delay the Company's main replacement projects, increase the time to complete the projects, increase the time of disruption to customers and the community, and increase the cost.

Estimated Cost of Indiana American Managed LSLRs on Customer Properties

Indiana American commenced offering to replace customer owned lead service lines in 2017 when encountering lead service lines during main replacement and relocation projects. Work and costs for replacing the service lines includes:

1. Time and materials in communicating with customers for purposes of education, schedule coordination, and sharing water sample test results.
2. Installation of new water service line and retirement of old water service line.
3. Inspection of service line work.
4. Restoration work to normal site conditions.
5. Electrical inspection, removal of any electrical system grounding connection from the old water service line, and installation of new electrical grounding system when warranted.
6. Time and materials for flushing from the building outside hose bibb, and flushing of all operating faucets within the building.
7. Time and materials for collection of water samples, mailing samples, performing sample analyses, completing documentation, and sharing results with customers.
8. General coordination and administration.

At the time of preparing this filing, Indiana American had replaced 81 customer owned LSLs in 2017 as part of main replacement and relocation projects. Most of this work occurred with projects in the Richmond service area. The contractor cost to replace the customer owned lead service lines has ranged from \$400 to \$3,953 per service thus far, and has averaged approximately \$2,900 per service. These costs do not include Company

personnel time for Engineering, planning, construction supervision, or water quality testing. The contractor cost has included replacing the service line into the inside of the house basement for most of the services because most of the buildings thus far have had unfinished basements. The average cost could increase or decrease as work continues. Factors impacting cost could include:

1. Local codes and requirements.
2. Changes in laws, standards, and best practices.
3. Local competitive market prices.
4. Differences in construction methods and equipment in different areas.
5. Property site conditions.
6. Scope of work and building conditions for work, if any, performed through building foundation walls and within buildings.
7. Any factors impacting material and labor costs such as inflation, strikes, and events affecting the supply chain.
8. Improvements in technology.

Considering the cost factors outlined above, Indiana American estimates that the current average cost per service across Indiana American's service area would be approximately \$3,500 in 2017 dollars.

Estimated Cost of Customer Managed LSLRs on Customer Properties

The EPA October, 2016 Lead and Copper Revisions White Paper sets forth a range of the estimated cost of replacing customer owned lead service lines. The IFA, additionally, has undertaken funding of a project to replace lead service lines in the Super Fund areas of East Chicago, Indiana. Indiana American received an opinion of cost for this work from a contractor who has been performing a number of replacements for Indiana American. The estimates for a customer managed LSLR, exclusive of Indiana American's time and materials for communicating with the customers, and exclusive of the water sampling and analyses would be at least 25% higher if managed and performed for an individual homeowner. This is primarily due to savings achieved with Indiana American's work from already having equipment mobilized for the project. This results in lower costs for equipment mobilization, scheduling, and coordination. The contractor also perceives savings due to efficiencies in performing systematic ongoing service line work deriving from the ability to develop more efficient practices, techniques, and use of equipment through the sequential systematic mass work while performing work in the Indiana American managed approach. In the case of the individual home owner managing the work, costs for communicating with customers and for Indiana American performed water sampling and analyses would be additional costs to the contractor work. These costs are included in the Company's costs of managing the service line work, and would add to the cost of the home owner managed approach. Including these costs, the total cost per service in the homeowner managed approach is estimated to range between \$4,000 and \$5,500 (in 2017 dollars) and is limited to the benefit of individual homeowners as opposed to the broad education and outreach proposed here.

The approach of individual home owners managing the work presents other challenges. A primary challenge is homeowner responsiveness and coordination of their service line work with Indiana American's service line work to ensure simultaneous full service line replacement to the building in lieu of partial service line replacements, while enabling timely replacement or relocation of water mains. This is a concern because studies indicate partial lead service line replacements can result in increases in lead concentrations to buildings being served by the service line. The time and cost involved in coordinating these activities with large numbers of individual home owners could also be extraordinary. All of these additional costs are difficult to quantify but would increase the \$4,000 to \$5,500 amount estimated above.

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4. Estimated Number of Lead Mains and Lead Service Lines that are part of Indiana American's Utility System

IC 8-1-31.6-6(a)(4): The number of lead mains and lead service lines estimated to be part of the water utility's system.

Estimated Number of Lead Mains

Indiana American Water has identified four small diameter lead mains in the distribution system serving less than 15 customers. Indiana American commenced replacing these mains in September of 2017, along with the lead services extending from these mains. The work on the replacement of the lead mains was completed in 2017.

Estimated Number of Lead Service Lines

The number of Indiana American owned lead services extending from the distribution mains to the customer property line is difficult to determine because of the state of historic paper records for these services. The Company has historic paper service records with some information for many service areas; however, historic service records do not exist for some areas. Because of the historic nature of information contained on these available records, some of the information like service line material and address may also be outdated and may no longer be accurate.

Many of the historic record addresses have been matched to premises in Indiana American's current computerized customer information system ("CIS"). The Company is also identifying a number of the historic record card addresses that cannot be matched to active premises in the Company's current CIS. Indiana American anticipates a number of these premises may no longer have a service, or may have a service line but a customer account has been inactive for longer than two years, or may have been redeveloped with a new address and a new non-lead service line. Indiana American is in the process of quantifying these circumstances.

A review of the Company's available historic service records indicates that 50,748 lead service lines from the distribution main to the property line may have been present at one time at the addresses identified. As the Company further researches the old service record addresses and determines the current state of the premises, it is anticipated that the number of lead services originally identified from these records will be reduced because a number of these premises may no longer have service or may have been redeveloped with a new address and a new non-lead service line. Indiana American could also discover an additional number of lead services through field investigations of both the Company owned portion of the service lines and the customer owned portion of the service lines. Indiana American has limited information about the portion of service line owned by the customer. It is possible that a service line from the distribution main to the house could be all non-lead, all lead, or partial lead with either the customer owned portion being lead or the Company owned portion being lead.

Nearly 65% of the count of possible lead service lines from the historic record cards are in the Northwest Indiana service area. The largest counts as a percent of total services in respective service areas are in the Winchester

District at approximately 43% of total services; the Northwest District at approximately 41% of total services; the Richmond District at approximately 26% percent of total services; and, the Terre Haute District at approximately 21% of total services.

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5. A Range of the Number of Customer Owned Lead Service Lines Estimated to be Replaced Annually

IC 8-1-31.6-6(a)(5): A range of the number of customer owned lead service lines to be replaced annually.

Indiana American completed 81 LSLRs in 2017.

Indiana American prepares and updates a five year capital investment plan each year. From this planning Indiana American currently estimates it will replace a quantity range of lead service lines in each of the next five years as shown in Table 1 below.

Table 1: Estimated Range of Number of Customer Owned Lead Service Lines to be Replaced from 2017 through 2022

<u>Year</u>	<u>Range of Number of Service Lines Replaced</u>
2017	81 (Actual)
2018	500 - 2,000
2019	1,000 - 5,000
2020	1,000 - 5,000
2021	1,500 - 5,000
<u>2022</u>	<u>1,500 - 5,000</u>
Total for period	5,581 - 22,081

Plan for Customer Owned Lead Service Line Replacement beyond Five Years

Indiana American does not prepare detailed capital investment budgets beyond a five year period; however, for the purposes of planning for LSLRs, it has prepared an estimated range of LSLRs completed by year beyond 2022, as shown in Table 2. Completion of LSLRs at the high end of the range results in completing the estimated LSLRs by year end 2027, within 10 years. Completion of LSLRs at the low end of the range results in completing the estimated number of LSLRs by year end 2041, or within 24 years.

Table 2: Estimated Range of Number of Customer Owned Lead Service Lines to be Replaced beyond 2022

Year	Range of Number of Service Lines Replaced
2023	2,000 – 6,000
2024	2,000 – 6,000
2025	2,000 – 6,000
2026	2,000 – 6,000
2027	2,000 – 6,000
2028	0 – 6,000
2029	0 – 6,000
2030	0 – 6,000
2031	0 – 6,000
2032	0 – 6,000
2033	0 – 6,000
2034	0 – 6,000
2035	0 – 6,000
2036	0 – 6,000
2037	0 – 6,000
2038	0 – 6,000
2039	0 – 6,000
2040	0 – 6,000
2041	0 – 6,000

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6. A Range for the Total Feet of Lead Mains Estimated to be Replaced Annually

IC 8-1-31.6-6(a)(6): A range for the total feet of lead mains estimated to be replaced annually.

Indiana American's Lead Main Replacement Plan

As described in Section 4 of this Plan, Indiana American identified four small diameter lead mains in the distribution system. These four lead mains are approximately 475 feet in length and serve less than 15 customers. Indiana American commenced in the replacement of these mains in September of 2017, along with the lead services extending from these mains. The work on the replacement of these mains was completed in 2017. Indiana American is not aware of any other lead mains existing in its services areas. If other mains are discovered, Indiana American will schedule their replacement when they are discovered.

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7. Indiana American's Proposal for Addressing Unusual Site Restoration Costs

IC 8-1-31.6-6(a)(7): The water utility's proposal for addressing the costs of unusual site restoration work necessitated by structures or improvements located above the customer owned portion of the lead service lines.

Indiana American will use any and all methods available to mitigate the need for unusual site restoration work necessitated by structures or improvements located above the customer owned portion of the lead service lines. However, there may be specific instances that necessitate unusual or extraordinary site restoration as a result of the replacement of customer owned lead service lines.

Replacement of the customer owned portion of the lead service lines might be categorized as usual or unusual with regard to what it takes to do the replacement and the related restoration.

A customer owned lead service line replacement for a specific property is designated as "Usual" if all of the following conditions exist:

Usual Replacement:

- Customer lead service line replacement and site restoration can be done with same equipment and crew expertise as used in the replacement of the Company owned portion of the lead service line; i.e., traditional excavation and grounds and pavement restoration as is done with routine main and service line replacement projects.
- Site has no unusual access requirements or structure interference that cannot be addressed with re-routing or traditional equipment and crew; i.e., requires no removal and replacement of outbuildings, fences, retaining walls, patios, pools, etc.
- Replacement requires no access inside building/home; or, access to replace a nominal length to the inside plumbing connection (i.e., shut-off, meter) does not require repair or restoration to the building/home.

If the lead service line replacement is considered "usual", the replacement and restoration will be executed by Indiana American at no cost to the customer; or, the customer can reject the offer of replacement by Indiana American. As noted in Section 8 (3) below, customers will be asked to sign a waiver if they reject the offer of replacement.

A customer owned lead service line replacement for a specific property is designated as "Unusual" if one or more of the following conditions exist:

Unusual Replacement:

- An unobstructed path allowing installation of a new underground non-lead service line on the property does not exist because of structures that interfere with the replacement (e.g., outbuildings, fences, retaining walls, patios, pools, etc.).

This premise will not be eligible for customer lead service line replacement under this program unless the customer takes whatever action is required, at customer's expense, to provide the required access for replacement. This action must be completed within the schedule set by

Indiana American in order to avoid delaying the Company's main replacement projects and replacements of lead service lines for other customers as planned and/or to avoid any increased cost resulting from such delay.

- Replacement of the customer lead service line up to the point of an inside shut-off connection or meter would require repair to the building after the lead service line replacement; i.e., repair of walls and/or drywall for a finished basement, or repair to the external wall or the foundation of the building.

In this situation, Indiana American will replace the customer lead service line as close as possible to the building/home, making the connection to existing plumbing outside the structure itself.

- Site has landscaping that would require costly replacement of trees, shrubs, flower beds, etc., resulting in restoration cost over the program allowable amount (see below).

In this case, Indiana American will complete the replacement and restoration, incurring cost up to the program allowable amount. Any further restoration will be the responsibility of the customer.

- The property is unsafe. In this situation, the homeowner will be responsible for rectifying the unsafe condition(s) prior to any work on their property.
- Any other unusual conditions which may exist will be addressed in a similar manner; i.e., requiring the customer to provide usual access for replacement, and to assume the responsibility for any restoration scope above that covered by the program allowable amount.

The program allowable amount will be \$7,000 for total cost of replacement and restoration. This amount is 200% of the midpoint for the estimated cost range (in 2017 dollars), based on actual replacements completed to date, as described in Section 3 of this Plan. The allowable amount will be adjusted at the beginning of each calendar year to reflect the Handy-Whitman Cost Trends of Water Utility Construction, North Central Region, Cost Index for Services Installed, which is updated semi-annually.

The program will not cover the cost of non-related local plumbing code upgrades such as installing pressure reducing valves or upgrading home fire protection systems. Such upgrades would be the responsibility of the customer.

The customer will be notified that an unusual site condition applies prior to providing approval for the work to begin. The customer may reject the offer of replacement if unwilling to meet the requirements for unusual replacement and restoration described above.

Unusual Site Conditions

Directional drilling and pull through methods are expected to mitigate much of any concern for unusual site restoration work. In 2017, Indiana American replaced 81 customer owned lead service lines. In the course of communicating with customers about the program, Indiana American encountered only one property owner who declined to have their lead service line replaced on their property because of concern about the life of a tree on their property. Thus, it is possible that unusual site conditions could lead to a decision by the property owner that the property owner manage the work on their property without Indiana American's involvement or funding if the property owner wants to replace the service line on their property. It is possible that other types of site conditions and concerns about restoration, unusual liability concerns, or safety concerns could lead to a similar decision by parties involved. If there is a unique replacement scenario encountered that would make a

lead service line replacement infeasible or impractical, other solutions would be investigated. Without these unusual concerns, and with customer agreement, Indiana American plans to replace customer owned lead service lines as described in this plan.

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8. Indiana American's Communication and Documentation Proposal

IC 8-1-31.6-6(a)(8): The water utility's proposal for:

- (A) communicating with the customer the availability of the water utility's plan to replace the customer owned portion of the lead service line in conjunction with the water utility's replacement of the utility owned portion of the lead service line; and
- (B) documenting the customer's consent or lack of consent to replace the customer owned portion of the lead service line.

Indiana American's Communication Plan

Indiana American has developed a comprehensive communication plan for communicating with customers regarding lead and drinking water.

Lead and Drinking Water Information

Indiana American has created a webpage on its customer website, www.indianaamwater.com, in the Water Quality tab, discussing lead and drinking water. Topics on the webpage include: water treatment and corrosion control; results from lead sampling; assessing exposure to lead; minimizing exposure to lead; home treatment for lead; and testing water for lead. Additional information from outside sources is also included on the webpage. The webpage link is: <https://amwater.com/inaw/water-quality/lead-and-drinking-water>.

Communication Plan for Customers with Lead Service Lines

Indiana American has developed a comprehensive communication plan for informing customers about project work and about lead and drinking water. The communication also informs customers about lead service lines, and steps for identifying and replacing lead services lines in conjunction with Indiana American work. Communications are described in the sections below. Examples of referenced communication materials are attached in the Appendices of this plan.

1. Communications with Scheduled Utility Work

In conjunction with scheduled utility work, Indiana American mails or otherwise delivers to affected customers a communication entitled "We Are Investing in Your Neighborhood". Service lines and service line replacements are described in this communication. This communication also advises customers that Indiana American will contact them to discuss replacing their service line if it is discovered that their service line is a lead service line.

Indiana American also includes in the package a communication entitled "Important Notice About Your Water Service and Lead Service Lines". This communication describes utility owned and customer owned service lines, along with steps of service line material investigation, further communications, an overview of the lead service replacement program, frequently asked questions with answers, and further information about lead and drinking water.

2. **Service Line Assessment Results**

After the service line material is investigated in the field, the results of the investigation are shared with the customer, usually via a door hanger entitled "Service Line Assessment Results". The customer is asked to call the identified Indiana American representative if the service material was identified as lead. Indiana American personnel or consultant inspectors attempt to follow up with property owners who are not responsive by mail, phone call, or both.

3. **Customer License Agreement to Replace Customer Owned Lead Service Line, and Lead Fact Sheet**

Indiana American personnel or consultant representatives share by mail, or in person, the customer owned water service line replacement license agreement entitled "Water Service Line Replacement". Indiana American personnel or consultant representatives share details about the work and schedule and answer any questions in person or by telephone.

The license agreement describes the work, the schedule, a 12-month workmanship warranty, indemnification provisions, the provisions that the service line will continue to be owned and maintained by the customer, and acknowledgements by the customer, including an acknowledgment that they have received and read the "Important Notice About Your Water" and the "Lead" fact sheet, which is given to them at this time. The "Lead" fact sheet describes lead and drinking water, health effects, exposures to lead, ways to minimize exposure to lead, testing for lead, frequently asked questions, and further contact information.

The customer can agree to permit Indiana American to replace their lead service line by signing the license agreement. The customer can also decline to permit Indiana American to replace their lead service line, and sign the acknowledgement indicating they decline. If the customer declines to sign the acknowledgement, all relative safety and educational materials will be left with the customer, Indiana American will document the customer's choice, and will maintain that information in its records. Indiana American also maintains copies of signed license agreements.

4. **Completion of Work, Water Sampling, and Sample Analysis**

Indiana American recommends that immediately after the service line is replaced that the house outside hose bibb first be flushed for 30 minutes, immediately followed by a whole house flush for 30 minutes. The whole house flush includes the removal of all faucet aerators and flushing of all operating faucets in the house together for 30 minutes. In instances of lower pressure, Indiana American may recommend the whole house flush be modified to a first floor flush. The purpose of the flushing is to flush high velocity water through the pipes to remove particles that may exist in the remaining home plumbing.

Indiana American offers to customers to perform the flushing for them, and to collect a first set of samples immediately after the flushing. Indiana American sends the samples to the American Water Works Service Company certified laboratory in Belleville, Illinois (the "Lab") for analysis. The test results are shared with the customer via letter, and are shared via telephone if the results are above the EPA action level.

Indiana American also offers for the customer to collect a second set of samples within a few days after the first sample. If the customer chooses to collect the second set of samples,

Indiana American coordinates pick up of the samples from the customer and sends the samples to the Lab for analysis. Coordination of the sample pick up from the customer may include a door hanger entitled "72 Hour Water Sample Reminder". Water sample test results are shared with the customer via letter, and are also shared via telephone if the results are above the EPA action level. If the results are above the EPA action level, Indiana American offers to perform flushing, sampling, and sample analysis up to two additional times.

If the customer does not permit Indiana American to perform a whole house flush, but does permit flushing of the outside hose bibb, Indiana American will perform the hose bibb flush and collect a sample at the hose bibb but will not collect samples inside the house.

At the time the service line is replaced Indiana American also gives the customer the communication entitled "Important Notice About Your Water". This communication informs the customer that the water service line was replaced. It also describes flushing instructions, other steps for managing exposure to lead, and identifies contact information.

5. Contractor Guidance for Lead Service Line Replacement & Electrical Grounding

Indiana American reviews the scope of work with contractors and gives them a guidance sheet entitled "Lead Service Line Replacement & Electrical Grounding". This sheet reviews instructions and practices for retiring lead service lines and for managing building electrical grounding issues.

All documents listed above are attached to this Plan and listed as "Communication Materials Included with Customer Lead Service Line Replacement Plan".

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9. Indiana American's Proposal for Future Ownership of the Customer Owned Lead Service Line

IC 8-1-31.6-6(a)(9): The water utility's proposal concerning whether the water utility or the customer will be responsible for future replacement or repair of the portion of the new service line corresponding to the previous customer owned lead service line.

Customer Service Line Ownership

As described in the preceding section, the customer license agreement for replacing the customer owned lead service identifies that the new service line will continue to be owned and maintained by the customer.

**Customer Lead Service Line Replacement Plan
For Submission and Approval
January, 2018**



10. Estimated Total Cost and Annual Cost Range to Replace Customer Owned Lead Service Lines

IC 8-1-31.6-6(a)(10): The estimated total cost to replace all customer owned portions of the lead service lines within or connected to the water utility’s system and an estimated range for the annual cost to be incurred by the water utility under the water utility’s plan.

As described in Section 5 of this Plan, Indiana American prepares and updates a five year capital investment plan each year. From this planning, Indiana American currently estimates it will replace a quantity range of lead service lines in 2017 and in each of the next five years shown in Table 3 below. Based on the estimated quantity range, and an average estimated cost of \$3,500 per service, the estimated range of annual cost is shown in Table 3. The estimates are in 2017 dollars and do not account for inflation of materials and labor costs.

Table 3: Estimated Annual Cost Range of Replacing Customer Owned Lead Service Lines from 2017 through 2022

<u>Year</u>	<u>Estimated Range of Number of Service Lines Replaced</u>	<u>Estimated Range of Annual Cost (In 2017 Dollars)</u>
2017	81 (actual)	\$210,000 - \$1,050,000
2018	500 - 2,000	\$1,750,000 - \$7,000,000
2019	1,000 - 5,000	\$3,500,000 - \$17,500,000
2020	1,000 - 5,000	\$3,500,000 - \$17,500,000
2021	1,500 - 5,000	\$5,250,000 - \$17,500,000
2022	1,500 - 5,000	\$5,250,000 - \$17,500,000

As described in Section 5 of this plan, Indiana American does not prepare detailed capital investment budgets beyond a five year period. However, for the purposes of planning for LSLRs it has prepared an estimated range of LSLRs completed by year beyond the year 2022, as shown in Table 4. Completion of LSLRs at the high end of the range results in completing the estimated number of LSLRs by year 2027, within 10 years. Completion of LSLRs at the low end of the range results in completing the estimated number of LSLRs by year end 2041, or within 24 years. Based on the estimated quantity range, and an average estimated cost of \$3,500 per service, the estimated range of annual cost is shown in the Table 4 for years beyond the year 2022. The estimates are in 2017 dollars and do not account for inflation of materials and labor costs.

Table 4: Estimated Annual Cost Range of Replacing Customer Owned Lead Service Lines beyond 2022

Year	Range of Number of Service Lines Replaced	Estimated Range of Annual Cost (in 2017 Dollars)
2023	2,000 – 6,000	\$7,000,000 - \$21,000,000
2024	2,000 – 6,000	\$7,000,000 - \$21,000,000
2025	2,000 – 6,000	\$7,000,000 - \$21,000,000
2026	2,000 – 6,000	\$7,000,000 - \$21,000,000
2027	2,000 – 6,000	\$7,000,000 - \$21,000,000
2028	0 – 6,000	\$0 - \$21,000,000
2029	0 – 6,000	\$0 - \$21,000,000
2030	0 – 6,000	\$0 - \$21,000,000
2031	0 – 6,000	\$0 - \$21,000,000
2032	0 – 6,000	\$0 - \$21,000,000
2033	0 – 6,000	\$0 - \$21,000,000
2034	0 – 6,000	\$0 - \$21,000,000
2035	0 – 6,000	\$0 - \$21,000,000
2036	0 – 6,000	\$0 - \$21,000,000
2037	0 – 6,000	\$0 - \$21,000,000
2038	0 – 6,000	\$0 - \$21,000,000
2039	0 – 6,000	\$0 - \$21,000,000
2040	0 – 6,000	\$0 - \$21,000,000
2041	0 – 6,000	\$0 - \$21,000,000

The total estimated cost to replace 50,748 customer owned lead services at an average cost of \$3,500 per service in 2017 dollars is \$177,618,000. This does not include inflation of materials and labor. As described in Section 4 of this Plan, as Indiana American further researches the old service record addresses and determines the current state of the premises, it is anticipated that the number of lead services originally identified from these records will be reduced because a number of these premises may no longer have service or may have been redeveloped with a new address and a new non-lead service line.

**Customer Lead Service Line Replacement Plan
For Submission and Approval
January, 2018**

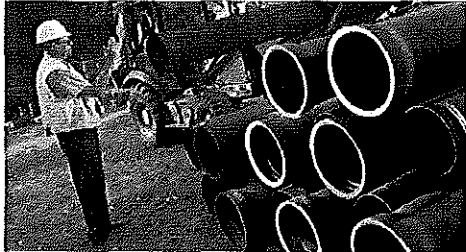


*Communication Materials Included with
Customer Lead Service Line Replacement Plan*

- Attachment 1: We Are Investing In Your Neighborhood
- Attachment 2: Important Notice About Your Water Service and Lead Service Lines
- Attachment 3: Service Line Assessment Results
- Attachment 4: Water Service Line Replacement
- Attachment 5: Lead
- Attachment 6: Water Sampling Process
- Attachment 7: It's Time to Flush Your Water Line
- Attachment 8: Important Notice About Your Water
- Attachment 9: 72-Hour Water Sample Reminder
- Attachment 10: Lead Service Line Replacement & Electrical Grounding

WE ARE INVESTING IN YOUR NEIGHBORHOOD

Main Replacement Project to Start Soon



At Indiana 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.

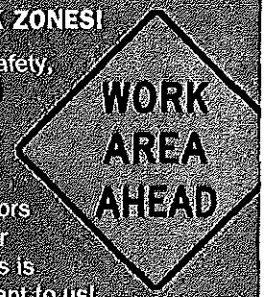
Once the new main is installed: We'll return to connect customers to the new main. This may involve replacing the utility-owned service lines. If we're replacing the utility-owned service line at your property, typically there is a 30- and 60-minute interruption of service while the contractor connects 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.



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 1-800-492-8373. Hours: 7 a.m. - 7 p.m. For emergencies, we're available 24/7.

ABOUT THE PROJECT

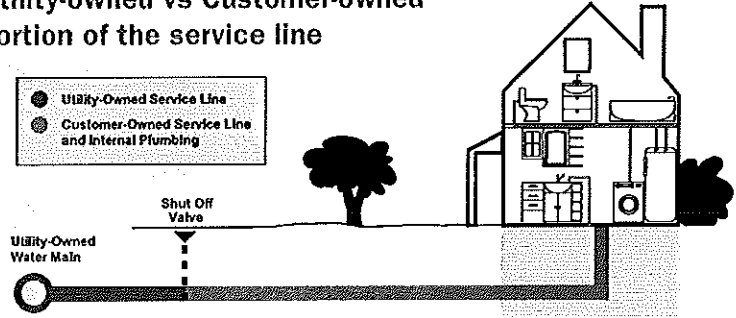
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WHAT	<input type="text"/>
WHERE	<input type="text"/>
WHEN	<input type="text"/>
WORK HOURS	<input type="text"/>
PROJECT CONTACT	<input type="text"/>



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?

Indiana 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 Indianaamwater.com. Under Water Quality, select Lead and Drinking Water.



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 decision. The U.S. Center 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 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 household (limited up to 5 feet inside your household). 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

Indiana 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 indianawater.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

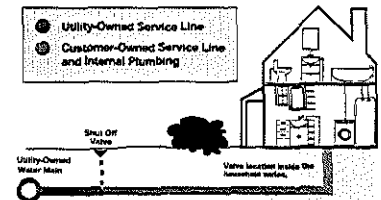
We will be upgrading the water infrastructure along your street in the near future. While we're there, if the utility-owned or customer-owned portion of the service line (see diagram) is made of lead or lined with lead, we'd like to work with you to replace it. Best of all, we'll cover a portion, and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

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.



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.

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.



We'll help you 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, and our contractor will be available to assist you.

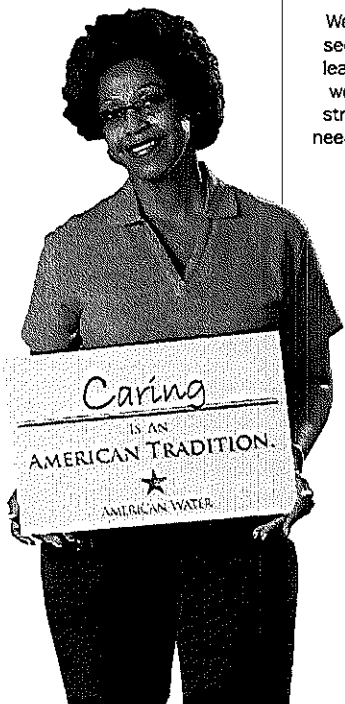


We collect a water sample.

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 1-800-492-8373. 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 www.indianawater.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.

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.

More information about the project will be sent to you in the near future, including the project timeline, work hours and contact information if you have questions.

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



INDIANA
AMERICAN WATER

CUSTOMER SERVICE

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

1-800-492-8373

WATER SERVICE LINE REPLACEMENT



Customer elects for Company to replace Customer's water service line: YES NO

The undersigned customer(s), whose name(s) appear in the signature block at the bottom of this page (the "Customer") grants to Indiana-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 _____

PREMISE NUMBER: _____ (Completed by Indiana-American Water)

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 _____
Phone Number _____	Phone Number _____
Email (if applicable) _____	Email (if applicable) _____
Date _____	Date _____

COMPANY: INDIANA-AMERICAN WATER COMPANY

Signature _____
 Print Name _____
 Date _____

If returning agreement by mail, please mail to:
 Indiana-American Water
 ATTN: Jennie Thomas
 555 East County Line Road, Suite 201
 Greenwood, IN 46143

WATER SERVICE LINE REPLACEMENT



Customer elects for Company to replace Customer's water service line: YES NO

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 _____

PREMISE NUMBER: _____ (Completed by Indiana-American Water)

CUSTOMER

Signature _____
Print Name _____
PhoneNumber _____
Email (if applicable) _____
Date _____

Signature _____
Print Name _____
PhoneNumber _____
Email (if applicable) _____
Date _____

If returning agreement by mail, please mail to:
Indiana-American Water
ATTN: Jennie Thomas
555 East County Line Road, Suite 201
Greenwood, IN 46143



INDIANA
AMERICAN WATER

LEAD

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

Indiana 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:

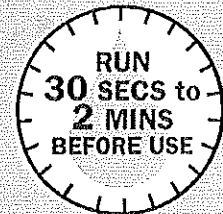
- **Flush your tap before drinking or cooking with water, if the water in the faucet has gone unused for more than six hours.** The longer the water lies dormant in your home's plumbing, the more lead it might contain. Flush your tap with cold water for 30 seconds to two minutes before using. To conserve 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

Indiana American Water
Customer Service Center:
1-800-492-8373
M-F, 7 a.m. - 7 p.m.

Check us out online
indianaamwater.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 Indiana 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.

Indiana 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 Indianaamwater.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. Indiana 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

Indiana 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

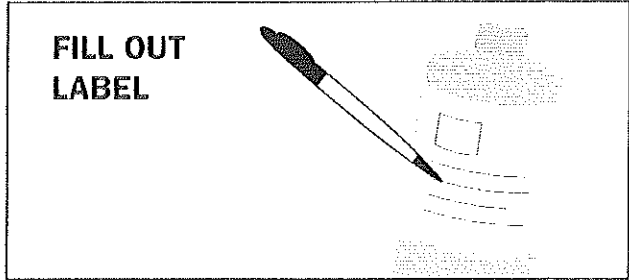
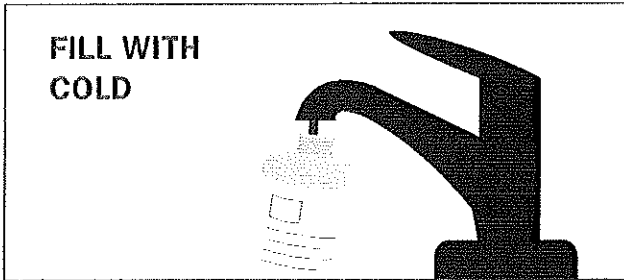
If you are still concerned about elevated levels and want to find out where you can have your water tested by a certified laboratory:

- **Contact EPA's Safe Drinking Water Act Hotline:**
1-800-426-4791
- **Visit Indiana EPA online at**
www.epa.gov/in

indianaamwater.com



Water Sampling Process



SAMPLE 1

Plumber takes water sample

WHEN: After whole house flush

Our 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 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 Sample #1 Box and complete Address, Sample Location, Collect Date, and Collect Time
4. Ship sample to laboratory same day it is collected via UPS Ground.

SAMPLE 2

Property owner 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.

Sampling Instructions for the Property Owner

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 Sample #2 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.

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.indianaamwater.com. Under Water Quality, select Water Quality Reports.

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



INDIANA
AMERICAN WATER

CUSTOMER SERVICE

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

1-800-492-8573

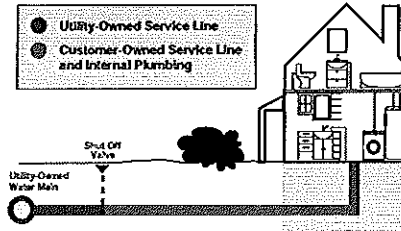
IMPORTANT NOTICE ABOUT YOUR WATER



Dear Valued Customer,

Today, we performed the following work at your property:

- We replaced the utility-owned side of the service line, which contained lead.
- We replaced the customer-owned portion of the service line, which contained lead.



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

Your household plumbing will need to be flushed to remove any pipe scale that may have come loose during construction. Please follow the **Household Flushing Instructions** listed below to minimize your exposure to any lead that may have been released.

If your service line contained lead:

You should contact a licensed plumber to identify the material in your household plumbing. If lead is found, you should consider replacing your fixtures to reduce your exposure to

lead. Please note: homeowners are responsible for their home plumbing.

Other steps to help manage your exposure include:

- flushing your tap before drinking or cooking with water, if the water in the faucet has gone unused for more than six hours
- removing and cleaning your faucet aerators monthly and running water if it sat in the faucet for more than 6 hours.

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 follows:

3. Remove faucet aerators from all cold water taps in the home (and remove any filter devices).
4. Beginning in the lowest level of the home, fully open the cold water taps throughout the home.
5. Let the water run for at least 30 minutes at the last tap you opened (top floor).
6. 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.

FOR MORE INFORMATION

For Questions About Lead:

Contact the Customer Service Center at 1-800-492-8373. Please request a water quality follow-up.

For Questions About Construction:

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For all other inquiries:

Customer Service Center
1-800-492-8373
Hours: M-F, 7 a.m. – 7 p.m.
For emergencies, we're available 24/7.

Indiana 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 www.Indianaamwater.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 (800) 426-4791.

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

¹Source: American Water Works Association (AWWA), www.awwa.org. AWWA is a nonprofit association dedicated to managing and treating water.

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 Property Owner

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 Sample #2 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.indianaamwater.com. Under Water Quality, select Water Quality Reports.

Date: ____/____/20____	Time: _____ a.m. / p.m.
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CUSTOMER SERVICE
HOURS OF OPERATION: M-F, 7 a.m. to 7 p.m.
FOR EMERGENCIES: We're available 24/7.

1-800-492-8373

Lead Service Line Replacement & Electrical Grounding



ATTENTION CONTRACTORS

Before retiring a lead water service line:

1. Have an electrician check the premises' 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 premises' 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 premises' 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 premises 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).

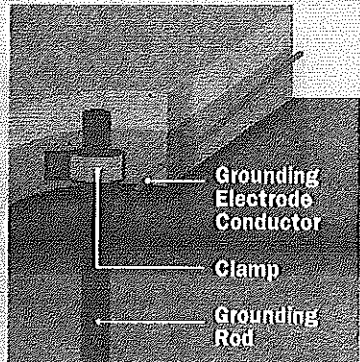
These options can lower the risk of lead corrosion, but may no longer make a reliable grounding option for the electrical system. In these cases, please have the electrician suggest an alternative means of grounding if needed.

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

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

Check Your Premises' 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 its pipes typically extend at least 10 feet underground from the point where the pipes enter the home to the main water line.

Questions? Call

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INDIANA-AMERICAN WATER COMPANY

I.U.R.C. No. W-15
CANCELLING ALL PREVIOUSLY
APPROVED RULES AND REGULATIONS
FOR WATER SERVICE
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4.4 Eligibility for Service in Certain Circumstances

- (a) Any property with a lead service line that is or becomes inactive for a period of twenty-four (24) consecutive months or that has been physically disconnected from the Company's Mains will not be eligible for service reconnection under paragraph 4.3 unless and until the Customer replaces the Customer Service Line portion of the lead service line.
- (b) Upon request for service, the Company will install a new, non-lead Company Service Line to the property and require the property owner to install a Customer Service Line that meets current building code and Company standards, before new water service is connected. The customer is subject to a connection fee per the Company's approved tariff.

Approved: