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File #: 203073

May 9, 2025

***VIA EMAIL***

Matthew L. Homsher, Secretary  
Pennsylvania Public Utility Commission  
Commonwealth Keystone Building  
400 North Street, 2nd Floor  
P.O. Box 3265  
Harrisburg, PA 17105-3265

**Re: Petition of Aqua Pennsylvania, Inc. for Approval of its Lead Service Line Replacement Program  
Docket No. P-2023-3044459  
Petition of Aqua Pennsylvania, Inc. For Approval of its Third Long-Term Infrastructure Improvement Plan  
Docket No. P-2023-3043755**

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Dear Secretary Homsher:

Enclosed for filing on behalf of Aqua Pennsylvania, Inc. (“Aqua” or the “Company”) are the Company’s amended Long-Term Infrastructure Improvement Plan (“LTIIIP”), which includes an updated Lead Service Line Replacement (“LSLR”) Plan, and tariff supplement. The amended LTIIIP, including the updated LSLR Plan, is attached hereto as Attachment 1, while the tariff supplement is attached hereto as Attachment 2. These materials are being filed in compliance with the Pennsylvania Public Utility Commission’s (“Commission”) Order entered on April 10, 2025, at Docket No. P-2023-3044459, which approved the Company’s LSLR Plan as modified by the unanimous Settlement reached in that proceeding.

Copies are being provided as indicated on the Certificate of Service.

Matthew L. Homsher, Secretary  
May 9, 2025  
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Respectfully submitted,

A handwritten signature in black ink, appearing to read 'M E Rulli', written in a cursive style.

Megan E. Rulli  
Associate

MER/sa  
Attachments

cc: The Honorable Alphonso Arnold III (*via email, w/ attachments*)  
The Honorable Gail M. Chiodo (*via email, w/ attachments*)  
Ken Shaffer (*kennshafe@pa.gov*)  
Certificate of Service

## CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been served upon the following persons, in the manner indicated, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant).

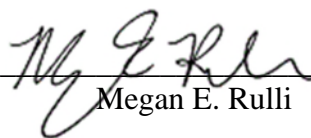
### VIA E-MAIL

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Date: May 9, 2025

  
Megan E. Rulli

# ATTACHMENT 1

## **AQUA PENNSYLVANIA, INC.**

### **Updated 2023 Long Term Infrastructure Improvement Plan – March 14, 2024**

Aqua Pennsylvania, Inc. (“Aqua” or the “Company”) is submitting this 2023 Long Term Infrastructure Improvement Plan (“LTIP”) in accordance with the requirements of Chapter 13 of the Public Utility Code, 66 Pa. C.S. §§ 1350-1360, Chapter 121 of Title 52 of the Pennsylvania Code, the Pennsylvania Public Utility Commission’s (“PUC” or the “Commission”) Final Implementation Order entered on August 2, 2011 in Docket No. M-2012-2293611, the Commission’s Supplemental Implementation Order entered on September 15, 2016 in Docket No. M-2012-2293611, and the Commission’s Final Rulemaking Order regarding Act 120 of 2018<sup>1</sup> (“Act 120”) entered on March 14, 2022 in Docket No. L-2020-3019521. The Company’s LTIP covers infrastructure investment through its established and longstanding Distribution System Improvement Charge (“DSIC”). Aqua had previously submitted and has operated under its existing LTIP approved by the Commission on February 27, 2020 at Docket No. P-2019-3013940 covering the period from 2020-2024. Since Aqua filed its LTIP in 2019, Aqua has acquired several systems (and several of these have been through the Company’s most recent rate case) and the Commission has implemented rules regarding customer-owned lead service lines (“COLSL”) under Act 120. In addition, this LTIP is being filed to include Aqua’s recent acquisition of the Municipal Authority of the Borough of Shenandoah’s water system in accordance with the Joint Settlement approved by the Commission.<sup>2</sup> Aqua now files a new LTIP for the years 2023-2027 which will replace the existing 2019 LTIP and include its plan for COLSL replacements consistent with Act 120.

#### **1. INTRODUCTION**

Aqua owns and operates water systems serving approximately 450,000 customers in 32 counties throughout Pennsylvania. Its water distribution systems include approximately 5,928 miles of pipe, 25,210 hydrants, 85,135 valves, and 449,298 customer meters.

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<sup>1</sup> Act of Oct. 24, 2018, P.L. 738, No. 120.

<sup>2</sup> *Application of Aqua Pennsylvania, Inc. pursuant to Sections 1102, 1329, and 507 of the Public Utility Code for Approval of its Acquisition of the Water System Assets of Shenandoah Borough and the Municipal Authority of the Borough of Shenandoah*, Docket No. A-2022-3034143, Opinion and Order, Ordering Paragraph 11 (Jul. 13, 2023).

Aqua's service territories are designated as either Southeast Pennsylvania ("SEPA"), which includes a contiguous distribution system within portions of Bucks, Chester, Delaware, and Montgomery counties and separate smaller systems in portions of Berks, Bucks, Chester, and Montgomery counties, or Greater Pennsylvania ("GPA"), which includes Aqua's service territories outside of SEPA.

In response to the problems presented by the Commonwealth's aging water infrastructure, the Commission, on August 22, 1996, issued an order authorizing Aqua (then Philadelphia Suburban Water Company) to establish a DSIC. Thereafter, on December 18, 1996, the General Assembly enacted Section 1307(g) of the Public Utility Code, 66 Pa. C.S. § 1307(g), to eliminate any uncertainty as to the Commission's authority in this area. Aqua subsequently filed and had approved a DSIC following the Commission's requirements and procedures for processing and calculation. Aqua's recovery was capped at 5%.

On December 8, 2008, Aqua filed Supplement No. 88 to Tariff Water-Pa. P.U.C. No. 1, requesting approval to increase the DSIC cap from 5% to 7.5%. In support of that tariff supplement, Aqua included a detailed analysis and long-term pipe replacement plan. The Commission approved the increase in the DSIC cap from 5% to 7.5% in a Final Order entered July 23, 2009 in Docket No. R-2008-2079310. The Commission, in that order, concluded that the water DSIC model was working effectively and, indeed, that its use has made a significant impact in terms of improving Aqua's distribution system. Aqua has continued its DSIC program under that model and has been successful in improving its distribution system.

Act 11 of 2012 ("Act 11") amended Chapter 13 of the Public Utility Code by adding Subchapter B, Sections 1350 through 1360 (66 Pa. C.S. §§ 1350-1360). Act 11 permitted water and wastewater utilities, electric distribution companies, natural gas distribution companies, and gas distribution operations to petition the Commission to implement a DSIC. The Commission entered its Final Implementation Order on Act 11 on August 2, 2012 at Docket M-2012-2293611. The Commission entered its Supplemental Implementation Order on Act 11 on September 21, 2016 at Docket M-2012-2293611 directing water utilities with pre-existing DSIC programs to file LTIIPs on a staggered filing schedule.

Aqua filed its first LTIP on January 20, 2017, which the Commission approved on May 18, 2017 at Docket No. P-2017-2584953. Aqua filed its second LTIP on October 31, 2019, which the Commission approved on February 27, 2020 at Docket No. P-2019-3013940.

On October 24, 2018, Governor Wolf signed Act 120 which allowed for public utilities to replace COLSLs and recover those costs through a utility’s DSIC if the utility has a DSIC program. The Commission implemented a rulemaking to set forth the requirements and guidelines for utilities that implement a Lead Service Line (“LSL”) Replacement Program (“LSLR Program”), which includes submitting a LSLR Plan to the Commission.

Since the inception of the DSIC program, Aqua has replaced approximately 2,676 miles of pipe and cleaned and lined an additional 331 miles of pipe for a total of 3,007 miles, or an average of over 100 miles per year. This represents approximately 46% of its distribution system that has been renewed under the DSIC. **Figure 1** presents a year-by-year overview of the DSIC program.

**Figure 1 – Miles of Main Replaced or Rehabilitated**

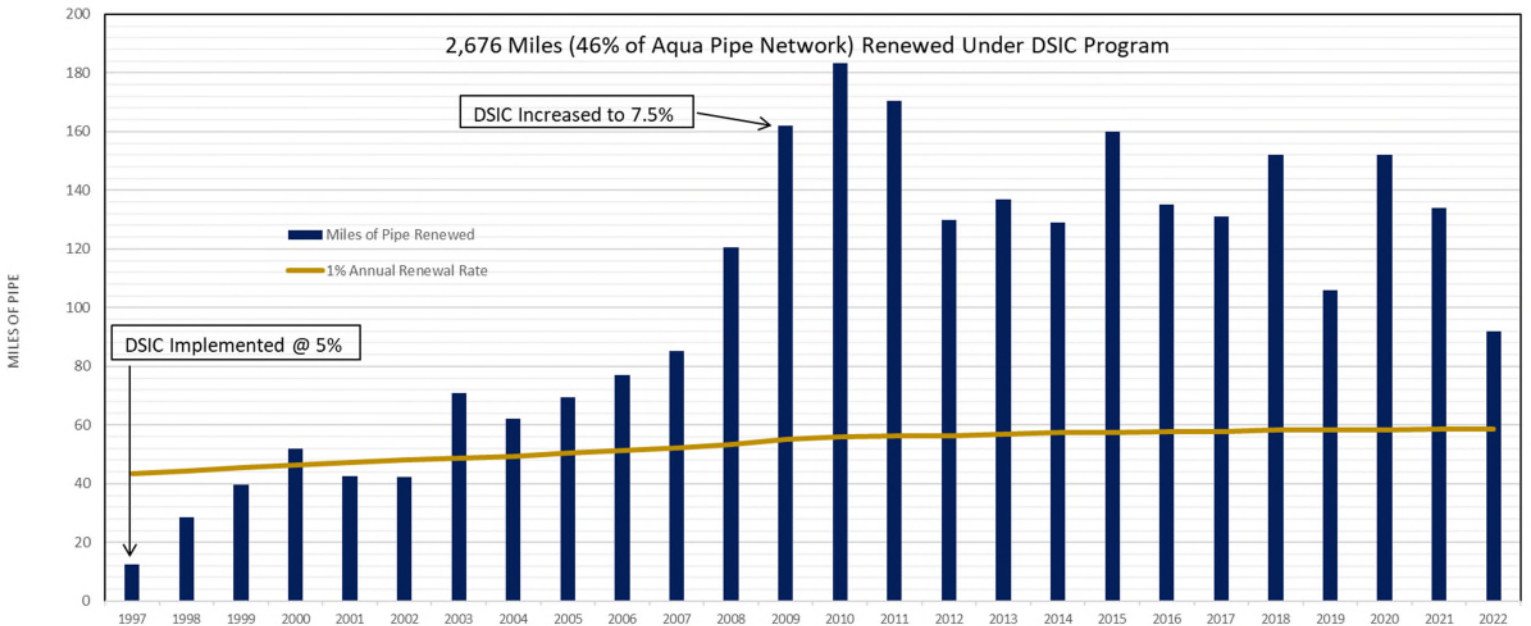


Figure 1 also displays the amount of pipe that would have been renewed at a 1% annual rate of renewal. The DSIC program has allowed Aqua to accelerate its renewal program

beyond the general rule of a 100-year replacement cycle. This LTIP demonstrates that over the next five years Aqua will continue an accelerated water main replacement program in excess of the 1% annual rate.

In addition to pipe, Aqua has also addressed services, valves, hydrants, and meters as part of its DSIC program. **Table 1** provides an estimate of the total number of these assets installed under DSIC since 1997.

**Table 1 – Summary of Assets Installed Under DSIC Program 1997- Oct 2023**

<b>Asset</b>	<b>Approximate Number Installed under DSIC 1997 - 2022</b>	<b>% of Total</b>
Pipe (miles) <sup>3</sup>	2,676	46%
Company Services <sup>4</sup>	148,545	34%
Valves <sup>5</sup>	43,725	51%
Hydrants <sup>6</sup>	6,041	24%
Meters <sup>7</sup>	636,197	142%

The data in Table 1 show that in addition to pipe, Aqua’s DSIC program has resulted in significant renewal of other distribution system assets since 1997.

<sup>3</sup> The miles of pipe shown includes both replaced pipe and pipe that was cleaned and lined.

<sup>4</sup> As a water main is replaced, the Company portion of the service line is entirely replaced. The value shown for “replaced” services represents the approximate number of service lines impacted by main replacement projects.

<sup>5</sup> Valves are not “replaced” during a water main replacement project. The original pipe and valves are abandoned in place, and new pipe and valves are installed. Often, the new pipe will include more valves, to provide better control of the system, than existed on the old pipe. The value shown for “replaced” valves is the approximate number of valves installed as part of main replacement projects.

<sup>6</sup> As with valves, hydrants are not “replaced” during a main replacement project. The old hydrants remain in place and in service until the new pipe is activated. New hydrants are connected to the new pipe and the old hydrants are removed. Inspections then occur on the new hydrants. Sometimes, the new pipe will include more hydrants than were located on the old pipe. The value shown for “replaced” hydrants is the approximate number of hydrants installed as part of main replacement projects.

<sup>7</sup> Meter replacement is not associated with water main replacement projects. Meters are replaced according to age and mandated replacement schedule.

## 2. TYPE AND AGE OF ELIGIBLE PROPERTY

Eligible asset property addressed under the DSIC program includes water mains, valves, hydrants, services and meters. In addition, items such as capitalized main breaks, tie-in of dead end mains, cleaning and lining, highway relocations, and other DSIC-eligible activities are included in Aqua’s DSIC program.

Aqua developed a Geographic Information System (“GIS”) for its water systems beginning in 2005. The GIS stores data on water mains, valves, and hydrants and is continually updated as the systems change with the addition of new assets and the replacement of old assets.

**Table 2** through **Table 13**, below, describe Aqua’s distribution system asset inventory and includes information on material, diameter, and age using GIS data as of October 2023. There is a subset of data that is “Unknown”, as occasionally data and/or plans are simply not available, particularly for older facilities and acquisitions. However, the GIS provides the means to capture data moving forward as continuing investigatory and repair work proceeds.

**Table 2 – Aqua Pipe Inventory by Diameter**

Pipe Diameter	Miles	% of Total
<=4	215	4%
6	839	14%
8	3365	57%
10	89	1%
12	839	14%
>12	420	7%
Unknown	2	0%
<b>TOTAL</b>	<b>5,928</b>	<b>100%</b>

**Table 3 – Aqua Pipe Inventory by Material**

Material	Miles	% of Total
Asbestos Cement	230	4%
Cast Iron	1,101	19%
Cement Stovepipe <sup>8</sup>	11	0%
Ductile Iron	4,186	71%
Other	151	3%
PVC	243	4%
Unknown	7	0%
<b>TOTAL</b>	<b>5,928</b>	<b>100%</b>

**Table 4 – Aqua Pipe Inventory by Installation Decade**

Decade	Miles	% of Total
< 1900	14	0%
1900-1909	71	1%
1910-1919	31	1%
1920-1929	190	3%
1930-1939	62	1%
1940-1949	87	1%
1950-1959	177	3%
1960-1969	347	6%
1970-1979	424	7%
1980-1989	429	7%
1990-1999	501	8%
2000-2009	1,093	18%
2010-2019	1,601	27%
2020-2023 <sup>9</sup>	441	7%
Unknown	460	8%
<b>TOTAL</b>	<b>5,928</b>	<b>100%</b>

<sup>8</sup> Cement stovepipe is a pipe material unique to SEPA. It consists of a “sandwich” of a cement material surrounding by an inner and outer jacket of galvanized iron. This pipe was installed in SEPA prior to 1930.

<sup>9</sup> As of October 2023.

**Table 5 – Aqua Valve Inventory by Diameter**

<b>Pipe Diameter</b>	<b>Number of Valves</b>	<b>% of Total</b>
<= 4-inch	3,375	4%
6-inch	13,827	16%
8-inch	52,821	62%
10-inch	1,163	1%
12-inch	10,425	12%
> 12-inch	3,305	4%
Unknown	219	0%
<b>TOTAL</b>	<b>85,135</b>	<b>100%</b>

**Table 6 – Aqua Valve Inventory by Pipe Material**

<b>Pipe Material</b>	<b>Number of Valves</b>	<b>% of Total</b>
Asbestos Cement	2,173	3%
Cast Iron	11,365	13%
Cement Stovepipe	161	0%
Ductile Iron	67,096	79%
Other	1,083	1%
PVC	2,941	%
Unknown	316	0%
<b>TOTAL</b>	<b>85,135</b>	<b>100%</b>

**Table 7 – Aqua Valve Inventory by Installation Decade**

Valve Installation Decade	Number of Valves	% of Total
<1900	167	0%
1900-1909	670	1%
1910-1919	271	0%
1920-1929	1,782	2%
1930-1939	667	1%
1940-1949	775	1%
1950-1959	1,756	2%
1960-1969	3,432	4%
1970-1979	4,429	5%
1980-1989	4,920	6%
1990-1999	6,545	8%
2000-2009	17,587	21%
2010-2019	28,923	34%
2020-2023 <sup>10</sup>	8,589	10%
Unknown	4,622	5%
<b>TOTAL</b>	<b>85,135</b>	<b>100%</b>

**Table 8– Aqua PA Hydrant Inventory by Installation Decade**

Hydrant Installation Decade	Number of Hydrants	% of Total
1900-1909	5	0%
1910-1919	16	0%
1920-1929	24	0%
1930-1939	47	0%
1940-1949	41	0%
1950-1959	154	1%
1960-1969	501	2%
1970-1979	899	4%
1980-1989	1,511	6%
1990-1999	2,157	9%
2000-2009	5,207	21%
2010-2019	6,816	27%
2020-2023 <sup>11</sup>	2,088	8%
Unknown	5,744	22%
<b>TOTAL</b>	<b>25,210</b>	<b>100%</b>

<sup>10</sup> As of October 2023.

<sup>11</sup> As of October 2023.

**Table 9 – Aqua PA Meter Inventory by Size**

Size	Description	Connection Size	Quantity	% of Total
1	1 INCH METER	1	9,168	2%
2	2 INCH METER	2	3,441	1%
3	3 INCH METER	3	785	0%
4	4 INCH METER	4	649	0%
6	6 INCH METER	6	508	0%
8	8 INCH METER	8	377	0%
10	10 INCH METER	10	48	0%
1 ½	1 1/2 INCH METER	1 ½	2722	1%
¾	3/4 INCH METER	3/4"	12,122	3%
5/8"	5/8 INCH METER	5/8"	387,642	86%
A	1" FIRE WITH BYPASS NON RES	1	18	0%
AA	2 X 2" RES MULT M	2	2	0%
B	1 1/2 WITH BYPASS NON[1] RES	1 ½	66	0%
C	2" WITH BYPASS NON RES	2	341	0%
D	3" WITH BYPASS NON RES	3	1	0%
E	4" WITH BYPASS NON RES	4	1,883	0%
G	6" WITH BYPASS NON RES	6	2,120	0%
K	8" WITH BYPASS NON RES	8	569	0%
L	10" WITH BYPASS NON RES	10	17	0%
M	5/8 X 3/4" RES MULT M[2]	5/8"	142	0%
N	5/8 X 1" RES MULT M	5/8"	21,863	5%
O	5/8 X 1 1/2" RES MULT M	5/8"	3,797	1%
P	5/8 X 2" RES MULT M	5/8"	75	0%
Q	3/4 X 1 RES MULT M	3/4"	184	0%
R	3/4 X 1 1/2" RES MULT M	3/4"	313	0%
S	3/4 X 2" RES MULT M	3/4"	14	0%
T	1" X 1" RES MULT M	1	100	0%
U	1" X 1 1/2" RES MULT M	1	265	0%
V	1" X 2" RES MULT M	1	58	0%
XX	1 1/2" X 1 1/2" RES MULT M	1 ½	2	0%
YY	1 1/2" X 2" RES MULT M	1 ½	4	0%
ZZ	2" X 1 1/2" RES MULT M	2	2	0%
<b>TOTAL</b>			<b>449,298</b>	<b>100%</b>

**Table 10 – Aqua Meter Inventory by Installation Year**

<b>Meter Installation Year</b>	<b>Number of Meters</b>	<b>% of Total</b>
Pre 1990	43	0%
1991	24	0%
1992	45	0%
1993	77	0%
1994	92	0%
1995	118	0%
1996	192	0%
1997	187	0%
1998	404	0%
1999	397	0%
2000	278	0%
2001	400	0%
2002	1,574	0%
2003	11,380	3%
2004	29,407	7%
2005	29,652	7%
2006	4,903	1%
2007	4,023	1%
2008	3,426	1%
2009	5,998	1%
2010	7,927	2%
2011	10,326	2%
2012	14,894	3%
2013	14,834	3%
2014	16,592	4%
2015	19,682	4%
2016	18,517	4%
2017	42,202	9%
2018	53,117	12%
2019	49,292	11%
2020	19,398	4%
2021	43,193	10%
2022	27,325	6%
2023 <sup>12</sup>	19,379	4%
<b>Total</b>	<b>449,298</b>	<b>100%</b>

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<sup>12</sup> As of October 2023.

**Table 11 – Aqua Services Inventory by Size**

Service Size	Number of Services	% of Total
½	168	0%
5/8	1,510	0%
¾	92,996	21%
1	143,278	33%
1 ¼	22	0%
1 ½	3,477	1%
2	3,143	1%
3	46	0%
4	1,319	0%
6	2,365	1%
8	755	0%
10	27	0%
12	30	0%
16	5	0%
20	1	0%
Unknown	185,767	43%
<b>Total</b>	<b>434,910</b>	<b>100%</b>

**Table 12 – Aqua Services Inventory by Material**

Service Material (Aqua owned portion)	Number of Services	% of Total
Copper	339,979	78%
Unknown	81,391	19%
Ductile Iron	5,807	1%
PVC	920	0%
Cast Iron	418	0%
Other	520	0%
Brass	517	0%
Galvanized Iron	920	0%
PolyEthylene (HDPE)	3,785	1%
Lead	43	0%
Black Iron	603	0%
Steel Welded	7	0%
<b>Total</b>	<b>434,910</b>	<b>100%</b>

**Table 13 – Service Lines by Installation Year**

<b>Service Line Installation Year (Aqua owned portion)</b>	<b>Number of Services</b>	<b>% of Total</b>
Pre 2005 or Unknown	250,862	52%
2005	7,019	2%
2006	6,319	1%
2007	6,715	2%
2008	8,147	2%
2009	10,530	2%
2010	11,875	3%
2011	11,170	3%
2012	9,548	2%
2013	8,428	2%
2014	10,959	3%
2015	13,136	3%
2016	13,027	3%
2017	14,328	3%
2018	10,954	3%
2019	10,108	2%
2020	9,298	2%
2021	10,913	3%
2022	8,215	2%
2023 <sup>13</sup>	3,323	1%
<b>Total</b>	<b>434,910</b>	<b>100%</b>

Service lines are the pipes that deliver water from a Company owned water main to the customer’s premise. Ownership of the service line is split between the Company and the customer. The Company owns the service line from its connection (tap) at the water main to a valve (curb stop), typically located near the customer’s property line. The customer is then responsible for the service line from the curb stop to the premise. **Figure 2** illustrates service line ownership for a typical situation.

The service line information provided represents the Company owned portion of the service line only. The values shown were obtained from the Company’s Tap Card data. Although tap cards are available for most of the original Philadelphia Suburban Water Company system, most acquisitions did not include tap cards. As a result, the Company often does

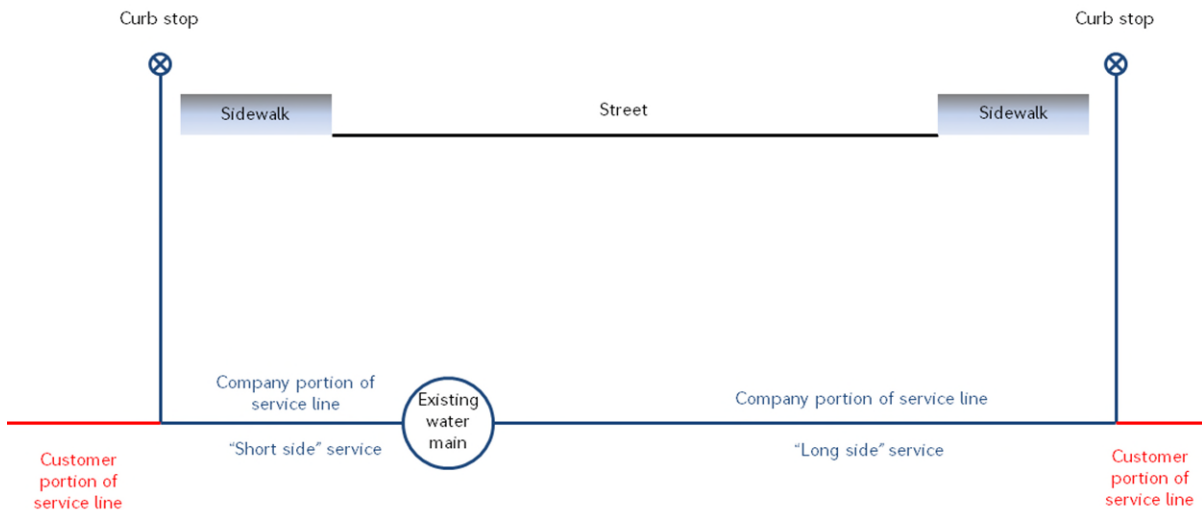
<sup>13</sup> As of October 2023.

not have good records of service line sizes, ages or material in acquired systems. And even when older tap cards do exist, the data is often incomplete. Thus, information on service line sizes and material may not be known until the service line is exposed. Therefore, the data provided represents the best available information, and is considered accurate after the implementation of GIS and related systems in the mid 2000's. The number of unknown sizes and materials is being reduced through the development of the Company's lead service line inventory, by which the Company is identifying both customer-side and Company-side service line material.

Service lines need to be addressed during water main replacement projects. The entire Company portion of the service line, both short side and long side, are replaced during a main replacement project. In some circumstances, plastic pipe is installed instead of copper when corrosive conditions are present.

Note that in both situations the customer portion of the service line currently is not replaced by the Company during the main replacement project. The exception to this is when a customer owned LSL is known or discovered. See the Company's LSLR Plan for more information.

**Figure 2 – Typical Service Lines**



## Customer-owned Lead Service Lines

Lead was sometimes used for service lines in the early portion of the 20<sup>th</sup> Century. According to Company records, Aqua ceased the installation of lead Company-owned services in the 1930's. Lead Company-owned services are occasionally discovered during main replacement projects. Prior to Act 120 and the Commission's regulations, Company-owned LSLs were replaced when they were encountered during a water main replacement project, and information was provided to the customer to review their service line material and encourage the customer to replace their service line if it was lead.

The Pennsylvania General Assembly passed, and the Governor signed, Act 120 into law on October 24, 2018. The Company petitioned for, and the Commission approved, a COLSL replacement program on July 15, 2021 to allow Aqua to replace COLSLs during a main replacement project or upon customer request. Subsequent to the Commission's approval of Aqua's replacement program, the Commission issued final regulations on the implementation of Act 120. A requirement of the Commission's regulations is that an utility that has prior Commission approval to perform LSLR activities must file a LSLR Program that conforms with the Commission's regulations the earlier of the effective date of new base rates in the utility's rate case filed after the effective date of the LSL regulations or within two years after the Commission's LSL regulations take effect (July 26, 2024), whichever is sooner.<sup>14</sup> The Commission also required that for those utilities with existing LTIIPs, their Petition for approval of their LSLR Program shall include a modified LTIIP that includes the LSLR Plan as a distinct component of the utility's LTIIP.<sup>15</sup>

The Company has included its LSLR Plan as **Attachment A** to this new LTIIP. The LSLR Plan complies with the Commission's regulations and proposes modifications to the Company's current cap of 200 on the number of replacements the Company may perform annually. The Company is not proposing a budget cap in its LSLR Plan, as a budgetary cap is not required by the Commission's regulations, but will seek to meet the targeted budget amounts stated in this LTIIP similar to other categories of DSIC-eligible property.

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<sup>14</sup> 52 Pa. Code § 65.61.

<sup>15</sup> Id. at § 65.54(b).

### 3. SCHEDULE FOR PLANNED REPAIR AND REPLACEMENT OF ELIGIBLE PROPERTY

Aqua initiated its DSIC program in 1997 and has replaced significant portions of its distribution system since that time. Figure 1 showed the work that has been completed through December 31, 2022.

#### Macro Planning

In 2008 Aqua submitted Supplement No. 88 to Tariff Water-Pa. P.U.C. No. 1, requesting approval to increase its DSIC surcharge cap from 5% to 7.5%. Included with that Supplement was a technical memo (Appendix E to that filing) that described Aqua’s approach to water main renewal. That approach continues to be applied today, with some additional “candidate pipe” targets added in the years since. A copy of that Appendix E was included in the Company’s 2017 LTIP.

The 2008 report identified a “candidate pool” of approximately 1,500 miles of pipe in Aqua’s distribution system to be targeted for replacement. Since then, Aqua has replaced more than 1,000 miles of pipe. Not all of this pipe was from that candidate pool, since other replacement needs arise each year (such as opportunistic coordination with municipal repaving projects). In addition, continuing data gathering as well as a better understanding of pipe inventories outside of SEPA has refined the estimate of the original candidate pool.

**Table 14** summarizes the current “candidate pool” of pipe for Aqua. It indicates which pipe was included in the 2008 report and new footage that has been added to the candidate pool since then based on new information. A discussion of why the pipe in the additional pool is being targeted follows the table.

**Table 14 – Aqua Current Candidate Pool**

<b>Pipe Category</b>	<b>Miles from Appendix E</b>	<b>Miles Remaining</b>
Cement Stovepipe	195	11
Unlined Cast Iron 1936-1948	243	41 <sup>16</sup>
1890-1926 pipe	825	121
≤ 4-inch	275	22 <sup>17</sup>
<b>Subtotal Original Pool</b>	<b>1,538</b>	<b>195</b>
Unlined Cast Iron (1949-1951)	-	14
Factory Lined Cast Iron (1952-1960)	-	130
Unlined Cast Iron (1927-1935)	-	34
Asbestos Cement	-	230
Cleaned and Lined Pipe	-	228 <sup>18</sup>
Factory Lined Cast Iron (1961-1963)	-	83
Factory Lined Cast Iron (1964-1970)	-	227
<b>Subtotal Additional Pool</b>	<b>-</b>	<b>946</b>
<b>TOTAL</b>	<b>1,538</b>	<b>1,141</b>

With the implementation of GIS, Aqua was able to effectively extend its long-term water main replacement program planning. Prior to the GIS, project selection was an annual process, relying on various spreadsheets and paper notes maintained by various groups and individuals within the Company. While effective, this approach did not allow for a broader, more long-term view of the program. Since the GIS has been in place, a significant amount of pipe that is not ductile iron, or is older than 50 to 60 years, has been captured in a future replacement project. This approach recognizes the fact that all pipe will eventually need to be replaced, and ensures that no pipe will be “missed”.

The candidate pools listed in Table 14 represent the categories of pipe that are highest on the priority list for replacement. Selection of specific replacement projects in a given year is done annually as described below in “Micro Planning”.

Unlined Cast Iron (1949-1951) pipe is very similar to the 1936-1948 vintage cast iron pipe that was included in the original candidate pool. The only difference is that additional joint types

<sup>16</sup> Only includes pipe in SEPA since data is not readily available to supplement this in GPA.

<sup>17</sup> Does not include Ductile Iron, PVC, and other “newer” pipe materials that are likely to be sized appropriately and thus not in need of replacement.

<sup>18</sup> The Cleaned and Lined pipe is all unlined Cast Iron installed prior to 1951. It is all in SEPA as that is the only region where Aqua performed cleaning and lining.

were starting to be used between 1949-1951. Break rates for this category of pipe were similar to the 1936-1948 vintage, and this pipe is also unlined.

The Factory Lined Cast Iron (1952-1960) category represents the first use of factory lined pipe in the Company. While the break rates for this pipe are not as high as the unlined 1936-1948 and 1949-1951 categories, Aqua has observed high break frequencies in specific water main installation projects from that era. Therefore, pipe in this category has been added to future replacement projects in the GIS, and specific projects are selected for construction based upon observed local high break frequencies. Factory Lined Cast Iron for the 1961-1963 and 1964-1970 periods have also recently been added to candidate pool which the Company will now incorporate into its replacement planning. These vintage categories contain the majority of the remaining mileage of fragile, thin-walled cast iron material and were added due to exhibitions of higher levels of break rates compared to Aqua's overall distribution network break rate.

The Unlined Cast Iron (1927-1935) was originally the preferred candidate for cleaning and lining. This pipe was manufactured using the "pit casting" method resulting in thicker walled pipe than the subsequent "spun cast" pipe that Aqua began installing in 1936. The thicker walls make this pipe less prone to breaking, thus making it a good candidate to clean and line. But as noted elsewhere, the 34 miles of pipe remaining in this category is scattered throughout the system making cleaning and lining less cost effective. As this pipe is nearing 100 years of age, it becomes a candidate for replacement.

Asbestos cement pipe is concentrated in several acquisitions in SEPA and a small number of systems in GPA. Asbestos cement pipe was most commonly installed in the 1940's and 1950's, but it was available and still being installed into the early 1980's. While the asbestos cement pipe does not create water quality concerns, special precautions must be taken when repairing such a pipe so that asbestos fibers are not released to the air. In addition, this pipe material often "crumbles" when under repair, increasing the scope and duration of a main break repair.

As noted elsewhere, cleaning and lining of unlined cast iron pipe resolved water quality and hydraulic problems, but did not extend the life of the pipe indefinitely. Some of that pipe (33 miles) is already more than 100 years old, and nearly half (164 miles) is more than 90 years

old. Generally, Aqua expects to get a minimum additional 20 years of life out of the cleaned and lined pipe. However, depending on ongoing break rates a lined pipe may be replaced earlier or later.

Aqua continues to monitor break rates for these cohorts as they age.

Valves, services, and hydrants are replaced generally as part of the Company's main replacement schedule. Meters are replaced, per Commission regulation, on a 20 year replacement schedule.

Please see Section 5, below, for the property to be improved during this LTIP period.

### Micro Planning

In SEPA, all pipes within the candidate pool have already been grouped into prospective projects. From these prospective projects, specific projects for the upcoming year are selected starting in early summer of the preceding year. The micro-level planning involves selecting specific projects from those, coordinating with local and state organizations, refining project scope as needed, balancing workload across the divisions, avoiding overloading any particular area, addressing new or worsening conditions, and addressing newly discovered issues.

The process is slightly different outside of SEPA. The characteristics of those systems require a different approach. Because the systems tend to be smaller, a relatively small project can have a significant impact on the overall system. Therefore, the selection of specific projects is driven more by "local knowledge" of the operators and engineers that work closely with those systems. Projects are selected to address pipes with high break frequencies or areas with ongoing water quality or hydraulic issues.

## **4. LOCATION OF ELIGIBLE PROPERTY AND REGIONAL CHARACTERISTICS**

Aqua's water systems are distributed across the state, but are concentrated in SEPA. The SEPA "region" includes a contiguous distribution system within Bucks, Chester, Delaware, and Montgomery counties and separate smaller systems in Berks, Bucks,

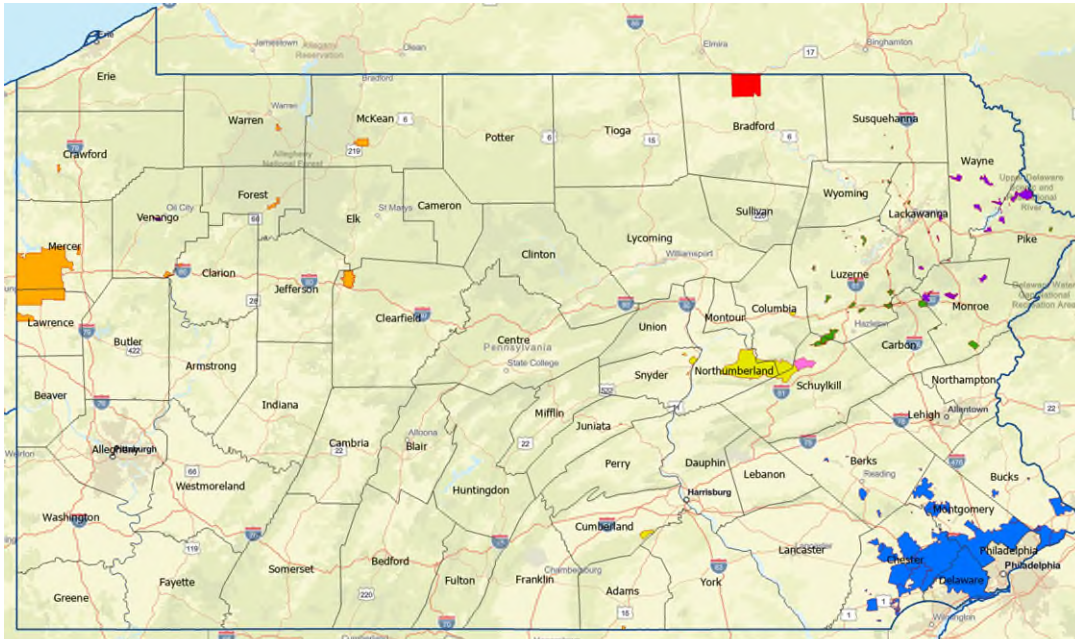
Chester, and Montgomery counties. SEPA accounts for 77% of Aqua’s pipe in Pennsylvania.

The SEPA distribution system ranges from urbanized areas surrounding the City of Philadelphia to suburban areas heading away from the City to rural areas at the outer edges of the system and in the satellite systems.

Aqua systems outside of SEPA, designated as GPA, are considerably smaller. They range in size from Canal Acres (Pike County) with fewer than 15 customers and less than 1 mile of pipe to the Shenango system (Mercer and Lawrence counties) with nearly 300 miles of pipe serving approximately 20,000 customers.

**Figure 3** shows the distribution of Aqua systems across Pennsylvania, **Table 15** provides a breakdown of pipe mileage by region and material, and **Table 16** provides information on other assets by region.

**Figure 3 – Aqua Systems**



**Table 15 – Pipe Mileage By Region and Material**

Region	Material_Category	Miles of Pipe	% of Total
<b>Greater PA</b>	Asbestos Cement	36	1%
	Cast Iron	199	3%
	Ductile Iron	889	15%
	Other	210	4%
	Unknown	6	0%
<b>Greater PA subtotal</b>		<b>1,341</b>	<b>23%</b>
<b>SEPA</b>	Asbestos Cement	194	3%
	Cast Iron	903	15%
	Cement Stovepipe	11	0%
	Ductile Iron	3,296	56%
	Other	183	3%
	Unknown	0	0%
<b>SEPA subtotal</b>		<b>4,587</b>	<b>77%</b>
<b>TOTAL</b>		<b>5,928</b>	<b>100%</b>

**Table 16 – Other Assets By Region**

Region	Number of Valves	% of Total	Number of Hydrants	% of Total	Number of Meters	% of Total
<b>GPA</b>	18,262	21%	4,945	20%	71,636	16%
<b>SEPA</b>	66,873	79%	20,265	80%	377,662	84%
<b>TOTAL</b>	<b>85,135</b>	<b>100%</b>	<b>25,210</b>	<b>100%</b>	<b>449,298</b>	<b>100%</b>

## 5. REASONABLE ESTIMATE OF THE QUANTITY OF PROPERTY TO BE IMPROVED

Note that in addition to planned water main replacements, the DSIC budget also addresses capital cost of 1) water main breaks, 2) highway relocations, and 3) tie-ins to eliminate dead ends.

**Table 17** presents Aqua’s planned water main replacement plans for the 5-year period 2023-2027. This projected mileage to be replaced has been included in the 5-year capital budget and assumes a slight annual increase in the average cost per foot for main replacement. Pipe replacement costs are also dependent on the types and locations of projects. For example, work done in a state road and large diameter pipe

replacement projects are typically more expensive than a “typical” 8-inch main replacement project in a small residential street. Thus, the actual mileage replaced in future years will be driven by these various factors, and may vary from the projected mileage presented in Table 17.

**Table 17 – Projected 5-year Water Main Replacement Schedule**

Year	Projected Miles of Pipe to be Replaced
2023	83
2024	64
2025	60
2026	58
2027	59

The 5-year main replacement projections demonstrate a continued accelerated replacement rate for Aqua. The pace also reflects plans to replace some larger mains, in congested construction areas, and addresses approximately 324 miles of our prioritized “pool” of candidate main replacement projects.

In addition to pipe replacement, the DSIC program will continue to address services, valves, hydrants, and meters. The DSIC program will also address COLSLs as described in Attachment A. **Table 18** presents 5 year projections of the number of these assets to be addressed. The values for service, valves and hydrants are projected based on historic “per mile” values. Meter replacement is independent of main replacement projects, and those values are based on scheduled meter replacements.

**Table 18 – Projected 5-year Replacement Schedule**

Year	Services	COLSL	Valves	Hydrants	Meters
2023	6,049	288	1,418	231	22,442
2024	4,191	1,200	867	162	53,100
2025	3,060	1,500	900	120	21,730
2026	2,958	1,500	870	116	11,175
2027	3,009	1,500	885	118	7,419

## 6. PROJECTED ANNUAL EXPENDITURES AND MEASURES TO ENSURE COST-EFFECTIVENESS

Aqua’s projected budget for 2023 through 2027 is in **Table 19** below.

**Table 19 – Projected Budget 2023-2027**

Project Group	2023	2024	2025	2026	2027
Main Replacements	\$ 158,130,781	\$ 124,910,049	\$ 128,786,868	\$ 121,245,137	\$ 121,585,291
Tie-In Dead End Mains	6,466,087	15,444,708	6,850,000	16,760,000	22,760,000
Capitalized Main Breaks	4,489,597	4,085,000	4,560,000	4,261,000	4,941,000
Highway Relocations	2,336,581	1,271,800	675,000	1,056,800	1,806,800
Valve Replacements	824,861	1,356,000	1,211,000	1,311,000	1,371,000
Other Main/DistrSysImpr	2,374,806	2,198,400	1,860,800	4,176,700	6,650,299
Eligible Meters	6,692,629	12,499,834	6,159,995	4,243,289	2,619,340
ERT Devices	861,074	3,637,222	1,532,977	812,047	555,285
Renewal Services - Regular	4,568,392	4,695,000	4,495,000	4,425,000	4,405,000
Renewal Services Main Rehab	16,969,011	18,510,649	18,070,062	17,014,219	17,061,841
Replace/Relocate Hydrants	5,702,755	4,251,568	4,057,156	3,775,904	3,786,109
COLSLs	2,106,359	9,782,664	14,580,928	15,018,356	15,468,906
<b>TOTAL DSIC ELIGIBLE</b>	<b>\$ 211,522,931</b>	<b>\$ 202,642,894</b>	<b>\$ 192,839,786</b>	<b>\$ 194,099,452</b>	<b>\$ 203,010,870</b>

Table 19 above displays Aqua’s 5 year capital budget for DSIC eligible projects. This budget is based upon the water main replacement “pace” described herein, planned “tie-ins” of dead ends, anticipated water main relocations associated with highway projects, and Aqua’s experience on the levels of valve, hydrant, and service line replacement that will be associated with these water main replacements, tie-ins and relocations. Budgets for DSIC eligible replacements associated with water main breaks and other eligible distribution system work are based upon past experience. Meter replacement budgets consider meter age, and PUC mandated meter replacement intervals. Aqua’s investment in these capital expenditures will be financed by a mix of equity and borrowed funds.

Aqua’s operation, maintenance and construction activities are structured into two main regions – SEPA and GPA. The GPA region evolved from the 1999 acquisition of the former Consumers Water Company as well as additional, smaller acquisitions. SEPA, formerly known as The Philadelphia Suburban Water Company, employed a long-time organizational structure with several regional offices to allow for efficient service. In both SEPA and GPA DSIC eligible main replacement projects are performed by

independent, pre-approved contractors. Other DSIC-eligible activities, such as service, hydrant and valve replacement, are performed by Aqua maintenance and construction crews augmented by independent contractors when necessary.

#### Contract Bidding Procedures – SEPA

SEPA has utilized a long-standing program of bidding and awarding construction contracts in each of its operating divisions. Each division contract primarily includes the construction of pipeline projects up to and including mains 16-inches in diameter. The contract also includes small installation and repair of services, hydrants, valves, etc. as needed to augment Aqua crews as well as road and ground restoration. These contracts are typically bid and awarded for a multi-year term. Contractors, usually 6 in number, are invited to bid based on past experience with Aqua. Most of the work performed under the contract is main replacement projects under Aqua's annual DSIC program. Currently, more than 100 pipe replacement projects annually are constructed under the multi-year contract. With the growth of the DSIC program since 1997, Aqua has steadily increased the number of pipe replacement projects which exceed the size limits under the multi-year contract. The majority of longer length projects or projects that involve mains 16-inches in diameter and greater are generally bid individually under a separate project-specific contract. Typically, 5 to 6 contractors are invited to bid based on past experience with Aqua, including those awardees of the multi-year contracts. In recent years, 20 to 25 projects per year have been individually bid in SEPA, accounting for approximately one third of the total length of pipe replaced.

#### Contract Bidding Procedures – GPA

The GPA region does not utilize the multi-year contracts. Since the operating areas are smaller than SEPA, the same efficiencies cannot be realized. DSIC-eligible main replacement projects are competitively bid as individual or multi-project bundles regardless of main size. Currently, these operating areas undertake 0 to 12 pipe replacement projects in each area annually or approximately 30-35 projects in total. As with SEPA, contractors are invited to bid based on past experience with Aqua or other utilities.

## 7. ACCELERATION PLAN AND MAINTENANCE OF SAFE AND RELIABLE SERVICE

Aqua has utilized the DSIC to renew its distribution system since 1997. Over that approximately 26-year period, over 46% of the pipe (2,676 miles) in the system has been renewed. This amount of pipe mileage renewed over 26 years comes to an average of 100 miles per year. This accelerated rate of renewal is nearly twice what a 1% per year renewal rate would have accomplished (1,384 miles). The Company considers a 1% per year renewal rate to be a baseline replacement rate. During the implementation of Aqua’s DSIC program over the past 26 years, Aqua has far surpassed that baseline replacement rate, and will continue to maintain its accelerated rate of replacement.

**Table 20** shows Aqua’s historic rehabilitation and replacement of mains for the period 2018-2022, and **Table 21** shows Aqua’s historic replacement of services, valves hydrants, and meters for the period 2018-2022.

**Table 20 – Historic Main Replacement and Rehabilitation**

Year	Actual Miles of Pipe Replaced or Rehabilitated
2018	152
2019	106
2020	152
2021	134
2022	92

**Table 21 – Historic Replacement Schedule Other Property**

Year	Services <sup>19</sup>	COLSLs	Valves <sup>20</sup>	Hydrants <sup>21</sup>	Meters
2018	9,188	N/A	3,171	454	47,688
2019	9,371	N/A	1,880	276	46,654
2020	9,894	N/A	2,571	408	23,613
2021	10,696	66	2,143	389	39,475
2022	7,760	200	1,643	277	23,199

<sup>19</sup> The number of services replaced is an estimate based on the miles of pipe that was replaced in each year shown in Table 21. Please see also footnote 4, above.

<sup>20</sup> The number of valves replaced is estimated based on the miles of pipe that was replaced in each year shown in Table 21. Please see also footnote 5, above.

<sup>21</sup> The number of hydrants replaced is estimated based on the miles of pipe that was replaced in each year shown in Table 21. Please see also footnote 6, above.

The associated expenditures for 2018-2022 are included below in **Table 22**.

**Table 22 – DSIC Expenditures for Prior Years**

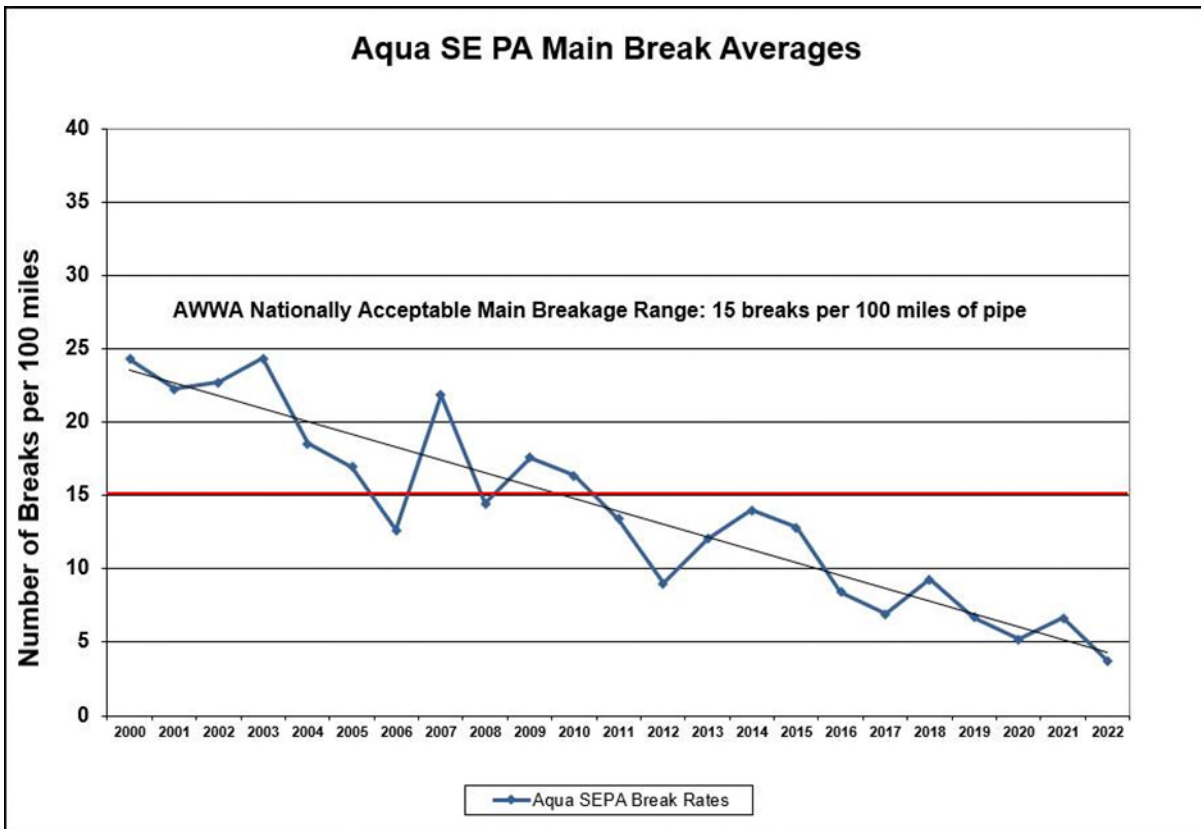
Project Group	2018	2019	2020	2021	2022
Main Replacements	\$ 146,442,379	\$ 174,569,280	\$ 158,577,871	\$ 152,676,638	\$152,114,123
Tie-In Dead End Mains	1,717,467	2,731,720	10,559,071	10,380,542	2,516,589
Capitalized Main Breaks	5,701,155	5,156,508	4,120,686	4,122,595	5,824,922
Highway Relocations	1,644,244	2,280,952	675,911	3,684,747	2,363,580
Valve Replacements	1,605,193	1,878,211	789,551	1,417,778	1,286,097
Other Main/DistrSystImpr	1,666,834	1,614,845	2,028,486	1,400,313	2,281,036
Eligible Meters	9,050,652	7,865,341	3,086,785	5,809,267	5,167,008
ERT Devices	3,582,349	3,575,972	2,007,335	3,031,446	747,963
Renewal Services - Regular	5,978,413	5,461,011	4,499,018	5,093,888	4,280,220
Renewal Services Main Rehab	17,856,738	18,124,916	16,658,391	20,768,430	18,807,918
Replace/Relocate Hydrants	6,388,695	5,934,460	4,333,198	4,831,088	4,208,325
COLSLs	-	-	-	342,424	1,134,417
<b>TOTAL DSIC ELIGIBLE</b>	<b>\$ 201,634,121</b>	<b>\$ 229,193,217</b>	<b>\$ 207,336,303</b>	<b>\$ 208,367,616</b>	<b>\$ 200,732,199</b>

The DSIC program has been successful in improving reliability (main breaks), efficiency (non-revenue water), and water quality.

**Figure 4** shows the general decline in water main break rates since 2000 in SEPA. Most water main breaks occur during the cold winter months, so yearly variations are expected depending on the severity of the weather. However, there is a definite downward trend in main breaks in SEPA resulting from the DSIC program. This results in fewer interruptions of service to customers.

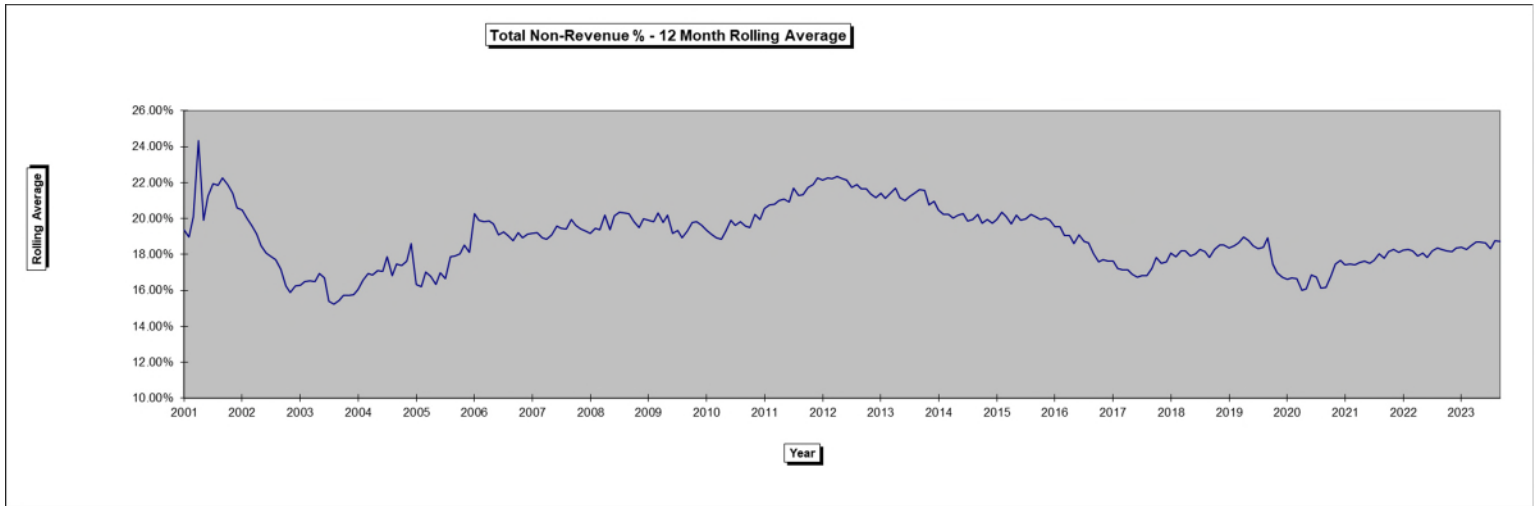
Another way to examine the declining main break trend is to consider the total number of breaks each year, rather than the break rate. In 2003 there were a total of 998 break events in SEPA, which is the most over this time period. In 2022, the number of breaks was a new low of 171. For the past twelve years, the SEPA break rate has been below the American Water Works Association (“AWWA”) nationally acceptable main breakage rate of 15 breaks per 100 miles.

**Figure 4 – Aqua SEPA Main Break Averages Since 2000**



Non-revenue water (“NRW”) is also declining. Replacement of older, potentially leaky pipes with newer pipes should result in lower leakage. **Figure 5** shows metered ratio trends for SEPA. The percentages shown represent the amount of unbilled water divided by the total water produced. While this is not the preferred approach to NRW evaluations today, it is the only data that is available dating back to 2001.

**Figure 5 – Metered Ratio Trends**

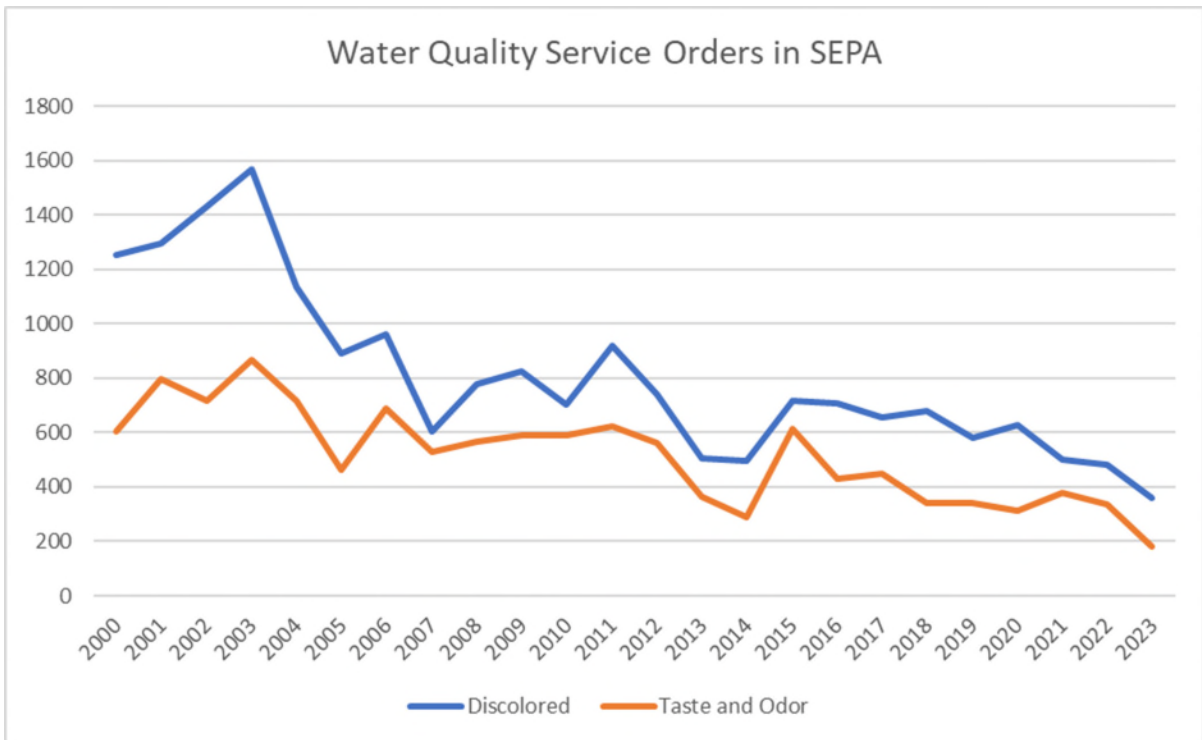


Applying more current approaches to analyzing and managing NRW has been a particular focus of the Company in recent years. This includes applying the AWWA water audit method. In 2013, a consultant was retained to conduct a study of NRW in SEPA. Considerable effort was spent examining real and apparent loss percentages and volumes. One finding of that study was that earlier metered ratio trends (prior to 2007) were actually flatter than shown on the chart due to errors discovered in the method used to account for Prior Month Billing Adjustments during that period. As a result of the study, the Company has identified and continues to pursue a number of business cases to address the efficient, sustainable distribution of water. These include standardization of customer meter testing, application of theft reduction techniques, calibration of production meters, and standardization of leak detection practices. The latter case, along with the ongoing replacement of old pipe from the DSIC program, has been a driver in reducing NRW. Figure 5 shows the impact of this effort on metered ratio as one performance indicator. Since total water send-out has been declining, metered ratio does not portray the more significant decline in water loss volume. Examined a different way, in SEPA alone, NRW has decreased by approximately 1.0 billion gallons per year since 2015.

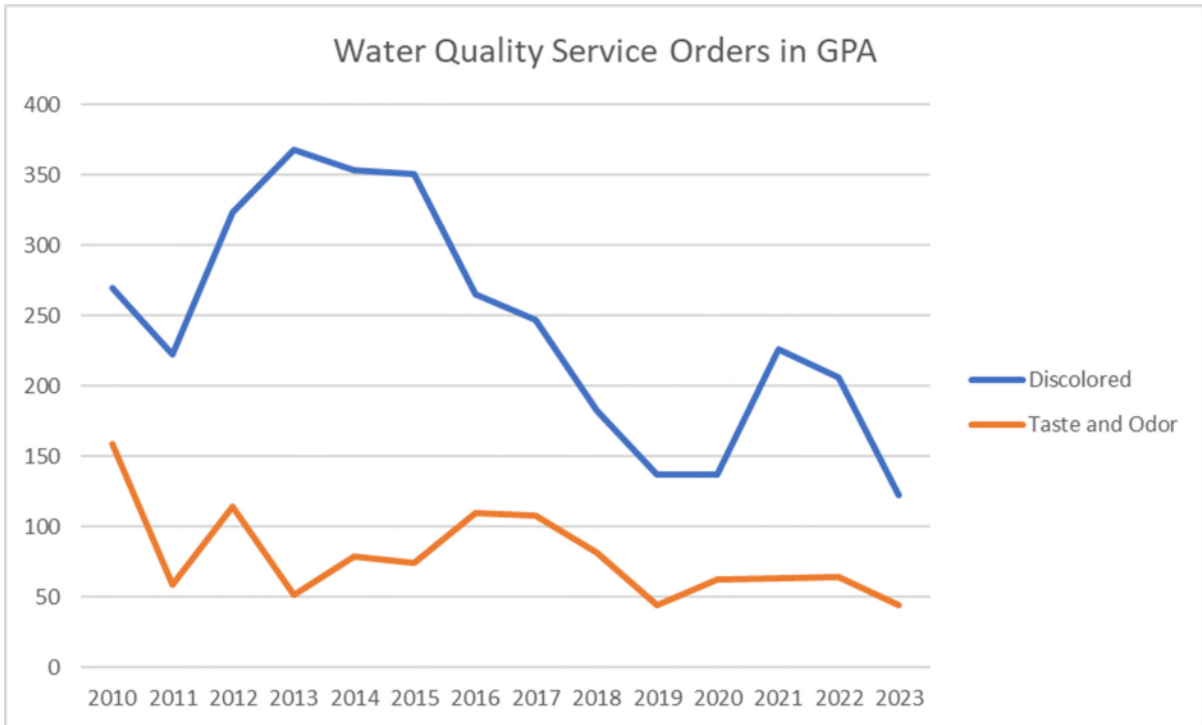
In addition to desktop NRW analysis, the Company has increased efforts in proactive leak detection, including lift and shift acoustic surveys, pilot satellite leak detection, pilot real-time permanently installed leak and transient monitoring on critical infrastructure, and partial theft of service algorithm directed investigations.

Water quality complaints have declined over time as noted in **Figure 6** which shows significant reductions in the number of both taste and odor and discolored water service orders since 2000 in SEPA. Similarly in **Figure 7**, both taste and odor and discolored water service orders have been reduced in GPA.

**Figure 6 – Water Quality Service Orders in SEPA**



**Figure 7 – Water Quality Service Orders in GPA**



This is another achievement for the DSIC program. As old, unlined cast iron pipes were replaced or cleaned and lined, the Company has experienced reduced complaints about water quality associated with the corrosion of the interior pipe walls. **Figure 8** shows an older unlined cast iron pipe that was replaced.

**Figure 8 – Replacement of Older Pipes**



The cleaning and lining program also contributed to improved water quality as the cement mortar lining applied to the walls of the unlined cast iron pipe prevents the interior corrosion of the iron. See **Figure 9** for before and after examples of the impact of cleaning and lining. However, it should be noted that the cleaning and lining process can only allow the Company to maintain the useful life of a cast iron pipe. Eventually that pipe will still need to be replaced due to age.

**Figure 9 – Impact of Cleaning and Lining**



Aqua’s cleaning and lining program was limited to the more urban areas in SEPA and ended after 2014. Cleaning and lining was an attractive alternative to pipe replacement in the 1990’s and early 2000’s as the population of candidate pipe (unlined cast iron with good remaining structural life) was concentrated in neighborhoods. This allowed contractors to mobilize in a single location and clean and line large quantities of pipe, resulting in cost efficiencies. At its peak, the cleaning and lining program was able to renew pipe for approximately half the cost of replacement.

As the population of this “candidate” pipe declined and became more geographically dispersed, the efficiencies of cleaning and lining were lost and the cost savings compared to pipe replacement became much less. As a result, Aqua has not included cleaning and lining of mains in its current LTIP budget.

## **8. WORKFORCE MANAGEMENT**

The Commission requires that a utility that utilizes DSIC have a workforce management and training program designed to ensure that the utility has access to a qualified workforce to perform work in a cost-effective, safe and reliable manner.

## Inspectors

Aqua utilizes construction inspectors to provide numerous services during the installation of mains, services, and hydrants in the distribution system. The inspectors are there to perform the following tasks, as well as any other work that may be necessary:

- Monitor the installation of the lines to confirm that they are properly bedded and installed to Aqua specifications.
- Monitor the backfill of the project for proper compaction as per Aqua specifications.
- Confirm that all materials such as pipe, fittings, backfill, concrete, etc. in the project meet the Aqua specifications.
- Capture the quantities of pipe and other materials for proper record keeping, plans, etc.
- Capture the quantities of pipe and other materials, labor, etc. for accurate billing and payments.
- Document all locations of pipe, fittings, valves, service lines, etc. for accurate mapping and recordkeeping.
- Work with residential customers to lessen the impact of the project and answer or address any issues that occur within the project.
- Work with businesses that are impacted by the project to insure deliveries, access, and service outages do not disrupt business.
- Coordinate contractors with school districts, municipalities, and emergency services so that bus routes, trash pick-up, mail delivery, and emergency response are not impacted.
- Monitor the temporary restoration during the project to make certain that roads are safely traveled.
- Monitor the restoration required in projects to make certain they are done to state or municipal specifications, and insure that proper payment is achieved.
- Observe contractor's implementation of contractor safety plans and advise contractor of any observed conditions of imminent danger. Inspectors can shut down a project until an imminent danger situation is addressed.

## Safety and Training

Aqua requires its employees in the Distribution/Construction arena to have mandatory safety training throughout the year. Aside from the required annual training, there is additional training that also takes place. Examples of the required annual training are confined space, traffic safety, excavation/trenching, general safety hazards, and hazard communications. In addition, there are other programs that are required, but not on an annual basis, including Personal Protection Equipment (“PPE”), electrical hazard, competent person, and others. First Aid/CPR and automated external defibrillator training are offered yearly to maintain certifications and proficiency. In 2019, Aqua developed a training program to educate drivers and reduce the frequency of backing accidents. Driving continues to be an integral part of training. In addition, to the video segments, Safety Days include keynote speakers discussing driving skills & techniques. In 2022, monthly video segments were implemented along with instructor led classes on reverse driving and backing, and in 2023 the Company included spotter training. Aqua routinely sends out “Tool Box” Talks on safety topics; tripping hazards, electrical, tools, and seasonal topics such as weather, holidays, and Back to School. The Safety department also issues “Safety Alerts” previewing incidents and near misses. In addition, Aqua has instituted a “Near Miss” (Safety Learning Opportunities) initiative where hazards are identified and resolved within 30 days.

All employees in Distribution/Construction are required to wear their Personal Protection Equipment whenever they exit their vehicles on a jobsite. The PPE includes hard hat, safety vest, safety glasses, and steel toe shoes. All of this PPE is supplied by the Company. Aqua also instituted a change in a policy for cutting pipe in a trench. The use of cut-off saws, also sometimes called demo saws, is prohibited from use in a trench by our employees and any contractors working for Aqua. These saws utilized in a trench have nationally been a source of fatalities and injuries in the industry. There are numerous other methods of cutting pipe or other material in trenches, so to prevent any incidents the use of the cut-off saws has been prohibited.

Aqua requires all employees, and contractors, to report immediately any injury that takes place to an employee of either party. Aqua also requires employees and contractors to report any damage to utilities during the excavation process. As part of

the Pennsylvania Underground Utility Protection Law, Aqua and its contractors are required to submit an Alleged Violation Report for all utility damage occurrences to the Commission.

### Contractors

To supplement Aqua's employee workforce, Aqua utilizes outside contractors for main replacement projects, including the service and hydrant connections that go along with the project. Contractors are required at Aqua's request to provide Aqua with their safety policy and documentation of training to their employees, including but not limited to competent person, utility damage prevention, and traffic safety.

Aqua requires contractors to follow all state, federal, and Occupational Safety and Health Administration rules and regulations in the implementation of a project. This is required in all contract documents for construction. Aqua utilizes a third-party safety consultant to perform site inspections on a regular basis for Aqua's contractors. Contractors are also required to fill out a Job Hazard Awareness form daily, either utilizing the Aqua form or a similar form designated by the contractor.

Contractors are also required to provide the PPE for their employees, including hard hat, work gloves, reflective vest or shirt, safety shoes, and safety eyewear.

Contractors are also responsible for reporting to Aqua any injuries sustained on an Aqua project. They are also required to report any utility damage that occurs on the jobsite. As part of the Pennsylvania Underground Utility Line Protection Law, the contractor is required to submit an Alleged Violation Report for all utility damage occurrences to the Commission. Contractors are responsible for following the requirements of PA One Call, including being responsible for all PA One Call requests for their project.

Aqua's inspectors are also required to coordinate all service outages or main outages with contractor and other Aqua personnel, including notification of the customers.

## **9. OUTREACH AND COORDINATION ACTIVITIES WITH OTHER UTILITIES, PENNDOT, AND LOCAL GOVERNMENTS**

Using Aqua’s GIS and historical asset data, Aqua has developed an inventory of pipe replacement candidates throughout its footprint. Between the months of May and October, replacement candidates are typically chosen and prioritized for replacement in the subsequent budget year. Each potential replacement project is vetted by the corresponding construction division’s manager, i.e., analyzed for feasibility of construction in the coming budget year. As part of the analysis process, Aqua collects information from the Pennsylvania Department of Transportation (“PENNDOT”), counties and municipalities as to their intentions to undertake paving and other public works projects during the budget year. Paving projects known by Aqua in advance of replacement project selection are posted to the GIS alongside candidate replacement projects and utilized in prioritizing specific projects for selection and refining of specific project scopes. Where Aqua chooses to undertake a pipe replacement project on a road pre-scheduled for paving, the project will be coordinated with the state, county or municipality. Aqua and the government agency will work together to insure that the design, permitting and construction of the pipe project will be completed in time to allow for the road to be paved. In some cases, where pipe replacement projects are large, the government agencies will agree to postpone paving of its roads to the following year. Aqua’s Engineering Department meets several times a year with PENNDOT’s Permits, Traffic and Maintenance officials, formally presenting plans for pipe replacement projects in state roads for the coming year or longer. As a result of these meetings PENNDOT may adjust its paving plans and other construction project schedules for Aqua’s benefit. Where PENNDOT schedules cannot accommodate Aqua’s projects, Aqua will defer its project a minimum of 5 years. Typically, when Aqua undertakes a project where paving has been pre-planned by the government agency, Aqua and its rate payers will benefit financially through the avoidance of road surface restoration, usually a full-lane or half-road milling and macadam overlay.

Unfortunately, most municipalities do not identify their paving plans in advance of Aqua’s project selection. Annual municipal budgets may not be approved until early in the budget year resulting in paving projects not being formalized until well into the budget year. In these instances, Aqua must be proactive in identifying opportunities to coordinate pipe

replacement and road paving. Following the selection of pipe replacement projects in early fall preceding Aqua's budget year, construction division managers and superintendents visit with each municipality in which pipe projects are planned. In many instances, municipal officials and engineers will identify roads where repaving can be coordinated with Aqua's project. A sharing of costs is negotiated and the municipality will undertake the milling and paving of the entire road with a monetary contribution from Aqua.

In 2020- October 2023, Aqua undertook 119 pipe projects which resulted in savings to Aqua in surface restoration avoidance.

Although less frequent, continuous outreach by Aqua has resulted in additional coordination opportunities recently, including track construction by SEPTA, and sanitary, storm sewer and bridge construction by state, county and municipal governments.

Following the initiation of the Gas DSIC in Pennsylvania, additional coordination opportunities for joint water main and gas main replacement have substantially increased, especially in SEPA between Aqua and PECO. Beginning in 2013, Aqua and PECO undertook a sharing of asset data including high-priority candidate replacement water and gas pipes. Joint project review meetings have been held every 6 to 8 weeks to coordinate replacement schedules where water and gas main replacement projects intersect in each municipality. Aqua and PECO have also met jointly with municipal officials, residents and businesses to present the timing and coordination plans of each utility's projects. Working together benefits the general public through greater efficiency, coordinated traffic control and the avoidance of wasteful demolition of recently paved roads by the second utility to construct. In addition, this coordination results in nominal cost savings to the utilities, associated with economies of scale, since installation of both water and gas mains usually requires repaving of the full road.

# ATTACHMENT A

## Lead Service Line Replacement Plan

# Aqua Pennsylvania, Inc.

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## Lead Service Line Replacement Plan

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## **DEFINITIONS**

Aqua or Company – Aqua Pennsylvania, Inc.

COLSL – Customer-owned lead service line

DEP – Pennsylvania Department of Environmental Protection

EPA – United States Environmental Protection Agency

GPA – Aqua’s Greater Pennsylvania Division

GRR – Galvanized service line requiring replacement

LCRR – Lead and Copper Rule Revisions amending the EPA’s Lead and Copper Rule. All community and non-transient non-community public water systems are required to comply with the LCRR starting October 16, 2024.

Lead action level - EPA's action level for lead in water delivered to users of public drinking water systems is 10 µg/L.

LSLR – Lead service line replacement

LSLR Project Commencement – Installation of the first lead service line replacement within a lead service line replacement project area.

LTIIIP – Long-Term Infrastructure Improvement Plan

PENNVEST – Pennsylvania Infrastructure Investment Authority

PUC or Commission – Pennsylvania Public Utility Commission

SEPA – Aqua’s Southeastern Division

µg/L – Micrograms per liter.

## **I. INTRODUCTION**

Aqua has developed the following Lead Service Line Replacement (“LSLR”) Plan in accordance with Chapter 65 of the Pennsylvania Public Utility Commission’s (“PUC” or the “Commission”) regulations, 52 Pa. Code §§ 65.51 et seq., and the Commission’s Final Implementation Order entered on March 14, 2022 at Docket No. L-2020-3019521. Included with the Company’s LSLR Plan is a pro-forma tariff supplement containing the proposed changes necessary to implement the LSLR Program, and information required by the Commission under 52 Pa. Code § 53.52(a). Aqua submits this LSLR Plan as part of its Long-Term Infrastructure Improvement Plan (“LTIIP”).

Aqua owns and operates water systems serving approximately 450,000 customers in 32 counties throughout Pennsylvania. Aqua’s service territories are designated as either Southeast Pennsylvania (“SEPA”), which includes a contiguous distribution system within portions of Bucks, Chester, Delaware, and Montgomery counties and separate smaller systems in portions of Berks, Bucks, Chester, and Montgomery counties, or Greater Pennsylvania (“GPA”), which includes Aqua’s service territories outside of SEPA.

The Company received prior Commission approval of its LSLR petition on July 15, 2021 at Docket No. P-2020-3021766. Under the Company’s existing plan, COLSL replacements are capped at 200 per year and at a budgeted amount of \$800,000.

## **II. LSLR PLAN REQUIREMENTS**

Aqua’s LSLR Plan contains the following elements and supporting documents as required by the Commission.

### **A. Service Line Inventory**

The Service Line Inventory is being developed consistent with the intent and guidance of the Lead and Copper Rule Revisions (“LCRR”) including use of all available sources of information to establish service line material designations for each side of ownership (i.e., Company and customer) which thus informs an overall service line material designation.

In developing the Service Line Inventory, the Company has used a combination of evidence-based data, including field observations, tap cards, and as-built drawings. Field observations which have occurred through meter replacement, and any time a field service representative is able to access the service line through excavation or at the meter location and is able to observe the service line material. The field observation also includes proactive review of service line material prior to main replacement work commencing in high-risk areas. The Company will send a letter to customers with unknown service line material requesting customers to identify their service line material.

When evidence-based data, as described above, is not available, the Company has applied the following methodology to assign material designations within the Service Line Inventory:

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1. Aqua’s tariff from 1956 to current practice requires installation of Type K Copper on both the Company and customer side of the service line for 49 municipalities within the Main system. Homes built during 1956 or later for these water systems were therefore assigned a “non-lead” designation.
2. Pennsylvania banned the use of lead in all plumbing in early January 1991, and therefore homes that were built during or after 1991 are similarly assigned a “non-lead” designation within the Service Line Inventory. To identify any area outliers, Aqua will implement a field verification process in compliance with LCRI which as proposed currently requires a mathematical model to ensure the veracity of the assumption to confidence level in the final regulations. The proposed regulations are summarized at 40 CFR 141.84(b)(5). Aqua will visually observe the service line materials on both the utility and customer sides by using a combination of methods including potholing and basement inspections.
3. For galvanized service lines which are or were downstream from LSLs and/or the Company cannot prove that they were never downstream from an LSL or lead gooseneck they are assigned a Galvanized Requiring Replacement (“GRR”) and will be considered candidates for replacement, unless the home and service line was built during or after 1991.

Aqua’s Service Line Inventory is continuing to be developed at this time, including the incorporation of all remaining tap cards, assumptions as described above, and other evidence-based data, with 92% of Company service line material identified and 83% of customer service line material identified, detailed further below.

The Company will update its Service Line Inventory as progress is made on completing the inventory and as new water systems are acquired. Section II.B.9 provides further discussion on integration of acquired systems into the Company’s LSLR Plan.

**Table 1** below shows total material type identification across Aqua’s service territory.

**Table 1 – Current Service Line Inventory Summary**

<b>Material Type</b>	<b>Company</b>	<b>Customer</b>
Lead	64	166
GRR	634	9,666
Non-lead	431,131	379,193
Lead status unknown	38,195	81,009
<b>Total</b>	<b>470,024</b>	<b>470,024</b>

The current Service Line Inventory with location identifiers is being developed and will be available on Aqua’s website as further described in Section II.C.2.

**B. Planning and Replacements**

**1. Aqua’s Projected Annual Investment and Sources of Financing**

The Company proposes a cap up to 1,500 replacements annually. Anticipated sources of financing for the replacements will include short term debt of the Company converted at a later time into long term debt and equity. The Company is also exploring low-cost/no cost financing through the Pennsylvania Infrastructure Investment Authority (“PENNVEST”) and other sources as they become available. As the Company identifies systems requiring significant LSL replacement, the Company will explore funding opportunities to reduce costs to ratepayers.

**2. Aqua’s Projected LSLRs Per Calendar Year and Description of Projection Development**

The Company is projecting the following replacements during the term of this LTIP as set forth in **Table 2**:

**Table 2 – Projected COLSL Replacements During LTIP Period**

2023	2024	2025	2026	2027
500	1,200	1,500	1,500	1,500

Aqua currently has 38,195 company-owned service lines which are identified as lead status unknown. The Company’s inventory identifies 81,009 customer side service lines that are lead status unknown. In addition to finding and replacing lead service lines, the addition of galvanized service lines that are or ever have been downstream from a lead service line or lead gooseneck are GRR and are eligible for replacement under Act 120 and therefore have increased the potential number of replacements needed throughout Aqua’s systems. Aqua believes 2% or 1,620 of the unknown customer side service lines are potentially lead or GRR that will need to be replaced. Currently, the Company’s inventory using the assumptions described above indicate that 11,452 customer LSLs will need to be replaced (Customer Lead PLUS Customer GRR PLUS 2% of Customer Lead status unknown). These numbers are subject to change as the Company continues to develop its inventory and can change based on evolving regulatory requirements. The projections for 2023-2027 are consistent with Aqua’s annual cap proposed in this LTIP and LSLR Plan.

**3. Prioritization Criteria**

The Company considered the following prioritization criteria when developing the LSLR Plan:

- Individual Properties
  - Emergency Repairs revealing LSLs.
  - Homes with elevated lead concentrations in tap samples.
  - Schools and licensed day care facilities
  - Homeowners that request replacements.
  - Homeowners in systems that do not have widespread LSLs.

- Systems
  - Systems with higher projected lead or GRR replacements.
  - Systems where PENNVEST or other funding is available.
  - Systems with aging water mains that require replacement.

#### **4. Processes and Procedures to Address Emergency Repairs and Replacements Which Reveal LSLs**

When the Company uncovers an LSL while completing emergency repairs to its system, if both the customer side and Company side of the service line are lead, the Company will contact the customer/owner and provide them with the information and materials in Section II.B.6. and prioritize the replacement of the entire service line both Company and customer side. Where emergency work requires replacement of the Company service line and the Company material is non-lead, Aqua will replace the Company service line up to the curb stop, but will not make the connection, and this excavation will reveal the customer-side material. If the customer side of the service line is lead, the Company will neither make the connection nor restore service, and the Company will provide the resident with the information and materials in Section II.B.6. and immediately coordinate and prioritize replacement of the COLSL. The Company will also provide the materials and information in Section II.B.6 to residents of a premises who are neither customers nor owners, but occupy the premises.

Where emergency work requires a spot repair to a Company side service line, the work does not require the replacement of the Company service line, and the Company side service line is not lead or GRR, then Aqua will complete the repair and restore service to the premises. Under this circumstance a connection was never severed and there was no partial replacement, therefore it does not require termination of service.

When the Company uncovers an LSL while completing emergency repairs to its system, and the LSL is Company-owned, the Company will replace its service line up to the curb stop but will not make the connection, and this excavation will reveal the customer-side material. Upon verification that the customer's service line is not lead, the Company will complete the Company-side replacement and restore service to the property. The Company will provide the customer with information regarding lead, pitcher filters, and flushing instructions as described below. If the customer's service line material is lead or GRR, the Company will neither make the connection nor restore service, and the Company will provide the resident with the information and materials in Section II.B.6. and immediately coordinate and prioritize replacement of the COLSL.

#### **5. Processes and Procedures to Obtain Acceptance of a LSLR Prior to Project Commencement When the Customer Is and Is Not the Property Owner**

For areas deemed high-risk, the Company or its third-party representatives will send pre-investigative letters to customers in preparation for the commencement of a main replacement project and will request authorization to gain access to a structure using pre-investigation letters (**Exhibit A1, A2, and A3**), requesting access to review the material type of the customer's service

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line. Aqua personnel or Aqua's third-party vendor will visit each customer premise within the scope of the project with an unknown service line material to identify material type of the customer service line. Aqua also sends out a letter to new customers when they move-in and establish an account with Aqua (**Exhibit A4**). Aqua plans on engaging customers/residents throughout its footprint with surveys (**Exhibit B**) sent by mail requesting customer participation in identifying service line materials. The Company will also be developing additional survey materials to engage customers/residents to assist the Company in completing the Service Line Inventory. If the Company uncovers a Company side LSL or a COLSL during maintenance or construction activities, the Company will provide a form (**Exhibit C**) to the resident if the resident is at the premise or will post the form if the resident is not at the premise and attempt to contact the resident through via phone to follow up with further information.

If there is no response to the pre-investigation letter or form, Aqua personnel or its third-party vendor will visit the premises to obtain acceptance in-person. If there is no response to door knocks, a door hanger (**Exhibit D**) will be left at the premises providing an Aqua contact number and requesting access to the resident/property owner's property to identify the service line material. If there is no response to the in-person outreach, a list is generated and Aqua will call the resident. If the Company does not receive a response, it will initiate the 10-day shut-off procedures (**Exhibit E**) to get access and review the service line material. If there is still no contact, Aqua will commence with the shut-off of service and require access to review the service line material as a condition to restore service.

After making contact with the resident and identifying the presence of a COLSL, Aqua personnel will ask whether the resident is the owner or renter of the building. If the customer is the owner, and they agree to participate in the replacement, then the Company will provide the information and materials in Section II.B.6 below. If the customer is the owner and refuses to participate in the replacement the Company will follow the provisions of Section II.B.10, below. If the resident is not the property owner, the Company will obtain the owner's contact information from the resident and call the owner to explain the program to the owner and provide the owner with a copy of the Customer Lead/Galvanized Service Line Replacement Agreement ("Replacement Agreement") (**Exhibit F**). If the Company does not receive a response to telephone calls to the owner, the Company will send a letter to the property owner (**Exhibit G**) explaining the program and request that the property owner contact the Company. If the property owner does not respond, the Company will explore all options to encourage property owners to participate, such as contacting the municipality and the local code enforcement in which the property is located, and, in certain circumstances, at the Company's discretion, using Step In Rights as described in Section II.B.10. If the Company has not received acceptance after multiple efforts to contact the property owner and obtain the Replacement Agreement, the Company will initiate the 10-day shut-off process.

By obtaining agreement of the property owner prior to commencing the main replacement project, the Company can more quickly and efficiently complete the main replacement and associated restoration. The Company will not be faced with having to delay a planned project or put an ongoing project on hold (including incomplete restoration) if the service line material cannot be identified or an LSL is discovered during a project. The Company would not have to stop mid-project to identify the service line material and get the owner's consent while potentially keeping

two mains in service or having an open cut in a roadway. As such, there is less disruption to traffic, customers' daily lives, and reduced safety concerns of open construction.

## **6. Processes and Procedures Based on Acceptance of a LSLR**

If the resident or property owner expresses that they want to participate in Aqua's LSLR Program after their service line has been identified as lead, Aqua will provide the following information to the customer:

- Customer Lead/Galvanized Service Line Replacement Agreement and postage-prepaid and pre-addressed envelope to the Company (**Exhibit F**).
- Lead Fact Sheet providing educational information about lead in drinking water (**Exhibit H**).
- Information Sheet explaining Aqua's Lead Service Line Replacement Program (**Exhibit I**).
- Post-COLSL replacement flushing instructions (**Exhibit J**).
- Pitcher filter with six months of replacement cartridges (**Exhibit K**).

When the above information is provided to the resident/property owner, the Company will explain to the resident/property owner that a plumber will contact them and schedule the replacement of the COLSL. If the resident/property owner does not return the Replacement Agreement, the Company will contact the resident/property owner until it receives a signed copy of the Replacement Agreement, which will be retained by the Company. During a main replacement project, the Company will proceed with the procedures set forth in II.B.10. if the signed Replacement Agreement is not returned.

The Replacement Agreement allows a third-party licensed professional to enter the property and complete the LSLR. The agreement authorizes the Company and the contractor performing the work to access the resident/property owner's property, confirms the ownership of the service line following installation, and provides a warranty on the work completed. Further, the agreement requires that the contractor install the replacement service line and restore the property as reasonably as practicable to the condition that existed prior to the LSLR.

Following replacement, Aqua personnel will visit the customer's property within 5 business days after the COLSL replacement to reinstall or exchange the meter.

Atypical conditions for a LSLR may include (a) the property owner has passed away and an executor is seeking replacement, (b) a person selling property during main replacement project, or (c) a service line serving multiple properties. As these situations arise, the Company will require documentation and, in the Company's judgment, get the proper authorization to complete the replacement.

In closing out the project, the Company will then provide a letter (**Exhibit L**) to the customer 3-6 months post-replacement confirming the provisions in the Replacement Agreement for project close-out. The letter confirms the newly installed customer service line has been transferred back to the property owner and reminds the resident/property owner of the warranty for the completed work. The Company will also offer to provide sampling materials for post replacement 5<sup>th</sup> liter sampling. If the resident agrees, the Company will provide instructions for post-replacement 5<sup>th</sup> liter sampling (**Exhibit M**). Following 5<sup>th</sup> liter sampling, Aqua will call and mail 5<sup>th</sup> liter sampling results within 10 business days for results less than 10 ug/L and within 3 calendar days for results greater than 10 ug/L (**Exhibit N**).

## **7. Lead/Material Recycling and Disposal Efforts**

When a customer LSLR occurs, Aqua's vendors make an attempt to pull the entire length of the line which reduces excavation and restoration costs. However, often the line cannot be pulled through and is abandoned in place. Aqua's third party vendors who complete the replacements will dispose of any lead material removed at recycling centers. No proceeds are provided to Aqua of the recycled material removed by the vendors.

For Company side LSL replacements, Aqua attempts to pull the entire length of the line which reduces excavation and restoration costs. However, often the line cannot be pulled through and is abandoned in place. Any lead material removed during a Company side LSL replacement will be brought back to the division office and put in our recycling containers to be taken to the recycling center. The scrap metal that is recycled is booked into a removal and salvage account and amortized over 5 years.

## **8. Industry Accepted Practices**

The Company will adhere to the provisions of its tariff regarding replacement of company-side service lines. In addition, the Company will require Company personnel and its contractors to comply with any applicable plumbing codes related to customer-side service line replacement. The Company will follow Commission regulations regarding LSLRs including prevention of partial service line replacements and termination of service provisions, if needed to prevent partial LSL replacements.

## **9. Integration of Acquired Systems in the LSLR Plan**

Where the Company acquires a water system prior to the deadline for water systems to complete their Service Line Inventories, the Company will take over the water system's efforts, if any, to identify and incorporate the service line materials of the system into Aqua's overall Service Line Inventory. This will include the efforts described in Section II.A., above.

For water systems acquired after the deadline for complete Service Line Inventories, the Company will incorporate the system's completed inventory into the Company's Service Line Inventory. It must be noted that some systems may not have completed a Service Line Inventory to the standards that the DEP and Commission regulations require either due to lack of resources

or other reasons. In these instances, during the acquisition process, the Company, to the extent feasible will work with the selling entity to begin the steps necessary to develop a Service Line Inventory and will continue those efforts after closing on the system. However, an incomplete Service Line Inventory by the selling entity should not hold up a closing on the system. The Company can more easily fold the acquired system into the Company's LSLR Program and complete the inventory post-closing where the Company can access the customers' meters and view service line material.

In these situations, the Company will explain its plans to complete the Service Line Inventory for the to-be-acquired system, and how those efforts will continue post-closing, and provide updates to the Commission on the progress of the Service Line Inventory for the subject system in its LSLR Program Reports.

#### **10. Procedure Regarding Refusal of Offer to Replace a LSL**

During a LSLR project connected to a main replacement or where the Company service line needs to be replaced, if the resident/property owner refuses to replace, and the Company has either made contact with the resident/property owner and they refuse, or where the resident/property owner is non-responsive to the Company's requests as described in Section II.B.5 to replace the COLSL, Aqua will initiate termination procedures. Termination procedures include posting of 10-day shut off notices, and other required contacts under the Commission's regulations. When the Company provides the 10-day shut off notice to the customer (either through and delivery or posting at the customer's premises), the Company will also provide the Customer Refusal Letter – either for not allowing access to identify service line material (**Exhibit O1**), or for failure to allow Aqua to replace the COLSL during a main replacement or where Aqua has to replace the Aqua side service line (**Exhibit O2**), the Lead Fact Sheet describing the health hazards of lead service lines (**Exhibit H**), and the Lead Service Line Program Information Sheet (**Exhibit I**) which explains the requirements for reimbursement and the potential for termination of service.

In certain circumstances, the Company shall use Step-In Right as described in its tariff to perform a replacement where it will avoid termination of service to an occupant or customer that is not the property owner, where the customer has a protection from abuse order (or other court order of competent jurisdiction in this Commonwealth which provides clear evidence of domestic violence) or a medical certificate.

In other circumstances, the Company may utilize Step-In Rights as described in its tariff to perform a replacement where it will avoid termination of service to an occupant or customer that is not the property owner. Under these limited circumstances, the Step-In Rights may be used when the Company has attempted to contact the property owner to replace the COLSL, the structure is occupied by a party that is not the property owner, and the Company has attempted to get authorization to replace the COLSL, the property owner cannot be identified, or the property owner has been notified of the offer to replace the COLSL and has not responded.

Where Aqua is performing LSLR projects that are not connected to a main replacement or the replacement of the Aqua side service line, and the resident/property owner refuses to replace the customer side LSL and Aqua has either made contact with the resident/property owner and

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**Lead Service Line Replacement Plan**

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they refuse, or where the resident/property owner is non-responsive to the Company's requests as described in Section II.B.5 to replace the customer LSL, Aqua will provide the Customer Refusal Letter – Non-Main Replacement (**Exhibit O3**), the Lead Fact Sheet describing the health hazards of lead service lines (**Exhibit H**), and the Lead Service Line Program Information Sheet (**Exhibit I**) which explains the requirements for reimbursement. Aqua will not initiate termination procedures for customers who refuse to replace their LSLs or GRRs unless there is a replacement to the Company's service line.

Aqua shall make reasonable best efforts to assist a Customer or property owner, if the Customer is not the property owner, through the reimbursement process and, to the extent possible, make determinations in favor of the Customer or property owner where the Customer or property owner has provided reasonable evidence of a customer lead or galvanized service line replacement to Aqua. However, the documentation provided to Aqua must be sufficient in the Aqua's opinion that a customer lead or galvanized service line replacement occurred.

The Company's representatives will include notes within its customer information system documenting the refusal or non-response and complete any termination procedures as needed if the customer/property owner continues to refuse to replace the COLSL or does not respond.

**C. Communications, Outreach and Education**

Aqua's communications activities listed and described in the following sections are in accordance with EPA regulations at 40 C.F.R. § 141.85.

**1. Printed and Broadcast Materials**

As described in Section II.B above, and as further supplemented here, below is a list of all printed and broadcast materials the Company plans on distributing under different scenarios of COLSL replacement efforts. These materials may change or be updated from time to time.

- Exhibit A1 – Pre-investigative letters to identify service line material.
- Exhibit A2 – Second Notice of Pre-investigative letter to identify service line material
- Exhibit A3 – Final Notice of Pre-investigative letter to identify service line material.
- Exhibit A4 – Move-in Letter to customers regarding service line material.
- Exhibit B – Customer surveys.
- Exhibit C – Form provided to customer if the Company discovers a LSL or GRR during construction or maintenance activities.
- Exhibit D – Door hanger placed if contact is not made with customer to identify service line material.
- Exhibit E – 10 day shutoff notice.
- Exhibit F – Customer Lead/Galvanized Service Line Replacement Agreement.
- Exhibit G – Letter to customer requesting participation in the replacement program.
- Exhibit H – Lead Fact Sheet providing educational information about lead in drinking water.

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- Exhibit I – Lead Service Line Replacement Program Information Sheet.
- Exhibit J – Post-COLSL replacement flushing instructions.
- Exhibit K – Pitcher filter, and instructions in other languages.
- Exhibit L – COLSL replacement close out letter.
- Exhibit M – 5<sup>th</sup> Liter sampling instructions.
- Exhibit N – 5<sup>th</sup> Liter sample results letter.
- Exhibit O1 – Letter provided if customer refuses or does not respond to requests for Aqua access Aqua’s meter to review the customer service line material.
- Exhibit O2 – Letter provided if the customer has an identified COLSL and refuses or does not respond to requests to replace the COLSL in connection with a main replacement project or where Aqua is replacing the Company side service line.
- Exhibit O3 – Letter provided where the customer refuses or does not respond to requests to replace the COLSL that are not connected to a main replacement project or a Company side service line replacement.

In addition to the above communication materials, Aqua has developed letters to be distributed as required by EPA regulations when they take effect:

- Exhibit P – Public education materials when elevated lead levels are found in a system.
- Exhibit Q – Notification of individual tap results from lead tap monitoring.
- Exhibit R – Notification of service line containing lead / GRR / unknown.
- Exhibit S – Held for future use.
- Exhibit T – Held for future use.
- Exhibit U – Notification of a disturbance to a lead, GRR, or lead status unknown service line that results in the service line being shut off or bypassed.
- Exhibit V – Notification of a disturbance to a lead, GRR, or lead status unknown service line from the replacement of an inline water meter, a water meter setter, or gooseneck, pigtail, or connector.
- Exhibit W – Press release regarding action level exceedance.

## **2. Aqua’s Website**

The Company has developed a section of its website that houses information related to Lead and its LSLR Program.

[www.aquawater.com/lead](http://www.aquawater.com/lead)

Aqua’s website provides information on sources of lead, the health effects of lead, the Company’s compliance with lead requirements, how residents can protect against lead exposure, and a help line for residents requiring assistance in determining their service line material. The website also includes information on Aqua’s LSLR Program including the status of current efforts to replace LSLs, flushing instructions post-replacement, a video showing how to take a sample with the sample bottles provided by Aqua, and reimbursement requirements.

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Aqua has developed an online tool to show service line material which is available on Aqua's publicly facing website. This tool can be found at the below web address and can also be accessed through Aqua's Lead web page.

[www.aquawater.com/leadmap](http://www.aquawater.com/leadmap)

Aqua is also developing an online tool that will show the replacement schedule by geographical location, six months into the future. This tool will be completed in accordance with the timeline set forth in the Commission's regulations. The online tool will be able to be used by customers/property owners to determine if they are within the required radius of a project and within the required time of the commencement of a project, thereby allowing them to determine their eligibility for reimbursement.

### **III. CONCLUSION**

The Company will continue to develop its Service Line Inventory and replace COLSLs in accordance with this LSLR Plan and work toward the goal of removing all LSLs from its system. The Company's LSLR Plan will be updated as needed.

# EXHIBIT A1

Pre-investigative letter to identify service  
line material



Date

M1-XXX RESIDENT OR CURRENT RESIDENT ADDRESS CITY STATE ZIP



Dear Customer,

Aqua Pennsylvania is completing a service line material inventory as required by the United States Environmental Protection Agency (USEPA), the Pennsylvania Department of Environmental Protection (PADEP), and the Pennsylvania Public Utility Commission (PAPUC). We have two options available for you to identify your service line material. The first option is self-reporting that involves either filling out a survey (enclosed) that can be mailed back to us, or using the QR Code provided on the survey to upload your survey responses. The second option is to schedule an appointment to have your water service line inspected to determine its material of construction, and more specifically, to determine if you have a lead or galvanized service line. To complete this study in a timely manner, Aqua has hired a contractor, Environmental Resource Management (ERM). If you select the second option, ERM will have an inspector visit your home to collect information regarding service line material.

The presence of a lead or galvanized water service line does not mean that drinking water in your home is contaminated with lead; however, removal of the lead or galvanized service line eliminates any future possibility of lead entering your water supply from the water service line. You can learn more about lead in drinking water and steps you can take to minimize exposure by calling the Safe Drinking Water Hotline at (800) 426-4791, or by visiting the EPA website at https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

If our inspection reveals that you have a lead or galvanized service line, Aqua is required to replace, AT NO DIRECT COST TO YOU, any part of your service line that is constructed of lead or galvanized pipe. The service line extends from the water main in the street to your water meter. Aqua will install the new service line and you will own and maintain the new service line as a part of your property. We will provide you with additional service line replacement information if we identify that your service line is lead or galvanized.

If you prefer to have your service line inspected in person, please call the ERM Call Center (484) 383-0111 between the hours of 8am-6pm to schedule an appointment. Appointments will be available on select weekdays, evenings and Saturdays. Please state that you are calling to have your water line inspected for lead or galvanized pipe. We thank you in advance for your support for this important initiative.

Sincerely,

Michael Fili, Vice President
Capital Planning, Design & Construction Aqua Pennsylvania

Para acceder al documento traducido al español, visite el sitio web de Aqua en https://www.aquawater.com/aqua-pa-lead-spanish.php

如果需要查看本文件的中文简体字译本, 请访问 Aqua 网站 : https://www.aquawater.com/aqua-pa-lead-chinese.php

Die deutsche Übersetzung dieses Dokuments finden Sie auf der Website von Aqua unter https://www.aquawater.com/aqua-pa-lead-german.php

# EXHIBIT A2

Second Pre-investigative letter to identify  
service line material

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**\*\*\*SECOND NOTICE\*\*\***

Dear Customer,

Aqua Pennsylvania is completing a service line material inventory as required by the United States Environmental Protection Agency (USEPA), the Pennsylvania Department of Environmental Protection (PADEP), and the Pennsylvania Public Utility Commission (PAPUC). We have two options available for you to identify your service line material. The first option is self-reporting that involves either filling out a survey (enclosed) that can be mailed back to us, or using the QR Code provided on the survey to upload your survey responses. The second option is to schedule an appointment to have your water service line inspected to determine its material of construction, and more specifically, to determine if you have a lead or galvanized service line. To complete this study in a timely manner, Aqua has hired a contractor, Environmental Resource Management (ERM). If you select the second option, ERM will have an inspector visit your home to collect information regarding service line material.

The presence of a lead or galvanized water service line does not mean that drinking water in your home is contaminated with lead; however, removal of the lead or galvanized service line eliminates any future possibility of lead entering your water supply from the water service line. You can learn more about lead in drinking water and steps you can take to minimize exposure by calling the Safe Drinking Water Hotline at (800) 426-4791, or by visiting the EPA website at <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>.

If our inspection reveals that you have a lead or galvanized service line, **Aqua is required to replace, AT NO DIRECT COST TO YOU, any part of your service line that is constructed of lead or galvanized pipe. The service line extends from the water main in the street to your water meter.** Aqua will install the new service line and you will own and maintain the new service line as a part of your property. We will provide you with additional service line replacement information if we identify that your service line is lead or galvanized.

If you prefer to have your service line inspected in person, please call the **ERM Call Center (484) 383-0111** between the hours of 8am-6pm to schedule an appointment. Please state that you are calling to have your water line inspected for lead or galvanized pipe. We thank you in advance for your support for this important initiative.

Sincerely,

A handwritten signature in blue ink that reads "Michael Fili".

Michael Fili, Vice President  
Capital Planning, Design & Construction  
Aqua Pennsylvania



# EXHIBIT A3

Final Pre-investigative letter to identify  
service line material



DATE

**\*\*\*\*FINAL ATTEMPT TO REACH YOU BEFORE FURTHER ACTION TAKEN\*\*\*\***

M1-XXX RESIDENT  
OR CURRENT RESIDENT  
ADDRESS  
CITY ST ZIP



Dear Customer,

Aqua Pennsylvania (Aqua or the Company), through its contractor, Environmental Resources Management, Inc. (ERM), has attempted to reach you on multiple occasions regarding a significant project that is under way in your area. Aqua requires that you identify your service line material or permit ERM to access the Company's meter at your property.

As required by the United States Environmental Protection Agency (USEPA), the Pennsylvania Department of Environmental Protection (PADEP), and the Pennsylvania Public Utility Commission (PAPUC), Aqua is complete a service line material inventory. We have two options available for you to identify your service line material. The first option is self-reporting that involves either filling out a survey (enclosed) that can be mailed back to us, or using the QR Code provided on the survey to upload your survey responses. The second option is to schedule an appointment to have your water service line inspected to determine its material of construction and more specifically, to determine if you have a lead or galvanized service line. If you select the second option, ERM will have an inspector visit your home to collect information regarding service line material. Failure to select one of these methods may result in further action taken by Aqua to obtain the required information, including requiring you to permit access to the Company's meter at your property and potential termination of service for failure to provide access.

The presence of a lead or galvanized water service line does not mean that drinking water in your home is contaminated with lead; however, removal of the lead or galvanized service line eliminates any future possibility of lead entering your water supply from the water service line. You can learn more about lead in drinking water and steps you can take to minimize exposure by calling the Safe Drinking Water Hotline at (800) 426-4791, or by visiting the EPA website at <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>.

If our inspection reveals that you have a lead or galvanized service line, **Aqua will replace, AT NO DIRECT COST TO YOU, any part of your service line that is constructed of lead or galvanized pipe. The service line extends from the water main in the street to your water meter.** Aqua owns the portion of the service line from the main in the street to the curb stop or edge of right of way (Aqua Service Line). You own the portion of the service line from the curb stop or edge of right of way through your property and into your structure (Customer Service Line). Aqua will install the new service line and dedicate back to you the Customer Service Line and you will own and maintain the new Customer Service Line as a part of your property. We will provide you with additional service line replacement information if we identify that your service line is lead or galvanized.

If you prefer to have your service line inspected in person, please call the **ERM Call Center at (484) 383-0111** between the hours of 8am-6pm to schedule an appointment. Please state that you are calling to have your water line inspected for lead or galvanized pipe. It is important that we hear from you soon. We thank you in advance for your support for this important initiative.

Sincerely,

Michael Fili, Vice President  
Capital Planning, Design & Construction Aqua Pennsylvania

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# EXHIBIT A4

Move-In Letter



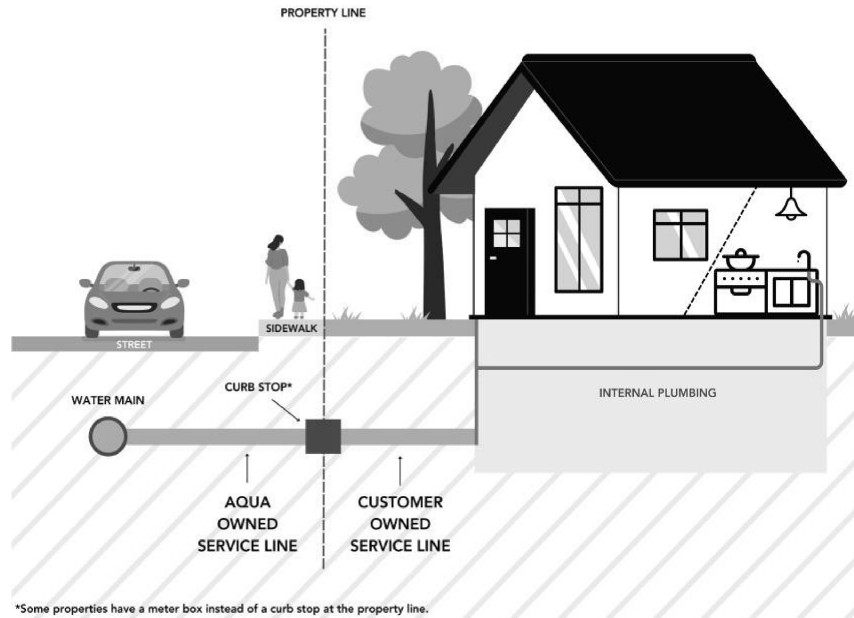
An  Essential Utilities Company

### \*\*\*\*\*AUTO\*\*SCH 5-DIGIT 16114  
   
John Q Sample M2D-01  
123 Main St  
Anytown, PA 19010

Dear Consumer:

Aqua is pleased to provide water service to your new address. Aqua supplies water to your property through a service line that runs from the water main into your building. Aqua owns the service line from the water main to the curb stop or meter box. You own the service line that runs from the curb stop or meter box into your building.

Aqua is conducting an ongoing service line material inventory and replacement program to identify and replace lead and galvanized service lines in our drinking water systems at no direct cost to our customers. Galvanized service lines are replaced if they could potentially be a source of lead to your tap water. Under the United States Environmental Protection Agency (USEPA), Aqua is required to notify you, as a new water consumer, whether your service line consists of lead, galvanized requiring replacement, or an unknown material. Currently, no action is required of you.



**SEE BELOW FOR YOUR SERVICE LINE CLASSIFICATION**

Our records show the following information for your property:

- **Premise Number: 123456-7**
- **Aqua Side Service Line Classification:**
- **Customer Side Service Line Classification:**
- **Regulatory Classification\*:**

\*Regulatory Classification is determined based on information available for both sides of the service line.



Please understand that inventorying and replacement efforts will take many years. We are developing detailed plans to meet these objectives. We will notify you if we require more information or need to arrange your service line replacement once we know the schedule for your area. Note that if you proceed with replacement of your service line using your own plumber, please contact us as soon as possible since we are required to replace the company-owned service line, if lead or galvanized, to minimize the risk of lead being released into your water.

### **HEALTH EFFECTS OF LEAD**

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

### **STEPS TO REDUCE LEAD IN YOUR DRINKING WATER**

Lead is more likely to accumulate when water is in contact with a lead source for longer periods of time. There are steps you can take to minimize exposure to lead in drinking water:

- **Run your tap to flush out lead.** If your water has not been used for several hours, run your water for a few minutes or until it becomes cold or reaches a steady temperature before drinking or cooking. The amount of time to run the water will depend on the length and diameter of the service line and the amount of plumbing in your home.
- **Use cold water to cook or prepare baby formula.** Do not boil water to reduce lead. Lead dissolves more easily in hot water and boiling water will concentrate the lead.
- **If you buy a water filter for lead removal, make sure it is approved to reduce lead.** The filter should be certified for lead removal by NSF. For more information, contact NSF International, [www.NSF.org](http://www.NSF.org).

For more information on lead and our replacement program, please visit [www.aquawater.com/lead](http://www.aquawater.com/lead).

Please note that when we begin working in your area, we will contact you to arrange inspections and service line replacements. This will provide you with the opportunity to verify your service line material. If you have other questions, please call our dedicated service line material call center hub at 1-866-SLM-AQUA (1-866-756-2782).

Sincerely,

Aqua

# EXHIBIT B

## Customer Surveys



## Customer Lead and Copper Survey

To comply with Pennsylvania Public Utility Commission (PAPUC), Pennsylvania Department of Environmental Protection (PADEP) and Environmental Protection Agency (EPA) regulations, Aqua is compiling a database of the materials used in our customer's service lines. Please take a few minutes to complete this survey. If you have questions or would like assistance, please call ERM Call Center **(484) 913-0346** between the hours of 8am-6pm to schedule an appointment. Please state that you are calling about the **Aqua [PROJECT] Survey**.

**To save time we provide a QR Code to complete this survey online:**

*(If you choose to complete this online, you may recycle these materials.)*



First Name:

Last Name:

Phone:    -    -

Year home built:

If known, what type of material is the service line coming into your home? Please provide a picture for verification via email to [LeadSurvey@erm.com](mailto:LeadSurvey@erm.com) or mail back with this survey. See included pipe identification instructions.

Lead

Copper

Plastic or PVC or PEX

Galvanized

**\*If other or unknown please CALL (484) 913-0346 to verify**

## Water Pipe and Service Line Material Identification

	Lead	Galvanized	Copper
Outer Appearance	Dull gray, bendable; Often curves between wall/floor and valve	Dark gray or black; Straight rigid pipe	Brown; Can have green corrosion spots
Threads at connections	None	Yes	None
Scratch Test (coin or key)	Shiny silver	Hard to scratch, remains gray	Copper, like a penny
Magnet Test	Does not stick	Magnet WILL stick	Does not stick

Please return completed survey in the enclosed self-address envelope to ERM c/o Melissa Marchisello, AQUA Pennsylvania  
PO Box 950  
Lansdale, PA 19446-9802



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## How to Identify Water Service Line and Water Pipe Materials in Your Home

### Water Service Line and Pipe Material Identification Instructions

#### Step 1

Locate the water service line entering your home which is usually located in the basement or a crawlspace. The service line is typically just before the whole-house shut-off valve which should be near where the water service enters the home.

#### Step 2

Use the identification sheet below to help identify your service line material (copper, lead, galvanized or plastic pipe).



- **Lead** – pipe is NOT threaded, it is soft, easily scraped, dull silver-gray in color, and a magnet does NOT stick to the pipe. Use flat edge of a screwdriver (or similar tool) to scrape the pipe. If the scraped area is shiny and silver, the line is lead.
- **Copper** – the color of a penny and not threaded
- **Galvanized** – pipe is threaded, dull silver-gray in color, and magnet will typically stick to the pipe
- **Plastic** – white, blue, or black rigid plastic pipe

#### Follow these steps:

##### You will need:

- Key or a coin
- Strong refrigerator magnet

1. Find the water meter in your basement. Look at the pipe that comes through the outside wall of your home and connects to your meter.
2. Carefully scratch the pipe (like you would a lottery ticket) with a key or a coin. Do not use a knife or other sharp tool. Take care not to make a hole in the pipe. If the scratch turns a shiny silver color, it could be lead or steel. **NOTE: If pipe is painted, use sandpaper to expose the metal first.**
3. Place the magnet on the pipe. If a magnet sticks, it is a steel pipe.



##### Other ways you can check for lead:

- Purchase a lead test kit at a hardware or home improvement store. These kits test what the pipe is made from – not the water inside. Look for an EPA recognized kit.
- A **licensed and insured plumber** can inspect your pipes and other plumbing for lead or steel. Replacing an older brass faucet or valve might reduce the lead in water.


**Thank you for taking time out of your busy schedule to complete and return this survey. The data collected will help us to provide an accurate inventory of water service line materials in your community to eliminate lead from service lines.**

Please return completed survey in the enclosed self-address envelope to ERM c/o Melissa Marchisello, AQUA Pennsylvania  
PO Box 950  
Lansdale, PA 19446-9802

PA-HUB-SL40-2412

# EXHIBIT C

Construction and Maintenance Activities  
Discover Lead Line Form

 An Essential Utilities Company	Premises No.: _____ Tap Serial No.: _____ Date: _____
	Address: _____
	Prepared by: _____
	PWSID: _____ System Name: _____

ESTE DOCUMENTO CONTIENE INFORMACIÓN IMPORTANTE ACERCA DE SU AGUA POTABLE.  
HAGA QUE ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.

# An Important Health Notice From Aqua

  
**PLEASE READ THIS BEFORE USING YOUR WATER!**

During our maintenance/construction activities today, Aqua encountered:

- An Aqua-owned lead service line       Copper  
 An Aqua-owned galvanized service line

that provides water from our water main to the curb stop.

Please note that:

- It has been replaced today.  
 It will be replaced by: \_\_\_\_\_

The customer-owned service line that provides water from the curb stop into your house is constructed of:


- Lead     Galvanized     Copper     Other: \_\_\_\_\_

We encourage you to review the flushing instructions below and the information about lead on the back of this form. We will:

1. contact you to arrange for tap water sampling and
2. provide you with a pitcher filter to protect you from lead.  Pitcher dropped off?

In the meantime, please call us if you would like additional information at 1-866-SLM-AQUA (1-866-756-2782).

Please review and follow these very important **instructions\*** to minimize your exposure to metals, such as lead, which might have been stirred up due to the service-line replacement work. Please flush all your faucets using these steps:

-  **1** If possible, remove faucet aerators from all water faucets in the home.
- 2** Beginning in the lowest level of the home, fully open the cold water faucets throughout the home.
- 3** Let the water run for at least 30 minutes at the last faucet you opened (which was on your top floor).
- 4** Turn off each faucet starting with the faucets in the highest level of the home. Be sure to run water in bathtubs and showers as well as faucets.
- 5** Clean and reinstall any aerators you might have removed in Step 1.
- 6** Do not consume tap water, open hot water faucets, or use icemaker or filtered water dispenser until after flushing is complete.

\*Based on the American Water Works Association-recommended safety procedures ([awwa.org](http://awwa.org)).

You might also wish to use a NSF-approved home filter for water to be used for drinking and cooking, particularly if you are pregnant or have children under age six. Go to NSF.org for more information.

Please see the other side of this notice for more information on lead. Thank you for letting Aqua serve you! For questions or concerns, please contact Aqua customer service line call center at **1-866-SLM-AQUA (1-866-756-2782)**.

**More helpful information on the back**



# Information About Lead and Drinking Water\*



## How does lead get into drinking water?

Lead is not typically found in the streams, reservoirs or wells that serve as our water supplies. The main water lines that carry water from treatment plants to customers don't contribute to lead. The main source of lead in drinking water is from lead service lines (the pipelines that deliver water from the water mains in the street to homes) and from household plumbing that contains lead.

Before the use of copper for water pipes, lead was once a material of choice. Before 1986, lead was also a key component of the solder used by plumbers when installing home plumbing. Lead is even found in brass and bronze plumbing fixtures. The chemical properties of water can cause lead and other metals to leach into the water. Water utilities, including Aqua, treat drinking water to reduce the chance for metals to leach into the water.

Customers who have, or think they might have, lead service lines are strongly encouraged to replace their service lines. If customers choose to replace their household plumbing, they should use certified lead-free solder and fixtures.

## How Aqua protects its customers:

Aqua conducts required testing for drinking water contaminants, including lead and copper, to ensure compliance with state and federal drinking water standards. Aqua also tests for lead in high-risk sample homes to comply with the U.S. Environmental Protection Agency's (EPA) lead and copper rule. According to the EPA, sampling locations must be selected based on priority tied to possible lead exposure. Aqua also works with individual customers who request lead information for their home. Test results, including those for lead and copper, are summarized in our annual water quality reports, which are produced for every water system we own and operate. You can find your community's water quality report on AquaWater.com.

Changes in water sources are not common. However, if we ever need to use a new water source, Aqua works with state environmental regulators to perform an early evaluation of the new source to anticipate water quality concerns and identify potential treatment needs.

Once a new water source is approved, Aqua further verifies the acceptability of water quality by conducting testing at approved high-risk homes for a sustained period of time to ensure water quality.

## Health effects of lead:

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

**If your home's water shows elevated levels of lead, or if you are concerned about the potential of lead in your water, here are ways you can minimize exposure.**

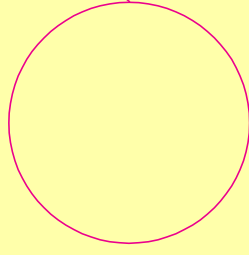
- **Run your tap to flush out lead.** If your water hasn't been used for several hours, run water for at least 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
- **Use cold water to cook and prepare baby formula. Don't boil water to reduce lead.** Lead dissolves more easily into hot water. Boiling water won't reduce lead.
- If you buy a water filter, make sure it's approved to reduce lead. You can contact NSF International at 800.NSF.8010 or NSF.org.
- If you are concerned about exposure, contact your local health department or healthcare provider to find out how you can get your child tested for lead. Call Aqua at 877.987.2782 for information about testing your water for lead.
- Brass faucets, fittings and valves – even those advertised as lead free – might contribute lead to drinking water. The law allows end-use fixtures, such as faucets, with wetted surfaces containing a maximum weighted average of 0.25 percent lead to be labeled as lead free. Visit NSF International at NSF.org to learn more.

**For more information** on reducing lead exposure in your home and the health effects of lead, visit the EPA at EPA.gov/lead or contact your healthcare provider.

\*This information sheet contains regulatorily required or recommended language and nothing herein is intended as, nor should be construed as, a promise of or contract for payment or reimbursement of expenses incurred for any action you take on account of this information sheet.


# EXHIBIT D

Door Hanger



# IMPORTANT NOTICE

# AQUA.

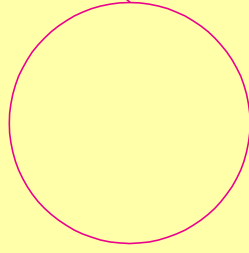
An  Essential Utilities Company

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[https://www.aquawater.com/aqua-pa-lead-  
german.php](https://www.aquawater.com/aqua-pa-lead-german.php)

PA-HUB-SL50-2412



## We're sorry...we missed you!

A company representative was at your property today.

Date: \_\_\_\_\_ Time: \_\_\_\_\_

The purpose(s) of our visit was to:

Gain Access to Conduct Service Line Inspection

Other/Comments: \_\_\_\_\_

\_\_\_\_\_

\* If unable to provide access for service line inspection, please fill out the survey provided via mail and/or QR code. The QR Code is located below. If you have questions, please contact the ERM Call Center via the information provided below.

**Please Contact Us**  
**ERM Call Center: (484) 913-0346**  
**Or email at [Leadsurvey@erm.com](mailto:Leadsurvey@erm.com)**

**QR Code: Bensalem/Bristol**



# AQUA

An Essential Utilities Company

# EXHIBIT E

10 Day Shutoff Notice

# 10-Day Shut Off Notice

DATE NOTICE ISSUED:

Name: \_\_\_\_\_

Service Address: \_\_\_\_\_

Premise No. \_\_\_\_\_

In order for Aqua Pennsylvania, Inc. to continue supplying water service to your residence/business, you need to take immediate action. If the information **marked** below is not provided within the next 10 days, we will shut off the water service at the above address on or after 8:00 A.M. on \_\_\_\_\_. **Aqua may act on this notice for up to 60 days.**

## THIS ACTION WILL BE TAKEN FOR THE FOLLOWING REASON:

1. Your Bill For \$ \_\_\_\_\_ is Overdue. Call 1.877.987.2782 (and choose Collections).

### 2. Meter Operations:

- ACT 120 Lead Service Line Inspection or Replacement. Call 610.645.4272 to speak with Water Quality.
- Inactive Account - Apply for Water Service
- Meter Equipment Inspection     Exchange or Install Meter     Meter Space Does Not Meet Aqua PA Specifications
- Customer side leak, property owner responsibility. Call 1.877.987.2782 to update repair status

Other: \_\_\_\_\_ Call 1.877.WTR.AQUA or 1.877.987.2782.

3. Backflow Prevention:  Failure to Test Backflow Device     SEPA 610.541.4179 or backflow@aquawater.com  
 Failure to Install Backflow Device     GPA 1.877.987.2782 or gpabackflow@aquawater.com

## TO STOP THE SHUT OFF, YOU MUST DO THE FOLLOWING IMMEDIATELY:

1. Pay the total amount overdue. To pay by phone, call our toll-free number at 866-269-2906 or see the back of the payment stub for all payment options. If we shut off your water, you may have to pay the following charges to have your water turned back on: Overdue Amount \$\_\_\_\_\_; Turn-On Charge \$\_\_\_\_\_; Payments will not be accepted by our representative. It must be paid at an authorized payment location (call Aqua for the nearest payment location's address).
2. Contact Aqua during normal business hours at 877.987.2782 (Select Collections) to let us know you made a payment in full (or in full of past due amounts of the most recent payment arrangement), to make a payment arrangement, dispute an overdue bill, the grounds for termination are otherwise eliminated, or learn about **Aqua's Customer Assistance Program**. You can also contact Aqua at our address above.
3. Call 877.987.2782 during normal business hours (Select Collections) if you or someone in your home has a serious illness or a medical condition.
  - Comunicarse con Aqua al 877.987.2782 (elija "Bobranzas" - "Collectiones" en inglés) para hacernos saber que realizó el pago, o para disputar el balance atrasado. También puede comunicarse con Aqua a la dirección que aparece arriba.
  - Attention! Este es un mensaje muy importante. Si usted no lo entiende, favor de llama a 877.987.2782.

If you have questions or need more information, contact us as soon as possible at 877.987.2782. After you talk to us, if you are not satisfied, you may file a complaint with the Public Utility Commission. The Public Utility Commission may delay the shut off if you file the complaint before the shut off date. To contact them, call 1.800.692.7380 or write to the Pennsylvania Public Utility Commission, P.O. Box 3265, Harrisburg, Pennsylvania 17105-3265.



762 W. Lancaster Avenue  
Bryn Mawr, PA 19010-3489

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### IMPORTANT TO KNOW - BEFORE WE SHUT OFF YOUR UTILITY SERVICE

- **If we shut off your service during the winter months (between Dec. 1 - Mar. 31)** we will restore your service within 24 hours of your meeting all requirements/conditions to have service reconnected. Where street digging is required it may take up to 7 days.
- If you are a victim of domestic violence and have a Protection From Abuse Order (PFA) or other court order that shows clear evidence of domestic violence, there are special protections available. **Call us immediately at 877.987.2782.** (You will be required to provide us with a copy of the order.)
- **If you need help to pay your bill**, you may be eligible for a payment arrangement or **debt forgiveness through Aqua's Customer Assistance Program.** Call **877.987.2782 right away** to provide us with household income and occupant information. You may be required to provide proof of your income.
- If your landlord pays your utility bill: You have certain legal protections. Please call us at 877.987.2782.
- If you have trouble understanding or speaking English or have a disability please call us at 877.987.2782 for free interpretation.
- If your service is shut off, you may be required to pay more than the amount listed on the front of this notice to have your service turned back on. You may have to pay any additional bills that have become past due.
- All adult occupants of the premise whose name appears on the mortgage, deed, or lease are considered "customers" and are responsible for payment of this bill.
- If service is shut off, ANY adult occupant who has been living at the premise may have to pay all or portions of this bill to have service restored.
- If your service is shut off, you must contact us after your payment has been made to be sure you have met all conditions to have the service turned back on and to arrange access to your premise.
- After all conditions have been met to have the service turned back on, it may take up to 7 days to have your service restored. Please contact us to discuss the details.
- If you need water to heat your property, please contact Aqua immediately at 877.987.2782 (and choose Collections) so we can arrange a service visit to verify that need. The company will act in accordance with the public utility laws with respect to water service shut offs.

### MEDICAL EMERGENCY NOTICE

Let us know if someone living in your home is seriously ill or has a medical condition.

**WE WILL NOT SHUT OFF YOUR SERVICE provided you:**

A. Provide a medical certification by a licensed physician, nurse practitioner or physician's assistant.

Medical certifications must be in writing and signed by your physician, nurse practitioner or physician's assistant by fax, email or mail within three days.

AND

B. Make some equitable arrangements to pay your current bills for service.

Call **Aqua at 877.987.2782** to let us know about your medical emergency.

**FAX: 610.520.2168 or toll-free at 866.780.8301**

**ATTN: Collections Department  
Aqua Pennsylvania, Inc.  
762 W. Lancaster Avenue  
Bryn Mawr, PA 19010**

# EXHIBIT F

## Customer Agreement



Para acceder al documento traducido al español, visite el sitio web de Aqua en <https://www.aquawater.com/aqua-pa-lead-spanish.php>

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## LICENSE AGREEMENT TO REPLACE THE CUSTOMER OWNED LEAD/GALVANIZED SERVICE LINE

The undersigned customer(s) or property owner(s) (the “Customer”), through this License Agreement, grants Aqua Pennsylvania, Inc. (“Aqua” or the “Company”) and its contractors and/or subcontractors a license to enter upon the Customer’s property at the service address set forth below (the “Property”) for the purpose of replacing the Customer-owned lead or galvanized service line with a new Customer-side service line and connecting the new Customer-side service line to the Company’s facilities, at no direct cost to the Customer.

Service  
Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

The Customer represents that the Customer is the sole legal owner of the Property and has sole authority to agree to this License Agreement. The term of this License Agreement shall be valid until the Company or its contractor/subcontractor completes the replacement of the Customer-side service line and restoration.

The Company owns the Company-side service line from the Company’s water main to the curb stop, meter pit, or valve (as applicable) at or near the Customer’s property line. The Company, in its sole discretion has determined the location of the Company-side service line. The Company-side service line will be owned and maintained by the Company.

The Company or the Company’s contractor and/or subcontractor shall replace the Customer-owned lead or galvanized service line with a new service line of size and material determined by the Company. The Customer-owned lead or galvanized service line will be abandoned in place. The Company shall connect the new Customer-side service line to the Company’s connecting facilities and the Customer’s premises. It may be necessary for the Company or Company’s contractor to gain entry into the Customer’s premises to make the connection at the meter with the new Customer-side service line. The ownership of the new Customer-side service line will be dedicated to the Customer at the completion of the replacement. Ownership and maintenance responsibilities of the new Customer-side service line will remain with the Customer.

Following the replacement of the Customer-side service line, the Company will restore the Customer's Property as reasonably as practicable to the condition prior to the commencement of the replacement under this License Agreement. The Company warrants the workmanship and materials of the installation of the new Customer-side service line and restoration of surfaces for a period of two (2) years from the date the replacement is completed. The date the replacement is completed is the date water service is re-established to the Property.

The maximum coverage under the warranty on the workmanship and materials is limited to an amount up to Twenty Thousand Dollars (\$20,000.00) and limited to repairing or replacing the Customer-side service line if the failure was due to the workmanship and materials of the replacement, and restoration of surfaces which shall mean restoration as reasonably as practicable to the condition that existed prior to the replacement under this License Agreement. The Company shall not be liable for any damages beyond the maximum coverage of the two year warranty as described in this License Agreement. Should any repair be necessary under this warranty, the Customer grants Aqua and its contractors and/or subcontractors license to enter upon the Customer's Property to complete the repairs.

**In consideration of the Company performing the Customer-side service line replacement at no direct cost to the Customer and receiving the associated warranty on workmanship and materials and restoration of surfaces as set forth above, the Customer agrees to indemnify, release and hold harmless the Company and its affiliates, agents, and contractors and/or subcontractors from and against all claims, liabilities, and costs arising from acts and omissions of the Company and/or its contractors and/or subcontractors in replacing and installing the new Customer-side service line that are outside of the associated warranty on workmanship and materials and restoration of surfaces. The Company and/or its contractors and/or subcontractors shall not be responsible for any pre-existing condition present at the Property, including, but not limited to, pre-existing conditions of the structures, other improvements, or other utility or customer service lines at the Property. The Customer specifically agrees to accept dedication of the newly installed Customer-owned portion of the service line upon completion of its installation.**

**PLEASE RETURN A SIGNED COPY OF THIS LICENSE AGREEMENT IN THE PRE-ADDRESSED, POSTAGE PAID, ENVELOPE TO:**

**Aqua Pennsylvania, Inc.  
762 W. Lancaster Ave.  
Bryn Mawr, PA 19010  
Attention: Water Quality Department**

Contract No.

CUSTOMER

AQUA PENNSYLVANIA, INC.

Signature: \_\_\_\_\_ Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Printed Name: \_\_\_\_\_

Date: \_\_\_\_\_ Title: \_\_\_\_\_

Phone: \_\_\_\_\_ Date: \_\_\_\_\_

# EXHIBIT G

Customer Letter – Lead Material Identified



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Date

Address

Dear Aqua Customer,

Aqua Pennsylvania is implementing a lead line replacement program. Our records show that the service line at the above address is, or may be, comprised of lead.

The water service line serving your property includes a section of pipe from the water main to the curb (curb stop) that is “company-owned.” There is a second section of pipe extending from the curb stop to your home that is “customer-owned.” It is the property owner’s responsibility to maintain the customer-owned service line.

**Aqua can replace, AT NO DIRECT COST TO YOU, your customer-owned service line from the curb line to the connection with the water meter inside your building/house.** Our contractor will excavate/tunnel from the water main to your building/house and enter your building/house to disconnect the lead service line and connect the new one. The new customer-owned service line will then be turned over to you to own and maintain as a part of your property.

To move forward with this program, please call 610.645.4272. Please leave a message that you would like your lead service line replaced with your name, address, and phone number. Someone will call you back by the next business day.

**Please note that refusal to replace the lead service line may result in termination of water service to the property.**

We thank you in advance for your support of this program.

Sincerely,

Ann Dreyer  
Supervisor, Water Quality Services

Attachments: Lead Fact Sheet

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An  Essential Utilities Company

# Aqua Wants Our Customers to Be Informed\*

Este documento contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

## Here's what you should know about lead and drinking water.

Lead is not typically found in the streams, reservoirs or wells that serve as water supplies or in the main water lines that carry water from treatment plants to homes. Yet, the chemical properties of water can cause lead and other metals to leach into drinking water. The main source of lead in drinking water is from lead service lines (the pipes that deliver water from water mains in the street and into homes) and from typical household plumbing (lead solder and brass fixtures) that contains lead. Households that have, or suspect having, lead service lines or lead in their household plumbing are strongly encouraged to replace them. The use of lead in solder was prohibited after 1986, so buildings constructed after then should not have contained lead in the solder.

### How Aqua protects its customers:

Water utilities, including Aqua, treat drinking water to reduce the chance for metals to leach into the water. Aqua conducts required testing for drinking water contaminants, including lead and copper, to ensure compliance with state and federal drinking water standards. Aqua tests the water at our treatment plants, and also schedules customer tap sampling and tests for lead in potential high-risk areas, to comply with the U.S. Environmental Protection Agency's (EPA) lead and copper rule.

You can always view your community's test results. They are summarized in our annual water quality reports, which are produced for every water system we own and operate.

### Lead Service Line Replacement Program:

Aqua can now assist customers with replacing the customer/property owner's portion of the service line if it is made of lead. Aqua's new program will allow us to work with customers, either during a main replacement project or by customer request, to replace the customer/property owner's portion of the service line if it is lead and dedicate the service line back to the customer/property owner at no direct cost to the customer/property owner.

Visit our website at <https://www.aquawater.com/lead> for more information.



Call us at  
1-866-SLM-AQUA  
(1-866-756-2782)  
for more information.



You can find your community's  
water quality report at  
[AquaWater.com](https://www.aquawater.com).

More helpful information on the back 



## If you are a residential customer:

You should know that there are parts of the service line bringing water to your home that are Aqua's property (the pipe that goes from our water main in the street to your curb) and parts of the service line that are the property owner's (the pipe that goes from your curb to your home). When we encounter lead service lines during our maintenance and construction activities, we will seek to identify the material type of both portions (Aqua's and the property owner's) of the service line. If we find lead on Aqua's side only, Aqua will replace its portion of the service line. If we find lead on the customer/property owner's side, we will work with you to replace the customer/property owner portion. Disturbing a service line that contains lead, including the replacement of your lead service line, could result in temporary elevated lead levels in your drinking water.

If you have concerns regarding your internal plumbing, we recommend that you have a licensed plumber check the pipes that are your property. This is important to know, because household plumbing can also be a source of lead in tap water. See the section below on "what you can do" for minimizing your risk if this happens.

**For more information about Aqua's Lead Program please call our call center hub at 1-866-SLM-AQUA (1-866-756-2782)**



## If you are a school or day care center:

You should know that the EPA has established more stringent sampling procedures for schools and day care centers. Because children often drink from fountains and faucets at school without flushing the water first, and because they are at higher risk of health effects due to exposure, for their protection, sampling is done differently at schools and day care centers.

**Aqua suggests that you call the EPA's safe drinking water hotline at 800.426.4791 or email them using this URL: <https://www.epa.gov/lead/forms/lead-hotline-national-lead-information-center>. Specific information regarding schools can be found on EPA's website at <https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water>. It's important for any testing you do to be conducted using EPA protocols, so that the results are meaningful.**

### The health effects of lead:

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

If you are concerned about lead exposure:

- Contact your local health department or healthcare provider to find out how you can get your child tested for lead.
- Visit the EPA at [EPA.gov/lead](https://www.epa.gov/lead) for more information on the health effects of lead or reducing lead exposure in your home.
- Call Aqua at 877.987.2782 for information about testing your water.

### What you can do:

If your home's water shows elevated levels of lead, or if you are concerned about the potential of lead in your water, below are ways you can minimize your exposure.

- **Run your tap to flush out lead.** If your water hasn't been used for several hours, run your water for a few minutes or until it becomes cold or reaches a steady temperature before drinking or cooking.
- **Use cold water to cook or prepare baby formula.** Don't boil water to reduce lead. Lead dissolves more easily into hot water and boiling will concentrate the lead. Boiling water won't reduce lead.
- If you buy a water filter for lead removal, make sure it's approved to reduce lead. Contact NSF International, [www.NSF.org](http://www.NSF.org).

\*This information sheet contains regulatorily required or recommended language and nothing herein is intended as, nor should be construed as, a promise of or contract for payment or reimbursement of expenses incurred for any action you take on account of this information sheet.

# EXHIBIT H

## Lead Fact Sheet

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You can always view your community's test results. They are summarized in our annual water quality reports, which are produced for every water system we own and operate.

### Lead Service Line Replacement Program:

Aqua can now assist customers with replacing the customer/property owner's portion of the service line if it is made of lead. Aqua's new program will allow us to work with customers, either during a main replacement project or by customer request, to replace the customer/property owner's portion of the service line if it is lead and dedicate the service line back to the customer/property owner at no direct cost to the customer/property owner.

Visit our website at <https://www.aquawater.com/lead> for more information.



Call us at  
1-866-SLM-AQUA  
(1-866-756-2782)  
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More helpful information on the back 



## If you are a residential customer:

You should know that there are parts of the service line bringing water to your home that are Aqua's property (the pipe that goes from our water main in the street to your curb) and parts of the service line that are the property owner's (the pipe that goes from your curb to your home). When we encounter lead service lines during our maintenance and construction activities, we will seek to identify the material type of both portions (Aqua's and the property owner's) of the service line. If we find lead on Aqua's side only, Aqua will replace its portion of the service line. If we find lead on the customer/property owner's side, we will work with you to replace the customer/property owner portion. Disturbing a service line that contains lead, including the replacement of your lead service line, could result in temporary elevated lead levels in your drinking water.

If you have concerns regarding your internal plumbing, we recommend that you have a licensed plumber check the pipes that are your property. This is important to know, because household plumbing can also be a source of lead in tap water. See the section below on "what you can do" for minimizing your risk if this happens.

**For more information about Aqua's Lead Program please call our call center hub at 1-866-SLM-AQUA (1-866-756-2782)**



## If you are a school or day care center:

You should know that the EPA has established more stringent sampling procedures for schools and day care centers. Because children often drink from fountains and faucets at school without flushing the water first, and because they are at higher risk of health effects due to exposure, for their protection, sampling is done differently at schools and day care centers.

**Aqua suggests that you call the EPA's safe drinking water hotline at 800.426.4791 or email them using this URL: <https://www.epa.gov/lead/forms/lead-hotline-national-lead-information-center>. Specific information regarding schools can be found on EPA's website at <https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water>. It's important for any testing you do to be conducted using EPA protocols, so that the results are meaningful.**

### The health effects of lead:

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

If you are concerned about lead exposure:

- Contact your local health department or healthcare provider to find out how you can get your child tested for lead.
- Visit the EPA at [EPA.gov/lead](https://www.epa.gov/lead) for more information on the health effects of lead or reducing lead exposure in your home.
- Call Aqua at 877.987.2782 for information about testing your water.

### What you can do:

If your home's water shows elevated levels of lead, or if you are concerned about the potential of lead in your water, below are ways you can minimize your exposure.

- **Run your tap to flush out lead.** If your water hasn't been used for several hours, run your water for a few minutes or until it becomes cold or reaches a steady temperature before drinking or cooking.
- **Use cold water to cook or prepare baby formula.** Don't boil water to reduce lead. Lead dissolves more easily into hot water and boiling will concentrate the lead. Boiling water won't reduce lead.
- If you buy a water filter for lead removal, make sure it's approved to reduce lead. Contact NSF International, [www.NSF.org](http://www.NSF.org).

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# EXHIBIT I

## Lead Service Line Replacement Program Information Sheet

# Customer Lead Service Line Replacement Program Information Sheet



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## **BACKGROUND – AQUA CUSTOMER LEAD SERVICE LINE REPLACEMENT PROGRAM**

Lead is a naturally occurring metal that can cause a variety of adverse health effects. While the most common sources of lead exposure are soil, paint chips and dust, drinking water is another route of lead exposure, primarily as a result of corrosion of lead pipes and plumbing materials. The Pennsylvania General Assembly determined it is in the public interest for water utilities to assist customers in the replacement of customer-owned lead, or galvanized requiring replacement (“galvanized”), service lines throughout Pennsylvania.

The service line that provides water service to a property is made up of two parts: a Company-owned portion (which connects from the Company’s main to the curb line) and a customer-owned portion (which connects from the curb line to a customer’s structure). Customers, or property owners if the customer is not the property owner (“Customer”) are required to maintain and repair the Customer-owned portion of the service line.

Aqua Pennsylvania, Inc. (“Aqua” or the “Company”) now has been granted the authority to assist Customers in replacing the Customer-owned portion of the service line if that service line is identified as lead or galvanized.

## **CUSTOMER-OWNED LEAD SERVICE LINE REPLACEMENT PROGRAM**

Under the Customer Lead Service Line Replacement Program (“Replacement Program”), Aqua will identify customer-owned service lines that are lead or galvanized, enter into an agreement with the Customer to replace the Customer-owned portion of the service line and restore the Customer’s property at no direct cost to the customer, dedicate the newly installed customer portion of the service line back to the Customer, and provide a warranty on the work completed to replace the Customer-owned lead or galvanized service line.

Aqua’s Replacement Program is made up of two parts: (1) replacements in connection with a main replacement project, and (2) replacements per Customer request not associated with a main replacement project.

### **Cap on Replacements Per Year**

Aqua can perform up to 1,500 customer-owned lead or galvanized service line replacements per year.

## **Customer Agreement and Replacement**

In order for Aqua to complete a replacement, the Customer must enter into an agreement with Aqua to replace the Customer-owned lead or galvanized service line. Aqua cannot replace the Customer portion of a lead or galvanized service line without first entering into an agreement. The agreement provides that the Customer will give access to Aqua, or Aqua's contractor, to complete the replacement. To facilitate a smooth customer service line replacement, all property and appliances near where the service line enters the building at the exterior and interior wall must be moved by the homeowner prior to the replacement appointment. Following replacement, Aqua, or Aqua's contractor, will restore the property as reasonably as practicable to its former condition prior to the replacement of the Customer-owned lead or galvanized service line.

## **Dedication of Newly Installed Customer Portion of Service Line and Warranty**

After the new Customer-owned portion of the service line is installed, the Customer-owned portion will be dedicated to the Customer and ownership and responsibility for repair and maintenance of the Customer-owned portion of the service line will remain with the Customer as was the case prior to the replacement. A two-year warranty on the workmanship and materials of the installation and the restoration of surfaces shall be provided.

## **Coordination of Replacements**

Aqua will strive to group customer requested replacements within its operating divisions to create efficiencies. However, Aqua may replace a Customer's lead or galvanized service line if projects cannot be grouped together in its discretion.

## **Filters, Sampling and Testing**

Upon identification of a customer lead or galvanized service line, Aqua will provide a National Sanitation Foundation approved water filter (pitcher or tap filter) and six months of replacement filters. At approximately 3-6 months after replacement is completed, Aqua will offer water sampling materials to Customers or residents, and if Customer or resident wants to have samples taken, Aqua will collect, test, and provide the results from those samples.

## **Reimbursement for Customers that Have Already Replaced a Lead or Galvanized Service Line**

As part of Aqua's Replacement Program, Aqua will, subject to certain requirements discussed below, provide a reimbursement to those Customers that have replaced their Customer-owned lead or galvanized service line at their own cost within one year before or after a lead service line replacement project commencement and within one mile of the project area. If a Customer or property owner refuses or fails to accept the Company replacement of the lead or galvanized customer service line, the Customer or property owner will only be eligible for reimbursement if they replace their Customer lead or galvanized service line at the customer or property owner's expense, within one year of the lead service line project commencement.

Reimbursement will occur for those Customers that provide documentation sufficient, in Aqua's sole discretion, to verify that the Customer replaced the Customer-owned lead or galvanized service line within one year before or after the start of a planned lead service line replacement project main replacement and as long as the Customer is within one mile of the main replacement project or focused replacement area. Customers will be eligible for reimbursement up to 125% of the average cost of Aqua's lead and galvanized replacements. Average cost used to determine reimbursement amounts during a calendar year will be based on Aqua's prior calendar year average costs for lead and galvanized service line replacements. Examples of documentation required by Aqua for a Customer to be eligible for reimbursement include, but are not limited to, detailed estimates from a licensed plumber and paid invoices or statements. A verified statement may also be submitted from the licensed plumber.

Aqua shall make reasonable best efforts to assist a Customer or property owner, if the Customer is not the property owner, through the reimbursement process and, to the extent possible, make determinations in favor of the Customer or property owner where the Customer or property owner has provided reasonable evidence of a customer lead or galvanized service line replacement to Aqua. However, the documentation provided to Aqua must be sufficient in the Aqua's opinion that a customer lead or galvanized service line replacement occurred.

### **Partial Replacements Prohibited**

Under the Pennsylvania Public Utility Commission's ("PUC") regulations, Aqua cannot perform a partial replacement of a lead or galvanized service line. If a Customer causes a partial replacement, by replacing the Customer portion of a lead or galvanized service line without notifying Aqua, Aqua is required to terminate service until a full replacement of the lead or galvanized service line can be completed.

In addition, any Customer that refuses to allow Aqua (or its contractor) to replace the lead or galvanized service line, or refuses to employ its own licensed plumber to replace the lead or galvanized service line, will result in termination of service to the property until the entire lead or galvanized service line is replaced.

Aqua shall use Step In Rights as described in Aqua's tariff to perform a replacement if the customer or occupier of the property is not the owner, and the customer or occupier provides a medical certificate or a Protection From Abuse order (or other court order issued by a court of competent jurisdiction in this Commonwealth which provides clear evidence of domestic violence), subject to the requirements in Aqua's tariff. Aqua may use Step In Rights where the customer or occupier is not the property owner if Aqua has attempted to contact the property owner with an offer to replace the Customer lead service line and has not received a response or the property owner cannot be identified.

### **CONCLUSION**

Aqua recognizes the importance of removing lead from water systems across Pennsylvania both on Aqua owned and Customer-owned assets. Aqua looks forward to working with Customers to achieve this goal.

# EXHIBIT J

## Post-Replacement Flushing Instructions

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ESTE DOCUMENTO CONTIENE INFORMACIÓN IMPORTANTE ACERCA DE SU AGUA POTABLE. HAGA QUE ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.

## An Important Health Notice From Aqua\*



PLEASE READ THIS BEFORE USING YOUR WATER!

As part of Aqua's Customer-Owned Lead Service Line Replacement Program ("Replacement Program"), Aqua, or Aqua's contractor, replaced your customer-owned lead or galvanized service line. Before using your water please follow the flushing instructions below:

Please review and follow these very important instructions<sup>1</sup> to minimize your exposure to metals, such as lead, which might have been stirred up due to the service-line replacement work. Please flush all your faucets using these steps:

1



If possible, remove faucet aerators from all water faucets in the home.

4

Turn off each faucet starting with the faucets in the highest level of the home. Be sure to run water in bathtubs and showers as well as faucets.

2

Beginning in the lowest level of the home, fully open the cold water faucets throughout the home.

5

Clean and reinstall any aerators you might have removed in Step 1.

3

Let the water run for at least 30 minutes at the last faucet you opened (which was on your top floor).

6

Do not consume tap water, open hot water faucets, or use icemaker or filtered water dispenser until after flushing is complete.

<sup>1</sup> Based on the American Water Works Association-recommended safety procedures ([awwa.org](http://awwa.org)).

You might also wish to use a NSF-approved home filter for water to be used for drinking and cooking, particularly if you are pregnant or have children under the age six. Go to [NSF.org](http://NSF.org) for more information.

Please visit Aqua's website for more information concerning Aqua's Replacement program at [www.aquawater.com/lead](http://www.aquawater.com/lead). Thank you for letting Aqua serve you! For questions or concerns, please contact Aqua customer service at **1-866-SLM-AQUA (1-866-756-2782)**.

# EXHIBIT K

Pitcher Filter and Instruction Letter



# BRITA® LONGLAST®

WATER FILTRATION SYSTEM

Longest-Lasting  
Lead-Removing Filter\*



**10** CUP CAPACITY  
1.5 LITER (50.7 FL. OZ.)  
MADE BY POLYMER BLENDS

1 PITCHER / 1 FILTER

**REDUCES**

**99% OF LEAD,**  
Mercury, Chlorine, Benzene and More  
(See back panel for details)

FILTER LASTS

**6**  
months\*

100 Gallons

\*See certifications.  
†Approximate timing based on  
100 gallons flow rate and average  
home usage of 11 gallons per day.

**BRITA**  
**LONGLAST**  
WATER FILTRATION SYSTEM

Small Filter, Big Impact™

GREAT-TASTING WATER WITHOUT THE WASTE™

With Brita LONGLAST,® enjoy 6 months (120 gallons) of cleaner, great-tasting water. Change your filter less often and replace up to 1,800 bottles each year.\*

\*Standard 16.9 oz. single-use water bottles

GET TO THE GOOD STUFF — WHAT WE FILTER OUT

The Brita® Pacifica Pitcher with LONGLAST® Filter reduces the following impurities that may be in your tap water:

Heavy Metals	Lead, Mercury, Cadmium
Taste and Odor	Chlorine
Particulates	Particulate I
Pharmaceuticals	Estrone, Ibuprofen, Naproxen
Industrial Chemicals	Bisphenol A (BPA), Nonyl Phenol
Industrial Pollutants	Asbestos, Benzene

EASY SETUP

With quick setup, you can start using your Brita® today!

WASH YOUR HANDS BEFORE UNWRAPPING THE FILTER. DISCARD FIRST 3 PITCHERS OF WATER TO FLUSH OUT SYSTEM.



See User's Guide for detailed instructions. No presoak or rinse required! For best results, store the Brita® Pitcher in your refrigerator or out of direct sunlight.

GET MORE WITH BRITA®

Join now to receive custom filter replacement reminders, see the latest news and offers, earn points and claim rewards. Visit [brita.com/register](http://brita.com/register).

FILTER REPLACEMENT IS ESSENTIAL FOR PRODUCT TO PERFORM AS REPRESENTED.

REPLACE FILTER EVERY 120 GALLONS (ABOUT 6 MONTHS FOR THE AVERAGE FAMILY).

ES IMPORTANTE CAMBIAR LOS FILTROS PARA QUE EL PRODUCTO FUNCIONE SEGUN LO INDICADO.

CAMBIE EL FILTRO DESPUES DE CADA 120 GALONES (ALREDEDOR DE 6 MESES PARA LA FAMILIA PROMEDIO).

Pacifica Pitcher (model LONGLAST® Filter has been tested against the WQA against standards 42, 53 and 401 of the claims. Performance Data Sheet.



See below for instructions on using the Brita® pitcher filter based on Brita's User's Guide available at

<https://assets.ctfassets.net/oyntpw38l81s/4at4PbGRwEt3DzNPy3bdGS/fe99caa7b2f53863443861e5a10483d9/Shasta-Elite-User-Guide.pdf>

1. Hand wash\* pitcher/dispenser, lid and reservoir. Rinse well. With clean hands, insert filter into reservoir by lining up groove in filter with ridge in reservoir. Press firmly for a tight seal.

\*Do not wash in dishwasher. Do not use abrasive cleaners.

2. To set the filter life status indicator, press the STATUS button and hold it down for 6 seconds, until the green light next to ELITE™ FILTER blinks three times.

3. Open the lid and fill the reservoir with cold tap water.\* Pour out the first 3 pitchers/first dispenser of water, or use to water plants.

\*Hot water shouldn't be used with the Brita® Elite™ Filter (Max. 85°F/29°C – Min. 32°F/0°C).

4. To check filter life status, quickly press and release the STATUS button. When the light blinks red, you should replace your filter and reset the indicator (step 2), about every 6 months\* for the average household.

\*Approximate timing based on 120 gallon (454 litres) filter life and average family usage of 11 glasses per day.

\*\*\*\*\*

Ve a continuación las instrucciones sobre cómo usar el filtro de la jarra Brita® basadas en la Guía del usuario de Brita disponibles en

<https://assets.ctfassets.net/oyntpw38l81s/4at4PbGRwEt3DzNPy3bdGS/fe99caa7b2f53863443861e5a10483d9/Shasta-Elite-User-Guide.pdf>

1. Lave a mano\* la jarra/dispensador, tapa y depósito. Enjuague bien. Con las manos limpias, inserte el filtro en el depósito alineando la ranura del filtro con la muesca del depósito. Presione firmemente para un cierre hermético.

\*No lave en el lavavajillas. No use limpiadores abrasivos.

2. Para activar el indicador del estado del filtro, presione el botón ESTADO (STATUS) y manténgalo apretado durante 6 segundos, hasta que la luz verde cerca del ELITE FILTER (FILTRO ELITE) titile tres veces.

3. Abra la tapa y llene el depósito con agua del grifo fría.\* Vierta las 3 primeras jarras/el primer depósito de agua, o use para regar las plantas.

\*No debe usar agua caliente con el filtro Elite™ de Brita® (Max. 85°F/29°C – Min. 32°F/0°C).

4. Para comprobar el estado del filtro, presione y suelte el botón ESTADO (STATUS) rápidamente. Cuando la luz titile en rojo, debe reemplazar el filtro y activar el indicador (paso 2), aproximadamente cada 6 meses\* para un hogar promedio.

\*El tiempo aproximado está basado en considerar que la vida del filtro es de 120 galones (454 litros) y que una familia promedio usa 11 vasos al día.

\*\*\*\*\*

请参阅以下有关 Brita® 滤水壶的使用说明，该说明改编自 Brita 产品的用户指南，用户指南的网址为

<https://assets.ctfassets.net/oyntpw38l81s/4at4PbGRwEt3DzNPy3bdGS/fe99caa7b2f53863443861e5a10483d9/Shasta-Elite-User-Guide.pdf>

1. 用手清洗\*滤水壶/配器、盖子和储水器。冲洗干净。用干净的那只手将过滤器插入储水器，将过滤器的凹槽与储水器中的凸起脊对齐。用力按压至密封。

\*不要用洗碗机清洗。不要使用研磨性清洁剂。

2. 如果想设置过滤器使用寿命状态指示器，请按下“STATUS”按钮并持续按 6 秒钟，直到看见“ELITE FILTER”旁边的绿灯闪烁三次。

3. 打开盖子，在储水器内灌满冷自来水。\*倒掉前三滤水壶/前一配器内的水，或用这些水浇灌植物。

\*Brita® Elite™ 过滤器不能用来过滤热水（水温范围：最高 85 华氏度/29 摄氏度 - 最低 32 华氏度/0 摄氏度）。

4. 如果想检查过滤器使用寿命状态，请快速按下并放开 STATUS 按钮。当指示灯闪光为红色时，您应该更换过滤器并重新设置指示器（步骤 2），对于普通家庭来说，大约每 6 个月\*需更换一次。

\*大致的使用寿命时限，根据过滤器使用寿命时限内最多过滤 120 加仑（454 升）的水量及一个家庭平均每天使用 11 杯的水量来估算。

\*\*\*\*\*

Im Folgenden finden Sie eine Anleitung zur Verwendung des Brita®-Kannenfilters, die auf der Brita-Bedienungsanleitung basiert, die Sie unter

<https://assets.ctfassets.net/oyntpw38l81s/4at4PbGRwEt3DzNPy3bdGS/fe99caa7b2f53863443861e5a10483d9/Shasta-Elite-User-Guide.pdf> finden.

1. Von Hand abwaschen\* Krug/Spender, Deckel und Behälter. Gut ausspülen. Setzen Sie den Filter mit sauberen Händen in den Behälter ein, wobei Sie die Rille im Filter mit der Kante im Behälter ausrichten. Drücken Sie sie fest an, um sie dicht zu verschließen.

\*Nicht in der Spülmaschine waschen. Verwenden Sie keine Scheuermittel.

2. Um die Filterlebensdaueranzeige einzustellen, drücken Sie die Taste STATUS und halten Sie sie 6 Sekunden lang gedrückt, bis die grüne Lampe neben ELITE FILTER dreimal blinkt.

3. Öffnen Sie den Deckel und füllen Sie den Behälter mit kaltem Leitungswasser.\* Gießen Sie die ersten 3 Kannen/den ersten Wasserspender aus, oder verwenden Sie ihn zum Gießen von Pflanzen.

\*Heißes Wasser sollte nicht mit dem Brita® Elite™ Filter verwendet werden (Max. 85°F/29°C – Min. 32°F/0°C).

4. Um den Status der Filterlebensdauer zu überprüfen, drücken Sie kurz auf die STATUS-Taste und lassen Sie sie wieder los. Wenn die Anzeige blinkt, sollten Sie den Filter austauschen und die Anzeige zurücksetzen (Schritt 2), was in einem durchschnittlichen Haushalt etwa alle 6 Monate\* geschieht.

\*Der ungefähre Zeitplan basiert auf einer Lebensdauer des Filters von 454 Litern und einem durchschnittlichen Familienverbrauch von 11 Gläsern pro Tag.

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# EXHIBIT L

Lead Service Line Replacement Close Out  
Letter



Para acceder al documento traducido al español, visite el sitio web de Aqua en <https://www.aquawater.com/aqua-pa-lead-spanish.php>

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<https://www.aquawater.com/aqua-pa-lead-chinese.php>

Die deutsche Übersetzung dieses Dokuments finden Sie auf der Website von Aqua unter <https://www.aquawater.com/aqua-pa-lead-german.php>

[DATE]

Dear Customer:

Our records show that your service line has been replaced in the last three to six months. As detailed in the Customer Lead/Galvanized Service Line Replacement License Agreement, the Company has dedicated the newly installed customer-owned portion of the service line back to you and you are responsible for that service line as of the date of completion of the installation. Your warranty on the workmanship and materials of the newly installed Customer-side service line and restoration of the surfaces is for 24 months from the date the replacement was completed.

**If you would like Aqua to sample the water at your premise, please contact Aqua at 610.645.4272. Aqua will provide sampling bottles and instructions for taking the samples as well as contact information for Aqua to arrange retrieval of the samples.**

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing in older homes. Aqua is responsible for providing high-quality drinking water to your home but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by running your water for a few minutes or until it becomes cold before using it for drinking or cooking.

Call me at 610.645.4234 if you have any questions.

Sincerely,

Ann Dreyer  
Supervisor, Water Quality Services

# EXHIBIT M

5<sup>th</sup> Liter Sampling Instructions

**Aqua Pennsylvania**  
**Sampling Instructions for Special Lead Analysis**  
**For homes that had their Lead or Galvanized Service Line**  
**Replaced**

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**Thank you for agreeing to collect samples following your lead/galvanized service line replacement. We recognize these instructions can be confusing. If you have any questions about the sampling protocol, please call us at 610.645.4272.**

**Please complete the back of these instructions with information on your home and when you collected the samples.**

**Sample Bottles** – Five 1 Liter plastic bottles will be dropped off from Aqua Pennsylvania’s Bryn Mawr Lab. These bottles are specifically designed for lead and copper analyses.

**Sample Location** – Please sample from a kitchen or bathroom cold-water faucet. The water going to that faucet should not have any treatment such as a filter or a water softener. If you do have a treatment system, note that on the form. Each of the 5 bottles must be collected from the same faucet.

**Sampling Procedure** – Do not use any water in your house for a minimum of six (6) hours prior to sampling. We recommend sampling either early mornings or evenings upon returning home. Be sure to use a kitchen or bathroom cold water tap that has been used for drinking water consumption in the past few days. Do not intentionally flush the water line before the start of the 6-hour period. Do not remove the aerator prior to sampling.

A series of five samples will be collected. We suggest that you line up the bottles by number (1 through 5) and remove the caps.

**Sample #1 (first draw):** Place the opened sample bottle below the faucet and open the cold water tap as you would to fill a glass of water. Fill the sample bottle to the line marked “1000-ml” **without allowing any water to run into the sink and keep running the water.**

After sample # 1 has been filled, quickly place bottle # 2 under the faucet. Fill each bottle in order (1 through 5) while the water continues to flow from the faucet. After each of the 5 bottles has been filled, replace the caps, tighten the caps, and place the bottles back in the bags.

If any plumbing repairs or replacements have been done in the home within the last three years, please note this on the form.

After the samples have been collected, please call 610.645.4272 Monday through Friday so that a driver can be notified to pick up samples. If you are leaving a message on our voicemail, please leave your name, address, and number where you can be reached. Place samples bottles outside the front door for pick-up (if it is more appropriate to leave somewhere other than front door, please specify that when calling).

**Results / Questions** - The results from your samples and information about lead will be provided to you as soon as practical but no later than 30 days. However, if elevated lead levels are found, prompt notification will be provided within two working days after results are made available. Call 610.645.4272 if you have any questions regarding these instructions.

**In order to process the samples, it is important that the resident complete this form and return with the 5 bottles.**

**Do you have a water softener or treatment system? Y / N**

**If so, was your softener or treatment bypassed when you took the samples? Y / N**

**Have you had any plumbing repairs or replacement in the last 3 years? Y/N If Yes, Explain:**

Sample Location and faucet (i.e., kitchen sink) \_\_\_\_\_

Water was last used:      Time: \_\_\_\_\_      Date: \_\_\_\_\_

Series of five water samples:

- Sample #1 was collected:      Time: \_\_\_\_\_      Date: \_\_\_\_\_
- Sample #5 was collected:      Time: \_\_\_\_\_      Date: \_\_\_\_\_

I have read the instructions and have taken the 5 tap samples in accordance with these instructions.

\_\_\_\_\_  
Signature

Date: \_\_\_\_\_

**Name:**

**Phone number:**

**Address:**

**Mailing Address (if different):**

# EXHIBIT N

5<sup>th</sup> Liter Sample Results Letter



An Essential Utilities Company

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DATE

Name  
Address

Dear [NAME] :

Below are the lead results for the water samples you collected from your property, following the 5<sup>th</sup> Liter sampling protocol instructions provided to you, on DATE.

	<i>1<sup>st</sup> Liter</i>	<i>5<sup>th</sup> Liter</i>
<b>LEAD RESULT</b>	ug/L	ug/L

**ug/L = Micrograms per Liter or parts per billion**  
**N.D. = Not Detected**

The “Action Level” for lead in drinking water is 15 ug/L. “Action Level” is defined as the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level Goal (MCLG) is 0 ug/L. “MCLG” is defined as the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing in older homes. Aqua is responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for a period of time it takes to bring in fresh water before using it for drinking or cooking.

The water supplied to this area meets all the National Primary Drinking Water Standards.

I have included an additional fact sheet on lead in drinking water for your information. Call me at 610.645.4234 if you have any questions.

Sincerely,

Ann Dreyer  
Supervisor, Water Quality Services

# EXHIBIT 01

Letter Provided If Customer Refuses Or  
Does Not Respond To Requests For Aqua  
To Access Aqua's Meter To Review The  
Customer Service Line Material



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Date

Name  
Address

Dear Customer:

In connection with Aqua's Lead Service Line Replacement Program, Aqua has attempted to contact you to identify your service line material to determine if your service line is lead or galvanized requiring replacement. You have either refused to allow Aqua to access your property or Aqua has not received a response from you.

Regarding access to identify service line material, Aqua must be allowed to identify the service line material that connects with Aqua's meter. Under the Pennsylvania Public Utility Commission's ("PUC") regulations, Aqua cannot perform a partial replacement of a lead or galvanized service line (see 52 Pa. Code § 65.62). Since your service line material is not known, in accordance with PUC regulations Aqua is required to terminate service to your premise if permission is not granted to identify the service line material.

To avoid termination of service, please contact Aqua's Water Quality Department at 610.645.4234 to set up an appointment and to receive further information for Aqua or its representatives to identify your service line material.

Sincerely,

A handwritten signature in blue ink that reads "Michael Fili".

Michael Fili, Vice President  
Capital Planning, Design & Construction  
Aqua Pennsylvania, Inc.

Attachments: Lead Fact Sheet  
Aqua Lead Service Line Replacement Program Information Sheet

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An  Essential Utilities Company

# Aqua Wants Our Customers to Be Informed\*

Este documento contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

## Here's what you should know about lead and drinking water.

Lead is not typically found in the streams, reservoirs or wells that serve as water supplies or in the main water lines that carry water from treatment plants to homes. Yet, the chemical properties of water can cause lead and other metals to leach into drinking water. The main source of lead in drinking water is from lead service lines (the pipes that deliver water from water mains in the street and into homes) and from typical household plumbing (lead solder and brass fixtures) that contains lead. Households that have, or suspect having, lead service lines or lead in their household plumbing are strongly encouraged to replace them. The use of lead in solder was prohibited after 1986, so buildings constructed after then should not have contained lead in the solder.

### How Aqua protects its customers:

Water utilities, including Aqua, treat drinking water to reduce the chance for metals to leach into the water. Aqua conducts required testing for drinking water contaminants, including lead and copper, to ensure compliance with state and federal drinking water standards. Aqua tests the water at our treatment plants, and also schedules customer tap sampling and tests for lead in potential high-risk areas, to comply with the U.S. Environmental Protection Agency's (EPA) lead and copper rule.

You can always view your community's test results. They are summarized in our annual water quality reports, which are produced for every water system we own and operate.

### Lead Service Line Replacement Program:

Aqua can now assist customers with replacing the customer/property owner's portion of the service line if it is made of lead. Aqua's new program will allow us to work with customers, either during a main replacement project or by customer request, to replace the customer/property owner's portion of the service line if it is lead and dedicate the service line back to the customer/property owner at no direct cost to the customer/property owner.

Visit our website at <https://www.aquawater.com/lead> for more information.



Call us at  
1-866-SLM-AQUA  
(1-866-756-2782)  
for more information.



You can find your community's  
water quality report at  
[AquaWater.com](https://www.aquawater.com).

More helpful information on the back 



## If you are a residential customer:

You should know that there are parts of the service line bringing water to your home that are Aqua's property (the pipe that goes from our water main in the street to your curb) and parts of the service line that are the property owner's (the pipe that goes from your curb to your home). When we encounter lead service lines during our maintenance and construction activities, we will seek to identify the material type of both portions (Aqua's and the property owner's) of the service line. If we find lead on Aqua's side only, Aqua will replace its portion of the service line. If we find lead on the customer/property owner's side, we will work with you to replace the customer/property owner portion. Disturbing a service line that contains lead, including the replacement of your lead service line, could result in temporary elevated lead levels in your drinking water.

If you have concerns regarding your internal plumbing, we recommend that you have a licensed plumber check the pipes that are your property. This is important to know, because household plumbing can also be a source of lead in tap water. See the section below on "what you can do" for minimizing your risk if this happens.

**For more information about Aqua's Lead Program please call our call center hub at 1-866-SLM-AQUA (1-866-756-2782)**



## If you are a school or day care center:

You should know that the EPA has established more stringent sampling procedures for schools and day care centers. Because children often drink from fountains and faucets at school without flushing the water first, and because they are at higher risk of health effects due to exposure, for their protection, sampling is done differently at schools and day care centers.

**Aqua suggests that you call the EPA's safe drinking water hotline at 800.426.4791 or email them using this URL: <https://www.epa.gov/lead/forms/lead-hotline-national-lead-information-center>. Specific information regarding schools can be found on EPA's website at <https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water>. It's important for any testing you do to be conducted using EPA protocols, so that the results are meaningful.**

### The health effects of lead:

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

If you are concerned about lead exposure:

- Contact your local health department or healthcare provider to find out how you can get your child tested for lead.
- Visit the EPA at [EPA.gov/lead](https://www.epa.gov/lead) for more information on the health effects of lead or reducing lead exposure in your home.
- Call Aqua at 877.987.2782 for information about testing your water.

### What you can do:

If your home's water shows elevated levels of lead, or if you are concerned about the potential of lead in your water, below are ways you can minimize your exposure.

- **Run your tap to flush out lead.** If your water hasn't been used for several hours, run your water for a few minutes or until it becomes cold or reaches a steady temperature before drinking or cooking.
- **Use cold water to cook or prepare baby formula.** Don't boil water to reduce lead. Lead dissolves more easily into hot water and boiling will concentrate the lead. Boiling water won't reduce lead.
- If you buy a water filter for lead removal, make sure it's approved to reduce lead. Contact NSF International, [www.NSF.org](http://www.NSF.org).

\*This information sheet contains regulatorily required or recommended language and nothing herein is intended as, nor should be construed as, a promise of or contract for payment or reimbursement of expenses incurred for any action you take on account of this information sheet.

# Customer Lead Service Line Replacement Program Information Sheet



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## **BACKGROUND – AQUA CUSTOMER LEAD SERVICE LINE REPLACEMENT PROGRAM**

Lead is a naturally occurring metal that can cause a variety of adverse health effects. While the most common sources of lead exposure are soil, paint chips and dust, drinking water is another route of lead exposure, primarily as a result of corrosion of lead pipes and plumbing materials. The Pennsylvania General Assembly determined it is in the public interest for water utilities to assist customers in the replacement of customer-owned lead, or galvanized requiring replacement (“galvanized”), service lines throughout Pennsylvania.

The service line that provides water service to a property is made up of two parts: a Company-owned portion (which connects from the Company’s main to the curb line) and a customer-owned portion (which connects from the curb line to a customer’s structure). Customers, or property owners if the customer is not the property owner (“Customer”) are required to maintain and repair the Customer-owned portion of the service line.

Aqua Pennsylvania, Inc. (“Aqua” or the “Company”) now has been granted the authority to assist Customers in replacing the Customer-owned portion of the service line if that service line is identified as lead or galvanized.

## **CUSTOMER-OWNED LEAD SERVICE LINE REPLACEMENT PROGRAM**

Under the Customer Lead Service Line Replacement Program (“Replacement Program”), Aqua will identify customer-owned service lines that are lead or galvanized, enter into an agreement with the Customer to replace the Customer-owned portion of the service line and restore the Customer’s property at no direct cost to the customer, dedicate the newly installed customer portion of the service line back to the Customer, and provide a warranty on the work completed to replace the Customer-owned lead or galvanized service line.

Aqua’s Replacement Program is made up of two parts: (1) replacements in connection with a main replacement project, and (2) replacements per Customer request not associated with a main replacement project.

### **Cap on Replacements Per Year**

Aqua can perform up to 1,500 customer-owned lead or galvanized service line replacements per year.

## **Customer Agreement and Replacement**

In order for Aqua to complete a replacement, the Customer must enter into an agreement with Aqua to replace the Customer-owned lead or galvanized service line. Aqua cannot replace the Customer portion of a lead or galvanized service line without first entering into an agreement. The agreement provides that the Customer will give access to Aqua, or Aqua's contractor, to complete the replacement. To facilitate a smooth customer service line replacement, all property and appliances near where the service line enters the building at the exterior and interior wall must be moved by the homeowner prior to the replacement appointment. Following replacement, Aqua, or Aqua's contractor, will restore the property as reasonably as practicable to its former condition prior to the replacement of the Customer-owned lead or galvanized service line.

## **Dedication of Newly Installed Customer Portion of Service Line and Warranty**

After the new Customer-owned portion of the service line is installed, the Customer-owned portion will be dedicated to the Customer and ownership and responsibility for repair and maintenance of the Customer-owned portion of the service line will remain with the Customer as was the case prior to the replacement. A two-year warranty on the workmanship and materials of the installation and the restoration of surfaces shall be provided.

## **Coordination of Replacements**

Aqua will strive to group customer requested replacements within its operating divisions to create efficiencies. However, Aqua may replace a Customer's lead or galvanized service line if projects cannot be grouped together in its discretion.

## **Filters, Sampling and Testing**

Upon identification of a customer lead or galvanized service line, Aqua will provide a National Sanitation Foundation approved water filter (pitcher or tap filter) and six months of replacement filters. At approximately 3-6 months after replacement is completed, Aqua will offer water sampling materials to Customers or residents, and if Customer or resident wants to have samples taken, Aqua will collect, test, and provide the results from those samples.

## **Reimbursement for Customers that Have Already Replaced a Lead or Galvanized Service Line**

As part of Aqua's Replacement Program, Aqua will, subject to certain requirements discussed below, provide a reimbursement to those Customers that have replaced their Customer-owned lead or galvanized service line at their own cost within one year before or after a lead service line replacement project commencement and within one mile of the project area. If a Customer or property owner refuses or fails to accept the Company replacement of the lead or galvanized customer service line, the Customer or property owner will only be eligible for reimbursement if they replace their Customer lead or galvanized service line at the customer or property owner's expense, within one year of the lead service line project commencement.

Reimbursement will occur for those Customers that provide documentation sufficient, in Aqua's sole discretion, to verify that the Customer replaced the Customer-owned lead or galvanized service line within one year before or after the start of a planned lead service line replacement project main replacement and as long as the Customer is within one mile of the main replacement project or focused replacement area. Customers will be eligible for reimbursement up to 125% of the average cost of Aqua's lead and galvanized replacements. Average cost used to determine reimbursement amounts during a calendar year will be based on Aqua's prior calendar year average costs for lead and galvanized service line replacements. Examples of documentation required by Aqua for a Customer to be eligible for reimbursement include, but are not limited to, detailed estimates from a licensed plumber and paid invoices or statements. A verified statement may also be submitted from the licensed plumber.

Aqua shall make reasonable best efforts to assist a Customer or property owner, if the Customer is not the property owner, through the reimbursement process and, to the extent possible, make determinations in favor of the Customer or property owner where the Customer or property owner has provided reasonable evidence of a customer lead or galvanized service line replacement to Aqua. However, the documentation provided to Aqua must be sufficient in the Aqua's opinion that a customer lead or galvanized service line replacement occurred.

### **Partial Replacements Prohibited**

Under the Pennsylvania Public Utility Commission's ("PUC") regulations, Aqua cannot perform a partial replacement of a lead or galvanized service line. If a Customer causes a partial replacement, by replacing the Customer portion of a lead or galvanized service line without notifying Aqua, Aqua is required to terminate service until a full replacement of the lead or galvanized service line can be completed.

In addition, any Customer that refuses to allow Aqua (or its contractor) to replace the lead or galvanized service line, or refuses to employ its own licensed plumber to replace the lead or galvanized service line, will result in termination of service to the property until the entire lead or galvanized service line is replaced.

Aqua shall use Step In Rights as described in Aqua's tariff to perform a replacement if the customer or occupier of the property is not the owner, and the customer or occupier provides a medical certificate or a Protection From Abuse order (or other court order issued by a court of competent jurisdiction in this Commonwealth which provides clear evidence of domestic violence), subject to the requirements in Aqua's tariff. Aqua may use Step In Rights where the customer or occupier is not the property owner if Aqua has attempted to contact the property owner with an offer to replace the Customer lead service line and has not received a response or the property owner cannot be identified.

### **CONCLUSION**

Aqua recognizes the importance of removing lead from water systems across Pennsylvania both on Aqua owned and Customer-owned assets. Aqua looks forward to working with Customers to achieve this goal.

# EXHIBIT 02

Letter Provided If The Customer Has An Identified COLSL And Refuses Or Does Not Respond To Requests To Replace The COLSL In Connection With A Main Replacement Project Or Where Aqua Is Replacing The Company Side Service Line



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Die deutsche Übersetzung dieses Dokuments finden Sie auf der Website von Aqua unter <https://www.aquawater.com/aqua-pa-lead-german.php>

Date

Name  
Address

Dear Customer:

In connection with Aqua's Lead Service Line Replacement Program, your customer-owned service line has been determined to be lead or galvanized requiring replacement and either you have refused to allow Aqua to replace the service line or Aqua has not received a response from you regarding the replacement of your service line.

In accordance with PUC regulations Aqua is required to terminate service to your premise as Aqua will be replacing the Company-owned side of the service line. Under the Pennsylvania Public Utility Commission's ("PUC") regulations, Aqua cannot perform a partial replacement of a lead or galvanized service line (see 52 Pa. Code § 65.62).

To avoid termination of service, please contact Aqua's Water Quality Department at 610.645.4234 to set up an appointment and to receive further information for Aqua or its representatives to replace your lead or galvanized service line.

Sincerely,

A handwritten signature in blue ink that reads "Michael Fili".

Michael Fili, Vice President  
Capital Planning, Design & Construction  
Aqua Pennsylvania, Inc.

Attachments: Lead Fact Sheet  
Aqua Lead Service Line Replacement Program Information Sheet

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# Aqua Wants Our Customers to Be Informed\*

Este documento contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

## Here's what you should know about lead and drinking water.

Lead is not typically found in the streams, reservoirs or wells that serve as water supplies or in the main water lines that carry water from treatment plants to homes. Yet, the chemical properties of water can cause lead and other metals to leach into drinking water. The main source of lead in drinking water is from lead service lines (the pipes that deliver water from water mains in the street and into homes) and from typical household plumbing (lead solder and brass fixtures) that contains lead. Households that have, or suspect having, lead service lines or lead in their household plumbing are strongly encouraged to replace them. The use of lead in solder was prohibited after 1986, so buildings constructed after then should not have contained lead in the solder.

### How Aqua protects its customers:

Water utilities, including Aqua, treat drinking water to reduce the chance for metals to leach into the water. Aqua conducts required testing for drinking water contaminants, including lead and copper, to ensure compliance with state and federal drinking water standards. Aqua tests the water at our treatment plants, and also schedules customer tap sampling and tests for lead in potential high-risk areas, to comply with the U.S. Environmental Protection Agency's (EPA) lead and copper rule.

You can always view your community's test results. They are summarized in our annual water quality reports, which are produced for every water system we own and operate.

### Lead Service Line Replacement Program:

Aqua can now assist customers with replacing the customer/property owner's portion of the service line if it is made of lead. Aqua's new program will allow us to work with customers, either during a main replacement project or by customer request, to replace the customer/property owner's portion of the service line if it is lead and dedicate the service line back to the customer/property owner at no direct cost to the customer/property owner.

Visit our website at <https://www.aquawater.com/lead> for more information.



Call us at  
1-866-SLM-AQUA  
(1-866-756-2782)  
for more information.



You can find your community's  
water quality report at  
[AquaWater.com](https://www.aquawater.com).

More helpful information on the back 



## If you are a residential customer:

You should know that there are parts of the service line bringing water to your home that are Aqua's property (the pipe that goes from our water main in the street to your curb) and parts of the service line that are the property owner's (the pipe that goes from your curb to your home). When we encounter lead service lines during our maintenance and construction activities, we will seek to identify the material type of both portions (Aqua's and the property owner's) of the service line. If we find lead on Aqua's side only, Aqua will replace its portion of the service line. If we find lead on the customer/property owner's side, we will work with you to replace the customer/property owner portion. Disturbing a service line that contains lead, including the replacement of your lead service line, could result in temporary elevated lead levels in your drinking water.

If you have concerns regarding your internal plumbing, we recommend that you have a licensed plumber check the pipes that are your property. This is important to know, because household plumbing can also be a source of lead in tap water. See the section below on "what you can do" for minimizing your risk if this happens.

**For more information about Aqua's Lead Program please call our call center hub at 1-866-SLM-AQUA (1-866-756-2782)**



## If you are a school or day care center:

You should know that the EPA has established more stringent sampling procedures for schools and day care centers. Because children often drink from fountains and faucets at school without flushing the water first, and because they are at higher risk of health effects due to exposure, for their protection, sampling is done differently at schools and day care centers.

**Aqua suggests that you call the EPA's safe drinking water hotline at 800.426.4791 or email them using this URL: <https://www.epa.gov/lead/forms/lead-hotline-national-lead-information-center>. Specific information regarding schools can be found on EPA's website at <https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water>. It's important for any testing you do to be conducted using EPA protocols, so that the results are meaningful.**

### The health effects of lead:

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

If you are concerned about lead exposure:

- Contact your local health department or healthcare provider to find out how you can get your child tested for lead.
- Visit the EPA at [EPA.gov/lead](https://www.epa.gov/lead) for more information on the health effects of lead or reducing lead exposure in your home.
- Call Aqua at 877.987.2782 for information about testing your water.

### What you can do:

If your home's water shows elevated levels of lead, or if you are concerned about the potential of lead in your water, below are ways you can minimize your exposure.

- **Run your tap to flush out lead.** If your water hasn't been used for several hours, run your water for a few minutes or until it becomes cold or reaches a steady temperature before drinking or cooking.
- **Use cold water to cook or prepare baby formula.** Don't boil water to reduce lead. Lead dissolves more easily into hot water and boiling will concentrate the lead. Boiling water won't reduce lead.
- If you buy a water filter for lead removal, make sure it's approved to reduce lead. Contact NSF International, [www.NSF.org](http://www.NSF.org).

\*This information sheet contains regulatorily required or recommended language and nothing herein is intended as, nor should be construed as, a promise of or contract for payment or reimbursement of expenses incurred for any action you take on account of this information sheet.

# Customer Lead Service Line Replacement Program Information Sheet



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## **BACKGROUND – AQUA CUSTOMER LEAD SERVICE LINE REPLACEMENT PROGRAM**

Lead is a naturally occurring metal that can cause a variety of adverse health effects. While the most common sources of lead exposure are soil, paint chips and dust, drinking water is another route of lead exposure, primarily as a result of corrosion of lead pipes and plumbing materials. The Pennsylvania General Assembly determined it is in the public interest for water utilities to assist customers in the replacement of customer-owned lead, or galvanized requiring replacement (“galvanized”), service lines throughout Pennsylvania.

The service line that provides water service to a property is made up of two parts: a Company-owned portion (which connects from the Company’s main to the curb line) and a customer-owned portion (which connects from the curb line to a customer’s structure). Customers, or property owners if the customer is not the property owner (“Customer”) are required to maintain and repair the Customer-owned portion of the service line.

Aqua Pennsylvania, Inc. (“Aqua” or the “Company”) now has been granted the authority to assist Customers in replacing the Customer-owned portion of the service line if that service line is identified as lead or galvanized.

## **CUSTOMER-OWNED LEAD SERVICE LINE REPLACEMENT PROGRAM**

Under the Customer Lead Service Line Replacement Program (“Replacement Program”), Aqua will identify customer-owned service lines that are lead or galvanized, enter into an agreement with the Customer to replace the Customer-owned portion of the service line and restore the Customer’s property at no direct cost to the customer, dedicate the newly installed customer portion of the service line back to the Customer, and provide a warranty on the work completed to replace the Customer-owned lead or galvanized service line.

Aqua’s Replacement Program is made up of two parts: (1) replacements in connection with a main replacement project, and (2) replacements per Customer request not associated with a main replacement project.

### **Cap on Replacements Per Year**

Aqua can perform up to 1,500 customer-owned lead or galvanized service line replacements per year.

## **Customer Agreement and Replacement**

In order for Aqua to complete a replacement, the Customer must enter into an agreement with Aqua to replace the Customer-owned lead or galvanized service line. Aqua cannot replace the Customer portion of a lead or galvanized service line without first entering into an agreement. The agreement provides that the Customer will give access to Aqua, or Aqua's contractor, to complete the replacement. To facilitate a smooth customer service line replacement, all property and appliances near where the service line enters the building at the exterior and interior wall must be moved by the homeowner prior to the replacement appointment. Following replacement, Aqua, or Aqua's contractor, will restore the property as reasonably as practicable to its former condition prior to the replacement of the Customer-owned lead or galvanized service line.

## **Dedication of Newly Installed Customer Portion of Service Line and Warranty**

After the new Customer-owned portion of the service line is installed, the Customer-owned portion will be dedicated to the Customer and ownership and responsibility for repair and maintenance of the Customer-owned portion of the service line will remain with the Customer as was the case prior to the replacement. A two-year warranty on the workmanship and materials of the installation and the restoration of surfaces shall be provided.

## **Coordination of Replacements**

Aqua will strive to group customer requested replacements within its operating divisions to create efficiencies. However, Aqua may replace a Customer's lead or galvanized service line if projects cannot be grouped together in its discretion.

## **Filters, Sampling and Testing**

Upon identification of a customer lead or galvanized service line, Aqua will provide a National Sanitation Foundation approved water filter (pitcher or tap filter) and six months of replacement filters. At approximately 3-6 months after replacement is completed, Aqua will offer water sampling materials to Customers or residents, and if Customer or resident wants to have samples taken, Aqua will collect, test, and provide the results from those samples.

## **Reimbursement for Customers that Have Already Replaced a Lead or Galvanized Service Line**

As part of Aqua's Replacement Program, Aqua will, subject to certain requirements discussed below, provide a reimbursement to those Customers that have replaced their Customer-owned lead or galvanized service line at their own cost within one year before or after a lead service line replacement project commencement and within one mile of the project area. If a Customer or property owner refuses or fails to accept the Company replacement of the lead or galvanized customer service line, the Customer or property owner will only be eligible for reimbursement if they replace their Customer lead or galvanized service line at the customer or property owner's expense, within one year of the lead service line project commencement.

Reimbursement will occur for those Customers that provide documentation sufficient, in Aqua's sole discretion, to verify that the Customer replaced the Customer-owned lead or galvanized service line within one year before or after the start of a planned lead service line replacement project main replacement and as long as the Customer is within one mile of the main replacement project or focused replacement area. Customers will be eligible for reimbursement up to 125% of the average cost of Aqua's lead and galvanized replacements. Average cost used to determine reimbursement amounts during a calendar year will be based on Aqua's prior calendar year average costs for lead and galvanized service line replacements. Examples of documentation required by Aqua for a Customer to be eligible for reimbursement include, but are not limited to, detailed estimates from a licensed plumber and paid invoices or statements. A verified statement may also be submitted from the licensed plumber.

Aqua shall make reasonable best efforts to assist a Customer or property owner, if the Customer is not the property owner, through the reimbursement process and, to the extent possible, make determinations in favor of the Customer or property owner where the Customer or property owner has provided reasonable evidence of a customer lead or galvanized service line replacement to Aqua. However, the documentation provided to Aqua must be sufficient in the Aqua's opinion that a customer lead or galvanized service line replacement occurred.

### **Partial Replacements Prohibited**

Under the Pennsylvania Public Utility Commission's ("PUC") regulations, Aqua cannot perform a partial replacement of a lead or galvanized service line. If a Customer causes a partial replacement, by replacing the Customer portion of a lead or galvanized service line without notifying Aqua, Aqua is required to terminate service until a full replacement of the lead or galvanized service line can be completed.

In addition, any Customer that refuses to allow Aqua (or its contractor) to replace the lead or galvanized service line, or refuses to employ its own licensed plumber to replace the lead or galvanized service line, will result in termination of service to the property until the entire lead or galvanized service line is replaced.

Aqua shall use Step In Rights as described in Aqua's tariff to perform a replacement if the customer or occupier of the property is not the owner, and the customer or occupier provides a medical certificate or a Protection From Abuse order (or other court order issued by a court of competent jurisdiction in this Commonwealth which provides clear evidence of domestic violence), subject to the requirements in Aqua's tariff. Aqua may use Step In Rights where the customer or occupier is not the property owner if Aqua has attempted to contact the property owner with an offer to replace the Customer lead service line and has not received a response or the property owner cannot be identified.

### **CONCLUSION**

Aqua recognizes the importance of removing lead from water systems across Pennsylvania both on Aqua owned and Customer-owned assets. Aqua looks forward to working with Customers to achieve this goal.

# EXHIBIT 03

Letter provided where the customer refuses or does not respond to requests to replace the COLSL that are not connected to a main replacement project or a Company side service line replacement



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Date

Name  
Address

Dear Customer:

In connection with Aqua's Lead Service Line Replacement ("LSLR") Program, your service line has been determined to be lead or galvanized requiring replacement and either you have refused to allow Aqua to replace the service line or Aqua has not received a response from you regarding the replacement of your service line. You are now categorized as a refusal under Aqua's Lead Service Line Replacement Program. You will continue to receive annual notification of your lead or galvanized service line until the service is replaced.

As your property is not associated with a current main replacement project or the replacement of Aqua's portion of the service line, Aqua continues to encourage you to contact Aqua to allow for the replacement of your lead or galvanized service line. Please be aware that customers/property owners that replace their lead or galvanized service lines at their own expense may be eligible for reimbursement if the replacement was within a 1-mile radius of an LSLR Project and within 1 year of the of the LSLR Project Commencement. If you replace your service line at your own expense more than 1 year after the LSLR Project Commencement, you will not be eligible for reimbursement. Please note that the reimbursement Aqua may provide may not be the full amount of the cost you incurred to replace your service line at your own expense. Please review the Lead Service Line Replacement Program Information Sheet for more information.

Please contact Aqua's Water Quality Department at 610.645.4234 to set up an appointment and receive further information for Aqua or its representatives to replace your lead or galvanized service line.

Sincerely,

A handwritten signature in blue ink that reads "Michael Fili".

Michael Fili, Vice President  
Capital Planning, Design & Construction  
Aqua Pennsylvania, Inc.

Attachments: Lead Fact Sheet  
Aqua Lead Service Line Replacement Program Information Sheet

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# Aqua Wants Our Customers to Be Informed\*

Este documento contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

## Here's what you should know about lead and drinking water.

Lead is not typically found in the streams, reservoirs or wells that serve as water supplies or in the main water lines that carry water from treatment plants to homes. Yet, the chemical properties of water can cause lead and other metals to leach into drinking water. The main source of lead in drinking water is from lead service lines (the pipes that deliver water from water mains in the street and into homes) and from typical household plumbing (lead solder and brass fixtures) that contains lead. Households that have, or suspect having, lead service lines or lead in their household plumbing are strongly encouraged to replace them. The use of lead in solder was prohibited after 1986, so buildings constructed after then should not have contained lead in the solder.

### How Aqua protects its customers:

Water utilities, including Aqua, treat drinking water to reduce the chance for metals to leach into the water. Aqua conducts required testing for drinking water contaminants, including lead and copper, to ensure compliance with state and federal drinking water standards. Aqua tests the water at our treatment plants, and also schedules customer tap sampling and tests for lead in potential high-risk areas, to comply with the U.S. Environmental Protection Agency's (EPA) lead and copper rule.

You can always view your community's test results. They are summarized in our annual water quality reports, which are produced for every water system we own and operate.

### Lead Service Line Replacement Program:

Aqua can now assist customers with replacing the customer/property owner's portion of the service line if it is made of lead. Aqua's new program will allow us to work with customers, either during a main replacement project or by customer request, to replace the customer/property owner's portion of the service line if it is lead and dedicate the service line back to the customer/property owner at no direct cost to the customer/property owner.

Visit our website at <https://www.aquawater.com/lead> for more information.



Call us at  
1-866-SLM-AQUA  
(1-866-756-2782)  
for more information.



You can find your community's  
water quality report at  
[AquaWater.com](https://www.aquawater.com).

More helpful information on the back 



## If you are a residential customer:

You should know that there are parts of the service line bringing water to your home that are Aqua's property (the pipe that goes from our water main in the street to your curb) and parts of the service line that are the property owner's (the pipe that goes from your curb to your home). When we encounter lead service lines during our maintenance and construction activities, we will seek to identify the material type of both portions (Aqua's and the property owner's) of the service line. If we find lead on Aqua's side only, Aqua will replace its portion of the service line. If we find lead on the customer/property owner's side, we will work with you to replace the customer/property owner portion. Disturbing a service line that contains lead, including the replacement of your lead service line, could result in temporary elevated lead levels in your drinking water.

If you have concerns regarding your internal plumbing, we recommend that you have a licensed plumber check the pipes that are your property. This is important to know, because household plumbing can also be a source of lead in tap water. See the section below on "what you can do" for minimizing your risk if this happens.

**For more information about Aqua's Lead Program please call our call center hub at 1-866-SLM-AQUA (1-866-756-2782)**



## If you are a school or day care center:

You should know that the EPA has established more stringent sampling procedures for schools and day care centers. Because children often drink from fountains and faucets at school without flushing the water first, and because they are at higher risk of health effects due to exposure, for their protection, sampling is done differently at schools and day care centers.

**Aqua suggests that you call the EPA's safe drinking water hotline at 800.426.4791 or email them using this URL: <https://www.epa.gov/lead/forms/lead-hotline-national-lead-information-center>. Specific information regarding schools can be found on EPA's website at <https://www.epa.gov/ground-water-and-drinking-water/3ts-reducing-lead-drinking-water>. It's important for any testing you do to be conducted using EPA protocols, so that the results are meaningful.**

### The health effects of lead:

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

If you are concerned about lead exposure:

- Contact your local health department or healthcare provider to find out how you can get your child tested for lead.
- Visit the EPA at [EPA.gov/lead](https://www.epa.gov/lead) for more information on the health effects of lead or reducing lead exposure in your home.
- Call Aqua at 877.987.2782 for information about testing your water.

### What you can do:

If your home's water shows elevated levels of lead, or if you are concerned about the potential of lead in your water, below are ways you can minimize your exposure.

- **Run your tap to flush out lead.** If your water hasn't been used for several hours, run your water for a few minutes or until it becomes cold or reaches a steady temperature before drinking or cooking.
- **Use cold water to cook or prepare baby formula.** Don't boil water to reduce lead. Lead dissolves more easily into hot water and boiling will concentrate the lead. Boiling water won't reduce lead.
- If you buy a water filter for lead removal, make sure it's approved to reduce lead. Contact NSF International, [www.NSF.org](http://www.NSF.org).

\*This information sheet contains regulatorily required or recommended language and nothing herein is intended as, nor should be construed as, a promise of or contract for payment or reimbursement of expenses incurred for any action you take on account of this information sheet.

# Customer Lead Service Line Replacement Program Information Sheet



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## **BACKGROUND – AQUA CUSTOMER LEAD SERVICE LINE REPLACEMENT PROGRAM**

Lead is a naturally occurring metal that can cause a variety of adverse health effects. While the most common sources of lead exposure are soil, paint chips and dust, drinking water is another route of lead exposure, primarily as a result of corrosion of lead pipes and plumbing materials. The Pennsylvania General Assembly determined it is in the public interest for water utilities to assist customers in the replacement of customer-owned lead, or galvanized requiring replacement (“galvanized”), service lines throughout Pennsylvania.

The service line that provides water service to a property is made up of two parts: a Company-owned portion (which connects from the Company’s main to the curb line) and a customer-owned portion (which connects from the curb line to a customer’s structure). Customers, or property owners if the customer is not the property owner (“Customer”) are required to maintain and repair the Customer-owned portion of the service line.

Aqua Pennsylvania, Inc. (“Aqua” or the “Company”) now has been granted the authority to assist Customers in replacing the Customer-owned portion of the service line if that service line is identified as lead or galvanized.

## **CUSTOMER-OWNED LEAD SERVICE LINE REPLACEMENT PROGRAM**

Under the Customer Lead Service Line Replacement Program (“Replacement Program”), Aqua will identify customer-owned service lines that are lead or galvanized, enter into an agreement with the Customer to replace the Customer-owned portion of the service line and restore the Customer’s property at no direct cost to the customer, dedicate the newly installed customer portion of the service line back to the Customer, and provide a warranty on the work completed to replace the Customer-owned lead or galvanized service line.

Aqua’s Replacement Program is made up of two parts: (1) replacements in connection with a main replacement project, and (2) replacements per Customer request not associated with a main replacement project.

### **Cap on Replacements Per Year**

Aqua can perform up to 1,500 customer-owned lead or galvanized service line replacements per year.

## **Customer Agreement and Replacement**

In order for Aqua to complete a replacement, the Customer must enter into an agreement with Aqua to replace the Customer-owned lead or galvanized service line. Aqua cannot replace the Customer portion of a lead or galvanized service line without first entering into an agreement. The agreement provides that the Customer will give access to Aqua, or Aqua's contractor, to complete the replacement. To facilitate a smooth customer service line replacement, all property and appliances near where the service line enters the building at the exterior and interior wall must be moved by the homeowner prior to the replacement appointment. Following replacement, Aqua, or Aqua's contractor, will restore the property as reasonably as practicable to its former condition prior to the replacement of the Customer-owned lead or galvanized service line.

## **Dedication of Newly Installed Customer Portion of Service Line and Warranty**

After the new Customer-owned portion of the service line is installed, the Customer-owned portion will be dedicated to the Customer and ownership and responsibility for repair and maintenance of the Customer-owned portion of the service line will remain with the Customer as was the case prior to the replacement. A two-year warranty on the workmanship and materials of the installation and the restoration of surfaces shall be provided.

## **Coordination of Replacements**

Aqua will strive to group customer requested replacements within its operating divisions to create efficiencies. However, Aqua may replace a Customer's lead or galvanized service line if projects cannot be grouped together in its discretion.

## **Filters, Sampling and Testing**

Upon identification of a customer lead or galvanized service line, Aqua will provide a National Sanitation Foundation approved water filter (pitcher or tap filter) and six months of replacement filters. At approximately 3-6 months after replacement is completed, Aqua will offer water sampling materials to Customers or residents, and if Customer or resident wants to have samples taken, Aqua will collect, test, and provide the results from those samples.

## **Reimbursement for Customers that Have Already Replaced a Lead or Galvanized Service Line**

As part of Aqua's Replacement Program, Aqua will, subject to certain requirements discussed below, provide a reimbursement to those Customers that have replaced their Customer-owned lead or galvanized service line at their own cost within one year before or after a lead service line replacement project commencement and within one mile of the project area. If a Customer or property owner refuses or fails to accept the Company replacement of the lead or galvanized customer service line, the Customer or property owner will only be eligible for reimbursement if they replace their Customer lead or galvanized service line at the customer or property owner's expense, within one year of the lead service line project commencement.

Reimbursement will occur for those Customers that provide documentation sufficient, in Aqua's sole discretion, to verify that the Customer replaced the Customer-owned lead or galvanized service line within one year before or after the start of a planned lead service line replacement project main replacement and as long as the Customer is within one mile of the main replacement project or focused replacement area. Customers will be eligible for reimbursement up to 125% of the average cost of Aqua's lead and galvanized replacements. Average cost used to determine reimbursement amounts during a calendar year will be based on Aqua's prior calendar year average costs for lead and galvanized service line replacements. Examples of documentation required by Aqua for a Customer to be eligible for reimbursement include, but are not limited to, detailed estimates from a licensed plumber and paid invoices or statements. A verified statement may also be submitted from the licensed plumber.

Aqua shall make reasonable best efforts to assist a Customer or property owner, if the Customer is not the property owner, through the reimbursement process and, to the extent possible, make determinations in favor of the Customer or property owner where the Customer or property owner has provided reasonable evidence of a customer lead or galvanized service line replacement to Aqua. However, the documentation provided to Aqua must be sufficient in the Aqua's opinion that a customer lead or galvanized service line replacement occurred.

### **Partial Replacements Prohibited**

Under the Pennsylvania Public Utility Commission's ("PUC") regulations, Aqua cannot perform a partial replacement of a lead or galvanized service line. If a Customer causes a partial replacement, by replacing the Customer portion of a lead or galvanized service line without notifying Aqua, Aqua is required to terminate service until a full replacement of the lead or galvanized service line can be completed.

In addition, any Customer that refuses to allow Aqua (or its contractor) to replace the lead or galvanized service line, or refuses to employ its own licensed plumber to replace the lead or galvanized service line, will result in termination of service to the property until the entire lead or galvanized service line is replaced.

Aqua shall use Step In Rights as described in Aqua's tariff to perform a replacement if the customer or occupier of the property is not the owner, and the customer or occupier provides a medical certificate or a Protection From Abuse order (or other court order issued by a court of competent jurisdiction in this Commonwealth which provides clear evidence of domestic violence), subject to the requirements in Aqua's tariff. Aqua may use Step In Rights where the customer or occupier is not the property owner if Aqua has attempted to contact the property owner with an offer to replace the Customer lead service line and has not received a response or the property owner cannot be identified.

### **CONCLUSION**

Aqua recognizes the importance of removing lead from water systems across Pennsylvania both on Aqua owned and Customer-owned assets. Aqua looks forward to working with Customers to achieve this goal.

# EXHIBIT P

Public Education Materials – 40 C.F.R. §  
141.85(a)

Para acceder al documento traducido al español, visite el sitio web de Aqua en <https://www.aquawater.com/aqua-pa-lead-spanish.php>

如果需要查看本文件的中文简体字译本，请访问 Aqua 网站：  
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## IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER\*

[INSERT NAME OF WATER SYSTEM] found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

### Health Effects of Lead

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

### Sources of Lead

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. Brass faucets, fittings, and valves, including those advertised as “low lead” or “lead-free,” may contribute lead to drinking water. Regulations previously allowed “low lead” fixtures containing up to 8 percent lead. Current regulations only allow “lead-free” fixtures with up to 0.25 percent lead. When water is in contact with pipes, service lines, or plumbing that contains lead for several hours, the lead may enter drinking water. Homes built before 1990 are more likely to have lead pipes or lead solder.

The main sources of lead exposure are lead-based paint, lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the workplace and exposure from certain hobbies (lead can be carried on clothing or shoes). Lead is found in some toys, some playground equipment, and some children’s metal jewelry.

### Steps You Can Take to Reduce Your Exposure to Lead in Your Water

- **Run your tap to flush out lead.** If your water has not been used for several hours, run your water for a few minutes or until it becomes cold or reaches a steady temperature before drinking or cooking. The amount of time to run the water will depend on the length and diameter of the service line and the amount of plumbing in your home.

- **Use cold water to cook or prepare baby formula.** Do not boil water to reduce lead. Lead dissolves more easily in hot water and boiling water will concentrate the lead.
- **If you buy a water filter for lead removal, make sure it is approved to reduce lead.** The filter should be certified for lead removal by NSF. For more information, contact NSF International, [www.NSF.org](http://www.NSF.org).
- Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.
- **Test your water for lead.** Call us at [NUMBER] to find out how to get your water tested for lead.
- **Get your child's blood tested.** Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.

### **What happened? What is being done?**

[Notice Specific Information: Explain why there are elevated levels of lead in the system's drinking water (if known) and what the water system is doing to reduce the lead levels in homes/buildings in this area.]

### **[Aqua's lead and galvanized service line replacement program**

At Aqua, we are conducting a replacement program that involves replacing lead and some galvanized service lines in our drinking water systems at no direct cost to our customers. Galvanized service lines are replaced if they could potentially be a source of lead to your tap water. We will notify you if we need to arrange your service line replacement once we know the replacement schedule for your area. Note that if you proceed with replacement of your service line using your own plumber, please contact us as soon as possible since we are required to replace the company-owned service line, if lead or galvanized, to minimize the risk of lead being released into your water. You can find out your service line material by visiting the customer service line material map at [www.aquawater.com/leadmap](http://www.aquawater.com/leadmap).

For more information, call us at [NUMBER], or visit our website at [www.aquawater.com/lead](http://www.aquawater.com/lead). For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at <http://www.epa.gov/lead> or contact your health care provider.

\*This information contains regulatory or recommended language, and nothing herein is intended as, nor should be construed as, a promise of or contract for payment or reimbursement of expenses incurred for any action you take on account of this information sheet.

# EXHIBIT Q

Lead and Copper Monitoring Results – 40  
C.F.R. § 141.85(d)



Para acceder al documento traducido al español, visite el sitio web de Aqua en <https://www.aquawater.com/aqua-pa-lead-spanish.php>

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[DATE]

Dear Customer:

We would like to thank you for your participation in the lead tap monitoring program. Below are the results of the water samples you collected from your property at **ADDRESS** on **DATE**, following the sampling instructions provided to you.

	Immediate Sample	USEPA Action Level
<b>Lead</b>	ug/L	15 ug/L
<b>Copper</b>	mg/L	1.3 mg/L

ug/L = micrograms per liter or parts per billion  
mg/L = milligrams per liter or parts per million  
ND = Not detected

- Lead was **NOT DETECTED** at this sample location.
- Lead was detected **BELOW** the action level of 15 ug/L (ppb).
- Lead was detected **ABOVE** the action level of 15 ug/L (ppb).

Under the authority of the Safe Drinking Water Act, the EPA set the action level for lead in drinking water at 15 ug/L. The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that Aqua must follow. This means Aqua must ensure that water from the customer’s tap does not exceed this level in at least 90 percent of the homes sampled (90th percentile value). Because lead may pose serious health risks, the EPA set a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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

Lead is more likely to accumulate when water is in contact with a lead source for longer periods of time. There are steps you can take to minimize exposure to lead in drinking water:<sup>1</sup>

- **Run your tap to flush out lead.** If your water hasn't been used for several hours, run your water for a few minutes or until it becomes cold or reaches a steady temperature before drinking or cooking.
- **Use cold water to cook or prepare baby formula.** Do not boil water to reduce lead. Lead dissolves more easily in hot water and boiling water will concentrate the lead.
- **Do not boil water to remove lead.** Boiling water will not reduce lead.
- **Consider alternative sources or treatment of water.** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International ([www.nsf.org](http://www.nsf.org)) for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.
- **Test your water for lead.** Call us at 610.645.4234 to find out how to get your water tested for lead.
- **Get your child's blood tested.** Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.

If you need more information concerning this result or have any questions, please contact us at 610.645.4234.

Sincerely,

Aqua Pennsylvania

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<sup>1</sup> This information contains regulatory or recommended language, and nothing herein is intended as, nor should be construed as, a promise of or contract for payment or reimbursement of expenses incurred for any action you take on account of this information sheet.

# EXHIBIT R

Notification of Known Lead / GRR /  
Unknown Service Line – 40 C.F.R. §  
141.85(e)(3)



Customer Name

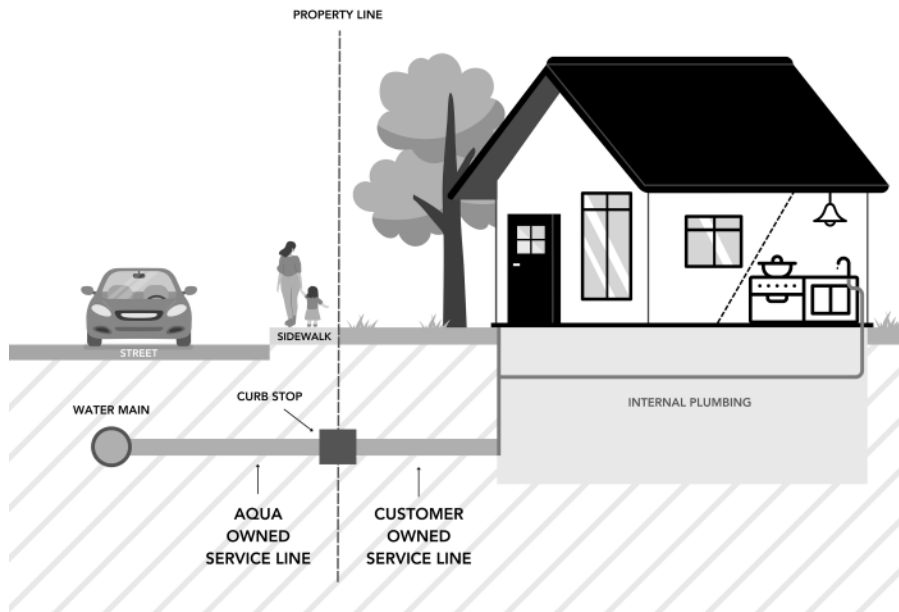
Address Line 1

Address Line 2

City, State Zip

Dear Customer:

Aqua Pennsylvania, Inc. (Aqua) is conducting a service line material inventory and replacement program to identify and replace all lead and galvanized service lines in our drinking water systems at no direct cost to our customers. Aqua supplies water to your property through a service line that runs from the water main into your building. Aqua owns the service line from the water main to the curb stop. You own the service line that runs from the curb stop into your building.



## SEE BELOW FOR YOUR SERVICE LINE CLASSIFICATION

Our records show the following information for your property:

- **Premise Number:**
- **Street Address:**
- **Aqua Side Service Line Classification:**
- **Customer Side Service Line Classification:**
- **Regulatory Classification\*:**

\*Regulatory Classification is determined based on information available for both sides of the service line.

Currently, no action is required of you. Please understand that inventorying and replacement efforts will take many years. We are developing detailed plans to meet these objectives. We will notify you if we require more information or need to arrange your service line replacement once we know the schedule for your area. Note that if you proceed with replacement of your service line using your own plumber, please contact us as soon as possible since we are required to replace the company-owned service line, if lead or galvanized, to minimize the risk of lead being released into your water.

### **HEALTH EFFECTS OF LEAD**

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

### **STEPS TO REDUCE LEAD IN YOUR DRINKING WATER**

Lead is more likely to accumulate when water is in contact with a lead source for longer periods of time. There are steps you can take to minimize exposure to lead in drinking water:

- **Run your tap to flush out lead.** If your water has not been used for several hours, run your water for a few minutes or until it becomes cold or reaches a steady temperature before drinking or cooking. The amount of time to run the water will depend on the length and diameter of the service line and the amount of plumbing in your home.
- **Use cold water to cook or prepare baby formula.** Do not boil water to reduce lead. Lead dissolves more easily in hot water and boiling water will concentrate the lead.
- **If you buy a water filter for lead removal, make sure it is approved to reduce lead.** The filter should be certified for lead removal by NSF. For more information, contact NSF International, [www.NSF.org](http://www.NSF.org).

For more information on lead and our replacement program, please visit [www.aquawater.com/lead](http://www.aquawater.com/lead).

Please note that when we begin working in your area, we will contact you to arrange inspections and service line replacements. This will provide you with the opportunity to verify your service line material. If you have other questions, please call our dedicated service line material call center hub at 1-866-SLM-AQUA (1-866-756-2782).

Sincerely,

Aqua Pennsylvania, Inc.

# EXHIBIT S

Held For Future Use

# EXHIBIT T

Held For Future Use

# EXHIBIT U

Notification of a Disturbance to a Lead,  
GRR, or Lead Status Unknown Service Line  
that Results in the Service Line Being Shut  
Off or Bypassed – 40 C.F.R. § 141.85(f)(1)




ESTE DOCUMENTO CONTIENE INFORMACIÓN IMPORTANTE ACERCA DE SU AGUA POTABLE. HAGA QUE ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.

# An Important Health Notice From Aqua\*



Aqua Pennsylvania is completing work on our water system that requires shutting off or bypassing your service line that may cause a disturbance to your service line. Our records indicate that your water service line is lead, galvanized requiring replacement, or lead status unknown. Due to the nature of your service line material, we must inform you that disturbing a service line that contains lead could result in elevated lead levels in your drinking water.

**Before using your water, please review and follow the flushing instructions<sup>1</sup> below to minimize your exposure to lead and to remove particulate lead that may have been stirred up during the disturbance.**

-  **1** If possible, remove faucet aerators from all water faucets in the home.
- 2** Beginning in the lowest level of the home, fully open the cold water faucets throughout the home.
- 3** Let the water run for at least 30 minutes at the last faucet you opened (which was on your top floor).
- 4** Turn off each faucet starting with the faucets in the highest level of the home. Be sure to run water in bathtubs and showers as well as faucets.
- 5** Clean and reinstall any aerators you might have removed in Step 1.
- 6** Do not consume tap water, open hot water faucets, or use icemaker or filtered water dispenser until after flushing is complete.

<sup>1</sup>Based on the American Water Works Association-recommended safety procedures ([awwa.org](http://awwa.org)).

Please visit Aqua's website for more information concerning Aqua's Replacement program at [www.aquawater.com/lead](http://www.aquawater.com/lead). Thank you for letting Aqua serve you! For questions and concerns please contact Aqua's lead call center hub at 1-866-SLM-AQUA (1-866-756-2782).

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# EXHIBIT V

Notification of a Disturbance to a Lead,  
GRR, or Lead Status Unknown Service Line  
From the Replacement of an Inline Water  
Meter, a Water Meter Setter, or Gooseneck,  
Pigtail, or Connector – 40 C.F.R. §  
141.85(f)(2)



An  Essential Utilities Company


ESTE DOCUMENTO CONTIENE INFORMACIÓN IMPORTANTE ACERCA DE SU AGUA POTABLE. HAGA QUE ALGUIEN LO TRADUZCA PARA USTED, O HABLE CON ALGUIEN QUE LO ENTIENDA.

# An Important Health Notice From Aqua\*



Aqua Pennsylvania is completing work on our water system including replacing an inline water meter, a water meter setter, or gooseneck, pigtail, or connector that may cause a disturbance to your service line. Our records indicate that your water service line is lead, galvanized requiring replacement, or lead status unknown. Due to the nature of your service line material, we must inform you that disturbing a service line that contains lead could result in elevated lead levels in your drinking water.

**Before using your water, please review and follow the flushing instructions<sup>1</sup> below to minimize your exposure to lead and to remove particulate lead that may have been stirred up during the disturbance. Please use the provided pitcher filter prior to using water for drinking and cooking. Please refer to the instructions provided with the pitcher filter.**

-  If possible, remove faucet aerators from all water faucets in the home.
- Beginning in the lowest level of the home, fully open the cold water faucets throughout the home.
- Let the water run for at least 30 minutes at the last faucet you opened (which was on your top floor).
- Turn off each faucet starting with the faucets in the highest level of the home. Be sure to run water in bathtubs and showers as well as faucets.
- Clean and reinstall any aerators you might have removed in Step 1.
- Do not consume tap water, open hot water faucets, or use icemaker or filtered water dispenser until after flushing is complete.

<sup>1</sup>Based on the American Water Works Association-recommended safety procedures ([awwa.org](http://awwa.org)).

Please visit Aqua's website for more information concerning Aqua's Replacement program at [www.aquawater.com/lead](http://www.aquawater.com/lead). Thank you for letting Aqua serve you! For questions and concerns please contact Aqua customer service at 1-866-SLM-AQUA (1-866-756-2782).

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# Customer Lead Service Line Replacement Program Information Sheet



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## **BACKGROUND – AQUA CUSTOMER LEAD SERVICE LINE REPLACEMENT PROGRAM**

Lead is a naturally occurring metal that can cause a variety of adverse health effects. While the most common sources of lead exposure are soil, paint chips and dust, drinking water is another route of lead exposure, primarily as a result of corrosion of lead pipes and plumbing materials. The Pennsylvania General Assembly determined it is in the public interest for water utilities to assist customers in the replacement of customer-owned lead, or galvanized requiring replacement (“galvanized”), service lines throughout Pennsylvania.

The service line that provides water service to a property is made up of two parts: a Company-owned portion (which connects from the Company’s main to the curb line) and a customer-owned portion (which connects from the curb line to a customer’s structure). Customers, or property owners if the customer is not the property owner (“Customer”) are required to maintain and repair the Customer-owned portion of the service line.

Aqua Pennsylvania, Inc. (“Aqua” or the “Company”) now has been granted the authority to assist Customers in replacing the Customer-owned portion of the service line if that service line is identified as lead or galvanized.

## **CUSTOMER-OWNED LEAD SERVICE LINE REPLACEMENT PROGRAM**

Under the Customer Lead Service Line Replacement Program (“Replacement Program”), Aqua will identify customer-owned service lines that are lead or galvanized, enter into an agreement with the Customer to replace the Customer-owned portion of the service line and restore the Customer’s property at no direct cost to the customer, dedicate the newly installed customer portion of the service line back to the Customer, and provide a warranty on the work completed to replace the Customer-owned lead or galvanized service line.

Aqua’s Replacement Program is made up of two parts: (1) replacements in connection with a main replacement project, and (2) replacements per Customer request not associated with a main replacement project.

### **Cap on Replacements Per Year**

Aqua can perform up to 1,500 customer-owned lead or galvanized service line replacements per year.

## **Customer Agreement and Replacement**

In order for Aqua to complete a replacement, the Customer must enter into an agreement with Aqua to replace the Customer-owned lead or galvanized service line. Aqua cannot replace the Customer portion of a lead or galvanized service line without first entering into an agreement. The agreement provides that the Customer will give access to Aqua, or Aqua's contractor, to complete the replacement. To facilitate a smooth customer service line replacement, all property and appliances near where the service line enters the building at the exterior and interior wall must be moved by the homeowner prior to the replacement appointment. Following replacement, Aqua, or Aqua's contractor, will restore the property as reasonably as practicable to its former condition prior to the replacement of the Customer-owned lead or galvanized service line.

## **Dedication of Newly Installed Customer Portion of Service Line and Warranty**

After the new Customer-owned portion of the service line is installed, the Customer-owned portion will be dedicated to the Customer and ownership and responsibility for repair and maintenance of the Customer-owned portion of the service line will remain with the Customer as was the case prior to the replacement. A two-year warranty on the workmanship and materials of the installation and the restoration of surfaces shall be provided.

## **Coordination of Replacements**

Aqua will strive to group customer requested replacements within its operating divisions to create efficiencies. However, Aqua may replace a Customer's lead or galvanized service line if projects cannot be grouped together in its discretion.

## **Filters, Sampling and Testing**

Upon identification of a customer lead or galvanized service line, Aqua will provide a National Sanitation Foundation approved water filter (pitcher or tap filter) and six months of replacement filters. At approximately 3-6 months after replacement is completed, Aqua will offer water sampling materials to Customers or residents, and if Customer or resident wants to have samples taken, Aqua will collect, test, and provide the results from those samples.

## **Reimbursement for Customers that Have Already Replaced a Lead or Galvanized Service Line**

As part of Aqua's Replacement Program, Aqua will, subject to certain requirements discussed below, provide a reimbursement to those Customers that have replaced their Customer-owned lead or galvanized service line at their own cost within one year before or after a lead service line replacement project commencement and within one mile of the project area. If a Customer or property owner refuses or fails to accept the Company replacement of the lead or galvanized customer service line, the Customer or property owner will only be eligible for reimbursement if they replace their Customer lead or galvanized service line at the customer or property owner's expense, within one year of the lead service line project commencement.

Reimbursement will occur for those Customers that provide documentation sufficient, in Aqua's sole discretion, to verify that the Customer replaced the Customer-owned lead or galvanized service line within one year before or after the start of a planned lead service line replacement project main replacement and as long as the Customer is within one mile of the main replacement project or focused replacement area. Customers will be eligible for reimbursement up to 125% of the average cost of Aqua's lead and galvanized replacements. Average cost used to determine reimbursement amounts during a calendar year will be based on Aqua's prior calendar year average costs for lead and galvanized service line replacements. Examples of documentation required by Aqua for a Customer to be eligible for reimbursement include, but are not limited to, detailed estimates from a licensed plumber and paid invoices or statements. A verified statement may also be submitted from the licensed plumber.

Aqua shall make reasonable best efforts to assist a Customer or property owner, if the Customer is not the property owner, through the reimbursement process and, to the extent possible, make determinations in favor of the Customer or property owner where the Customer or property owner has provided reasonable evidence of a customer lead or galvanized service line replacement to Aqua. However, the documentation provided to Aqua must be sufficient in the Aqua's opinion that a customer lead or galvanized service line replacement occurred.

### **Partial Replacements Prohibited**

Under the Pennsylvania Public Utility Commission's ("PUC") regulations, Aqua cannot perform a partial replacement of a lead or galvanized service line. If a Customer causes a partial replacement, by replacing the Customer portion of a lead or galvanized service line without notifying Aqua, Aqua is required to terminate service until a full replacement of the lead or galvanized service line can be completed.

In addition, any Customer that refuses to allow Aqua (or its contractor) to replace the lead or galvanized service line, or refuses to employ its own licensed plumber to replace the lead or galvanized service line, will result in termination of service to the property until the entire lead or galvanized service line is replaced.

Aqua shall use Step In Rights as described in Aqua's tariff to perform a replacement if the customer or occupier of the property is not the owner, and the customer or occupier provides a medical certificate or a Protection From Abuse order (or other court order issued by a court of competent jurisdiction in this Commonwealth which provides clear evidence of domestic violence), subject to the requirements in Aqua's tariff. Aqua may use Step In Rights where the customer or occupier is not the property owner if Aqua has attempted to contact the property owner with an offer to replace the Customer lead service line and has not received a response or the property owner cannot be identified.

### **CONCLUSION**

Aqua recognizes the importance of removing lead from water systems across Pennsylvania both on Aqua owned and Customer-owned assets. Aqua looks forward to working with Customers to achieve this goal.

# EXHIBIT W

Press Release Regarding Action Level  
Exceedance – 40 C.F.R. § 141.85(b)(2)(v)

**Contact:** [INSERT]**For release:** [DATE]

## **IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER<sup>1</sup>**

**BRYN MAWR, Pa.** – [INSERT NAME OF WATER SYSTEM] found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

### **Health Effects of Lead**

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

### **Sources of Lead**

Lead is a common metal found in the environment. Drinking water is one possible source of lead exposure. Lead Service lines, brass faucets, fittings, and valves, including those advertised as “low lead” or “lead-free,” may contribute lead to drinking water. Regulations previously allowed “low lead” fixtures containing up to 8 percent lead. Current regulations only allow “lead-free” fixtures with up to 0.25 percent lead. When water is in contact with pipes, service lines, or plumbing that contains lead for several hours, the lead may enter drinking water. Homes built before 1990 are more likely to have lead pipes or lead solder.

The main sources of lead exposure are lead-based paint, lead-contaminated dust or soil, and some plumbing materials. In addition, lead can be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the workplace and exposure from certain hobbies (lead can be carried on clothing or shoes). Lead is found in some toys, some playground equipment, and some children’s metal jewelry.

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<sup>1</sup> This information contains regulatory or recommended language, and nothing herein is intended as, nor should be construed as, a promise of or contract for payment or reimbursement of expenses incurred for any action you take on account of this information sheet.

## Steps You Can Take to Reduce Your Exposure to Lead in Your Water

- **Run your tap to flush out lead.** If your water hasn't been used for several hours, run your water for a few minutes or until it becomes cold or reaches a steady temperature before drinking or cooking.
- **Use cold water to cook or prepare baby formula.** Do not boil water to reduce lead. Lead dissolves more easily in hot water and boiling water will concentrate the lead.
- **Do not boil water to remove lead.** Boiling water will not reduce lead.
- **Consider alternative sources or treatment of water.** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead or contact NSF International ([www.nsf.org](http://www.nsf.org)) for information on performance standards for water filters. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.
- **Test your water for lead.** Call us at 1-877-987-2782 to find out how to get your water tested for lead.
- **Get your child's blood tested.** Contact your local health department or healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.

## What happened? What is being done?

[Notice Specific Information: Explain why there are elevated levels of lead in the system's drinking water (if known) and what the water system is doing to reduce the lead levels in homes/buildings in this area.]

## Aqua's lead and galvanized service line replacement program

At Aqua, we are implementing a program that involves replacing all lead and galvanized service lines in our drinking water systems at no direct cost to our customers. Information about our lead and galvanized service line replacement program is attached. For more information, call us at 1-866-SLM-AQUA (1-866-756-2782), or visit our website at [www.aquawater.com/lead](http://www.aquawater.com/lead).

"We take seriously our responsibility to sustain life by safely delivering Earth's most essential resource, and our mission is exemplified by our commitment to remove lead service lines from drinking water systems across Pennsylvania," said Aqua Pennsylvania President Marc Lucca. "Our lead service line replacement program enables our team to ensure safe drinking water for our customers without unnecessarily burdening them with the direct cost of replacement."

For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at <http://www.epa.gov/lead> or contact your health care provider.

Aqua Pennsylvania serves approximately 1.5 million people in 32 counties throughout the Commonwealth of Pennsylvania. Visit [AquaWater.com](http://AquaWater.com) for more information or follow Aqua on Facebook at [facebook.com/AquaWater](https://facebook.com/AquaWater) and on Twitter at [@AquaWater](https://twitter.com/AquaWater).

This release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others: the Company's ability to replace all lead and galvanized requiring replacement service lines in its drinking water systems and to do this at no direct cost to its customers. There are important factors that could cause actual results to differ materially from those expressed or implied by such forward-looking statements including: general economic business conditions; the receipt of governmental approvals; and other factors discussed in our Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q, and other filings with the Securities and Exchange Commission. For more information regarding risks and uncertainties associated with Essential Utilities' business, please refer to Essential Utilities' annual, quarterly and other SEC filings. Essential Utilities is not under any obligation — and expressly disclaims any such obligation — to update or alter its forward-looking statements whether as a result of new information, future events or otherwise.

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# ATTACHMENT 2

AQUA PENNSYLVANIA, INC.  
(hereinafter referred to as the "Company")

RATES, RULES, AND REGULATIONS

GOVERNING THE DISTRIBUTION AND SALE OF

WATER SERVICE

IN PORTIONS OF

ADAMS, BERKS, BRADFORD, BUCKS, CARBON, CHESTER, CLARION, CLEARFIELD,  
COLUMBIA, CRAWFORD, CUMBERLAND, DELAWARE, FOREST, JUNIATA,  
LACKAWANNA, LAWRENCE, LEHIGH, LUZERNE, MERCER, MCKEAN, MONROE,  
MONTGOMERY, NORTHHAMPTON, NORTHUMBERLAND, PIKE, SCHUYLKILL,  
SUSQUEHANNA, SNYDER, VENANGO, WARREN, WAYNE, AND WYOMING COUNTIES

IN THE COMMONWEALTH OF PENNSYLVANIA

ISSUED: May 9, 2025

EFFECTIVE: May 10, 2025

By:

Marc Lucca, President  
Aqua Pennsylvania, Inc.  
762 Lancaster Avenue  
Bryn Mawr, Pennsylvania 19010

## **NOTICE**

THIS TARIFF SUPPLEMENT MODIFIES THE EXISTING LEAD SERVICE LINE  
RULES IN COMPLIANCE WITH 52 PA. CODE § 65.51 ET SEQ.

LIST OF CHANGES MADE BY THIS TARIFF

Changes: Supplement No. 2 to Tariff Water-PA P.U.C. No. 4 modifies the lead service line rules (Rules 20.1 and 20.2) in compliance with 52 Pa. Code § 65.51 et seq. and in accordance with the Settlement at Docket No. P-2023-3044459. Refer to pages 1, 2, 3, 4, 48, 49, 50, and 51.

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RULES AND REGULATIONS**SERVICE CONNECTIONS****19. Company's Service Lines:**

Except for service connections made in accordance with Rule 65, the Company will make all connections to its mains and furnish, install and maintain the Company's service main to and including the Curb Stop, which under normal circumstances will be placed inside the curb-line. The Company's service line will be the property of the Company and under its control. The point of delivery and sale for any water service furnished to the Customer shall be at the Curb Stop.

The maximum Company investment per Company service line shall be calculated using the same formula set forth in the definition of Company Contribution in Rule 62.

The cost of any Company service line in excess of the applicable maximum Company investment shall be paid by the Customer, plus all applicable taxes including income taxes occasioned by the contract. The Company may require payment of the estimated amount of such excess cost in advance of the installation and will make a partial repayment of the extent the actual cost is determined to be less than the estimate.

Whenever it is necessary to install a service line in advance of the date on which the premises are occupied and a meter is set, a deposit may be required in an amount not to exceed the estimated cost of installation, which deposit will be refunded to the depositor when the service becomes active (i.e., the meter has been set and the premises occupied), provided that event occurs within five years from the date of deposit.

**20.1. Customer Service Line:** The Customer's service line shall extend from the Property to the Curb Stop or curb line or such point as designated by the Company. All connections, service lines and fixtures owned by the Customer shall be maintained by the Customer in good order, and all meters and appurtenances owned by the Company and located on the Property of the Customer shall be protected properly by the Customer. All leaks in or other deteriorated condition of the Customer's service line or any other pipe or fixture in or upon the premises supplied must be repaired immediately by the owner or occupant of the premises.

**(C)**

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RULES AND REGULATIONS**SERVICE CONNECTIONS (cont'd)****20.2. Customer Owned Lead Service Line Replacements:****(C)**

Notwithstanding Rules 20.1, 21, and 25, the Company (or contractors employed by the Company) shall replace Customer Owned Lead Service Lines ("COLSLs") pursuant to the Company's Lead Service Line Replacement Program ("Replacement Program"), provided the customer (or the property owner if the customer is not the property owner) provides consent through a signed agreement.

Lead Service Line – LSL – shall be defined as a service line made of lead that connects the water main to a building inlet and a lead pigtail, gooseneck or other fitting that is connected to the lead line. A galvanized service line (iron or steel piping that has been dipped in zinc to prevent corrosion and rusting) is considered a Lead Service Line if it ever was or is currently downstream of any lead service line or service line of unknown material.

Customer Owned Lead Service Line – COLSL – shall be defined as the portion of the lead service line extending from the curb, property line or Company connection to the Company's water meter or, if the Company's water meter is located outside of the structure or water is not metered by the Company, at the first shutoff valve located within the interior of the structure.

The Company will replace up to 1,500 COLSLs per year under the Company's Replacement Program. If reimbursements would cause the Company to exceed its current annual cap, the Company shall increase its current annual cap by the amount of the reimbursement and decrease its next annual cap by this amount.

If no shutoff valve exists along the pipe within 5 feet of the Customer's structure wall, the Company may install a shutoff valve which will serve as the point of demarcation between the property's service line and the property's interior water distribution piping.

No customer or property owner may install a partial LSL. A partial LSL shall result in termination of service until such time as the Company can replace the Company-owned LSL. A customer, or property owner where the customer is not the property owner, that elects to replace the COLSL themselves, shall replace the COLSL concurrent with the Company replacing the Company-owned LSL, provided that the customer or property owner shall provide the Company at least 90 days' notice prior to replacing the COLSL.

The Company shall refuse to establish service to a property where a customer or property owner (if the customer is not the property owner) has previously refused or failed to accept the Company's offer to replace the COLSL until the applicant verifies the replacement of the COLSL by providing a paid invoice from a licensed contractor or verified statement from a licensed contractor attesting to the completion of the COLSL replacement. The customer or property owner may also request Aqua (or its contractor) complete the COLSL replacement. Upon completion, service will be established or restored to the property.

Through the Replacement Program the Company will perfect any ownership discrepancies regarding the Company Service Line and the Customer Service Line, so that the Customer will own the Customer Service Line and the Company will own the Company Service Line. This will occur by the Customer and the Company executing the Customer Lead/Galvanized Service Line Replacement License Agreement which establishes the Customer's and Company's respective ownership and responsibilities regarding the Customer Service Line and Company Service Line.

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RULES AND REGULATIONS**SERVICE CONNECTIONS (cont'd)****20.2. Customer Owned Lead Service Line Replacements (cont'd):****(C)**Step-In Rights

A. Step-In Rights Defined. In reference to 52 Pa. Code § 65.58(c)(3), Step-In Rights means the right of the Company to avoid termination of service to a property where the resident of the Property is not the property owner, and the property owner is nonresponsive to the Company's offer to replace a COLSL.

The Company can utilize Step-In Rights in the following circumstances where a Customer or occupier of a premise is not the property owner.

1. The Company has attempted to contact the property owner with an offer to replace the COLSL in accordance with the Company's LSLR Plan;
2. The Customer or the occupier of the Property is not the property owner; and
3. The Company has attempted to get authorization to replace the COLSL, the property owner cannot be identified, or the property owner has been notified and has not responded to the Company's offer to replace the COLSL.

B. Circumstances Where the Company Must Use Step-In Rights.

1. The Company shall use Step-In Rights to avoid the termination of water service and replace a COLSL when the Customer or occupant of the Property provides a medical certification signed by a licensed physician, nurse practitioner or physician's assistant to the Company by fax, email or mail (providing the contact information).
2. The Company shall use Step-In Rights to avoid the termination of water service and replace a COLSL when the Customer or occupant provides a Protection From Abuse (PFA) order, or other court order issued by a court of competent jurisdiction in this Commonwealth which provides clear evidence of domestic violence.
3. The Company shall use Step-In Rights to avoid the termination of water service to the Customer or the occupant of the Property except when, in the Company's reasonable judgement, replacement would place its workers or utility facilities at a safety risk and in such instance, the Company may use Step-In Rights at its discretion.

C. After the replacement is complete, the Company will restore roadways and public sidewalks, backfill any trenches excavated as part of the replacement process and will fill and seal any wall or floor penetrations caused by the service line replacement in the structure at the Property (Company Restoration Work). No other restoration will be conducted for the Customer side replacement. The Company will not replace any landscaping, interior finishes, paving, seeding, or walkways (Private Side Restoration Work), and all restoration costs for such Private Side Restoration Work shall be borne by the property owner.

D. When the Company exercises Step-In Rights, the Company's liability shall be limited to the amount in Section 51 of its Water Tariff for any action brought against the Company, its officers, directors, employees and agents for damages arising from any and all liability, including liability to third parties and the property owner, for personal injury, including death, property damage, or other actions, damages, fines, penalties, claims, demands, judgments, losses, costs, expenses, suit and actions (including reasonable attorney's fees), for personal injury, including death, property damage or other injury, to the extent caused by or arising out of the work performed by the Company or its agents in replacing the customer-owned LSL and/or the Company Restoration Work that the Company is responsible for under subsection C above.

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RULES AND REGULATIONS**SERVICE CONNECTIONS (cont'd)****20.2. Customer Owned Lead Service Line Replacements (cont'd): (C)**  
Reimbursements

The Company shall provide a reimbursement to an eligible customer or property owner, if the customer is not the property owner, who replaced their LSL within 1 year before or after the commencement of a Lead Service Line Replacement ("LSLR") Project. A LSLR Project shall be defined as a Company scheduled lead service line replacement activity either in conjunction with main replacements, or a specific delineated project area to replace LSLs. LSLR Project Commencement shall be defined as installation of the first lead service line replacement within a lead service line project area. LSLR Project Area shall be defined as the area encompassing the Company's scheduled lead service line replacement activities, which includes the area within a 1-mile radius of a LSLR Project, if that area is served by the Company.

Reimbursements to customers or property owners, if the customer is not the property owner, require that the customer or property owner provides the Company with a paid invoice, a certification or verified statement from a certified plumber, and other documentation required by the Company, in its sole discretion, to verify the replacement. Failure to provide sufficient information will result in no reimbursement being paid. The Company shall reimburse eligible customers or property owners up to 125% of the average costs of Aqua's LSLRs, not to exceed the actual cost incurred by the customer to replace their LSL. The average cost of Aqua's LSLRs in any year will be determined by the average cost of Aqua LSLRs in the prior calendar year. Reimbursements will be provided to customers or property owners through check mailed to the customer or property owner within 90 days of the request; provided that all documentation is sufficient and received by the Company. Customers or property owners that are outside the LSLR Project Area or seek reimbursement for a replacement that occurred greater than one year before or after the LSLR Project Commencement will be ineligible for reimbursement.

Warranty

The Company (or its contractor) shall provide a warranty to the customer or property owner, if the customer is not the property owner, for a period of two years on the workmanship and materials of the LSLR and the restoration of surfaces. The two-year warranty shall commence upon the re-establishment of water service to the property after the LSLR has occurred.

The maximum coverage under the warranty shall be only to repair or replace the Customer side service line if the failure was due to the workmanship or materials of the LSLR, and restoration of surfaces which shall mean restoration as reasonably as practicable to the condition that existed prior to the LSLR. The maximum coverage amount for replacing or repairing the Customer side service line if the failure was due to the workmanship or materials of the LSLR, and restoration of surfaces shall be an amount up to Twenty Thousand Dollars (\$20,000.00).

The Company will not be liable for any damages beyond the maximum coverage of the two-year warranty as described in this warranty section.

If a repair is required and qualifies under the warranty, the customer or property owner consents and grants license to Aqua or its contractor to access the property and complete the repair as needed.