Testimony of Environmental Advocates NY

Before the Troy City Council

Lead Service Lines in Troy, New York

February 2, 2023

Environmental Advocates NY appreciates the opportunity to submit testimony to the Troy City Council on the urgency of replacing lead service lines ("LSLs") in Troy and providing every Troy resident clean, lead-free water. LSLs pose one of the greatest threats to our drinking water, disproportionately harming low-income communities and communities of color when they turn on the tap.

We are alarmed that the City of Troy ("the City") has not been taking the necessary and proper action to protect the health of its residents from LSLs and reduce the prevalence of lead exposure. In March 2018, the City received over $500,000 in grant funding from the NYS Department of Health ("DOH") to conduct full LSL replacements at no cost to property owners. Yet nearly 5 years later, the City has not spent any of these funds, and currently has no plan in place to do so.

Even more shocking is that according to some residents, whose comments you will hear tonight, the City has been aware of families whose properties are served by LSLs and who have detected elevated levels of lead in their drinking water. Some of these families even have children who have been lead-poisoned. The City's apparent unwillingness to intervene to safeguard the wellbeing of these vulnerable community members is unacceptable. We submit these comments in solidarity with everyone in the Troy community demanding action.

Many other cities that have benefitted from DOH's LSL replacement grant funding spent their full award years ago. There is no good reason why the City should not also have done so, especially since the City recently exceeded the US Environmental Protection Agency's ("EPA") Action Level for lead in drinking water[1] and continues to detect dangerous levels of lead.[2]

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[1] City of Troy, "2021 Annual Water Quality Report," https://www.troyny.gov/wp-content/uploads/2022/05/AWQR2021.pdf.

[2] Albany Times Union, "Troy doubles testing after lead found in 4 homes' water samples," January 2023, https://www.timesunion.com/news/article/troy-detects-lead-water-four-60-homes-tested-17752186.php.

This testimony will provide information on the dangers of lead in drinking water and LSLs, background on DOH's grant program and other municipalities' success with this funding, and the actions that the City must immediately take to get the lead out of drinking water, including:

1. Swiftly spending all of its LSL replacement grant funding, in line with best-practices such as prioritizing replacements for and providing health resources to families with lead-poisoned children;
2. Applying for new funding for LSL replacement through the federal Infrastructure Investment and Jobs Act ("IIJA");
3. Developing a plan to achieve 100% LSL replacement in Troy, including the identification of local funding sources;
4. Urging the Governor and State Legislature to appropriate and award significant state funding for LSL replacement; and
5. Completing a full service line inventory by October 2024 as required by EPA.

Replacing LSLs cannot be put on the back burner. The City has a responsibility to do everything in its power to provide every resident clean drinking water, and it must demonstrate its commitment to achieving 100% LSL replacement. Troy residents deserve nothing less.

Health Hazards of Lead in Drinking Water

There is no safe level of lead exposure. The EPA has established a Maximum Contaminant Level Goal of 0 parts per billion ("ppb") for lead in drinking water, defined as the level below which there is no known or expected risk to health.[3] The American Academy of Pediatrics has recommended an enforceable standard of 1 ppb be set for lead in school drinking water to fully protect human health.[4]

Even low levels of exposure to this harmful neurotoxin can cause permanent damage to the human body, including decreased cognitive function, developmental delays, and behavioral problems. Other harmful health effects include heart and kidney disease, fetal miscarriages, and premature birth. More severe exposure can result in seizures, coma, and even death.[5]

Young children and pregnant women are especially sensitive to lead in drinking water. Formula-fed infants can receive 40-60% of their lead exposure from drinking water.[6] A 2017 study by EPA scientists concluded that a substantial proportion of the blood level levels ("BLLs") of infants aged 0-6 months comes from water ingestion (Figure 1).[7] In addition, for the most at-risk

[3] US EPA, "Basic Information about Lead in Drinking Water," https://www.epa.gov/ground-water-and-drinkingwater/basic-information-about-lead-drinking-water.
[4] American Academy of Pediatrics, "Prevention of Childhood Lead Toxicity," 2016, https://publications.aap.org/pediatrics/article/138/1/e20161493/52600/Prevention-of-Childhood-Lead-Toxicity.
[5] ATSDR, "What Are Possible Health Effects from Lead Exposure?," https://www.atsdr.cdc.gov/csem/leadtoxicity/physiological_effects.html.
[6] Pittsburgh Water and Sewer Authority, "Important Information about Lead in Your Drinking Water," https://apps.pittsburghpa.gov/pwsa/PWSA_Lead_Brochure.pdf.
[7] Zartarian et al., "Children's Lead Exposure: A Multimedia Modeling Analysis to Guide Public Health DecisionMaking," Environmental Health Perspectives, 2017, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5915183/.

children exposed to numerous sources of lead, levels of lead in drinking water as low as 5 ppb can cause an infants' BLL to exceed the Center for Disease Control's Blood Lead Reference Value of 3.5 micrograms per deciliter (Figure 2).[8]

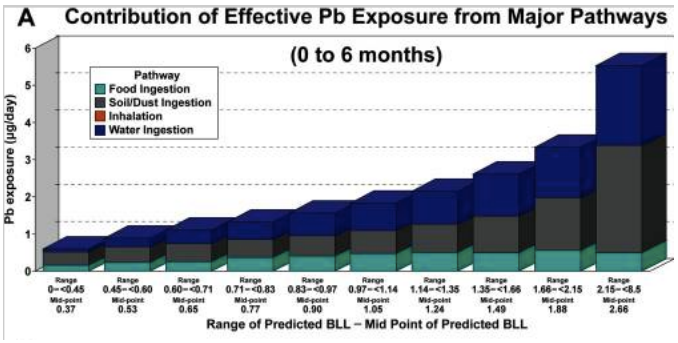

Figure 1

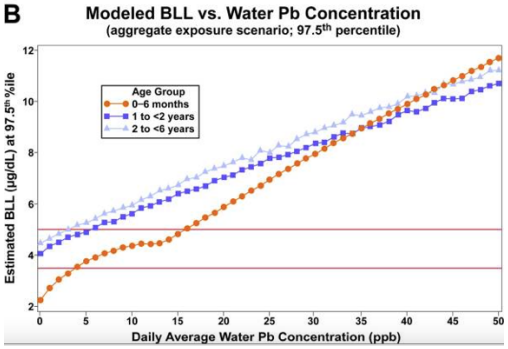

Figure 2

This evidence shows the need to eliminate lead in drinking water simultaneously with other sources of lead exposure, including lead paint. While lead paint is a primary source of exposure for many children, additional lead present in drinking water can push BLLs to even higher and more dangerous levels. Because lead paint and LSLs are both more common in older housing stock, the communities most at risk of lead paint are also the communities most at risk of experiencing lead in drinking water contamination.

Background on LSLs

DOH, the agency charged with enforcing lead in drinking water regulations in New York, currently defines an LSL as "a service line made of lead which connects the water main to the building inlet and any lead appurtenances connected to the lead service line."[9] EPA estimates that LSLs contribute between 50-75% of the total amount of lead in a building's drinking water, making these pipes the greatest contributors of lead in drinking water.[10]

The best indicator of a person's risk of being exposed to lead in drinking water is the presence of a lead service line. It is close to impossible to fully prevent lead from leaching from LSLs into drinking water.[11] Wherever LSLs are present, contamination will ultimately occur. A change in water temperature, chemistry, and flow rate can all corrode LSLs and cause lead to entering drinking water. In addition, physical disruption of LSLs, including from street construction, can dislodge lead from the LSL which then contaminate the water.

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[8] Centers for Disease Control and Prevention, "Blood Lead Reference Value," https://www.cdc.gov/nceh/lead/data/blood-lead-reference-value.htm.
[9] NYS DOH, "Public Water Supply Regulations," https://regs.health.ny.gov/content/section-5-11-definitions.
[10] AWWA Research Foundation, "Contribution of Service Line and Plumbing Fixtures to Lead and Copper Rule Compliance Issues," 2008, https://archive.epa.gov/region03/dclead/web/pdf/91229.pdf.
[11] Corrosion control, a process of adding chemicals to drinking water in order to coat service lines and prevent lead leachage, is extremely difficult to operate correctly and is not fully effective. While it can be an interim measure for dealing with elevated levels of lead, corrosion control is not a long-term solution.

New Yorkers living in older housing stock, especially housing constructed before 1945, are at greater risk of having an LSL. Historically, lead was used because it was less expensive than iron, could more easily be bent around existing structures without leaking, and allowed more durable connections to stiffer pipes that expand and contract with temperature.[12] New York City prohibited the installation of new LSLs in 1960, and the US Environmental Protection Agency (EPA) prohibited service lines from containing more than 8% lead in 1986. In 2014, EPA mandated that all plumbing cannot contain more than 0.25% lead.

LSLs are also more common in smaller housing stock, such as single-family homes and two- and three-flat apartment buildings. Lead is a soft and malleable material which will buckle if large volumes of water flow through it. This prevented the use of LSLs at most skyscrapers, schools, and other large buildings with high water usage.

New York has one of the highest totals of LSLs in the nation. In 2016, the American Water Works Association estimated that there are 360,000 LSLs across the state.[13] Based on this estimate, New York is believed to rank fourth among all fifty states when judged by the number of LSLs.[14]

Given the prevalence of older and smaller building stock in Troy, the City is estimated to have thousands of LSLs still delivering drinking water to residents, though the City lacks a more precise estimate as it has not completed a full inventory of its service lines.

The Lead Service Line Replacement Program: Comparing Troy and Other Municipalities

In 2017, former Governor Cuomo and the State Legislature created the Clean Water Infrastructure Act ("CWIA"), a $2.5 billion initiative to protect clean water across the state. One of the programs created and funded by the CWIA was the Lead Service Line Replacement Program ("LSLRP").[15]

Since 2017, the LSLRP has provided $30 million in grants to 44 municipalities across the state to conduct full lead service line replacements, regardless of whether the LSL is owned by the municipality, the property owner, or both. This policy prevents partial LSL replacements, where only half of an LSL is removed, causing cause lead levels in drinking water to actually increase. It also ensures that economically-struggling property owners are not burdened with thousands of dollars in costs to dig up a pipe that they didn't put in the ground. Both are key components of ensuring that lead reduction efforts are truly equitable.

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[12] Minnesota Department of Health, "Assessment of Eliminating Lead in Minnesota Drinking Water," 2019, https://www.health.state.mn.us/communities/environment/water/docs/leadreport.pdf.
[13] Cornwell et al., "National Survey of Lead Service Line Occurrence," 2016, http://media.mlive.com/news_impact/other/jaw201604cornwell_pr.pdf.
[14] NRDC, "Lead Pipes are Widespread and Used in Every State," https://www.nrdc.org/lead-pipes-widespreadused-every-state.
[15] NYS DOH, "Lead Service Line Replacement Program Overview," https://www.health.ny.gov/environmental/water/drinking/lslrp/index.htm.

The LSLRP also covers the full range of costs associated with LSL replacements, including engineering fees, legal fees, municipal administration fees, construction (materials, equipment, labor) and site/property restoration.

In March 2018, the City agreed to a contract with DOH and received $516,565 in LSLRP funds, one of twenty-seven municipalities awarded in the program's first grant cycle. But according to research conducted by the organization Timber, nearly five years later, "Troy is the only Round 1 City to spend none of the LSLRP money and the only Round 1 municipality to not request an extension after having spent less than 85% of the funds" (Figure 3).[16]

Municipality	Category	Contract #	Contract Amount	Amount Spent	Start	End	Approved	Amended	Amended Approval	2nd Amended	2nd Amended Approval	% Spent
Albany	City	C33199GG	$516,565.00	$516,565.00	3/1/18	2/29/20	3/15/18	2/28/22	6/25/20			100.00%
Syracuse	City	C33200GG	$698,134.00	$698,134.00	3/1/18	2/29/20	5/29/18	2/28/22	6/11/20			100.00%
Auburn	City	C33201GG	$698,134.00	$698,134.00	3/1/18	2/29/20	4/13/18	2/28/22	7/15/20			100.00%
Rochester	City	C33202GG	$538,096.00	$538,096.00	3/1/18	2/29/20	4/25/18					100.00%
Middletown	City	C33211GG	$544,745.00	$544,745.00	3/1/18	2/29/20	4/13/18	2/28/22	6/12/20			100.00%
Buffalo	City	C33220GG	$567,492.00	$567,492.00	3/1/18	2/29/20	2/13/19	2/28/22	7/20/20			100.00%
Schenectady	City	C33198GG	$516,565.00	$516,556.98	3/1/18	2/29/20	5/17/18	2/28/22	7/7/20			100.00%
Newburgh	City	C33209GG	$544,745.00	$543,015.00	3/1/18	2/29/20	4/13/18	2/28/22	2/16/21			99.68%
Jamestown	City	C33222GG	$567,492.00	$561,897.81	3/1/18	2/29/20	4/13/18	2/28/22	7/31/20			99.01%
Kingston	City	C33212GG	$544,745.00	$529,822.59	3/1/18	2/29/20	3/29/18	2/28/22	7/15/20	2/28/24	3/17/22	97.26%
Long Beach	City	C34393GG	$611,363.00	$533,267.58	3/1/18	2/29/20	10/8/20					87.23%
Niagara Falls	City	C33221GG	$567,492.00	$472,166.84	3/1/18	2/29/20	4/13/18	2/28/22	6/25/20	2/28/24	5/17/22	83.20%
Watertown	City	C33217GG	$607,629.00	$479,675.57	3/1/18	2/29/20	5/7/18	2/28/22	7/30/20	2/28/24	3/17/22	78.94%
Poughkeepsie	City	C33210GG	$544,745.00	$399,928.00	3/1/18	2/29/20	9/6/18	2/28/22	6/11/20	4/12/22	2/28/24	73.42%
Elmira	City	C33219GG	$663,185.00	$469,044.73	3/1/18	2/29/20	9/5/18	2/28/22	7/31/20	2/28/24	3/17/22	70.73%
Lyons	Town	C33203GG	$538,096.00	$357,339.00	3/1/18	2/29/20	9/21/18	2/28/22	6/25/20			66.41%
Binghamton	City	C33218GG	$663,185.00	$412,554.00	3/1/18	2/29/20	1/28/20	2/28/22	7/30/20			62.21%
New York City	City	C33215GG	$5,323,903.00	$2,646,414.42	3/1/18	2/29/20	9/11/19	2/28/22	6/11/20	2/28/24	3/18/20	49.71%
Gloversville	City	C33214GG	$623,655.00	$264,949.52	3/1/18	2/29/20	4/13/18	2/28/22	7/20/20	2/28/24	3/17/22	42.48%
Utica	City	C33213GG	$623,655.00	$262,658.98	3/1/18	2/29/20	8/16/18	2/28/22	6/12/20	2/28/24	4/13/22	42.12%
North Hempstead	Town	C33208GG	$611,363.00	$228,032.00	3/1/18	2/29/20	6/8/18	2/28/22	6/12/20	2/28/24	3/17/22	37.30%
Geneva	City	C33204GG	$538,096.00	$168,984.00	3/1/18	2/29/20	3/14/18	2/28/22	7/31/20	3/17/22	2/28/24	31.40%
Hudson	City	C34396GG	$548,422.00	$153,491.25	6/1/29	5/31/23						27.99%
Gouverneur	Town	C33216GG	$607,629.00	$36,410.53	3/1/18	2/29/20	5/2/18	2/28/22	7/7/20	2/28/24	3/17/22	5.99%
Hempstead	Town	C33207GG	$611,363.00	$6,395.30	3/1/18	2/29/20	3/29/18	2/28/22	7/8/20	2/28/24	4/13/22	1.05%
Troy	**City**	**C33197GG**	**$516,565.00**	**$0.00**	**3/1/18**	**2/29/20**	**6/26/18**					**0.00%**
Southold	Town	C33205GG	$611,363.00	$0.00	3/1/18	2/29/20	6/25/18	2/28/22	7/14/21	2/28/24	05/09/22	0.00%

Figure 3: LSLRP Round 1 Awardee Spending Data

Troy stands in stark contrast to other municipalities that took swift advantage of these new resources to protect the health of their residents. Ten Round 1 awardees, including neighbors like Albany and Schenectady, have spent essentially 100% of their LSLRP funds. According to separate data provided by DOH, eight of those ten awardees had requested reimbursement for all of their funds by July 2021, over a year and a half ago. Collectively, those eight municipalities replaced 951 LSLs with their LSLRP funding, with the average cost per LSL replaced ranging from $3,200 to $8,600 (Figure 4).

[16] Timber, "LSLRP Public Comments," February 2023, https://drive.google.com/file/d/1ND1QybZIPq8H1RWKsI4kzWdcnZ8wSS-7/view.

Municipality	LSLRP Award	Percent of Award Vouchered	Contract Approved	Date of 100% Vouchered	Total LSLs Replaced	Average Cost per LSL Replaced
Rochester	$538,096	100.0	4/25/18	3/30/20	129	$4,171
Auburn	$698,134	100.0	4/13/18	6/25/20	214	$3,262
Buffalo	$567,492	100.0	2/14/19	12/22/20	128	$4,433
Albany	$516,565	100.0	3/15/18	3/31/21	74	$6,980
Syracuse	$698,134	100.0	5/31/18	7/27/21	81	$8,618
Schenectady	$516,565	100.0	5/17/18	6/10/21	93	$5,554
Newburgh	$544,745	99.7	4/13/18	2/10/20	76	$7,144
Jamestown	$567,492	99.0	4/13/18	7/2/21	156	$3,601

Figure 4

In addition, other municipalities still in the process of spending their LSLRP funds continue to make steady progress in utilizing those resources. For example, Watervliet, just across the Hudson River, was awarded $548,422 in Round 2 in 2019, which they used to replace 41 LSLs in 2020 and another 16 LSL in 2022.[17]

Ultimately, the City's unnecessary and unconscionable delay in spending its LSLRP funds means that hundreds of residents who could have had their LSLs removed instead remain at risk of exposure to a dangerous neurotoxin when they turn on the tap. The City must provide resident with a comprehensive update as to the status of its funds, whether a request for a grant extension needs to be filed with DOH, and the plan for getting money out the door quickly.

No Reason for Delay in Spending LSLRP Funds

There is no reason why the City should not have also spent 100% of its LSLRP funds by now. There should be no concerns from the city about liability issues with replacing a privately-owned LSL. Other cities where the property owner is legally responsible for the service line, including Albany, have developed policies and procedures to obtain customer consent and legal safeguards before the work is conducted. The City can and must do the same.

Nor does the City have to complete a full inventory of its service lines before spending the grant award. Few of the cities that have spent all of their LSLRP funds have completed inventories. Obviously, the LSLRP did not provide the City enough funding to dig up all of its LSLs; the initial goal of the program was to help municipalities develop the policies and procedures to *start* digging up LSLs, and conduct as many replacements as possible while additional funding became available. The longer the City waits to dig up lead pipes, the longer that residents are kept at risk.

[17] News10, "Watervliet to continue replacing lead water lines," July 2022, https://www.news10.com/news/albany-county/watervliet-to-continue-replacing-lead-water-lines/.

Importantly, the City should not rely solely or even mainly on property owners to report when they have an LSL to determine where to conduct replacements. Resident reporting can be helpful, but the LSL problem is a city-wide issue and it demands a deliberate and coordinated intervention from the city to address it. Under the EPA's Lead and Copper Rule Revisions, the City is currently required to review a number of record sources to determine the potential locations of LSLs in its system, including construction and plumbing codes, permits, distribution system maps and drawings, historical records on each service connection, meter installation records, historical capital improvement or master plans, standard operating procedures, and inspections and records of the distribution system that identify the service line material.[18] In addition to a written records review, the city should conduct a neighborhood canvassing operation, going door-to-door to ask residents about LSLs and help identify them.

Concerns about whether or not LSLRP funds can be spent "fairly" should also not prevent progress from happening. There are clear prioritizations for where LSL replacements should first be targeted that can achieve near universal agreement: families with lead-poisoned children, high poverty areas, etc. The most unfair outcome would be for no one's pipes to be replaced.

Finally, if the City believes that changes to the city code are necessary to begin LSL replacements, it should quickly identify and share with the public what changes it is considering. Ultimately, if those changes are necessary, they should have been initiated when the City received its grant award, not close to 5 years later.

Actions Needed to Get the Lead Out

The City must dramatically overhaul its approach to lead service lines and be much more aggressive and proactive in eliminating lead exposure. EANY recommends that the City take the following steps to get the lead out of drinking water:

1. <u>Swiftly spending all of its LSL replacement grant funding, in line with best-practices such as prioritizing replacements for and providing health resources to families with lead-poisoned children.</u>

   Troy should develop a gold-standard LSL replacement program with its LSLRP funds and beyond. Recently, a national coalition of clean water advocates and community groups impacted by lead poisoning released *Principles for Lead Service Line Replacement*, a comprehensive list of best-practices for how to efficiently and equitably implement LSL replacements across the country.[19] Some of the principles that Troy should integrate into its program include prioritizing homes in areas already burdened by lead, using copper rather than plastic as a replacement material, and providing certified filters to residents for a period of time after LSL replacement occurs.

[18] 40 CFR § 141.84, "Lead service line replacement requirements," https://www.law.cornell.edu/cfr/text/40/141.84#a.
[19] NRDC et al., "Principles for Lead Service Line Replacements," February 2022, https://www.nrdc.org/sites/default/files/principles-for-lead-service-line-replacements-20220228.pdf.

2. Applying for new funding for LSL replacement through the federal Infrastructure Investment and Jobs Act ("IIJA");

   In 2021, the federal government enacted the IIJA, which included $15 billion in grant and loan funding to conduct LSL replacements nationwide. New York will receive over $500 million of IIJA LSL funding over the next five years, more money than the state has ever had for this purpose. The NYS Environmental Facilities Corporation (EFC), which will administer the program, has already accepted the first round of applications from municipalities seeking to access this funding, with initial award announcements expected shortly. It is unclear whether or not the City applied for this first round; given its failure to spend its LSLRP funding, the answer is likely no. Troy must commit to applying for substantial IISJA LSL funding as soon as the next opportunity arises.

3. Developing a plan to achieve 100% LSL replacement in Troy, including the identification of local funding sources;

   The only way to eliminate lead exposure is to remove the sources of that exposure entirely. The City must conduct a deep engagement with the community to develop a plan on how to achieve 100% LSL replacement, ideally in no more than ten years. Identifying local funding sources to complement available state and federal funds will be critical Albany recently went through and completed its LSL replacement plan, and the City could learn much from their experience.

4. Urging the Governor and State Legislature to appropriate and award significant state funding for LSL replacement.

   The $500 million that New York is receiving from the IIJA will not be enough to replace every LSL across the state; the total need that New York faces is at least $2 billion. The Governor and the State Legislature must therefore step up and provide significant funding to accelerate LSL replacements. Over the last several years, New York has appropriated $4.5 billion for the CWIA, much of which the Governor could allocate for this purpose (the LSLRP has only received $30 million of the $4.5 billion, and has not provided new grant awards since 2019). Similarly, voters overwhelmingly approved the $4.2 billion Clean Water, Clean Air, and Green Jobs Bond Act last November, a portion of could be spent on LSL replacement. The City should urge state leaders to immediately allocate current funding and appropriate new resources for LSL replacement.

5. Completing a full service line inventory by October 2024 as required by EPA.

   The City should provide an update on its progress towards complying with EPA's requirement to categorize every service line in its system as either lead, not lead, or of unknown material, and it should detail ways that it plans to make the resulting inventory easily accessible to the public online, including through GIS mapping.

Conclusion

It is EANY's understanding that a meeting of the City's Utility Committee is being scheduled for several weeks from now to discuss a plan to address LSLs. Our organization will closely engage with these next steps and continue supporting community members in their demands to be protected from the hazards of lead. Troy residents should not have to wait any longer for their local government take to such common-sense actions as spending lead remediation money that was willingly accepted. We hope that these comments and others will spur the City to finally address this issue with the urgency that it deserves.

Sincerely,

Rob Hayes
Director of Clean Water
Environmental Advocates NY