



February 12, 2020

Mr. David Ross  
Assistant Administrator, Office of Water  
U.S. Environmental Protection Agency (EPA)  
1200 Pennsylvania Avenue, NW  
Washington, D.C. 20460

**Attn: Docket ID No. EPA-HQ-OW-2017-0300**

Dear Assistant Administrator Ross:

Please accept these comments on the proposed “Lead and Copper Corrosion” rule (often simply called “L & C rule”). These comments are offered as a follow up to the earlier comments submitted to EPA in 2018 when your staff requested comments from state and local agencies in anticipation of the proposed rule. Those earlier comments are included. *(It was not clear if the March 2018 call for comments was classified as an official Advanced Notice of Proposed Rulemaking or merely an outreach by the intergovernmental affairs office at EPA).*

#### Executive Summary

Commenter supports EPA issuing a rule to address lead and copper corrosion. However, the proposed rule still may be improved. Some of the improvements recommended in these comments are to address human health protection and others are for economic protection—to protect the homeowner, renter, consumers and business owners who will, in a practical sense, be indirectly affected to any rule that covers lead and copper corrosion found in local water system and schools. While I commend EPA for focusing on the issues in a step-wise manner—focusing on local water systems and schools, the public will become concerned about their local homes and businesses when they learn that a local water system has detected lead and copper. Thus, comments address some real-world recommendations about what happens when the public understands that the U. S. EPA regulation has a rule that identified copper and lead—and when the local community will expect action. It is a totally predictable outcome even if the rule itself only applies to water systems (private and public) and schools. We experienced a similar series of events in Washington, D. C. when lead was detected in U. S. governmental buildings, public schools and private sector in the 1980s. U.S. EPA itself closed off water fountains found in the older U.S. EPA building. To commenter’s knowledge, U. S. EPA’s current main building at 1200 Pennsylvania Ave, NW in Washington, D. C. still has no functioning public water fountains due to lead in building’s very old city pipes first identified in the 1980s. In the late 1980s, when lead was detected in older pipes the Washington, D. C. public became worried, and sometimes outraged, learning there is lead in drinking

water. Presumably EPA or GAO has determined it is very expensive to replace those older pipes or the remediation would have been done quickly. Sometimes the public does not understand that the pipe issue stems from very old infrastructure and what the costs would be to replace those water pipes from curb to the interior of the buildings. Given the events of Flint and other cities, U. S. EPA needs to expect that even if the final applies to water systems and schools, homes and local businesses may be affected by public response. U.S. EPA needs to expect this and have clear communications system prepared before the rule is issued as a result.

For some of us old enough to recall the radon panic of mid 1980s, we can learn from how to protect consumers from nefarious contractors who may prey upon older, poorer and those who do not understand science and public health language. I encourage you to work address these communications and consumer protection issues with the same vigor you have used to address public health exposure standards. An effective lead and copper rule needs to address both science and the public's ability to differentiate between real health risks and exaggerated risks by fraudulent businesses or landlords who might use 'risk' as an excuse to expel existing renters for financial gain. This is especially important given the history of bad actors with radon exposure and renovations to homes and businesses. In this case, attention to these indirect impacts are even more critical given how important real estate values are to the vast majority of Americans.

The comments' reference to providing critical human health protection information in key languages (updated based upon current immigration data) is NOT meant to be derogatory or anti-immigrant. Many legal immigrant-own small businesses potentially affected by L & C rule are in food business, food storage, commercial product sales, or are homeowners. They need to understand the inventory issue and what are correct actions to take if lead or copper corrosion is detected. Many native English speakers have difficulty understanding scientific jargon and our immigrant population often has the same difficulty.

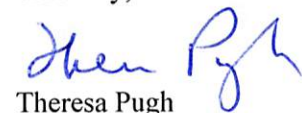
EPA's final rule should provide for L & C compliance webinars, conference calls or on-site training coordinated with other state certification programs for construction or plumbing businesses. U. S. EPA's final rule (and any implementation by state agencies) should be expansive in including the largest number of qualified to undertake detection and remediation. Seminars and compliance advisories should include all likely businesses to undertake this enterprise for a reasonably smooth implementation of the rule. The purpose of the rule is to protect public health for all- not to preclude businesses. In this instance, ability to attend any U. S. EPA workshops, webinars or participate in conference calls for learning how to comply

Commenter's background and qualifications for filling:

Commenter has worked with and for municipal governmentally owned/operated water utilities co-managed by electric utilities for almost 20 years. Thank you for reading these comments that supplement comments submitted March 8, 2018<sup>1</sup>. Some of those points are still relevant.

For answering questions, commenter may be reached at 703-507-6843.

Sincerely,



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<sup>1</sup> Submitted to EPA Docket EPA-HQ-OW-2018-007 and available through official EPA docket or at <https://theresapughconsulting.com/wp-content/uploads/2018/03/Comments-Lead-Copper-Federalism-ConsultationFINAL.pdf>

## Recommendations

- 1) The proposed rule's preamble and proposed rule language are not always consistent in the proposed rule. The final rule should be clear than the proposed rule. For example, the proposed rule's language might create an unexpected fear in the public if the inventory results in many parties finding "unknown material" in inventory results when referring to original infrastructure materials. "Unknown materials" may intend to explain that the original constructed materials are unknown but not imply they are pollutants. For some in the public "unknown material" may accidentally imply some other type of pollutant or cause for concern. It is very important that the "unknown material" term does not create confusion or panic in public who might assume that this must mean their pipes contain other pollutants because they learn there may be lead or copper corrosion. Perhaps the terminology should be changed to "unknown construction materials". As mentioned in the introduction, the rule's coverage of water systems and schools is appropriate. But as soon as the information is available to the public that pollutants have been detected there will be immediate questions asked about similarly aged or designed pipelines serving local homes, small businesses (especially those in food industry) and other parties. The rule may say it applies to limited parties but it is human nature for the public to immediately expect answers about their own drinking water once sampling is announced and conducted. We should expect the public will expect explanations about lead and copper corrosion to prove that their drinking water is safe.
- 2) In the 1980s there were many instances of contractors and fraudulent laboratories that panicked homeowners in areas where lab results detected indoor radon—but sometimes not at any serious human health risk. In those cases, some homeowners were duped into spending a great deal of money to "correct" a problem that merely meant the homeowner needed better ventilation in residential unfinished basements for storage and HVAC equipment—sometimes by purchasing a \$10 electric fan<sup>2</sup> or opening a window during spring, summer and fall months in unfinished basements or adjusting existing HVAC system in finished basements. Commenter is not suggesting there were no legitimate concerns about indoor radon exposure. There were. But there were many dozens of news stories about people acting upon fear and lack of understanding about legitimate, low cost ways to address radon exposure without tremendous remediation costs. There are some similar stories about small amounts of non-friable asbestos found in flooring found in older basement floors where leaving the asbestos alone or securely covering flooring might be a totally suitable method reduce exposure.

Commenter wants to see that the EPA lead and copper final rule does not inadvertently panic consumers or create opportunities for nefarious businesses 'upselling' unnecessary and expensive solutions to exaggerated risks. EPA and state agencies need to be cognizant that identification of lead and copper corrosion might have a swift and difficult to correct impacts on economic values of homes and home-based businesses—especially those home businesses in food distribution and construction industry.

- 3) Similarly, U. S. EPA should design and provide public education information on its website that explains the rule and the pollutants even if the rule does not directly affect remediation conducted by home owners or home-based businesses. There are approximately 38 million at home businesses in the U. S. with an annual revenue of \$427 billion annually. Approximately 50% of all small businesses are home-based businesses. It is foolish to assume this issue will not become a concern for many who have small businesses at home. The most common home-based industries are construction and IT.U.S. Census records from 2001 indicate that 57% of home-based businesses bring in \$25,000 in revenue per year<sup>3</sup>. Many states have strict rules regarding

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<sup>2</sup> In 1980s prices

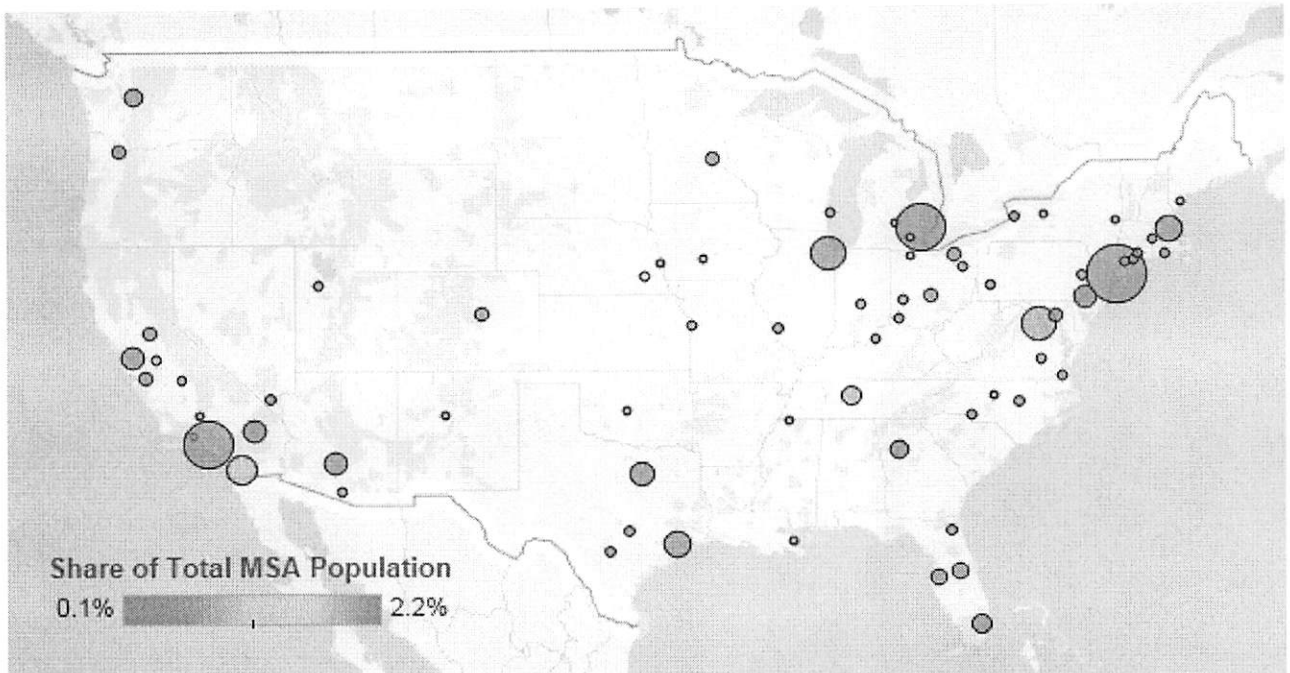
<sup>3</sup> [www.fundera.com](http://www.fundera.com)

certification and public health for home-based food industry. EPA needs to face these 'unexpected outcome' issues and make certain that competitors, especially those who can quickly change labeling or advertising cannot smear home-based businesses making, selling, packaging, shipping/distributing food that comes through homes in neighborhoods service by water systems that detect lead or copper corrosion. Commenter observes how many grocery store products are voluntarily labeled "non-GMO" and fresh vegetables labeled "non-trans fat" or "non-peanut" as if to imply that other sellers might have GMO, peanut or trans-fat ingredients. *Perhaps the voluntary labeling was not intended to induce fear or concerns—but sometimes they create confusion.*

- 4) All of EPA's public education materials should be clearly understandable in language(s) appropriate for local communities or in cartoon or minimal word graphics to ensure that low income immigrants are not targeted by contractors hired by homeowners (especially testing rental market) who seek to frighten some business owners or residential home owners that do not speak English. According to Pew Research Center<sup>4</sup> approximately 33% of the agriculture and 29% of the food manufacturing sector workers are immigrants. Forty-five percent of private households are owned by immigrants and 22% of the food preparation and service industry are immigrants (based upon Pew Research Center's 2014 data). U. S. EPA provided website drinking water and aquatic protection information (including wordless cartoons) for use by local governments for communication with recent immigrants. In the late 1990s EPA successfully used extra communications measures when targeting fish netting and fish habitat protection with Vietnamese, Chinese and Laotian at little expense by providing Q and A flyers and brochures easily available. Similar multi language or cartoon education programs were successfully undertaken by EPA and state water agencies when educating the public about two headed fish and disposal of ballast water that might accidentally move non-native Asian carp or muscels with that ballast water movement.
- 5) Given current changes in population, perhaps Arabic and Urdu materials should be made available about lead and copper exposure since 1.167 million U. S. immigrants are speak/read Arabic and Urdu. EPA does a great job in providing key public health information in Spanish but given recent patterns in rural immigrants from the Middle East and Asia, EPA may want to contemplate how to provide practical consumer and small business information on this rule in Arabic or Chinese through website to local communities/private sector water systems. While populations of only 2-3% in a community may not normally necessitate translation of key human health information in Arabic, Chinese or Urdu, but a failure to make information clear to these populations might make them the target of fraud or forced moving out of rental properties or unfair smears about safety by competitors if they are in the food business and the food business is located in an area where the water system or school detects lead or copper. Commenter offers a map (see page 5) from Migration Policy Center offered because commenter was not able to create comparable maps through use of U. S. Census maps or charts. Obviously, U. S. EPA can rely upon U. S. Census data.

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<sup>4</sup> Pew Research Center <https://www.pewresearch.org/fact-tank/2017/03/16/immigrants-dont-make-up-a-majority-of-workers-in-any-u-s-industry/>



Source: Middle Eastern population density in U. S. cities; Migration Policy Center  
<https://www.migrationpolicy.org/article/middle-eastern-and-north-african-immigrants-united-states>

- 6) Similarly, EPA’s Office of General Counsel should provide a memo to State Attorneys General that gives basic information on detection devices and what in home tap sampling means so that the Attorneys General may be aware of opportunities for fraudulent contractors seeking to scare and sell services to home owners or displace renters because a local public school or water system detects lead or copper. Often state Attorney Generals issue a memo addressing price gauging or scare tactics used by some bad actors during hurricanes, tornados and roof repairs following emergency events. It might be appropriate for the state AGs to anticipate the consequences for in-home tap sampling and to minimize confusion by consumers.

The goal should be to address public health, based public safety upon the Congressionally mandated 90<sup>th</sup> percentile or what has been retained from the original lead and copper rule. The public needs to understand that a detectible lead or copper level may not mean their home is not safe. EPA’s final rule should not inadvertently place elderly, those on fixed incomes, and those with language limitations, to hire “storm chaser” contractors (pejorative term for some less than honorable who replace roofs or lanai structures after storms) where they might not be needed. Homeowners should not be lured into believing the risks are not going to be addressed by their city government or private water systems in adequate time. It is also possible that nefarious home purchasers may pursue neighborhoods offering to buy homes “as is” claiming the neighborhood has homes of low quality due to lead or copper corrosion when the risks are not as high. It is important for EPA to understand that this rulemaking can inadvertently instill fear and for others to take advantage of fear. The public might incorrectly assume any level of detection or an “unknown material” classification might place them at the same level of risk and distrust of Flint, MI’s tragic (and avoidable) events. Many can recall the “postcard” marketing by questionable real estate developers in 2010-2013 who sought to buy homes at much reduced prices after the economic and real estate collapse when some neighborhoods had reductions in home value. Some were lured into selling homes at reduced prices when neighboring homes were sold by banks, hedge funds, and private parties at reduced prices not realizing that the homes might regain value in five years. EPA needs to think very soberly about unintended economic consequences of the final rule and how it may affect homes. For most Americans their homes are their single largest investment. The goal should be to product public health—but also to do their best to

communicate with those who have consumer protection authority well in advance of the tap sampling.

- 7) Requiring public announcements within 24 hours of detection might be too extreme of a requirement if punishment might mean civil penalties. Announcement within 24 hours is highly desired to reinforce public trust but perhaps cities and private sector should be given up to 72 hours before punished for noncompliance. This extra time allows local public health departments to communicate with grocery store and big box store distribution systems to ensure that there are adequate available supplies of drinking water or to set up municipal distribution of drinking water. Non-willful failure to comply should encourage more budget and staff on the project in lieu of non-compliance fines back to EPA. This enforcement policy has been successfully done in the PCB labeling in the Toxics Substances and Control Act (TSCA) program with no loss of public health protection. This does not mean that the names of noncompliant parties should not be publicly available. The risk of public announcement for non-compliance is an effective motivator for compliance.

Perhaps EPA and state agencies should identify a way to differentiate between large water systems and small water systems and revise enforcement arrangements accordingly. Again, this does not mean create loopholes for noncompliance. It means don't expect a water system serving 5,000 or 25,000 water meters or <500 employees to act at the same speed as a major municipal government or private water system with hundreds or thousands of employees.

- 8) The corrosion control language in the proposed rule does not provide adequate flexibility to water systems seeking to balance multiple water quality, operational constraints, and other environmental factors. The one-size fits all approach on corrosion control should be revised.
- 9) EPA has wisely proposed in-home tap sample protocols. Mayors, city council, local health officials, homeowners and renters will need very clear explanations about 90<sup>th</sup> percentile lead and copper concentrations. They need to be told what Congress or EPA believed was safe under SDWA. The final rule should include sequential sampling options. Local officials need to understanding sequential sampling benefits so they can explain it to local water system parties, municipal government, press and public.
- 10) All regulated parties will need an EPA authorized "toolbox" to address corrosion control treatment.
- 11) Trigger level: Commenter defers to American Water Works Association (AWWA) and Association of State Drinking Water Administrators on the correct trigger level for action (10 ug/L v. 15 ug/L). If commenter's reading of the proposed rule is correct it appears there might be TWO bright lines. This is extremely confusing for local officials, public health departments, and those with public communications responsibilities. Whatever the level is selected for trigger level—it needs to be one level, clear to all with compliance obligations, and easy to explain to the public. Having TWO bright lines simply invites the public to mistrust either EPA for over regulating or their local water agency/private provider for failing to comply.
- 12) Presumably any rule requiring inventory will place pollution control and pipeline replacement by state/city agencies and private water systems in a timely manner. EPA's final rule should include basic training and public communication webinars held during both business day (Monday-Friday) for those parties needed to replace pipes with corrosion and lead. Webinars for small businesses in plumbing or construction or home businesses in the food industry should be offered on both work days, weekend days and in evenings—even if a video that is repeated with no opportunity to ask questions during weekend dates. Many contractors and plumbers in remodeling are scheduled three months in advance and need to plan ahead for any employee

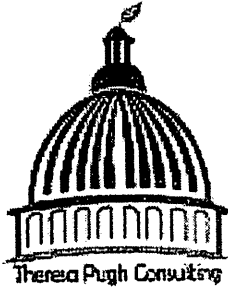
certification training. Webinars explaining L and C inventory and public health explanations should be available on EPA's website for access by owners of apartment buildings, plumbers, and other participants in either detecting the lead or copper corrosion or making decisions on making repairs. EPA should be very aware that rule requiring certification for pipe replacement might have an inadvertent way to squeeze out small businesses or foreign born-English language as second language entrepreneurs if certification and training is not designed correctly.

Example: the Obama Administration's lead paint removal training/certification for general contractors and commercial/residential painters was far too complicated for small businesses. States like Virginia held only a few two-day training/certification for small businesses that were not held on weekends or with advance notice. Those training/certification programs required small business owners/operators to take at least one day off from work, stay overnight at a hotel since Richmond, VA is almost three hours away from western Virginia and two hours from Northern Virginia during traffic rush hour. These types of classes and certification training for L & C rule correction implementation should be held via internet if possible. Face to face training should be offered in locations where many of these business owners are located or may reach within 90 minutes to minimize need for hotel sleeping room costs. EPA should encourage announcement at least three months in advance for small construction and plumbing businesses to plan attendance or time with any other certification programs for plumbers and general contractors.

Public health protection laws and regulations should not be used to squeeze our small businesses trying to compete—whether in food service, remodeling, residential real estate, lab testing or other related enterprises affected by the rule. EPA needs to be careful that bad actors cannot use this rule for private misbegotten commercial and economic gain.

- 13) The commenter believes EPA should attempt to explain the issues in non-English that local governments (including health departments) and water systems can use. This does not mean that the rule needs to be published in any language other than English. It simply means "Question and Answer" or public health explanations and consumer protection advice needs to be provided on website in at least two non-English languages. This coordinated communication in non-English minimizes the risks that cities or private water systems might attempt to translate technical public health terms into other languages in a rapid timeframe and result in public confusion.
- 14) When remediation or pipe replacement is ultimately required there should be deference made to both private water systems and municipal governments for coordinating, staging, and sequencing since even if the affected pipes are not under streets but on private property. Repairs to pipes serving public schools may need to be conducted during optimal weather to avoid rain, snow or freezing temperatures or >95-degree weather to protect workers. Private and public parties should not be at odds with one another when making repairs. Timing of response is important but should be sensible. Similarly, streets with narrow openings or on small cul de sacs or those that block major streets may need to be coordinated to avoid traffic with trucks and remediation services. (Commenter realizes the pipes are not under streets but the trucks sent to deploy remediation will block those streets).

These comments are offered to help improve the rule's implementation. They are not meant to be critical of U. S. EPA's goal to address lead and copper corrosion. *The comments submitted in March, 2018 are attached.* Thank you for considering the comments.



**COMMENTS REGARDING FEDERALISM CONSULTATION  
IN ANTICIPATION OF  
PROPOSED RULE TO REVISE EXISTING 1991 LEAD AND COPPER  
DOCKET NO. EPA-HQ-OW-2018-007  
U. S. ENVIRONMENTAL PROTECTION AGENCY**

**MARCH 8, 2018**

**Submitted by**

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## **Introduction**

U. S. EPA (EPA or Agency) has announced its plans to revise the 1991 Lead and Copper Rule (LCR) under the Safe Drinking Water Act. The EPA's plan to revise the 1991 Lead and Copper Rule (LCR) makes eminent good sense to protect public health.

These comments respond to the solicitation for comment regarding the Federalism issues, Unfunded Mandates Reform Act (UMRA), and Executive Order 13132<sup>1</sup> entitled "Federalism." That Executive Order is clear about regulatory impacts and costs on local government should be seriously considered when any agency proposes or revises regulations. The Executive Order also mandates early recognition of state and local government impacts and costs as well as outreach to those entities<sup>2</sup> before a rule is proposed. EPA's outreach meeting and solicitation of comments is to be commended for its outreach. However, it is not clear that, based upon the December 14, 2017 invitation letter (and solicitation for comments by March 8, 2018), that EPA has contemplated outreach to all appropriate state and local governmental organizations.

## **Logistics/Planning for City Government Affects Unfunded Mandate Costs**

A proposed rule addressing local private and public water systems that provide drinking water to 300 million homes is inherently wide reaching and might have indirect impacts on many planned maintenance obligations under other regulations or industry standards. Further, a final rule could have negative implications on the city's tax base and even home values. These comments attempt to "cross walk" many local governmental obligations for repair and maintenance under several regulatory agencies. EPA should consider these issues in its proposed rule expected in late 2018. Without realizing the depth and scope of many other similar regulations for local government (city and county or other special jurisdictional districts), EPA cannot adequately assess Unfunded Mandates, costs to the taxpayers and consumers of drinking water provided by municipal and private water systems. *These comments attempt to address local government-owned water utility concerns—though they do not attempt to treat public water systems differently than private water systems or utilities.*

In addition, these comments request consideration under President Trump's Executive Order 13897 (pertaining to infrastructure projects) and 13771 (to address reducing regulatory costs). These comments focus primarily on lead issues. Commenter defers to American Water Works Association (AWWA) on copper corrosion issues and human health protection issues.

This rule should be considered a major rule by Office of Management and Budget (OMB) because of the direct impact on human health and the capital and continuing operational costs to municipal and county governments. Regulatory costs on cities must be offset by higher tax revenue. Raising tax revenue often requires special municipal governance approval from city council (with votes) and some cities restrict the frequency of raising debt or raising tax revenue within a calendar year under a city charter—not simply according to custom. Compliance under a revised Lead and Copper Rule for municipal or county agencies should take into account when agencies receive tax revenue from property and home owners

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<sup>1</sup> Issued August 10, 1999 under President William Clinton to further the policies expressed in the Unfunded Mandates Reform Act (UMRA) of 1995.

<sup>2</sup> National Conference of State Legislatures, Council of State Governments, International City/County Management Association, National Association of Towns and Townships, County Executives of America, Environmental Council of States, Association of State Drinking Water Administrators, American Water Works Association, American Public Works Association, National School Board Association, and the American Association of School Administrators, and Western Governors Association.

as most private property tax revenue is not always received by the first quarter. For cities that want to use cash this implementation issue should be considered. Some smaller towns and cities may need to both work around seasons (avoiding harsh weather conditions) and when access to or use of cranes, bucket trucks and maintenance crews is optimal if the city government is responsible for ultimate replacement of the service lines. For some regions of the country subsurface work can be conducted 10 or 11 months of the year. For some northern tier states either frozen ground temperatures or use of city government bucket trucks and city manpower is limited to seven months of the year.

EPA and OMB should consider the Lead and Copper Rule (LCR) will be a major and significant rule since it has the potential to affect, according to EPA, approximately 68,000 drinking water systems serving 300 million Americans<sup>3</sup>. If EPA does not manage the rulemaking correctly people could be affected by lead or copper contamination in drinking water **OR** find that the rule inadvertently had an effect on the home's value. Home investments are the most significant financial assets that most Americans have. In the context of the call for comments directing Federalism issues, EPA should consider that a misdirected implementation of a revised rule. A poorly designed rule could indirectly affect tax revenue if property values decline as a result of human health risks that are not corrected or unsubstantiated fears from negligible or non-existent risks.

#### **Why EPA's Rule Could Have Broader Implications**

The current U. S. municipal bond market is approximately \$3.8 trillion in debt.<sup>4</sup> While fewer Americans (approximately 2% of investors) directly hold municipal bonds, taxpayers benefit from the strength of the investment system. For many local and state governments, the cost to finance debt has spiked on some levels in the last year. For example, fixed-income experts expect a major drop in municipal bond issuance in 2019. The January 2018 debt issuance fell by 26% from January 2017 due to changes in the 2017 Tax Cuts and Jobs Act<sup>5</sup>. Corporate debt might be more preferable to municipal debt/bonds driving up the cost of bonds. EPA and OMB should contemplate the larger municipal debt and bond consequences in final rules if cities may incur sampling and remediation/line replacement costs for abandoned properties. This does not mean that the human health standards are not of primary concern but it might mean that the staging or sequencing of municipal actions should recognize that some cities may have more economic consequences than others.

#### **Background and Expertise of Comment Submitter**

Theresa Pugh Consulting, LLC is a regulatory consulting firm primarily for energy sector and for affiliated public (municipal) water utilities. These comments reflect 17 years of working for public power/water combination utilities or water utility organizations owned by municipal government and related impacts of a rule with rating agencies<sup>6</sup>. Due to the brief time remaining before the March 8 comment period

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<sup>3</sup> EPA, January 8, 2018 Lead and Copper Rule Revisions, Office of Ground Water and Drinking Water, Federalism Consultation Meeting slides, slide 3.

<sup>4</sup> [www.municipalbonds.com](http://www.municipalbonds.com)

<sup>5</sup> CNBC News on municipal bonds and treasuries <https://www.cnbc.com/2018/02/22/muni-bonds-face-steep-decline-challenging-trump-infrastructure-plan.html>

<sup>6</sup> Moody's, Fitch and Standard and Poor's are the three rating agencies that evaluate municipal debt offerings with scoring based upon a number of factors including credit-worthiness and ability to repay debt. Some municipal agencies combine debt and others offer separate bond instruments for individual utilities such as electric, water or natural gas. Municipal bonds may be general obligation bonds (GO) or revenue bonds for specific projects (ex. school systems, bridge construction, or highway tolls). Maturity date of existing bonds may also limit additional debt offerings or ability of smaller towns with declining

closure, the comments do not reflect any specific municipal water agencies but do reflect knowledge of what those city departments will face in terms of other maintenance, repair, and capital expenditures for a number of upcoming 2018-2025 Federal Agency regulations at U. S. EPA and Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) affecting municipal natural gas pipelines serving gas and electric utilities. Often these municipal utilities locate electric, gas, cable and drinking water in same Right of Way locations. Even if a city's obligations under the final rule are nominal, the EPA rule should recognize that cities need to coordinate their maintenance obligations.

**Request:** If EPA holds a Small Entity Representative (SER) meeting or Advanced Notice of Proposed Rulemaking related briefings and discussions, this comment submitter would like to be considered as a participant. EPA's outreach requires expertise on human health expertise in revisions to the lead and copper rule. In prior capacity, the commenter participated in eight EPA-U. S. Small Business Administration (SBA) Small Entity Representative (SER) panels from 2001-2014 including the Clean Water Act 316(b) cooling water intake regulation and others.

In addition to the revision of the standard, EPA should seek deployment or implementation advice as to the timing of the regulation. For community-owned drinking water systems, electric power generation owned by municipal agencies ("public power") and natural gas pipelines owned by municipal power or public gas agencies—all requiring significant repairs, maintenance and capital outlays. Often, for communities of 50,000 or less, those city street shutdowns or repairs are organized by one central task force made up of multiple agencies including zoning, traffic, police, fire, telecommunications (cable, phone), street light management, and electric generation because often the trucks and other equipment might be loaned by the electric power generation entity. Even if the monitoring of residential taps is conducted by the homeowner or contractor to the city, the city government may find many requests for "Miss Dig" type requests for subsurface identification of the water service lines and adjacent natural gas lines (if there is a municipal gas agency) before the homeowner (or plumber) should initiate repairs and replacement of the service lines. For small communities of 30,000 the city might have only a few dozen employees in these departments. For cities that have many public schools that do not have separate school districts who have all maintenance and capital expenditure authority, the city government will need to manage the school drinking water testing. For obvious reasons implementation in the rule should recognize protection of children's health from lead or copper but the city and school districts must also weigh the public safety demands if any service lines must be conducted on school property to keep heavy equipment away from children during the school year.

**Recommendations:**

1. Commenter recommends and endorses the policy, human health protection, implementation considerations in the comments submitted separately by the American Water Works Association (AWWA).<sup>7</sup>
2. **Future requests for Federalism comments should be placed in the Federal Register rather than to rely solely on the letter to professional societies or trade associations.** There are potentially affected parties that did not receive the letter from EPA.

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tax revenue to undertake major maintenance projects that were not anticipated when budget was set by city council. Ratings often reflect whether a city's population is increasing or decreasing or whether there is economic diversity in manufacturing, hospitals community colleges or other job 'anchors' and availability skilled workforce.

<sup>7</sup> Theresa Pugh Consulting, LLC is an affiliate member of AWWA.

3. **Public and private water systems should develop inventories of lead service lines.** Implementation deadlines or “milestone” deadlines should consider when annexation has been undertaken and a city may acquire smaller communities that have little or no paperwork on older residences or rural areas with inadequate data on pipeline materials.
4. **Development of plans for complete removal of all lead service lines should recognize the shared responsibilities—homeowners, city governments, school systems, and other parties.** Municipal, township or rural water systems must be allowed adequate time to develop plans for removal given size, proximity to contractors, extreme weather events in northern tier states where travel by contractors to rural, smaller towns can be significant.
5. **Implementation of tap testing and service line replacements for locations owned/operated by municipal or township should allow coordination with other required repair deadlines unless there is an acute human health risk.** For many cities, Right of Way may contain service lines as well as other public utility or private utility infrastructure. This should be considered and avoid “cookie cutter” implementation deadlines. Permit writer should be allowed to provide for implementation deadlines to tear up streets and property surrounding school systems, county or city hospitals, community colleges, jails, or other government owned affected areas. These should include (but not be restricted to) methane leak repair deadlines under EPA’s Clean Air Act Section OOOOa (NSPS for new natural gas pipelines owned/operated by municipal electric utilities or municipal natural gas utilities that commenced construction after September 18, 2015 or any existing source natural gas pipelines (and compressor stations) affected by subsequent EPA methane leak detection and repair regulations. In addition, where cities have accepted FEMA storm response actions (and funding) for hardening of water, gas, or electric utilities the EPA deadline on compliance should recognize that the deadlines may need to be altered. In some cases, power plants would need to remove infrastructure and replace with steel poles and other actions that may be in the same neighborhood where LCR changes must also be undertaken. Perhaps unless where lead or copper has been detected in acute human health exposure concern, the city government should have some reasonable leeway (to be determined by permit writer) to undertake service line replacements.
6. **Corrosion process control in water systems should meet all human health concerns.**
7. Future annexation or expansion of municipal/county jurisdiction should mean the rule allows for reasonable date(s) for coordination of data for inventory updates, lookback at legacy pipeline materials (if available) before repair compliance with replacement should be met.
8. Before municipal governments must undertake any new tap monitoring or sampling to identify where homeowners (or government agency) should replace service line, EPA should make certain the **best testing methods** are used to rule out false positives, masked positives, or incorrect readings.
9. **Public disclosure about results of testing is important but the results could have unexpected outcomes on homeowner’s most precious financial commodity.** EPA needs to recognize the delicate dance of informing the public about communities that have found lead in service line problems. These comments are not encouraging failure to inform the public. But EPA should recognize that for **vast majority of Americans, their homes are their largest investment.** EPA (and state agencies) should be cautious in **inadvertently causing loss of property values if real estate market might misunderstand the detection of copper or lead in neighborhoods.** Home sales reflect true economic markets. Home price sales can quickly be adversely affected by stigmatization of neighborhoods or because individual homes may test positively for lead or copper. It is very important that EPA, OMB and the

states recognize that human health protection is critical—but EPA should not accidentally create a cause of economic stigmatization of properties, neighborhoods that have lead or copper pipes. EPA (and states) should recognize that after the economic downturn of 2008-2009, home appraisals<sup>8</sup> are based upon home sales within immediate last six-month, lot size, square footage, number of rooms, and sale of comparable homes with quality of materials (brick, vinyl siding, finished basements, attic, central heating, high quality roofs, etc.). Unfortunately, the new appraisal rules appear to have a bias downward versus ten years ago. Perhaps this bias is wise from a home mortgage purchase process—avoiding distortions in making homeowners have a false sense that all homes are more valuable than they actually are. But in this new process, a fixable, perhaps temporary repair of service line due to lead (or copper elsewhere) could hurt the value of a home. But any EPA rule should recognize that inadvertent determinations about home values can affect both consumer's home sales and a municipal government's tax base. Changes in tax base can also affect the ability for a city government to obtain tax-exempt financing through the municipal bond market. While human health protection is critical, *HOW* the public comes to understand the relative risks of lead or copper in service line pipes, and how to remediate has long-term consequences. One does not have to look very far to see where similar environmental events have caused a collapse in real estate values adjacent to locations with hazardous waste, Superfund sites, brownfield sites, factory closures, etc. Elderly and uneducated homeowners might be persuaded by charlatans to sell their homes at greatly reduced prices if the homeowner is misled to believe the home has no value because lead or copper has been detected. EPA's rulemaking process should make efforts to seek comment from state consumer affairs offices and to send advisories about the final rule to those agencies.

10. **Many states have sampled recently in response to public outrage over 2014 events in Flint, MI.** Where states have undertaken recent sampling, and where that sampling is generally in accordance with EPA's methods, learning from their implementation results should be used in outreach and education. Rule shouldn't arbitrarily require second testing if not truly needed.
11. **EPA's final rule should not make replacing all lead service lines in a specific timeframe.** Communities should start as quickly as possible but this cannot mean all communities act concurrently. Time must be allowed for issuing bids, hiring contractors, aligning city departments for coordinated work, and to work around weather events (freeze off weather conditions, rains, flooding, extreme heat, etc..).
12. **EPA's rule should not be a cookie cutter approach to implementation of home tap testing.** Rental homes, apartment buildings, and community dorms (especially when those are offsite from campus) may take more time to sample. As AWWA points out in its comments, 35% of all Americans rent their homes. Renters often move more frequently than home owners. Rental housing owners should be allowed to make these transformations in a reasonable manner. AWWA's points that the timing for testing for rental property service

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<sup>8</sup> Article on stigmatized housing <https://www.usatoday.com/story/money/personalfinance/2015/06/10/24-7-wall-st-hidden-things-home-prices/71002294/> and Article on changes to home appraisals [https://www.philadelphiafed.org/-/media/research-and-data/publications/business-review/2010/q1/brq110\\_home-worth-appraisal-bias.pdf?la=en](https://www.philadelphiafed.org/-/media/research-and-data/publications/business-review/2010/q1/brq110_home-worth-appraisal-bias.pdf?la=en) ; U. S. News and World Reports <https://loans.usnews.com/factors-that-influence-your-homes-resale-value> or Home Appraiser's forum on radon [https://inspectapedia.com/hazmat/Radon\\_Impact\\_on\\_Property\\_Value.php](https://inspectapedia.com/hazmat/Radon_Impact_on_Property_Value.php) and on mold see <http://sacramentoappraisalblog.com/2012/07/12/how-do-appraisers-deal-with-mold-situations/>

lines might be coordinated with timing of replacement water heaters by owner. Typically, water heaters (often called “hot water heaters”) corrode and need to be replaced approximately every 8-12 years<sup>9</sup> EPA’s proposed rule should specifically call out the issues related to rental homes and rental apartment buildings to determine if those owners have recommendations to handle their regulatory responsibilities to protect the renters’ health while not incurring extreme costs.

To better protect consumers, perhaps EPA’s rule should consider that notices about rental properties should disclosure results of tap sampling results in a similar way to disclosure on square footage, central heat, washer/dryer, proximity to public transportation, or school district. Similarly, home sales should disclose recent sampling results with easy to understand frame of reference on relative risk. Many states already require disclosure about lead in paint, asbestos or radon during sale or rental process. If states already require and cover these disclosures, EPA should not add secondary disclosure.

13. **Public education is key.** AWWA’s comments on pitchers and filters are very useful and reflect practical experience from their members. If EPA’s rule involves the use of filters and pitcher filters, this should include the extensive use of public education via paper flyers, bill inserts, YouTube videos, and other methods such as the use of social media. The public needs to understand the distinction between detection of lead or copper and elevated levels that warrant faster action due to human health risks.
14. **As pointed out in AWWA’s comments, estimates of \$4,700 per individual service line is unrealistic.** While Flint, Michigan’s experience may not be indicative of all cities, EPA should consider their recent experience. Flint’s administrative costs alone ran \$760 per service line. Cost estimates in AWWA’s comments merit serious consideration. AWWA’s Figure 1 suggests that the average cost might be \$6,700 per line based upon 14 community water systems.
15. **EPA rulemaking process should both engage public health experts to advise on ways to better explain what detection means and ensure the public health experts explain the results of filter tests.**
16. **EPA’s rule should not mandate U. S. made products for testing, response, or services used in service line replacement.** Although some might prefer the use of U. S. made goods to respond to the EPA rulemaking, the EPA rule should not mandate U.S. manufactured goods or testing devices. For some parts of the country, such as northern states along the U. S.-Canadian border, importation of Canadian (or other country) replacement service line equipment or devices may be faster, cheaper, and equally safe for those private and public parties. EPA rulemakings should not be used to make statements on trade. Many municipal governments have purchasing incentives for U. S. made or North American made goods. But EPA regulations should not set or revise trade policy in public health regulations. As long as an imported product or service meets the standards EPA should be agnostic as to the country of origin.
17. **EPA’s final rule should give some leeway for coordinating the city’s requirements on city-owned properties with other repair regulations** as required by U. S. Department of Transportation (DOT), Pipeline and Hazardous Materials Safety Administration, U. S. EPA, Federal Emergency Management Administration (FEMA) or others. Many of these agencies have many new regulations affecting municipal or county Right of Way property or of ‘hardening’ of the electric and water utilities following FEMA disaster designations. These

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<sup>9</sup> DOE, 2010 Water Heater Market Profile, U. S. Department of Energy, September, 2010.

'hardening' upgrades are capital extensive and manpower extensive work. In some cases, FEMA appears to be pushing investor owned and public power (municipal) utilities to take power lines to underground system. If an electric utility that co-manages water utility anticipates major "undergrounding" changes on the electric side, the utility should be able to coordinate the new LCR obligations to minimize disruptions. This leeway for coordination of the LCR rule responsibilities should be allowed unless there is a true acute public health risk.

- 18. Recognition by U. S. EPA and OMB that the proposed rule would be a major and significant rule easily costing (directly and indirectly) in excess of \$100 million as the rule has the potential impact on 300 million homes.** Accordingly, EPA and OMB should do all that they can to see that rule can be implemented by cities and counties in a manner to protect public health and minimize regulatory costs. These twin goals are not mutually exclusive. For some communities, the city will have to determine who is responsible for schools, public hospitals, community centers, abandoned private properties, legacy properties that have not been brought up to date, and for properties where low income are affected if leak or copper detection proves to be a risk for acute human health problems. In those instances, cities should be allowed to design deployment of monitoring, testing and response accordingly. Where there is no owner available or financially able to take corrective action, EPA may want to explore in the rulemaking the use of brownfields funding or take appropriate actions with the State Revolving Fund Program (SRF).
- 19. EPA's FY19 and FY 19 budgets, funding for infrastructure loans, and State Revolving Fund Program funding should reflect additional regulatory burdens to states and jurisdictions of the states.**

The proposed U. S. Federal Year 2019 Budget appears to cut EPA's funding to states from current \$8.05 billion to a reduced \$6.1 billion—although there is a wise increase to the State Revolving Fund (SRF) program under the Office of Water. Environmental Commissioners of the States (ECOS) wrote in September, 2017 to assert that they are carrying out 98% of the EPA's programs. Their concerns about ability to meet all the air, water, waste and disaster response obligations with budget cuts concerned them. (It should be noted that the ECOS letter was sent shortly after three major hurricanes across Texas, the Gulf Coast coastline, Florida, U. S. Virgin Islands, Puerto Rico and the California forest fires). While the commenter is not an expert on how the EPA budget, State and Tribal Assistance Grants (STAG) and SRF programs should be designed for FY2019 and future years—it is possible that implementation of the revised LCR program require state agency coordination with local officials, state responsibilities and costs.

The 1996 Congressional amendments to the Safe Drinking Water Act (SDWA)<sup>10</sup> made it clear that all Federal agencies that own or operate a public water system must comply. Although this firm does not have direct expertise in budgeting for Federal lands government agencies with facilities this commenter recommends advance notification to key Federal Agencies that will have obligations to implement a revised lead and copper rule. Some Federal agencies that anticipate cuts to operational budgets or staff may learn too late that they have obligations to implement the revisions to the 1991 Lead and Copper rule. These agencies might include General Services Administration, Department of Defense/U. S. Veteran's Association, Bureau of Land Management, and Department of Interior's Bureau of

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<sup>10</sup> 42 U. S. C Section 300f. The statute applies to public drinking water or public water systems as well as Federal facilities.

Indian Affairs (BIA). According to DOI's website<sup>11</sup>, BIA oversees housing improvements at 566 Federally recognized Native American Indian tribes through the Housing Improvement Plan.

A superficial review of Housing and Urban Development's 2018-2022 Strategic Plan<sup>12</sup> does not indicate any references to the implementation of this rule but does mention lead in paint. Perhaps HUD and other agencies need adequate advance notification for their own agencies' unique issues and budgetary planning.

Thank you for consideration of these comments offered to broaden EPA's understanding of the possible coordination and implementation of the rule. Copies of these comments will be sent directly to Mr. Peter Grevatt, Director, OGWDW and Mr. Andrew Hanson.

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<sup>11</sup> <https://www.doi.gov/international/what-we-do/tribes>

<sup>12</sup> <https://www.hud.gov/sites/dfiles/SPM/documents/HUDSTRATEGICPLAN2018-2022.pdf> See pp 20-22 not on page 17 as referenced in the HUD Strategic Plan's Table of Contents.