EPA'S LEAD AND COPPER PROPOSAL: FALLING SHORT OF PROTECTING PUBLIC HEALTH

HEARING

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENT AND CLIMATE CHANGE

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTEENTH CONGRESS

SECOND SESSION

TUESDAY, FEBRUARY 11, 2020

Serial No. 116–99

Printed for the use of the Committee on Energy and Commerce
govinfo.gov/committee/house-energy
energycommerce.house.gov

U.S. GOVERNMENT PUBLISHING OFFICE
51–560 PDF WASHINGTON : 2024

COMMITTEE ON ENERGY AND COMMERCE

FRANK PALLONE, JR., New Jersey
Chairman

BOBBY L. RUSH, Illinois
ANNA G. ESHOO, California
ELIOT L. ENGEL, New York
DIANA DEGETTE, Colorado
MIKE DOYLE, Pennsylvania
JAN SCHAKOWSKY, Illinois
G. K. BUTTERFIELD, North Carolina
DORIS O. MATSUI, California
KATHY CASTOR, Florida
JOHN P. SARBANES, Maryland
JERRY MCNERNEY, California
PETER WELCH, Vermont
BEN RAY LUJAN, New Mexico
PAUL TONKO, New York
YVETTE D. CLARKE, New York, *Vice Chair*
DAVID LOEBSACK, Iowa
KURT SCHRADER, Oregon
JOSEPH P. KENNEDY III, Massachusetts
TONY CÁRDENAS, California
RAUL RUIZ, California
SCOTT H. PETERS, California
DEBBIE DINGELL, Michigan
MARC A. VEASEY, Texas
ANN M. KUSTER, New Hampshire
ROBIN L. KELLY, Illinois
NANETTE DIAZ BARRAGÁN, California
A. DONALD MCEACHIN, Virginia
LISA BLUNT ROCHESTER, Delaware
DARREN SOTO, Florida
TOM O'HALLERAN, Arizona

GREG WALDEN, Oregon
Ranking Member
FRED UPTON, Michigan
JOHN SHIMKUS, Illinois
MICHAEL C. BURGESS, Texas
STEVE SCALISE, Louisiana
ROBERT E. LATTA, Ohio
CATHY MCMORRIS RODGERS, Washington
BRETT GUTHRIE, Kentucky
PETE OLSON, Texas
DAVID B. MCKINLEY, West Virginia
ADAM KINZINGER, Illinois
H. MORGAN GRIFFITH, Virginia
GUS M. BILIRAKIS, Florida
BILL JOHNSON, Ohio
BILLY LONG, Missouri
LARRY BUCSHON, Indiana
BILL FLORES, Texas
SUSAN W. BROOKS, Indiana
MARKWAYNE MULLIN, Oklahoma
RICHARD HUDSON, North Carolina
TIM WALBERG, Michigan
EARL L. "BUDDY" CARTER, Georgia
JEFF DUNCAN, South Carolina
GREG GIANFORTE, Montana

PROFESSIONAL STAFF

JEFFREY C. CARROLL, *Staff Director*
TIFFANY GUARASCIO, *Deputy Staff Director*
MIKE BLOOMQUIST, *Minority Staff Director*

SUBCOMMITTEE ON ENVIRONMENT AND CLIMATE CHANGE

PAUL TONKO, New York
Chairman

YVETTE D. CLARKE, New York
SCOTT H. PETERS, California
NANETTE DIAZ BARRAGÁN, California
A. DONALD MCEACHIN, Virginia
LISA BLUNT ROCHESTER, Delaware
DARREN SOTO, Florida
DIANA DEGETTE, Colorado
JAN SCHAKOWSKY, Illinois
DORIS O. MATSUI, California
JERRY MCNERNEY, California
RAUL RUIZ, California, *Vice Chair*
DEBBIE DINGELL, Michigan
FRANK PALLONE, JR., New Jersey *(ex officio)*

JOHN SHIMKUS, Illinois
Ranking Member
CATHY MCMORRIS RODGERS, Washington
DAVID B. MCKINLEY, West Virginia
BILL JOHNSON, Ohio
BILLY LONG, Missouri
BILL FLORES, Texas
MARKWAYNE MULLIN, Oklahoma
EARL L. "BUDDY" CARTER, Georgia
JEFF DUNCAN, South Carolina
GREG WALDEN, Oregon *(ex officio)*

C O N T E N T S

WITNESSES STATEMENT

[1] The information has been retained in committee files and also is available at https://docs.house.gov/meetings/IF/IF18/20200211/110501/HHRG-116-IF18-Wstate-Tucker-VogelC-20200211.pdf.

Page

SUBMITTED MATERIAL

EPA'S LEAD AND COPPER PROPOSAL: FALLING SHORT OF PROTECTING PUBLIC HEALTH

TUESDAY, FEBRUARY 11, 2020

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENVIRONMENT AND CLIMATE CHANGE,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 10:30 a.m., in room 2322 Rayburn House Office Building, Hon. Paul Tonko (chairman of the subcommittee) presiding.

Members present: Representatives Tonko, Clarke, Peters, Barragán, Blunt Rochester, Soto, DeGette, Matsui, McNerney, Ruiz, Dingell, Pallone (ex officio), Shimkus (subcommittee ranking member), McMorris Rodgers, McKinley, Johnson, Long, Flores, Carter, Duncan, and Walden (ex officio).

Staff present: Jacqueline Cohen, Chief Environment Counsel; Adam Fischer, Policy Analyst; Anthony Gutierrez, Professional Staff Member; Rick Kessler, Senior Advisor and Staff Directory, Energy and Environment; Brendan Larkin, Policy Coordinator; Tim Robinson, Chief Counsel; Nikki Roy, Policy Coordinator; William Clutterbuck, Minority Staff Assistant; Jordan Davis, Minority Senior Advisor; Tyler Greenberg, Minority Staff Assistant; Peter Kielty, Minority General Counsel; Mary Martin, Minority Chief Counsel, Energy and Environment and Climate Change; and Peter Spencer, Minority Senior Professional Staff Member, Environment and Climate Change.

Mr. TONKO. The Subcommittee on Environment and Climate Change of the Committee on Energy and Commerce will now come to order.

I recognize myself for 5 minutes for the purposes of an opening statement.

OPENING STATEMENT OF HON. PAUL TONKO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

In 2004, EPA initiated a review of the lead and copper Rule following the lead crisis in Washington, DC 16 years later, we are still waiting for EPA to finalize its long-term revision. The intention at that time was to take action to prevent the next crisis. Since then, we have witnessed one water crisis after another, upturning the lives of millions in Flint, in Newark, in Pittsburgh, and other communities which have had to suffer at least partially due to an unproductive standard, unprotective standard.

Last year, EPA proposed its long-awaited revision for the Lead and Copper Rule. The deadline for public comment is tomorrow. I expect we will hear today that the proposal still needs work and, in my opinion, it falls far short of the meaningful protective action necessary to get lead out of our drinking water systems.

Today's panel includes witnesses representing health experts, environmental advocates, state regulators, local governments, and utilities. I appreciate everyone's perspective and hope we can find some common ground around which a goal can be developed, a common that we share in those efforts in ensuring that Americans have safe drinking water. The Lead and Copper Rule was first promulgated in 1991, so we have known for decades that there is no safe level of lead for children. We also know that the impaired brain development these children experience from lead exposure will follow them the rest of their lives.

Unlike other contaminants, lead enters into drinking water from within the system. It can be found in millions of service lines and fixtures within homes. Action to get the lead out of our water systems starts with identifying existing service lines and making that information publicly available. I support EPA's proposal to require inventories of service lines, but identifying these lines must be followed with full replacement, removing lead service lines and prohibiting unsafe partial replacements.

Many of the communities currently responding to lead contaminations are doing this at no cost to residents. Unfortunately, the proposed Lead and Copper Rule revision does not require proactive service line replacement. It also fails to establish a health-based household lead action level or even reduce the current action level of 15 parts per billion.

The proposal does include a new trigger level for utilities to begin to plan for future action at ten parts per billion. But we already have challenges with risk communication and lead contaminations and, in practice, this new level adds complexity to an already complicated rule without directly improving public health outcomes. I know replacing all lead service lines will not be easy or cheap. That is why I strongly support additional federal funding to ensure that state and local governments, schools, daycares, and water utilities have the resources necessary to map and replace water infrastructure containing lead as quickly as possible.

Today, we will also hear about other aspects of the proposal, including treatment requirements, sampling procedures, public notification, and monitoring at schools and child care facilities. Ultimately, the revision as proposed will not require the action needed to get lead out of our drinking water systems. This EPA proposal has further demonstrated the major deficiencies of the Safe Drinking Water Act which have prevented EPA from setting enforceable standards that are truly protective of public health.

The past 24 years of SDWA, including recent considerations of PFOS, have made it clear that the regulatory framework for standard setting has left Americans dangerously exposed. I look forward to today's discussion on EPA's proposal and hope that we can continue to explore the reforms necessary to ensure the Safe Drinking Water Act is able to guarantee the safe water that our constituents expect, our constituents require, and our constituents deserve.

[The prepared statement of Mr. Tonko follows:]

PREPARED STATEMENT OF HON. PAUL TONKO

In 2004, EPA initiated a review of the Lead and Copper Rule following the lead crisis in Washington, DC.

Sixteen years later, we are still waiting for EPA to finalize its long-term revision.

The intention at that time was to take action to prevent the next crisis. Since then we have witnessed one water crisis after another, upturning the lives of millions in Flint, Newark, Pittsburgh, and other communities who have had to suffer, at least partially, due to an unprotective standard.

Last year, EPA proposed its long-awaited revision for the Lead and Copper Rule. The deadline for public comment is tomorrow.

I expect we will hear today that the proposal still needs works.

And in my opinion, it falls far short of the meaningful protective action necessary to get lead out of our drinking water systems.

Today's panel includes witnesses representing health experts, environmental advocates, state regulators, local governments, and utilities.

I appreciate everyone's perspective and hope we can find some common ground around a goal I know we share: ensuring Americans have safe drinking water.

The Lead and Copper Rule was first promulgated in 1991, so we have known for decades that there is no safe level of lead for children.

We also know that the impaired brain development these children experience from lead exposure will follow them the rest of their lives.

Unlike other contaminants, lead enters into drinking water from within the system. It can be found in millions of service lines and fixtures within homes.

Action to get the lead out of our water systems, starts with identifying existing service lines and making that information publicly available.

I support EPA's proposal to require inventories of services lines, but identifying these lines must be followed with full replacement—removing lead service lines and prohibiting unsafe partial replacements.

Many of the communities currently responding to lead contaminations are doing this at no cost to residents.

Unfortunately, the proposed Lead and Copper Rule revision does not require proactive service line replacement.

It also fails to establish a health-based household lead action level or even reduce the current action level of 15 parts per billion.

The proposal does include a new "trigger" level for utilities to begin to plan for future action at ten parts per billion.

But we already have challenges with risk communication and lead contaminations.

And, in practice, this new level adds complexity to an already complicated rule without directly improving public health outcomes.

I know replacing all lead service lines will not be easy or cheap. That is why I strongly support additional federal funding to ensure state and local governments, schools, daycares, and water utilities have the resources necessary to map and replace water infrastructure containing lead as quickly as possible.

Today we will also hear about other aspects of the proposal, including treatment requirements, sampling procedures, public notification, and monitoring at schools and childcare facilities.

Ultimately, the revision as proposed will not require the action needed to get lead out of our drinking water systems.

This EPA proposal has further demonstrated the major deficiencies of the Safe Drinking Water Act, which have prevented EPA from setting enforceable standards that are truly protective of public health. The past 24 years of SDWA ("sid-wah"), including recent considerations of PFAS, have made it clear that the regulatory framework for standard-setting has left Americans dangerously exposed.

I look forward to today's discussion on EPA's proposal and hope we can continue to explore the reforms necessary to ensure the Safe Drinking Water Act is able to guarantee the safe water that our constituents expect, require and deserve.

With that, I will now recognize Mr. Shimkus, our ranking member of the Subcommittee on Environment and Climate Change, for 5 minutes for his opening statement, please.

OPENING STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. SHIMKUS. Thank you, Mr. Tonko.

Mr. Chairman, lead is a potent neurotoxin, exposure to which is known to cause serious educational deficits in children. Our country has made significant strides in reducing harmful exposure to lead by removing it from gasoline and paint. Even still, preventing lead from entering drinking water remains a serious issue and it deserves this committee's attention.

Over the last 15 years, breakdowns in oversights, engineering, enforcement, and leadership have caused and highlighted some of the more troubling incidents of increased levels of lead in drinking water. In Washington, DC, Flint, Michigan, and Newark, New Jersey, and every community we represent, our constituents should be drinking safe water from their taps.

What is troubling to me today is not that we are addressing the subject, but that we are not giving it the serious attention it deserves. Almost three months ago, the Environmental Protection Agency issued its first major revision of the Lead and Copper Rule since 1991. This is obviously long overdue, and I am glad they at least released this in November. This updated rule has been greatly anticipated by the regulated stakeholders and the general public and since its release, many have expressed strong feelings about its contents and whether it does too much or not enough. Meaningful oversight is imperative, but that is not what is happening here today. Why?

To the best of my knowledge, the decision to have this hearing was made just over seven days ago, an amount of time that barely meets the requirements of the committee's rules. This might be less of a problem if this were an easy subject which we all agreed upon, but it is not. It is a highly technical, emotionally charged matter that demands time and attention to be done right. Moreover, it seems we are continuing a pattern of complaining about the Agency without affording them the opportunity to explain themselves.

The EPA has been clear with us in the past that a week's notice isn't sufficient to provide members the detailed context and answers that we expect. I understand the Agency offered to provide us with a witness on other dates if the committee wanted them. It appears they did not. I am not the only one who thinks the EPA was unwanted here today. The Agency itself has publicly asserted some of these same points in a press statement, which they released this morning, which I would ask unanimous consent to place into the record, Mr. Tonko.

Mr. TONKO. We will review it.

Mr. SHIMKUS. Had EPA been here, I would want to ask where the Agency sees pipe replacements versus optimized corrosion control, considering from 1991 to 2001, the number of large systems exceeding the action level for lead dropped by 90 percent. I would ask how the 2012 amendments tightening the amount of copper and brass in fixtures was impacting drinking water levels. I would ask what time, effort, and resources EPA planned in undertaking to assist water systems, especially in rural and low-income areas, to comply with the proposed rule as well as make information

available for managing the rule. And I would ask how the Agency expects communities to pay for new mandates.

The reality is, this rule will increase costs and the Drinking Water State Revolving Fund will not be able to meet all these needs. Moreover, the funds should not be viewed as a way to federally subsidize rates, and I want to ask about the Agency's thinking on this question too. These are just my questions, but they are worthy of a live, public discussion that addresses these and other concerns raised in the testimony.

For our witnesses that are here today, thank you for being with us. Most of you are not local and had to rearrange your schedules to make hotel and travel arrangements, written testimony, finished your comments to the Agency on this rule, and travel here in a few days' time. We appreciate your sacrifice under the expedited timeframe and we look forward to what you have to tell us.

Before I yield back my time, I want to ask unanimous consent to have the following letter inserted in the hearing record from the honorable Dominick Longobardi, mayor of Floral Park, New York, president of the Hempstead, New York, board of directors, and member of the American Public Works Association board of directors. We believe his views are important and should be included in the hearing record, even though we were refused an additional witness.

With that, Mr. Chairman, I yield back my time.

[The prepared statement of Mr. Shimkus follows:]

PREPARED STATEMENT OF HON. JOHN SHIMKUS

Lead is a potent neurotoxin, exposure to which is known to cause serious educational deficits in children. Our county has made significant strides in reducing harmful exposure to lead by removing it from gasoline and paint.

Even still, preventing lead from entering drinking water remains a serious issue and it deserves this committee's attention. Over the last fifteen years, breakdowns in oversight, engineering, enforcement, and leadership have caused and highlighted some of the more troubling incidents of increased levels of lead in drinking water.

In Washington, DC, in Flint, Michigan, in Newark, New Jersey, and in every community we represent, our constituents should be drinking safe water from their taps.

What is troubling to me about today is not that we are addressing this subject, but that we are not giving it the serious attention it deserves.

Almost three months ago, the Environmental Protection Agency issued its first major revision of the Lead and Copper Rule since 1991. This updated rule has been greatly anticipated by regulated stakeholders and the general public and, since its release, many have expressed strong feeling about its contents and whether it does too much or not enough.

Meaningful oversight is imperative, but that is not what is happening here today. Why?

To the best of my knowledge, the decision to have this hearing was made just over seven days ago—an amount of time that barely meets the requirements of the Committee's rules. This might be less of a problem if this were an easy subject on which we all agreed, but it's not—it's a highly technical, emotionally charged matter, that demands time and attention to be done right.

Moreover, it seems we're continuing a pattern of complaining about the Agency without affording them the opportunity to explain themselves. The EPA has been clear with us in the past that a week's notice is insufficient to provide Members the detail, context, and answers we expect. I understand the Agency offered to provide us a witness on other dates if the Committee wanted them—it appears they did not.

Had EPA been here, I would want to ask where the Agency sees pipe replacement versus optimized corrosion control—considering from 1991 to 2001 the number of large systems exceeding the action level for lead dropped by 90 percent.

I would ask how the 2012 amendments tightening the amount of copper and brass in fixtures was impacting drinking water lead levels.

I would ask what time, effort and resources EPA planned in undertaking to assist water systems—especially in rural and low-income areas—to comply with the proposed rule as well as make information available for managing lead.

And I would ask how the Agency expects communities to pay for new mandates. The reality is this rule will increase costs, and the Drinking Water State Revolving Fund will not be able to meet all these needs. Moreover, the fund should not be viewed as a way to federally subsidize rates and I would want to ask about the Agency's thinking on this question too.

These are just my questions, but they are worthy of a live, public discussion that addresses these, and the other concerns raised in the testimony.

For our witnesses that are here, thank you for being with us. Most of you are not local and had to rearrange your schedules, make hotel and travel arrangements, write testimony, finish your comments to the Agency on this rule, and travel here in a few days' time. We appreciate your sacrifice under the expedited timeframe and look forward to what you have to tell us.

Before I yield back my time, I want to ask unanimous consent to have the following letter inserted in the hearing record from the Honorable Dominick Longobardi, Mayor of Floral Park, New York; President of the Hempstead, New York Board of Directors; and members of the American Public Works Association's Board of Directors. We believe his views are important and should be included in the hearing record even though Majority refused to include Mayor Longobardi as a witness for today's panel.

With that, Mr. Chairman, I yield back my time.

Mr. TONKO. OK. We will submit that, without objection.

[The information appears at the conclusion of the hearing.]

Mr. SHIMKUS. Thank you.

Mr. TONKO. The release from the EPA seems to have some inaccuracies in it, so perhaps we should have the staff go through it and——

Mr. SHIMKUS. OK. That would be fine.

Mr. TONKO. OK.

Mr. SHIMKUS. So we will just hold that off until further review.

Mr. TONKO. Right. So the gentleman yields back.

The Chair now recognizes Representative Pallone, chair of the full committee, for 5 minutes for his opening statement, please.

Mr. PALLONE. Thank you, Mr. Chairman.

OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Today's hearing focuses on a widespread and pressing public health crisis, lead contamination in drinking water. Safe drinking water is a fundamental right and duty of our federal government. Every American should be able to turn on their tap confident that the water coming out is safe, and this should be true for all communities and it must be safe for pregnant women, infants, children, and the elderly.

But we are falling short and failing communities like Washington, DC, Flint, Michigan, and Newark, in my home state of New Jersey. The Environmental Protection Agency has an important opportunity to strengthen our protections against lead by revising the Lead and Copper Rule, but, unfortunately, the Trump EPA's recent proposal squanders that opportunity. Lead is a known toxin and Congress banned lead pipes in '86, but those pipes remain in the ground leaching lead into the drinking water that comes into our homes and schools.

Since 1991, EPA has set the maximum contaminant level goal for lead and drinking water at zero, but nearly 30 years later, EPA is still saying we can't achieve that goal or even get close to it. To make matters worse, the Trump EPA's proposed rule would not even set us on the path to achieving the goal of lead-free water because it doesn't require aggressive replacement of lead service lines.

And the proposal also falls short of providing the certainty and clarity states and localities need in implementing the Lead and Copper Rule. It ignores the lessons of Flint, so it will fail to prevent the next Flint. It also doesn't properly reflect some of the lessons from the drinking water issue in Newark, New Jersey, where aggressive lead pipeline replacement appears to be working.

Any final rule that fails to aggressively replace lead service lines will fail to solve the problem of lead in drinking water and those shortcomings should be addressed as EPA works to finalize this important rule. Ultimately, if EPA were to finalize this proposal, there is a real possibility that 30 years from now, we could be no closer to ensuring lead-free water for the American people and we can't allow that to happen.

The inactivity over the last 30 years certainly highlights the weaknesses in the Lead and Copper Rule. The fact is that the Safe Drinking Water Act instructs EPA to set drinking water standards based on cost-benefit analysis, not public health and this is a fundamental flaw in the statute that leaves vulnerable populations and disproportionately exposed communities unprotected.

This hearing is the beginning of work in this subcommittee to explore how the Safe Drinking Water Act should be reformed. I thank chairman Mr. Tonko for undertaking this work. The Safe Drinking Water Act should absolutely ensure that drinking water is safe and that means health protective, not defined by cost-benefit analysis. Chairman Tonko and I have worked together repeatedly over the years to provide more funding for drinking water infrastructure. That funding not only helps cities and towns modernize their infrastructure and protect public health, but it also creates jobs.

We will continue to work to provide the resources water utilities need, the resources that those utilities need to address lead and other threats to public health. The cost of replacing lead service lines should be addressed through infrastructure funding and financing. It should not dictate how safe our water can be. Now the science is clear; there is no safe level of lead exposure. The time for action is overdue. EPA has to strengthen this proposal to protect public health, including the health of vulnerable populations, and we in Congress should strengthen the Safe Drinking Water Act to do the same.

So, I just want to welcome Kim Gaddy from Clean Water Action of New Jersey for joining us today. I look forward to hearing from Kim and from all our witnesses about ways we can strengthen the Safe Drinking Water Act for the future to better protect the American people.

[The prepared statement of Mr. Pallone follows:]

PREPARED STATEMENT OF HON. FRANK PALLONE, JR.

Today's hearing focuses on a widespread and pressing public health crisis—lead contamination in drinking water. Safe drinking water is a fundamental right and duty of our federal government. Every American should be able to turn on their tap, confident that the water coming out is safe. This should be true for all communities, and it must be safe for pregnant women, infants, children, and the elderly. But we are falling short and failing communities like Washington, DC, Flint, Michigan, and Newark in my home state of New Jersey.

The Environmental Protection Agency (EPA) has an important opportunity to strengthen our protections against lead by revising the Lead and Copper Rule, but unfortunately the Trump EPA's recent proposal squanders that opportunity.

Lead is a known toxin and Congress banned lead pipes in 1986. But those pipes remain in the ground, leaching lead into the drinking water that comes into our homes and schools.

Since 1991, EPA has set the maximum contaminant level goal for lead in drinking water at zero. But, nearly 30 years later, EPA is still saying we cannot achieve that goal or even get closer to it.

To make matters worse, the Trump EPA's proposed rule would not even set us on the path to achieving the goal of lead-free water because it doesn't require aggressive replacement of lead servicelines. The proposal also falls far short of providing the certainty and clarity states and localities need in implementing the Lead and Copper Rule.

It ignores the lessons of Flint, so it will fail to prevent the next Flint. It also doesn't properly reflect some of the lessons from the drinking water issue in Newark where aggressive lead pipeline replacement appears to be working. Any final rule that fails to aggressively replace lead service lines will fail to solve the problem of lead in drinking water. These shortcomings should be addressed as EPA works to finalize this important rule.

Ultimately, if EPA were to finalize this proposal, there is a real possibility that 30 years from now we could be no closer to ensuring lead free water for the American people.

We simply cannot and will not allow that to happen. The inactivity over the last 30 years certainly highlights the weaknesses in the Lead and Copper Rule. The fact is that the Safe Drinking Water Act instructs EPA to set drinking water standards based on cost-benefit analysis, not public health. This is a fundamental flaw in the statute that leaves vulnerable populations and disproportionately exposed communities unprotected.

This hearing is the beginning of work in this Subcommittee to explore how the Safe Drinking Water Act should be reformed. I thank the Chairman Tonko for undertaking this work. The Safe Drinking Water Act should absolutely ensure that drinking water is safe, and that means health protective, not defined by cost-benefit analysis.

Chairman Tonko and I have worked together repeatedly over the years to provide more funding for drinking water infrastructure. That funding not only helps cities and towns modernize their infrastructure and protect public health, but it also creates jobs. We will continue to work to provide the resources water utilities need to address lead and other threats to public health. The cost of replacing lead service lines should be addressed through infrastructure funding and financing—it should not dictate how safe our water can be.

The science is clear—here is no safe level of lead exposure. The time for action is overdue. EPA must strengthen this proposal to protect public health, including the health of vulnerable populations. And we in Congress should strengthen the Safe Drinking Water Act to do the same.

I would also like to welcome Kim Gaddy from Clean Water Action of New Jersey for joining us today. I look forward to hearing from Kim and from all of our witnesses about ways we can strengthen the Safe Drinking Water Act for the future to better protect the American people. I would now like to yield my remaining time to Representative Dingell.

I now yield the rest of my time to Congresswoman Dingell from Michigan.

Ms. DINGELL. Thank you, Mr. Pallone, for yielding. I would like to briefly recognize an important witness here today, Dr. Mona Hanna-Attisha, from the great state of Michigan, who has done some truly amazing work to help bring critical attention to the

dangerous levels of lead in Flint, Michigan's drinking water, and she has become a national champion.

Dr. Mona, as the kids call her, thank you for being here. We are all grateful to you for all the work that you have done during the Flint water crisis and all the good that you continue to do as a pediatrician, professor, and public health advocate. There is much that the committee can learn from her today and it is an honor to have you here.

This is actually a very true story. I met Dr. Mona early on, like before any of you had heard about Flint water, and it was the first sick child that I met. And you all can picture me doing this; I was going to take the child in my arms, put him in the car, and take him to the best hospital I could in the country. And she said, "OK, Debbie. Take a deep breath. It is systematic. There are a lot more kids like this."

And she has taught me much ever since that first day I met her. Welcome, and I welcome all the witnesses for being here today. I yield back.

Ms. DINGELL. It is a true story.

Mr. PALLONE. I yield back.

Mr. TONKO. The gentleman yields back. The Chair now recognizes Representative Walden, ranking member of the full committee, for 5 minutes for his opening statement, please.

OPENING STATEMENT OF HON. GREG WALDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. WALDEN. Good morning, Chairman.

Mr. TONKO. Good morning.

Mr. WALDEN. And I will say at the top of this; we have another subcommittee meeting concurrent with this one, so I will be, so some of us will be going back and forth. But we all believe the issue of lead exposure in drinking water is of great concern to the safety of our citizens, safety of our children, to our communities, and our overall health and well-being.

The question is, how do we tackle this issue in a way that makes the most sense for public health in a broad sense, in a constitutionally permissible manner, and that best leverages finite public and private resources on this task? No matter how simple people want to make this issue, from engineering to policy choices, the Lead and Copper Rule and its proposed revisions are one of the most technical and challenging drinking water rules that EPA has. It is really hard work.

Lead is typically not present in drinking water sources, nor is it removed at the treatment plant. Moreover, as raised in testimony of the witnesses from the Association of Metropolitan Water Agencies, even if every lead service line in the country were replaced, lead-tainted home plumbing fixtures and piping would continue to present lead exposure issues, is my understanding. So getting EPA to agreement in 1991 on the existing Lead and Copper Rule was no small feat, and the fact that its revisions have taken three decades to formally propose is both frustrating, but not surprising.

While they are not here to accept congratulations, Administrator Wheeler and the staff in the EPA's Office of Ground Water and Drinking Water deserve great credit for finally getting a proposal

out the door when many had given up on its prospects altogether. As we all know though, the proposed rule is still very early in the process. Tomorrow, the public comment period closes and the EPA will be busy digesting and assembling responses to the many issues the public is raising on this rule, which I expect today to be just a brief preview.

While I wish we had this oversight hearing at a time when the EPA and a broader set of witnesses could be heard, it is important that we learn these issues on the front end to understand their impacts when decided by the EPA. So I am especially interested in learning more from Mr. Estes-Smargiassi—did I get close to that?

Mr. ESTES-SMARGIASSI. That was good.

Mr. WALDEN. Oh, good. Well, don't expect me to do it twice and get it right—and other municipal officials about the impact the mandates this proposed rule will place on drinking water systems, particularly unfunded mandates because that is something we have to be aware of. The Drinking Water State Revolving Fund program in the Safe Drinking Water Act owes its existence entirely to a congressional desire to address unfunded mandates posed by federal regulations, not to subsidize rates or chase other collateral goals.

I also want to understand from these same folks whether this rule strikes the correct balance between addressing lead pipes, their treatment or replacement in a cost-effective way for citizens and local governments, so we must also be careful not to avoidably have federal law and state and local requirements conflict with each other and make simultaneous compliance impossible. We have all seen that happen before in different areas. In addition, because of continued disturbances that rattle pipes in turn shakes new lead into the system, I also want to better appreciate what economic and practical impact this rule might have on local planning related to other emergency services like fire safety, sewage, and telecommunications.

And, finally, I am interested in learning from Commissioner Bobbitt as a rural elected official. I think we must look at the cost of this rule to taxpayers, states, communities, and the Federal Government. Every finite dollar we spend here is one dollar less we can spend on other public health priorities, and we have a lot of those.

So, Mr. Chairman, thanks again for having this panel. And I want to welcome our witnesses and some of you, I know, are making return appearances and we appreciate that. We are fortunate to have the level of expertise that many of you bring to this subject and I look forward to the question-and-answer period to get behind your written statements. So thanks again for your participation. We share a goal here and hopefully, we will get a good outcome. And with that I yield back and I have to go to the other sub.

[The prepared statement of Mr. Walden follows:]

PREPARED STATEMENT OF HON. GREG WALDEN

The issue of lead exposures in drinking water is obviously of great concern to the safety of our communities and our children's health and well-being. The question is how do we tackle this issue in a way that makes the most sense for public health - in a broad sense, in a constitutionally permissible manner, and that best leverages finite public and private resources on this task?

No matter how simple people want to make this issue, from engineering to policy choices, the Lead and Copper Rule and its proposed revisions is one of the more technical and challenging drinking water rules that EPA has. Lead is typically not present in drinking water sources, nor is it removed at the treatment plant.

Moreover, as raised in testimony of the witness from the Association of Metropolitan Water Agencies, even if every lead service line in the country was replaced, lead tainted home plumbing fixtures and piping would continue to present lead exposure issues.

Getting EPA to agreement in 1991 on the existing Lead and Copper Rule was no small feat and the fact that its revisions have taken three decades to formally propose is both frustrating and unsurprising. While they are not here to accept congratulations, Administrator Wheeler and the staff in EPA's Office of Groundwater and Drinking Water deserve credit for finally getting a proposal out the door when many had given up on its prospects.

As we all know, though, the proposed rule is still very early in the process. Tomorrow, the public comment period closes and EPA will be busy digesting and assembling responses to the many issues the public is raising on this rule, of which I expect today to be a brief preview. While I wish we had this oversight hearing at a time when EPA and a broader set of witnesses could be heard, it is important that we learn these issues on the front end to understand their impacts when decided by EPA.

I am interested in learning more from Mr. Estes-Smargiassi and other municipal officials about the impact of the mandates this proposed rule will place on drinking water systems—particularly an unfunded mandates, The Drinking Water State Revolving Fund program in the Safe Drinking Water Act owes its existence entirely to a congressional desire to address unfunded mandates posed by Federal regulations—not to subsidize rates or chase other collateral goals.

I also want to understand from these same folks whether this rule strikes the correct balance between addressing lead pipes—their treatment or replacement—in a cost-effective way for citizens and local governments. We must also be careful not to avoidably have Federal law and state and local requirements conflict with each other and make simultaneous compliance impossible.

In addition, because continued disturbances that rattle pipes in turn shakes new lead into the system, I also want to better appreciate what economic and practical impact this rule might have on local planning related to other emergency services, like fire safety, sewage, and telecommunications.

Finally, I am interested in hearing from Commissioner Bobbitt, as a rural elected official. I think we must look at the cost of this rule to taxpayers, states, communities, and the Federal Government. Every finite dollar we spend here is one dollar less we can spend on other public health priorities.

Mr. Chairman, I want to welcome our many witnesses here today—some making return appearances. We are fortunate to have the level of expertise that many of our witnesses bring to this subject and I look forward to the question and answer period to get behind their written statements.

I yield back the balance of my time.

Mr. TONKO. The gentleman yields back. We thank him. And the Chair would like to remind Members that pursuant to committee rules, all Members' written opening statements shall be made part of the record.

I agree with Representative Walden's assessment that this is an expert panel that we are very much helped by your presence here today, so thank you for joining in this discussion which will lead us to, I think, strong advocacy.

I will now introduce the witnesses for today's hearing. We begin with Dr. Mona Hanna-Attisha, Director of Pediatric Public Health Initiative with C. S. Mott, Endowed Professor of Public Health, Division of Public Health, Associate Professor of the Department of Pediatrics and Human Development at Michigan State University with the College of Human Medicine.

So, quite the credentials.

Next, we have Kim Gaddy, who is with the Environmental Justice efforts. She is an organizer with Clean Water Action of New Jersey. She has joined us in the past, so welcome on the return.

Ms. Angela Licata, New York City Department of Environmental Protection, and she is appearing on behalf of the Association of Metropolitan Administrators.

Next, we have Ms. Cathy Tucker-Vogel, Public Water Supply Section Chief with the Kansas Department of Health and Environment, and she is appearing on behalf of the Association of State Drinking Water Administrators.

Mr. Steve Estes-Smargiassi, Director of Planning and Sustainability at Massachusetts Water Resources Authority, and he is appearing on behalf of the American Water Works Association.

And we then have the honorable Cindy Bobbitt, Commissioner of Grant County, Oklahoma and she is appearing on behalf of the National Association of Counties.

And, finally, Ms. Mae Wu, Senior Director of Health & Food, Senior Attorney, Healthy People & Thriving Communities Program with the Natural Resources Defense Council.

Again, to each and every one of you, thank you for taking the time and for informing us. Before we begin, I would like to explain the lighting system. In front of you are a series of lights. The light will initially be green. The light will turn yellow when you have 1-minute remaining. Please begin to wrap up your testimony at that point. The light will turn red when your time has expired.

At this time, I recognize Dr. Hanna-Attisha for 5 minutes to provide her opening statement, please.

STATEMENTS OF MONA HANNA-ATTISHA, M.D., DIRECTOR, PEDIATRIC PUBLIC HEALTH INITIATIVE, C. S. MOTT ENDOWED PROFESSOR OF PUBLIC HEALTH, DIVISION OF PUBLIC HEALTH; DEBORAH KIM GADDY, ENVIRONMENTAL JUSTICE ORGANIZER, CLEAN WATER ACTION OF NEW JERSEY; ANGELA LICATA, DEPUTY COMMISSIONER, NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION; CATHY TUCKER-VOGEL, PUBLIC WATER SUPPLY SECTION CHIEF, KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT; STEVE ESTES-SMARGIASSI, DIRECTOR OF PLANNING AND SUSTAINABILITY, MASSACHUSETTS WATER RESOURCES AUTHORITY; HONORABLE CINDY BOBBITT, COMMISSIONER, GRANT COUNTY, OKLAHOMA; AND, MAE WU, SENIOR DIRECTOR HEALTH AND FOOD, SENIOR ATTORNEY HEALTHY PEOPLE AND THRIVING COMMUNITIES PROGRAM

STATEMENT OF MONA HANNA-ATTISHA, M.D.

Dr. HANNA-ATTISHA. Good morning.

Mr. TONKO. Good morning.

Dr. HANNA-ATTISHA. I would like to begin by thanking Chairman Paul Tonko, Ranking Member John Shimkus, and all the distinguished members of the subcommittee for the opportunity to present today. A special thank you to Michigan Congresswoman Debbie Dingell for all of her leadership and support of Flint kids during the crisis and since.

Like all of you, I also took an oath. As a pediatrician, I literally put my hand up and dedicated my career to serve and to protect

the children entrusted in my care. Much of that work centers around the child in front of me to make sure that they are healthy today but, more importantly, my work as a pediatrician is nestled in protecting and promoting the promise of our children. Yet in Flint, there was something in our water, something that you couldn't see or taste, or smell that was threatening the tomorrows of all of our children.

In a breakdown of democracy and driven by austerity, our drinking water was changed without proper corrosion control treatment. The corrosive water leached lead from our infrastructure into our water in the hundreds and thousands of parts per billion. It has been said that pediatricians are the ultimate witnesses to failed social policies. It is in our exam rooms where we see the everyday consequences of policy decisions like Medicaid cuts and action on gun violence and lax public health protections.

Our children disproportionately share, bear the burden of these consequences both in their bodies and in their blunted potentials. And as a pediatrician in Flint, I can attest that once again, our children were the victims of a failed policy, specifically the Lead and Copper Rule that provided the vehicle of loopholes, minimal oversight, confusion, and nonhealth-based standards that helped create and perpetuate our crisis.

I wish there was a magic pill that could take away what happened, but when it comes to lead the treatment is prevention. Lead is an irreversible neurotoxin with lifelong multisystem, multigenerational impacts. There is no safe level. Children should never be exposed to lead. What we should be practicing is what we call in public health, primary prevention. And that is why in Flint, after our citywide exposure, our only option has been to move forward to create a sanctuary where children can recover and thrive.

Critical to our recovery has been the congressionally supported Flint Lead Exposure Registry, with funding set to expire next year absent congressional action. The Flint Registry has been an essential resource for identifying individuals exposed to our crisis, connecting them to public health promoting resources, and sharing best practices with similarly impacted communities.

Flint's crisis is an extreme case, but not the first, not the last, and not the worst. A positive ripple effect of our crisis has been the growing awakening across our country that our drinking water regulations never intended for us to consume lead-free water. A troubling number of our cities across the country are now recognizing and struggling with elevated lead in their drinking water.

On behalf of children everywhere, we need a stronger Lead and Copper Rule that catches policy up with science, rights historic wrongs, and prioritizes public health over a minimal compliance. Unfortunately, the proposed revisions are a missed opportunity and fail to rebuild trust in our nation's drinking water.

With further details in my written testimony, I recommend that the EPA make the following improvements: One, lower the action level and remove the trigger level; two, mandate removal of all lead pipes and ban partial line replacements; three, improve sampling to better detect lead and water, especially the contribution from service lines; and four, improve communication, public health, and transparency.

Michigan has decided that we can do better and we revised our state Lead and Copper Rule in 2019. It exceeds national standards. It is now implemented and Michigan's Lead and Copper Rule now better locates service lines through mandatory inventory, improves education and transparency, mandates the replacement of lead lines, and more optimally samples for lead and will eventually lower the action level. Our nation can learn from Michigan and do better.

In conclusion, in 1969, a scientist warned that the problem of lead is so well defined, so neatly packaged with both causes and cures known that if we don't eliminate the social crime, our society deserves all the disasters that have been forecast for it. We have come a long way, but we have more to go. We have not eliminated the social crime and as a pediatrician, I continue to diagnose in the bodies of our children the consequences of our collective inaction and paralysis. Thank you for the opportunity to testify and I look forward to your questions.

[The prepared statement of Dr. Hanna-Attisha follows:]

MICHIGAN STATE UNIVERSITY | HURLEY CHILDREN'S HOSPITAL

PEDIATRIC PUBLIC HEALTH INITIATIVE

Statement of Mona Hanna-Attisha MD MPH FAAP

Associate Professor of Pediatrics and Human Development & C.S. Mott Endowed Professor of Public Health
Director, Michigan State University & Hurley Children's Hospital Pediatric Public Health Initiative
Michigan State University College of Human Medicine

before the:

Committee on Energy and Commerce
Subcommittee on Environment and Climate Change
"EPA's Lead and Copper Proposal: Failing to Protect Public Health"

February 11, 2020

Good morning. I would like to begin by thanking Chairman Paul Tonko, Ranking Member John Shimkus, and all of the distinguished Members of the sub-committee for the opportunity to testify at today's hearing regarding the proposed Lead and Copper Rule revisions. A special thank you to Michigan Congresswoman Debbie Dingell for all her support of Flint's kids during the crisis and since. I would also like to thank your respective staff members for their concern and dedicated work on this issue. This is a very important topic, and I am pleased this sub-committee has chosen to devote today's hearing to the safety of our nation's drinking water and to our public health.

SUMMARY STATEMENT

The EPA's proposed revisions to the Lead and Copper Rule (LCR) are minimalistic and insufficient. In the midst of the Flint water crisis, I have testified twice that a perfect storm of horrible circumstances, including a denial of science, caused the Flint water crisis. One of the ingredients in the perfect storm was the weak and confusing LCR. For the past four years, I have urged the EPA to rethink, modernize, strengthen and simplify the LCR. The current LCR revisions take a small step in the right direction, but fail to change the rule's underlying structural problem - it does not reflect the science of lead exposure, which tells us there is no safe level. It also does not recognize, nor address, that the confusion intrinsic to the LCR itself played a detrimental role in perpetuating the crisis. The current LCR has long-standing problems, including permitting problematic testing methods that do not accurately reflect lead exposure, and opportunities for states to avoid the actions needed to truly protect children. The proposed revisions do not fix these underlying issues, and will not address the national public health crisis of lead in our drinking water delivery system swiftly enough. More simply said, the millions of lead pipes in this country need to be replaced as soon as possible, and now is the time for EPA to mandate it. Following the examples of Madison, Wisconsin; Lansing, Michigan; and now Flint, this can and should be done in ten years.

THE LEAD AND COPPER RULE FAILED FLINT

Like you, I also took an oath. As a pediatrician, I literally put my hand up and vowed to care for and protect the children entrusted in my care. Much of that work centers around the child in front of me - in clinic for a checkup or hospitalized with the flu; but more importantly, my work as a pediatrician is nestled in protecting and promoting the promise of our children. From immunizations to injury prevention, the oath that I took is about making sure that our kids grow up healthy and strong.

Yet in Flint, there was something in our water - something that you couldn't see or taste or smell - that was threatening the potential, the tomorrows, of all our children. By now, you all know that what happened in Flint was the signature environmental and public health disaster of our time. In a breakdown of democracy and driven by austerity, our drinking source was changed without proper corrosion control treatment. Our water was so corrosive that it corroded engine parts at a Flint auto plant.[1] The corrosive water leached lead from our aged and outsized infrastructure into our drinking water, in the hundreds and thousands of parts per billion.[2,3] Hazardous waste levels of lead. **It was the current Lead and Copper Rule that provided the vehicle of loopholes, minimal oversight, and non-health based standards that helped create and perpetuate our crisis, and this proposed rule will not address those problems.**

It has been said that pediatricians are the ultimate witnesses to failed social policies. It is in our exam rooms where we see the everyday consequences of policy decisions such as Medicaid cuts, food assistance rollbacks, staggering child poverty rates, inaction on gun violence, and lax public health protections. Our children disproportionately shoulder these burdens, both in their bodies and in their blunted potentials. And as a pediatrician in Flint, I can attest and bear witness that once again our children were the victims of a failed policy, specifically the Lead and Copper Rule, that did not prioritize their health and development.

It was over four years ago, with my doctor's white coat on, that I stepped out of my pediatric clinic and blew the whistle on behalf of my children: sharing the research that lead was increasingly in the blood of Flint's kids.[4] Research that I never should have had to do considering that we already knew there was lead in the water. The powers-that-be tried to silence me, just as they had done to everyone else who had raised concerns about our contaminated water; but persistence, teamwork and science prevailed. Since then, and with your bipartisan support, Flint has been on a slow but sure path toward long-term recovery.

I wish there was a magic pill or an antidote to take away our crisis; but when it comes to lead, the treatment is prevention. A well-studied poison, lead is a potent, irreversible neurotoxin - it erodes cognition and twists behavior - with lifelong, multisystem and multigenerational impacts. As pediatricians, we respect the science that now clearly understands that there is **no safe level of lead.**[5,6,7] And we recognize that efforts should focus on ensuring children are never exposed to lead - also known as primary prevention. And that is why in Flint, after our population-wide exposure,

---

[1] General Motors shutting off Flint River water at engine plant over corrosion worries. Oct 13, 2014. mlive.com. https://www.mlive.com/news/flint/2014/10/general_motors_wont_use_flint.html

[2] Pieper KJ, Martin R, Tang M, Walters L, Parks J, Roy S, Devine C, Edwards MA. Evaluating water lead levels during the Flint water crisis. *Environ Sci Technol*. 2018;52(15):8124-8132. DOI: 10.1021/acs.est.8b00791

[3] Flint water test results. State of Michigan. https://www.michigan.gov/flintwater/0,6092,7-345-76292_76294_76297---,00.html

[4] Hanna-Attisha M, LaChance J, Sadler RC, Champney Schnepp A. Elevated blood lead levels in children associated with the Flint drinking water crisis: A spatial analysis of risk and public health response. *Am J Public Health*. 2016;106(2):283-290.

[5] Centers for Disease Control and Prevention, Advisory Committee on Childhood Lead Poisoning Prevention. Low level lead exposure harms children: A renewed call for primary prevention. Atlanta, GA: Centers for Disease Control and Prevention; 2012. Available at: www.cdc.gov/nceh/lead/ACCLPP/Final_Document_030712.pdf.

[6] See, e.g., National Institute of Environmental Health Sciences, Lead, https://www.niehs.nih.gov/health/topics/agents/lead/index.cfm

[7] AAP Council on Environmental Health. Prevention of childhood lead toxicity. *Pediatrics*. 2016;138(1):e20161493.

our only option has been to move forward, to create a sanctuary where our children can recover and thrive. Flint is an incredibly resilient community with a proud past; and we have been working around the clock determined to create an even more promising future. The evidence-based interventions we have implemented span the domains of education, nutrition, and health - including early intervention, high quality childcare, home visiting and parenting support, healthcare and behavioral health expansion, nutrition support, trauma informed services and more. Developmental neurobiology has taught us that adverse childhood experiences and toxic stresses, like lead exposure, change the trajectory of a child's life in graded and predictable ways. But science also gives us hope. We can reduce the impact of adversities like lead exposure when we wrap children in evidence-based interventions to promote their health and development.[8] All vulnerable children need these interventions, but kids exposed to lead especially need them.

One of the critical ingredients of our holistic recovery has been the congressionally-supported **Flint Registry**.[9,10,11] With funding set to expire next year absent congressional action, the Flint Registry has been an essential resource for identifying individuals exposed to the crisis, connecting them to public health promoting resources, and sharing best practices with similarly impacted communities. Just as the potential effects of lead exposure are long-term, the work of the Flint Registry is also long-term, and we are optimistic that Congress will continue its bipartisan support for this crucial component of Flint's recovery.

FLINT'S RIPPLES

And as much as the story of Flint is the story of a preventable crime committed with absolute indifference against some of the most vulnerable people in this country, it is also a story of how **we can do better**, especially on behalf of our children. That is what we are trying to model in Flint and that is why I am privileged to be here with you today. We can do better. The much-awaited revision of the Lead and Copper Rule is an opportunity to respect science, right historic wrongs, and prioritize public health over minimal compliance.

Flint's lead-in-water crisis is an extreme case, but not unique, nor the first. A positive ripple effect of our Flint crisis has been the growing awakening that our drinking water regulations never intended for us to consume lead-free water; a troubling number of cities and schools across the country are now recognizing and struggling with elevated lead in their drinking water. It's one of the legacies of the profit-driven and largely unaccountable lead industry that thwarted science, fought regulations and forced its use in our gasoline, paint, and plumbing. On behalf of kids in Flint and kids in

[8] Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, Section on Developmental and Behavioral Pediatrics, Garner AS, Shonkoff JP, Siegel BS, et al. Early childhood adversity, toxic stress, and the role of the pediatrician: Translating developmental science into lifelong health. *Pediatrics*. 2012;129(1):e224-e231.
[9] Flint Registry Home. Flint Registry, 2019. https://www.flintregistry.org
[10] Ruckart PZ, Ettinger AS, Hanna-Attisha M, Jones N, Davis SI, Breysse PN. The Flint water crisis: A coordinated public health emergency response and recovery initiative. *J Public Health Manag Pract*. 2019;25(Suppl 1):S84-S90.
[11] Centers for Disease Control and Prevention. Lead exposure registry of Flint residents - Michigan, CDC-RFA-EH17-1704. Notice of funding opportunity. https://www.cdc.gov/nceh/lead/docs/CDC-RFA-EH17-1704.pdf

Pittsburgh,[12] Chicago,[13] Newark,[14] Portland[15] and throughout this country - and the kids who walk through the halls of congressional buildings - [16] **we need a stronger Lead and Copper Rule.**

It has been approximately fifteen years since the United States Environmental Protection Agency (EPA) committed to writing "long-term revisions" to the Lead and Copper Rule. To much anticipation, the proposed revisions were released in November of 2019. Rather than learning the lessons of Flint and respecting the science of lead's neurotoxicity, **the proposed Lead and Copper Rule Revisions (LCRR) are a missed opportunity** to protect the public's health and to rebuild trust in our nation's drinking water.

OPPORTUNITIES FOR IMPROVING THE LCRR

The EPA should take this opportunity to shift the focus of the LCR to public health, focusing on lead removal and primary prevention. Even in buildings without lead service lines, most of our plumbing contains lead, in fittings and fixtures, lead solder, and galvanized steel.[17] This creates a continuous risk of lead in water, in an exposure pathway intended for human consumption and necessary for survival. To both simplify the LCR and improve public health protection, EPA should include the following improvements in the final LCR revision:

1. ***Lower the action level & remove the trigger level***

The current EPA LCR and proposed LCRR's lead action level of 15 ppb is a measure of utility feasibility and corrosion control effectiveness, not a measure of public health protection.[18] It is not a health-based action level, yet too often interpreted as a "safety level." As noted by the EPA's non-enforceable Maximum Contaminant Level Goal (MCLG) of 0 ppb,[19] there is no safe level of lead. When a water system exceeds the lead action level they are then triggered into additional steps – corrosion control studies, more frequent sampling, public education, and lead service line replacement. This is a missed opportunity to protect public health. The lead action level should be as low as possible, at least at par with the Food and Drug Administration's (FDA) standard for bottled water (5 ppb) or the American Academy

[12] Natural Resources Defense Council. Pittsburgh agrees to terms for tackling its lead-contaminated water. Feb 7, 2019. https://www.nrdc.org/experts/nrdc/pittsburgh-agrees-terms-tackling-its-lead-contaminated-water

[13] Hawthorne M, Reyes C. Brain-damaging lead found in tap water in hundreds of homes tested across Chicago, results show. Apr 12, 2018. Chicago Tribune. https://www.chicagotribune.com/investigations/ct-chicago-water-lead-contamination-20180411-htmlstory.html

[14] Aratani L. 'Damage has been done': Newark water crisis echoes Flint. Aug 25, 2019. The Guardian. https://www.theguardian.com/us-news/2019/aug/25/newark-lead-water-crisis-flint

[15] Portland Water Bureau. Recent monitoring results found elevated levels of lead in tests at some high-risk homes. City of Portland, Oregon. https://www.portlandoregon.gov/water/article/660840

[16] Milman O. High lead levels force workers in Congress building to drink bottled water. Jun 29, 2016. The Guardian. https://www.theguardian.com/us-news/2016/jun/29/congress-building-water-lead-levels

[17] United States Environmental Protection Agency. Use of lead free pipes, fittings, fixtures, solder and flux for drinking water. Updated Jan 27, 2020. https://www.epa.gov/sdwa/use-lead-free-pipes-fittings-fixtures-solder-and-flux-drinking-water

[18] United States Environmental Protection Agency Office of Water. Lead and Copper Rule revisions white paper. Oct 2016. https://www.epa.gov/sites/production/files/2016-10/documents/508_lcr_revisions_white_paper_final_10.26.16.pdf

[19] United States Environmental Protection Agency. Ground water and drinking water: Basic information about lead in drinking water. Updated Nov 18, 2019. https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water

of Pediatrics recommendation for the maximum in drinking water in schools and child care facilities (1 ppb).[20] The proposed lead trigger level of 10 ppb adds outstanding complexity to an already very complicated rule. If 15 ppb is too high for systems to begin taking action, it will be far more simple to reduce the action level to 10 ppb.

2. Mandate removal of lead pipes & ban partial line replacements

There are 6.5 to 10 million lead service lines serving tens of millions of Americans.[21] We must remove lead service lines proactively. If we wait until sampling confirms there is a problem (triggered by an action level exceedance), we have waited too long. The best time to remove a lead service line is before a water treatment failure that could cause high lead release into the water. The LCRR should mandate a requirement to remove all full lead service lines, regardless of lead levels measured in drinking water. This requirement should be completed within 10 years of the rule becoming final. This requirement will be most effective if coupled with an appropriation for lead service line replacement. Funding for lead service line replacement should be prioritized for water systems with a high ratio of lead service lines to population served living under the poverty level. The revised rule should also prohibit all partial lead service line replacements because of their potential to increase risk of lead release.[22]

3. Improve sampling to better detect lead in water

The current EPA LCR and the proposed LCRR requires water systems to collect the first liter of water from the tap; this first liter typically does not include water from the lead service line, which is the largest source of lead in drinking water. These first liter samples are inadequate for identifying at-risk systems, communicating the risk of lead service lines, triggering public education and lead service line replacement programs, and measuring the effectiveness of corrosion control treatment. The final LCRR must include a requirement for water systems with lead service lines to collect sequential samples (ie: first liter and fifth liter) to better detect lead in water.

4. Improved communication/public education/transparency

Revise public education to provide more timely and informative information regarding the risk of lead in drinking water. This includes annual notification to all consumers of lead and unknown service lines as proposed, improved language regarding the risk of lead service lines and the need to use lead-reducing filters, and more complete information on the health risk of exposure to lead in water. While the proposal includes a requirement to make compliance sampling data publicly available, the final rule should make ***all*** sampling data publicly available including investigation and source water sampling data, and there must be a requirement to notify the public how to access the publicly available data. In lead crises all over the country, consumers have been left uninformed about source water and treatment changes that affect water quality in their homes. The final rule should require water systems to notify all consumers when they are considering source water and treatment changes, and make any studies investigating potential changes - including corrosion control studies - available to the public. Consumers need this critical information in easily accessible and acceptable non-technical language to understand their own role in reducing their exposure to lead in drinking water.

---

[20] AAP Council on Environmental Health. Prevention of childhood lead toxicity. *Pediatrics*. 2016;138(1):e20161493.

[21] United States Environmental Protection Agency Office of Water. Lead and Copper Rule revisions white paper. Oct 2016. https://www.epa.gov/sites/production/files/2016-10/documents/508_lcr_revisions_white_paper_final_10.26.16.pdf

[22] Del Toral MA, Porter A, Schock MR. Detection and evaluation of elevated lead release from service lines: A field study. *Environ Sci Technol*. 2013;47(16):9300–9307.

MICHIGAN'S MODEL LEAD AND COPPER RULE

Michigan's experience with the Flint water crisis tragically demonstrated the inadequacies of the LCR. Driven by public health protection, Michigan revised the state LCR in 2018. Now implemented, Michigan's LCR better locates lead service lines through mandatory comprehensive inventories, improves education and transparency, mandates replacement of lead service lines, more optimally samples for lead in water (first and fifth liter sampling) and will eventually lower the lead action level.[23,24] Preliminary analysis from the first year, using the new sampling procedures, reveals that more than three times the number of systems (4% to 13%) exceeded the lead action level when fifth liter samples were collected. Communities across Michigan are now becoming better informed about the risk of lead in drinking water, and how they can best minimize their risk. Preliminary economic research also notes a 40% return on investment for replacing lead service lines.[25] Michigan's LCR experience can serve as a model for the entire nation. It shows that proactive prevention-based practices coupled with improved transparency has the potential to reduce lead in drinking water.

IT IS AN EQUITY AND JUSTICE ISSUE

It is well recognized that the burden of lead exposure does not fall equally on our nation's children. An environmental and social injustice, poor and predominantly-minority kids disproportionately suffer from lead exposure and consequently its pernicious and potentially life-altering impacts. The LCR further exacerbates this injustice by requiring private property owners to pay for private side lead service line replacement. The LCR has resulted, and the LCRR will continue to result in, two tiers of water quality - safe water for those who can afford it, and worse quality water for those who cannot afford to replace lead service lines. This means that the deleterious health and neurodevelopmental manifestations of lead exposure are further concentrated on individuals who already struggle with access to safe affordable housing, quality education, nutrition, and health care. These regulatory changes are not just a "water quality" issue, but an opportunity to address historic and socioeconomic disparities.

[23] University of Michigan Graham Sustainability Institute. What you need to know about Michigan's 2018 Lead and Copper Rule. http://graham.umich.edu/project/revised-lead-and-copper-rule

[24] MIchigan Department of Environment, Great Lakes, and Energy. Lead and Copper Rule. https://www.michigan.gov/egle/0,9429,7-135-3313_3675_3691-9677--,00.html

[25] Greene J. New lead water line study underway in Michigan. Nov 1, 2019. Crain's Detroit Business. https://www.crainsdetroit.com/health-care/new-lead-water-line-study-underway-michigan

MICHIGAN STATE UNIVERSITY | HURLEY CHILDREN'S HOSPITAL

PEDIATRIC PUBLIC HEALTH INITIATIVE

CONCLUSION

In 1969 at the National Conference on Lead Poisoning, reflecting on the persistence of childhood lead exposure, scientist Rene DuBos warned that **". . . the problem is so well-defined, so neatly packaged, with both causes and cures known, that if we don't eliminate this social crime promptly, our society deserves all the disasters that have been forecast for it."**[26]

We have come a long way as a nation since 1969; with policies enacted that have restricted the industrial and commercial uses of lead, far less children are now exposed to lead. However, in some respects, we continue to reactively respond to the many disasters that have been so omnisciently forecast for us. Underneath layers of paint, hidden in the soil of our children's playspaces, and delivering our drinking water, remains the lingering legacy of lead. We have not eliminated this social crime. And as a pediatrician, I continue to diagnose in the bodies of our children, the consequences of our collective inaction and paralysis.

It is my hope that our discussion today, and this committee's interest in this subject, will help learn the lessons of Flint and truly strengthen the Lead and Copper Rule. Throughout time, and within these great rooms of Congress, we have respected science, learned from history, and boldly taken steps to protect our nation's children. I am hopeful that we will continue to do the same to finally address lead in drinking water in a meaningful way. Thank you again for the opportunity to address the committee today, and I look forward to your questions.

DR. MONA HANNA-ATTISHA

Mona Hanna-Attisha, MD, MPH, FAAP is founder and director of the Michigan State University and Hurley Children's Hospital Pediatric Public Health Initiative, an innovative and model public health program in Flint, Michigan. A pediatrician, scientist, public health advocate and author, Dr. Hanna-Attisha has testified twice before the United States Congress, awarded the Freedom of Expression Courage Award by PEN America, and named one of *Time* magazine's 100 Most Influential People in the World for her role in uncovering the Flint Water Crisis and leading recovery efforts. She is founding donor of the Flint Child Health and Development Fund (flintkids.org) and author of the 2018 *New York Times* 100 Notable book, *What The Eyes Don't See: A Story of Crisis, Resistance, and Hope in an American City*.

Trained in environmental health and health policy, Dr. Hanna-Attisha received her Bachelor's and Master of Public Health degrees from the University of Michigan and her medical degree from Michigan State University College of Human Medicine. She completed her residency and chief residency in pediatrics at Children's Hospital of Michigan in Detroit. She is currently an Associate Professor of Pediatrics and Human Development and a C.S. Mott Endowed Professor of Public Health at Michigan State University College of Human Medicine in Flint, Michigan.

[26] Bellinger DC, Bellinger AM. Childhood lead poisoning: The tortuous path from science to policy. *J Clin Invest*. 2006;116(4):853–857. doi:10.1172/JCI28232

Mr. TONKO. Thank you, Doctor.

And now we recognize Ms. Gaddy. You are recognized for 5 minutes, please, and again, welcome.

STATEMENT OF KIM GADDY

Ms. GADDY. Good morning, Chairman Tonko and Ranking Member Shimkus and all members present as well as Congressman Pallone from my home state of New Jersey. My name is Kim Gaddy and I am the Environmental Justice Organizer for Clean Water Action of New Jersey.

Clean Water Action is a national organization working in 14 states on environmental and health issues with a focus on drinking water and water pollution. Thank you for the opportunity to address the subcommittee today. Although I live in Newark, I am also here to lift up the voices of residents in environmental justice communities to speak about the needs of all communities in New Jersey and to comment on how this Environmental Protection Agency can improve its proposal to revise the Safe Drinking Water Act Lead and Copper Rule.

Our experience with elevated lead levels in Newark points to the need for clear federal requirements for water systems and state primacy agency. We also sorely need increased federal investment in water infrastructure in EPA and state implementation and enforcement and in promoting improved managerial, operations, and communications capacity for water systems.

In Newark, we experienced the difficulty of communicating health risk and technical information. At a time when residents needed the clearest possible information, some felt that city officials were not being transparent. The role of our state agency in overseeing our water system's compliance with regulations was not obvious to residents, nor was the role of the EPA regional office.

Rules and procedures for water systems need to be straightforward and the states' responsibilities need to be well defined as well. Newark has taken significant steps to reduce the risk of lead at the tap, including partnering with the state to fully replace, at no cost to the homeowners, 18,000 lead service lines in three years. New treatment has been installed and is expected to reduce lead levels by the end of the year. Filters and replacement cartridges have been made available to impacted residents as well as free water testing.

We are relieved to see progress, but we think this crisis could have been avoided and if we can prevent similar problems in other New Jersey communities and around the country, we must act now. Revisions to the Lead and Copper Rule are not the only solution, but they can help to prevent communities from experiencing what we have gone through in Newark.

While water chemistry and treatment play a role in whether lead leaches from pipes and fixtures, removing sources of lead in contact with water is the best way to reduce lead at the tap. Lead service lines are the largest source of lead in tap water. EPA has missed an opportunity to address this source of lead by requiring full lead service line replacement at all regulated water systems. This is an ambitious undertaking, but momentum toward full replacement has never been greater.

Water systems across the country are prioritizing replacement and some have committed to fully replacing all lead service lines, including Newark. States are taking action to support this activity and New Jersey as well. EPA's own proposal signals throughout that full lead service line replacement is a desirable goal that is achievable. EPA proposes that water systems submit lead service line replacement plans that include a wide range of details that would be involved in setting up a replacement program.

While EPA's proposal envisions these plans being used in the event of elevated lead levels, the requirements suggest that EPA has determined that all systems with lead service lines are able to develop such plans. Many other aspects of the proposal indicate that EPA knows that full lead service line replacement is the most obvious way. Clean Water Action is calling on EPA to require full lead service line replacement at all water systems with a baseline goal of ten years. Had such a requirement been in place, perhaps Newark could have been spared the crisis that erupted in the wake of Lead Action Level exceedances. We need to start now to get the lead out of contact with drinking water to prevent elevated lead levels and similar crises in other communities in New Jersey and across the country.

As we learned in Newark, full replacement programs are impeded when customers are required to pay for replacement of the portion of the line on the customer's side. It is more equitable and efficient for water systems to cover this cost. When Newark's lead service line replacement program started, the homeowner was originally going to contribute $1,000 toward the cost of the full replacement while less than the cost in homes' owners.

In Newark, over 75 percent of residents are renters who did not receive water bills or information about replacement programs and other issues. I am a Newark renter who experienced this firsthand. We know that there is no safe level of lead. We know that there is no safe level of lead. We know that health impacts of lead are of particular concern of children under six. That is why we are urging EPA to strengthen its proposal and urging Congress to support a vision of modernized drinking water systems by making bold investments now. Thank you.

[The prepared statement of Ms. Gaddy follows:]

Testimony of Deborah Kim Gaddy
Clean Water Action New Jersey Environmental Justice Organizer
House Committee on Energy and Commerce
Subcommittee on Environment and Climate Change
Hearing on "EPA's Lead and Copper Proposal: Failing to Protect Public Health"
February 11, 2020

Good morning. My name is Deborah Kim Gaddy. I am the Environmental Justice Organizer for Clean Water Action in New Jersey. Clean Water Action is a national organization working in 14 states. Founded in 1972 to help pass and then engage the public in effective implementation of the Clean Water Act, Clean Water Action works on a wide array of environmental and health issues with a focus on drinking water and water pollution. Thank you for the opportunity to address the Subcommittee today. Although I live in Newark, I'm also here to lift up the voices of residents in Environmental Justice communities, to speak about the needs of all communities in New Jersey, and to comment on how the Environmental Protection Agency (EPA) can improve its proposal to revise the Safe Drinking Water Act Lead and Copper Rule (LCR).

Our experience with elevated lead levels in Newark points to the need for clear federal requirements for water systems and State primacy agencies. We also sorely need increased federal investment in water infrastructure, in EPA and State implementation and enforcement activities, and in promoting improved managerial, operations, and communications capacity for water systems. During the period where Newark experienced on-going exceedances of the LCR Lead Action Level, we experienced the difficulty of communicating public health risk and technical information to the public. At a time when residents needed the clearest possible information, they felt that city officials were not being transparent. The role of our State agency in overseeing our water system's compliance with regulations was not clear to residents. We came to

understand that clear requirements for water systems and well-defined responsibilities for State agencies and EPA are critical. Coordination within communities, for example with local public health agencies, is also important.

The City of Newark has now taken significant steps to reduce the risk of lead at the tap including partnering with the State to fully replace, at no cost to the home or building owner, 18,000 lead service lines in 3 years. New treatment has been installed and is expected to reduce lead levels by the end of the year. Filters and replacement cartridges have been made available to impacted residents, as well as free water testing and blood testing for children under six years of age. We are relieved to see progress but we think this crisis could have been avoided and if we can prevent similar problems in other New Jersey communities and those around the country we must act now.

Revisions to the Lead and Copper rule are not the only solution but they can help to prevent communities from experiencing what we have gone through in Newark. Updating these regulations to prevent lead at the tap is overdue. While water chemistry and treatment play a role in whether lead leaches from pipes and fixtures, removing sources of lead in contact with water is the best way to reduce lead at the tap. Lead service lines- the pipes that deliver water from the large water main to the home or building - are the largest source of lead in tap water.[1] In its proposal, EPA missed an opportunity to address this source of lead by requiring full lead service line replacement at all regulated water systems. This is an ambitious undertaking but momentum toward full replacement has never been greater. Water systems across the country are prioritizing replacement and some have committed to fully replacing all lead service lines, including Newark. States are taking action to support this activity, including New Jersey.

[1] National Primary Drinking Water Revisions: Proposed Lead and Copper Rule Revisions, Federal Register Vol. 84 No. 219, November 13, 2019, p. 61694; American Water Works Association (AWWA) Water Research Foundation (2008) "Contributions of Service Line and Plumbing Fixtures to Lead and Copper Rule Compliance Issues" (Sandvig et al., 2008) estimates that 50 percent–75 percent of lead in drinking water comes from lead service lines.

EPA's own proposal signals throughout that full lead service line replacement is a desirable goal that is achievable. EPA proposes that within 3 years, water systems prepare lead service line replacement plans that include a wide range of details that would be involved in planning for full replacement, including a replacement rate developed in consultation with the State, plans for notifying customers, procedures for filter provision and post-replacement flushing, and a funding strategy. While EPA's proposal envisions these plans being used in the event replacements are done in the event of elevated lead levels, they suggest that EPA has determined that all systems with lead service lines or service lines of unknown composition are able to develop such plans. Yet, EPA stops short of putting a requirement in place. In *Strategies to Achieve Full Lead Service Line Replacement*, an EPA document published to support the proposed LCR revisions, EPA notes that "LSLR programs can be structured in ways to overcome potential legal, financial, and practical challenges related to full LSLR."[2] The document offers solutions to critical replacement program issues around legal issues and financing. Many other aspects of the proposal indicate that EPA knows that full lead service line replacement is the most obvious way to reduce lead at the tap. Yet they stopped short of requiring full replacement at all water systems.

Clean Water Action is calling on EPA to require full lead service line replacements at all water systems with a baseline goal of ten years. Had such a requirement been in place, perhaps Newark could have been spared the crisis that erupted in the wake of Lead Action Level exceedances. We need to start now to get the lead out of contact with drinking water to prevent elevated lead levels and similar crises in other communities in New Jersey and across the country.

As we learned in Newark, full replacement programs are impeded when customers are required to pay for replacement of the portion of the line under private property, often referred to as the "customer side." It is more equitable and efficient for water systems to cover this cost. When Newark's lead service line replacement program started, the

[2] *Strategies to Achieve Full Lead Service Line Replacement,* October 2019, EPA 810-R-19-003, page 5

home or building owner was required to contribute $1,000 toward the cost of the full replacement. While less than the cost that home or building owners currently pay in other communities, this was a disincentive in our community. Now the water system covers the entire cost of the full replacement. Although, Newark Mayor Baraka and the Municipal Council were able to secure funding to fully replace the 18,000 lead service lines in Newark, this will not be the case for all the other communities in New Jersey where lead service lines are present. Congress can and should help by increasing federal investment to help Environmental Justice and all communities achieve these and other clean water goals. The "Moving Forward Framework" recently proposed by the House Committee on Energy and Commerce and other Committees includes $22.9 billion in "Transformative Drinking Water Investments" and we support this proposal to invest in much needed improvements.

My personal experience in Newark included living in a rental property where the lead service line was replaced. In Newark, over 75% of residents are renters, who do not receive water bills or information about replacement programs and other issues. I can say from personal experience that aspects of EPA's proposed revisions that increase outreach to renters and actual consumers of the water in the home or building are critical. EPA needs to provide guidance for water systems on how to effectively reach the people who are consuming the water but not paying the bill.

EPA needs to ensure that all aspects of the complex Lead and Copper Rule are as clear as possible so water systems know exactly what is required. Clear requirements are also essential for implementation and enforcement by the State agencies responsible for overseeing compliance. An updated Lead and Copper Rule will require increased State agency activity to be effective and to help make sure ongoing elevated lead levels like we experienced in Newark do not happen in other communities and that problems are spotted before they become crises. We are encouraged that the transformative drinking water investments proposed in the Moving Forward Framework include increases in Public Water System Supervision grants for State primacy

agencies implementing the Lead and Copper Rule and other Safe Drinking Water Act regulations.

In communities like Newark, people are exposed to lead from numerous sources. We know that there is no safe level of lead. We know that health impacts of lead are of particular concern for children under 6, but that lead affects all of us. We must make more and faster progress on addressing all sources of lead. Right now, we have an opportunity to do more to reduce exposures from lead in drinking water. That's why we are urging EPA to strengthen its proposal and urging Congress to support a vision of modernized drinking water systems by making bold investments now.

Mr. TONKO. Thank you very much.

Next, we will move to Ms. Licata, please, for 5 minutes with your opening statement. Thank you.

STATEMENT OF ANGELA LICATA

Ms. LICATA. Chairman Tonko, Ranking Member Shimkus, and members of the subcommittee, the Association of Metropolitan Water Agencies, or AMWA, appreciates the opportunity to offer our thoughts today on EPA's proposed revisions to the Lead and Copper Rule. I am Angela Licata, deputy commissioner of the New York City Department of Environmental Protection, or DEP. Each day, DEP delivers more than one billion gallons of fresh, clean water to the taps of millions of customers throughout New York State. That is nine million people.

I also serve as vice president of AMWA's board of directors. AMWA is an organization representing the nation's largest publicly-owned drinking water systems. AMWA's members collectively serve more than 155 million Americans with quality drinking water, and the Association has developed detailed comments in response to EPA's proposed revisions to the Lead and Copper Rule.

These comments, which will be formally submitted to EPA this week, are the basis of the Association's testimony today. And please note that I address you as a representative of the AMWA board of directors and that tomorrow New York City will submit its own written comments to EPA. AMWA's comments outline a number of places where we agree with EPA's approach, but identify numerous areas where we believe there is room for improvement.

Addressing lead in drinking water is a particularly vexing challenge, because unlike most other contaminants, lead is typically not present in drinking water sources. Instead, lead may be introduced into the drinking water of communities when the water reacts with lead in buried service lines and premise plumbing in homes.

Making things even more complicated is the fact that homeowners are responsible for their interior plumbing and ownership of service lines are typically divided between the public water system and the private homeowner. There is no easy solution that can quickly eliminate this problem. Even getting rid of every lead service line in the nation would not eliminate exposure to lead as lead solder in plumbing fixtures would remain in millions of homes throughout the country.

In terms of the proposed Lead and Copper Rule revisions, AMWA believes the most effective regulations must be achievable, practical, and enforceable. AMWA appreciates that the proposal avoids setting mandates such as a deadline for the replacement of all service lines nationwide. While removing all lead service lines is a worthy aspiration and should be a goal, in reality, doing so would take decades, cost billions of dollars, and require the cooperation of millions of individual homeowners. It would prevent water systems from allocating their limited budgets to other initiatives that may deliver greater public health benefits such as other emerging contaminants such as PFOS and dealing with aging infrastructure and resilience to climate change.

We also support aspects of the rule that require water systems to complete an inventory that specifies the composition of service

lines and that require large systems to post these inventories online. Armed with this information, individual homeowners will be empowered to direct their water system to replace the publicly-owned portion of the lead service line when the homeowner simultaneously replaces their privately-owned lead line.

AMWA has a number of suggestions to make this process as seamless as possible, but we generally agree with the intent. AMWA also agrees with steps the proposal takes to discourage partial lead service line replacements such as making them ineligible to count towards mandated replacement rates. AMWA agrees that a total ban on partial replacements would be ill-advised. For example, emergency water replacement work may require a water system to replace the publicly-owned portion of the household's lead service line. Because customer consent to replace the private portion of the lead service line cannot always be quickly obtained, it would be impractical to completely ban partial replacements in these circumstances.

Other parts of the proposed rule require improvement and we harbor deep concerns requiring a water system to notify all customers within 24 hours of any 90th percentile lead action level exceedance. This goes far beyond the mandate set by Congress in the 2016 WIIN Act, which only requires this urgent notification if the exceedance has the potential for serious adverse human health effects as a result of short-term exposure. We believe an urgent notification in the absence of such health risks could unnecessarily alarm the public.

We also have strong concerns with aspects of the proposed rule that would require water systems to obtain and distribute high quantities of pitchers that may not readily be available, prompt adjustments to a water system's corrosion control based on only a small number of samples showing elevated lead levels, and task water systems with compelling school and child care centers to give water quality testing in their facilities.

In closing, AMWA supports achievable, practical, enforceable action to reduce public exposure to lead in drinking water. This concludes my statement and I will be happy to answer any questions you may have.

[The prepared statement of Ms. Licata follows:]

Testimony of

Angela Licata
Deputy Commissioner, New York City Department
of Environmental Protection

On Behalf of the
Association of Metropolitan Water Agencies

Before the
U.S. House of Representatives
Energy and Commerce Committee
Environment and Climate Change Subcommittee

Hearing on:
"EPA's Lead and Copper Proposal:
Failing to Protect Public Health"

February 11, 2020

Summary of the Testimony of Angela Licata

- Addressing lead in drinking water is a challenge because lead is typically not present in drinking water sources, nor is it removed at the treatment plant. Instead, lead is introduced into drinking water supplies when the water reacts with lead in buried service lines and premise plumbing in homes.

- AMWA has been involved with the Lead and Copper Rule since its inception and values all the work that EPA has done to decrease the public's exposure to lead through drinking water. The association has developed extensive comments on the proposed revisions to the rule, and these comments are the basis of our testimony.

- We appreciate that the proposal would require water systems to complete inventories of their service lines, discourages partial lead service line replacements, and avoids setting mandates for the removal of all lead service lines nationwide.

- We have numerous constructive suggestions to improve the proposed rule, particularly areas relating to the notification of customers following a lead action level exceedance, the procurement and distribution of filters, circumstances where adjustments to a community's corrosion control must be considered, and the interaction between water systems and school and child care centers for the purpose of testing for lead in facility drinking water.

- AMWA supports an achievable, practical, and enforceable Lead and Copper Rule, and hopes its comments will help EPA attain this objective.

Chairman Tonko, Ranking Member Shimkus, and members of the subcommittee: The Association of Metropolitan Water Agencies (AMWA) appreciates the opportunity to offer our thoughts today on EPA's proposed revisions to the Lead and Copper Rule.

I am Angela Licata, Deputy Commissioner of the New York City Department of Environmental Protection (DEP). Each day, DEP delivers more than 1 billion gallons of fresh, clean water to the taps of nine million customers throughout New York State.

I also serve as Vice President of AMWA's Board of Directors. AMWA is an organization representing the nation's largest publicly owned drinking water systems, which collectively serve more than 155 million Americans with quality drinking water. Please note that I address you today as a representative of AMWA. Tomorrow, New York City will submit its own written comments to EPA in response to the agency's proposed Lead and Copper Rule revisions.

Over the past several months, AMWA's members have worked with the association's staff to develop comprehensive comments for EPA in response to the agency's proposed revisions to the Lead and Copper Rule. Those detailed comments, which will be formally submitted to EPA this week, are the basis for AMWA's testimony today.

Addressing lead in drinking water is a particularly challenging because – unlike most other contaminants – lead is typically not present in drinking water sources, nor is it removed at the treatment plant. Instead, lead is introduced into the drinking water of New York City and many other communities when the water reacts with lead in buried service lines and premise plumbing in homes.

To minimize these reactions, New York City and many other communities carefully adjust the pH levels of drinking water to a specific range to lessen the corrosive nature of the water. We also add phosphoric acid – a common food preservative – that forms a protective film on pipes and household plumbing as water passes through. We also perform extensive water quality monitoring throughout the city every day.

Nevertheless, there is no easy solution that can quickly and completely eliminate the problem of lead in drinking water. The issue is further complicated because ownership of individual service lines is typically split between private homeowners and public water systems. But even if every lead service line in the country were removed, lead remaining in premise plumbing and fixtures would continue to pose a threat to public health.

In terms of EPA's proposed revisions to the Lead and Copper Rule, AMWA believes that the agency has put a great degree of thought into the proposal, and we support the effort to address this complicated issue. AMWA has been involved with the Lead and Copper Rule since its inception and values all the work that EPA has done to decrease the public's exposure to lead through drinking water. The formal comments we will file this week will identify a number of strengths in the proposed rule, but will also encourage EPA to make a number of changes to improve its clarity and the ability of water systems to implement and comply with the rule's requirements.

Strengths of the proposed revisions

Among the strengths of the rule is the new requirement for water systems to complete an inventory that specifies the composition, if known, of public and privately

owned service lines connected to the distribution system. While many water systems will face challenges in accurately determining the makeup of some service lines – particularly those on private property – on balance it is important and worthwhile for water systems to document what materials are in the service lines that deliver water to their customers. Once an inventory is completed, we agree that all water systems serving more than 100,000 people should make their inventories available to the public online. Our comments will include several suggestions to improve the inventory requirements, but overall we welcome their addition to the Lead and Copper Rule.

AMWA appreciates that EPA's proposal avoids setting unattainable mandates such as a deadline for the replacement of all lead service lines nationwide. Compliance with such a mandate would take decades, cost billions of dollars, and would prevent water systems from allocating their limited budgets to other projects and initiatives that may deliver greater public health benefits. However, the rule also empowers individual homeowners to compel their water system to replace the publicly owned portion of a lead service line when the homeowner simultaneously replaces their privately owned lead line. AMWA will offer EPA a number of suggestions to make this process as seamless as possible – such as fostering a cooperative process between the homeowner and the water system in place of arbitrary deadlines that may be impractical in many cases – but we generally agree that giving homeowners a pathway to have their water system replace a lead service line connected to their property is one of the most important new features in the proposed rule.

AMWA also agrees with steps the proposal takes to discourage partial lead service line replacements, as they carry few public health benefits and allow lead pipes to

remain in the ground. But a total ban on partial replacements, as some would advocate, is ill-advised and not feasible. For example, emergency water main replacement work may offer an opportunity for a water system to simultaneously replace the publicly owned portion of a household's lead service line. Likewise, a planned water main replacement project may result in a new alignment or spacing of the main, necessitating replacement of at least part of a lead service line. Ideally the privately owned portion of the lead line would be replaced at the same time, but a water system's ability to do so is often contingent upon that customer's willingness to allow work on his or her property (and, in many cases, for the customer to pay the costs associated with replacing the privately owned portion). EPA's proposed revisions recognize that there will be situations where customer consent cannot be quickly obtained, and in those limited cases would permit a water system to at least remove the publicly owned portion of a lead service line when the emergency main repair projects or other scheduled infrastructure work provide an opportunity to do so.

AMWA further appreciates that the proposed rule would not require water systems to cover costs associated with the replacement of privately owned service lines, though they would retain the option to do so. While some water systems are able to subsidize private-side replacement, the ability of many others to do so is legally questionable or banned outright. A mandate in the Lead and Copper Rule for a water system to pay the cost of replacing a privately owned portion of a lead service line would therefore leave many water systems in the position of either violating the rule, or violating state or local laws barring the use of ratepayer dollars for infrastructure projects that benefit individual residents. The proposed rule wisely avoids this scenario.

We understand that low-income homeowners may face particular challenges related to paying for the replacement of their privately-owned lead service line. Fortunately, Section 2105 of the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016 (P.L. 114-322) authorized grant funding that may be used by water systems for "providing assistance to low-income homeowners to replace lead service lines." Through fiscal year 2020 Congress has appropriated nearly $45 million for these grants, and AMWA hopes that EPA will soon begin seeking applications so these funds can be put to work for low-income homeowners who wish to proactively remove lead lines from their property.

Areas in need of improvement

AMWA has also identified a number of parts of the proposed rule that are not achievable, practical, or enforceable. For example, one section would require any water system that exceeds the lead action level at the 90th percentile to notify all customers within 24 hours of learning of the exceedance. While we agree that the public should be promptly notified of water quality conditions that may pose severe and acute human health risks, the rule should avoid unnecessarily alarming members of the public (such as those whose homes are not served by lead service lines) who are not expected to be significantly impacted by an exceedance.

We do understand that EPA's proposal for public notification following a lead action level exceedance must abide by the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016 (P.L. 114-322). That law amended the Safe Drinking Water Act to require a notice to "be distributed as soon as practicable, but not later than 24

hours, after the public water system learns of the … exceedance," provided that the exceedance "has the potential to have serious adverse effects on human health as a result of short-term exposure."

However, no expedited statutory notice distribution timeframe applies in the case of a lead action level exceedance that does not have the potential to have serious adverse effects on human health as a result of short-term exposure. In that case, the Safe Drinking Water Act directs EPA to issue a regulation to prescribe the "manner, frequency, form, and content" of such notice after taking "into account the seriousness of any potential adverse health effects that may be involved" (See SDWA Sec. 300g-3(c)(2)(A)).

EPA contends in the preamble to the proposed rule that it "cannot define the subset of [action level] exceedances that could result in serious adverse health effects due to short-term exposure." While we acknowledge this could pose a challenging task, Congress has only directed the agency to require 24-hour notification under this specific circumstance. We have strong concerns that requiring an expedited notice following any 90th percentile action level exceedance could unnecessarily alarm the public, and our comments will offer alternative options for EPA to explore that abide by the requirements of the WIIN Act.

AMWA notes that the proposal includes a new "Find-and-Fix" procedure that water systems would follow to attempt to identify and address the underlying cause of elevated levels of lead detected in individual homes during the course of required monitoring activities. However, as proposed, even a single tap sample result that exceeds the action level could cause a water system to have to consider or implement systemwide corrosion control changes. This could prompt adjustments that have unintended

consequences elsewhere in the distribution system and that expose the public to elevated lead levels and corresponding public health issues. Our comments will tell EPA that corrosion control adjustments should only be made in response to data demonstrating that current corrosion control is deficient throughout the distribution system, and not in response to a small number of samples where other, household-specific factors may have influenced the results.

The proposed rule lays out a number of scenarios under which a water system would be required to provide pitcher filters to customers, such as following lead service line replacement work or other projects that could disturb lead pipes. AMWA believes that this is reasonable, but we have significant concerns with a proposed requirement for water systems to provide pitcher filters and three months of replacement cartridges to customers served by a lead service line following the replacement of the water meter. Water meter replacement typically consists only of shutting off water for a short time and replacing the meter without any cutting of the pipe itself, meaning that the potential to disturb lead is minimal. Requiring water systems to provide filters for these normal operational and maintenance activities would amount to a significant cost burden on water systems and their customers, and would raise doubts about the ability of large water systems – some of which replace thousands of water meters every year – to obtain sufficient quantities of filters in a timely manner.

Finally, AMWA disagrees with language in the proposal that would require water systems to meet a target of testing the water of 20 percent of schools and 20 percent of licensed child care facilities in their service area each year. The proposal offers no guidance as to how a water system should identify and contact appropriate schools and

child care centers or how a lack of response by the school or child care center should be treated. As written, the proposal effectively charges water systems with the task of convincing schools and child care centers to agree to testing, while also holding water systems accountable for a school or child care facility's compliance. Because the Safe Drinking Water Act includes no authority for EPA to require schools and child care facilities to test their water for lead - unless that school or child care facility is itself a non-transient non-community water system – we believe it is patently unfair for the proposed rule to create a school and child care facility testing regime that is only enforceable against community water systems.

AMWA will therefore ask EPA to eliminate all annual school and child care facility testing benchmarks from the final rule, and only require water systems to assist in the testing of a school or child care facility's water when requested to do so by that facility. We believe those who wish for EPA to go further in requiring water quality testing in schools and child care facilities should encourage Congress to give the agency that authority directly.

Conclusion

AMWA thanks the committee for the opportunity to discuss EPA's long-awaited revisions to the Lead and Copper Rule. AMWA's members are public health leaders in their communities and make protection of their customers the highest priority. At the same time, we believe that any regulatory mandate related to lead in drinking water must be achievable, practical, and enforceable. The comments we have discussed today, and

will formally submit to EPA this week in response to the proposed rule, aim for this objective.

Thank you again for the opportunity to testify, and I would be happy to answer any questions you may have.

Mr. TONKO. Thank you very much, Ms. Licata.

And next, we will go to Ms. Tucker-Vogel. You are recognized for your opening statement of 5 minutes, please.

STATEMENT OF CATHY TUCKER-VOGEL

Ms. TUCKER-VOGEL. Good morning, Chairman Tonko, Ranking Member Shimkus, and members of the subcommittee. Thank you for inviting me to speak today. I am the president-elect of the Association of State Drinking Water Administrators whose members include the 50 state drinking water programs, five territorial programs, the District of Columbia, and the Navajo nation.

ASDWA members have primary oversight responsibility for implementing the Safe Drinking Water Act, and provide technical assistance, support, and oversight of drinking water systems which is critical to ensuring safe drinking water. I am also chief of the Public Water Supply Section within the Kansas Department of Health and Environment.

Today, I will discuss ASDWA's perspective on EPA's proposed Lead and Copper Rule revisions and how to strengthen the rule to more effectively address lead in drinking water and protect public health. I would also like to note that this testimony reflects recommendations of ASDWA and may not necessarily reflect the position of the Kansas Department of Health and Environment.

Lead in drinking water has long been a concern for communities across the nation. Although considerable progress has been made in reducing lead in water since implementation of the 1991 Lead and Copper Rule, large-scale crises in Flint, Michigan and Washington, DC stand as proof that lead continues to be a public health concern. States' water systems and the public need national leadership to continue making progress in reducing exposure to lead through drinking water.

As was key issues on the LCRR include the following: First, it is time to get the lead out. Replacing all lead service lines is the long-term solution for reducing exposure to lead in drinking water. The first step towards removal is an inventory of all service lines. ASDWA supports regulatory requirements for water utilities to develop a lead service line inventory and replacement plan or demonstrate the absence of lead in their distribution systems. EPA must clarify its lead service line definition for galvanized lines, goosenecks, and pigtails and should include unknown service lines as lead.

ASDWA also recommends strengthening the rule to require a minimum of ten percent lead service line replacement over a 3-year period for any system with lead service lines, and a twenty percent replacement over three years for systems that exceed the lead action level. Second, continue to reduce exposure from lead in drinking water. To reduce lead exposure, ASDWA recommends improved sampling, corrosion control treatment, and water quality parameter monitoring to ensure appropriate water quality is maintained, particularly when water sourcement or treatment processes are changed.

ASDWA recommends sample site assessments proposed as "find and fix" be included in the final rule to ensure there is appropriate corrosion control throughout the distribution system. In addition,

ASDWA recommends systems have an "upon request" rather than a mandatory lead testing program for schools and child care facilities. Third, work to increase transparency and clarify public notification.

Public access to lead service line inventories will demonstrate transparency and is critical to helping utilities be a trusted source of information. Tier 1 public notification has historically applied to acute maximum contaminant level violations where immediate action is necessary to protect public health. The proposed change in the LCRR for action level exceedance alters the logic for Tier 1 public notification for acute MCL violations.

And fourth, additional funding for states, EPA, and water utilities is essential. The significant increase in the complexity of the proposed rule places additional burdens on states. EPA proposed several new program requirements with significant tracking, review, and approval components. Adding to the burden, there is not a data system that exists at the state or federal level that supports implementation of the rule.

Without additional funding and a functioning data management system, implementing the LCRR will be impossible for most states. Increased funding for EPA and for states is vital to support the implementation of the LCRR. Finally, funding is needed to assist water systems with lead service line replacements. State Revolving Fund programs provide loans, but there are competing priorities for this subsidy including emerging contaminants and aging infrastructure.

In conclusion, ASDWA thanks the subcommittee for holding this hearing on these important topics and commends EPA for moving forward with the LCRR. ASDWA looks forward to continuing dialogue with Congress and our federal agency partners. I will be happy to take questions at the appropriate time. Thank you.

[The prepared statement of Ms. Tucker-Vogel follows:]

Mr. TONKO. Thank you, Ms. Tucker-Vogel.

Now we will move to Mr. Estes-Smargiassi for 5 minutes for your opening statement, please.

STATEMENT OF STEVE ESTES-SMARGIASSI

Mr. ESTES-SMARGIASSI. Chairman Tonko, Ranking Member Shimkus, and members of the subcommittee, the American Water Works Association appreciates the opportunity to offer our thoughts on EPA's proposed revisions to the Lead and Copper Rule. My name is Steve Estes-Smargiassi. I am director of Planning and Sustainability for the Massachusetts Water Resource Authority, the regional wholesale water and sewer provider to three million people in 61 cities and towns in the metro Boston region.

I have been involved in our region's collaborative efforts on lead for over 25 years, serve on EPA's National Drinking Water Advisory Council's workgroups on the Lead and Copper Rule, and chair AWWA's Lead and Copper Technical Advisory Workgroup. The AWWA strongly supports full removal of all lead service lines. Indeed, our board of directors voted to endorse the 2015 recommendations made by the National Drinking Water Advisory Council, NDWAC. I will quote from them.

"AWWA supports the NDWAC recommendations to reduce lead in drinking water through the complete removal of lead service lines while ensuring optimum corrosion control measures. Support of the NDWAC recommendations underscores the importance of protecting the public from lead exposure through the development of collaborative, community-based approaches to remove all lead service lines in their entirety. Effective lead service line replacement requires solutions that successfully address the often-shared ownership of these lines, the associated financial burden, and other barriers and risks."

EPA's proposed revisions are an important step forward. We have offered what we hope are constructive comments on the ninety pages of the Federal Register Notice to make the rule clear, implementable in the field, and enforceable. We believe that the proposed rule requirements for immediate development of inventories of all lead service lines, making those inventories publicly available, immediate development of plans for the full removal of all lead service lines, and no partial lead service line replacements except under the narrowest of circumstances, and provision of an annual notice to every home with a lead service line will go a long way towards the future where there aren't lead service lines connecting our water mains to our customers' homes.

Regulatory mandates, though are only one part of solving this problem. One obstacle to full lead service line replacement is the cost, particularly the cost of the portion on private property. My agency has tried to remove that obstacle by creating a hundred-million-dollar fund for our member communities, but the ability of lower-income families to afford even a loan can be an issue. Congress has appointed 45 million dollars for assistance to low-income homeowners. We hope that you will continue to direct substantial funds to this critical need.

Another obstacle is creating and sustaining community interest. We all know that a crisis creates short-term momentum, but more effort is needed to keep going until that last service line is removed. In one of our gateway cities, Chelsea, we have been working with our local Clean Water Action organizers to do door-to-door canvassing to encourage residents to participate in that community's replacement efforts. Neighbors speaking the same language become trusted sources of information and assistants in navigating the program.

I mention this to stress that every program will be different. A national lead service line removal program is actually 50,000 local programs tailored to local circumstance. Any regulatory approach needs to account for that. A frustration that we all encounter in dealing with lead is the siloing of programs. The Department of Housing and Urban Development has programs to pay for lead paint removal. When they are done, they call the home lead-free without checking for or allowing for the removal of any lead service line. That cries out for a legislative push towards integration of those efforts.

Until recently, our state's lead poisoning prevention program like most others, didn't test the water or check for lead service lines. My agency is now providing training and lab services to make that happen. Again, these types of structural program problems could be

solved nationally with coordinated efforts by HUD, HHS, and Department of Education.

A final note on risk communication. Lead is a powerful neurotoxin affecting children's development, and thus it is one of the most sensitive and alarming of the topics that we talk to our customers about. Where and when there is a risk, we need to coordinate with trusted partners in the medical and public health professions to clearly communicate that risk. Rushing that task and failing to do it effectively fails our customers, preventing those who need to take action from doing so and unnecessarily alarming others.

I hope that AWWA's written comments and those of my colleagues here on the panel have been helpful to the committee and I welcome any questions.

[The prepared statement of Mr. Estes-Smargiassi follows:]

American Water Works Association
Dedicated to the World's Most Important Resource®

Government Affairs Office
1300 Eye Street NW
Suite 701W
Washington, DC 20005-3314
T 202.628.8303
F 202.628.2846

Proposed Revisions
to the Federal Lead and Copper Rule for Drinking Water

Presented by
Stephen Estes-Smargiassi
Director of Planning and Sustainability
Massachusetts Water Resources Authority

Before the House Subcommittee on Environment and Climate Change
Feb. 11, 2020

The members of the American Water Works Association (AWWA) appreciate the opportunity to provide our perspectives for today's hearing on the proposed revisions to the federal Lead and Copper Rule (LCR) in the interest of advancing public health protection. Lead exposure is unquestionably one of the most significant and challenging environmental issues the country faces, whether that exposure be through water, paint, dust or other media. AWWA's board adopted a statement of public policy more than three years ago calling for the removal of all lead service lines, a primary source of lead in drinking water.

There is good news to report. The U.S. Environmental Protection Agency (EPA) first promulgated the Lead and Copper Rule in 1991. Within ten years the number of large systems exceeding the action level for lead, 15 microgram per liter, dropped 90 percent. This reduction reflects the success of effective corrosion control treatment. Corrosion control reduces the release of lead into drinking water from lead service lines, home plumbing and fixtures where lead is present. The LCR's success builds on previous and ongoing efforts to eliminate the use

of lead in plumbing. Notably, Congress banned the use of lead pipe and lead solder in 1986, and then in 2012, further tightened the allowable level of lead in brasses and other materials that come in contact with drinking water.

The reduction of lead exposure through all media, water, air, dust, and soil have contributed to a substantial reduction in blood lead lead levels, including blood lead levels of young children. As summarized in the 2016 EPA Lead and Copper Rule Revision White Paper, "…from 1976 – 1980 the median blood lead level of a child (1-5 years old) was 15 micrograms per deciliter. That median level has been reduced dramatically since then, to 1 microgram per deciliter, based on the most recent data. Further, over the last twenty-five years, the percentage of children aged 1–5 years with blood lead levels less than or equal to 5 micrograms per deciliter declined more than ten-fold, and blood lead levels fell dramatically for all racial and ethnic groups."

My system, the Massachusetts Water Resources Authority, is the wholesale water and sewer provider to 3 million people in 61 cities and towns in the Boston metropolitan area. Lead has been a significant focus of our public health efforts since the early 1990s. We installed modern corrosion control treatment and saw lead levels in high-risk homes drop by about 90 percent. We have ongoing collaborative outreach and education efforts with our public health partners to provide our customers with the information they need to take action on lead risks. To remove obstacles that may make it difficult for our communities to replace lead service lines, four years ago, we created a $100-million, zero-interest loan program. And over the past four years, we have provided free laboratory services to test 38,000 samples from 478 schools and childcare facilities in 43 communities. We believe that managing lead in water is a shared responsibility; we're doing our best to carry our part of the load.

AWWA appreciates the challenges EPA faces in developing a rule that is implementable and that addresses the many perspectives brought to the rulemaking process.

AWWA has submitted formal comments on the LCR to EPA with the objective of helping to develop a rule that does the following:

1. Is indeed implementable in the field;
2. Supports proactive water system choices that accelerate lead service line replacement and maintain effective corrosion control;
3. Promotes the ongoing development of affordable and effective technical solutions; and
4. Is understandable and clear to all people who are affected by lead in drinking water and who must be involved in moving toward a lead-free future

We would like to share with the committee additional thoughts on the proposed rule. Shared responsibility is central to reducing the health risks from lead across every media, but is particularly important with developing policies to manage lead in drinking water. Reduction of lead in drinking water requires a collaborative effort by the water system, customers, consumers, manufacturers, state regulators, federal agencies, financing authorities, plumbers, code officials, local government and many others.

In setting out the proposed rule, EPA did not describe any significant new efforts by the agency or Safe Drinking Water Act primacy agencies, or other federal agencies to support the proposed framework, so that water systems subject to the rule would be empowered to be successful. EPA and state primacy agencies should allocate time, effort and resources to activities to assist water systems as they undertake the actions envisioned in the proposal, and to make information on lead available to everyone with consideration of educational level, socio-economic status, and responsibility for managing lead.

AWWA recommended that EPA focus on refining the regulatory text to address the following and that the final rule preamble provide supporting commentary on these issues:

1. **Inventory.** Development of an inventory of lead service lines is a critical first requirement of the proposal. The agency should continue to emphasize that the lead service line inventory is to be based on available information and improved over time in the course of routine system activities. The rule must recognize that there is going to be uncertainty in which pipe materials are present, but make clear that water systems should be transparent about the basis for the inventory when presenting it to the public.

   AWWA strongly supports development of these inventories. That said, the proposed rule provisions will create unnecessary customer concern and distrust if the required methodology artificially inflates the number of "unknown material" service lines and those lines must be treated as though they are made of lead. Artificially high numbers of lead service lines of concern misdirect limited resources and disincentivize water systems.

2. **Clarity.** The proposed rule preamble and the proposed rule text are often inconsistent. EPA's description of the proposed rule requirements in the preamble – and in public statements – are often a more cogent articulation of expectations for water systems than the rule text. A lack of consistency will lead to confusion. Moreover, due to this ambiguity, the rule text repeatedly leaves open the possibility that water systems, despite significant efforts toward complying with the rule's substance and intent, would be subject to the caprices of state or regional EPA administrators. This is especially true with respect to the early implementation requirements related to the development of lead service line inventories.

3. **Corrosion control.** The required steps in the proposed rule for evaluating corrosion control in the current proposal does not provide any flexibility to water systems seeking to balance multiple water quality issues, operational constraints and environmental factors. It unnecessarily prevents EPA, state primacy officials and water systems from using the best available science. The rule attempts to apply a

one-size-fits-all approach to corrosion control evaluation when experience and science has shown the need for site-specific decisions about the best evaluation technique. This is even more concerning given the very prescriptive ways and timeframes in which the corrosion control treatment studies must be conducted. AWWA strongly encourages EPA to revisit its requirements for corrosion control in the proposal and incorporate a toolbox approach to evaluating corrosion control that clearly articulates criteria for balancing objectives and constraints in selecting appropriate lead corrosion control strategies that will actually and reliably provide the desired reductions in lead levels without increasing risks.

4. **WIIN Act Implementation.** Providing community-wide Tier 1 public notice based on a 90th-percentile concentration greater than 15 µg/L is inconsistent with Congress's instruction to provide such notice to the public after a lead level exceedance "that has the potential to have serious adverse effects on human health as a result of short-term exposure." If EPA is unable to determine such a health-based level of lead, then the agency must be especially careful to assure that expectations for public notification and the notification language itself are carefully gauged so as to not cause undue public panic. Sample data is based on high-risk homes, not the average for all homes. This is especially true in the initial implementation of the rule where a new definition of the compliance pool may have many water systems exceeding the action level although their water quality and corrosion control have not changed.

5. **Fifth-liter sample.** EPA's proposal appropriately uses the current in-home tap sample protocol for calculation of a system's 90th-percentile lead and copper concentrations for comparison to the lead and copper action levels and lead trigger level to evaluate the effectiveness of corrosion control. Fifth-liter sample protocols and other sampling strategies, such as sequential sampling, may be useful for diagnostic evaluations and other purposes rather than in the rule construct to trigger evaluation of the effectiveness of corrosion control. EPA should develop guidance on

fit-for-purpose sampling protocols which water systems and others can use to investigate individual structures, evaluate changes in corrosion control treatment and help homeowners make informed-decisions.

6. **Find-and-Fix.** When required, first-draw tap samples from compliance monitoring are above 15 µg/L, then the water system should engage that household to encourage them to determine which source of lead is contributing to such high values and what remediation options are available to the household. Evaluation of corrosion control practice should not be based on individual high lead values, but should be a part of a trend analysis to inform responses to exceedances, consideration of new sources and treatment changes and long-term measure to improve corrosion control.

   The final rule language must recognize that it may not be possible to identify a specific action to take in every instance, and that the primary purpose of this monitoring is to engage the customer in understanding the sources of lead in their home to assist that customer to take action.

7. **Pitcher filters.** Based on EPA's experiences in Flint, Mich., Newark, N.J., and other locales, it is already clear that requirements for partial and full lead service line replacement must be flexible. Additional risk mitigation measures, such as the use of filters, should be situation-specific decisions determined by the system with state oversight.

   EPA does not change regulatory language sufficiently frequently to identify just one risk mitigation strategy; regulatory revisions will not keep pace with research, or experience may identify more efficient and effective alternatives. The proposed rule language does not provide sufficient clarity as to the filter performance criteria desired to guide either procurement of filters or selection of alternative risk reduction measures.

8. **Monitoring in schools and childcare facilities.** AWWA states in its comments filed with EPA that the agency should remove the proposed monitoring requirements for lead in schools and childcare facilities. These institutions and businesses have a responsibility to provide a healthy environment for the children in their care. Many states already have regulatory regimes to assure that educational and childcare facilities provide a safe environment for the children. EPA, the Department of Health and Human Services and many state agencies have information on the management of all environmental hazardous at these facilities. These materials guide facilities toward prioritizing and managing risks across multiple media with an emphasis on achieving remediation. If this provision is retained in the LCR revisions, it should be focused on community water systems being prepared to assist schools and child care facilities that are investigating and remediating plumbing to reduce lead in drinking water upon the request of those facilities. In October, EPA announced the renewal of a memorandum of understanding with AWWA and a number of organizations, including other federal agencies, toward this end.

   In keeping with the spirit of the Federal Action Plan to Reduce Childhood Lead Exposure, school and child-care testing would be more effective if efforts were spearheaded by the Department of Education or Department of Health and Human Services, which currently work with schools and childcare facilities and have the ability to incentivize such testing as part of a comprehensive effort to reduce the risk of lead.

9. **Timely notification of individual home results.** AWWA agrees that customers that participate in a community water system's compliance monitoring program and that have elevated sample results should receive timely notification of sample results. This is an important provision for which rule requirements should be carefully written to encourage best efforts, rather than discourage water systems from engaging customers in monitoring for lead. Effective risk communication may require more than

24 hours to execute, and standard operating procedures should reflect best efforts for rapid delivery, but recognize that several business days could elapse in some instances.

10. **Documentation.** The standard of care for best-effort compliance with LCR provisions should be achievable by community water systems and not create unreasonable performance expectations or unmanageable levels of documentation for state oversight. With a more complicated rule, reporting and monitoring violations could be very significant and a draw on primacy agency resources while eroding public confidence.

11. **Administratively Sound.** The current proposal should be reviewed for provisions that create infeasible timelines for state and water systems, and such provisions should be revised to eliminate such conflicts. States are charged with overseeing more than 67,500 community water systems in this rulemaking. A rule that is not implementable will be detrimental to public confidence in the nation's drinking water supply.

    In our formal comments to EPA on the proposed revisions to the LCR, we note the proposed rule would impose 35 significant, new paperwork requirements. We have suggested ways that EPA may reduce the paperwork burden on water systems and state agencies without impairing EPA's ability to oversee or enforce the lead and copper regulations.

12. **Guidance.** The proposed rule uses a number of technical and administrative terms that cannot be fully defined in the rule, but must be well described for states and water systems to implement the rule. Not only must the final rule be clearer, but AWWA requests that EPA begin to develop guidance for the final LCR immediately and that the guidance be developed in collaboration with stakeholders knowledgeable in the relevant subject matter. The guidance for corrosion control and corrosion control studies is of particular concern at this time.

13. **Trigger Level.** In proposing a trigger level at 10 ug/L in addition to the action level of 15 ug/L, EPA and the Association of State Drinking Water Administrators, on whose comments the bin approach was based, appear to be creating an administrative structure to reduce the workload on states. It is not clear that as written the proposed approach has that effect. It does have two negative effects: (1) creating another "bright-line" value about which risk communication with the public is very challenging and (2) it leads EPA to triggered evaluations of corrosion control practice rather than promoting processes that collect data that can be used to improve corrosion control incrementally over time.

14. **Incentives are Lacking.** Water systems have been moving toward proactive replacement of lead service lines since the recommendations by the National Drinking Water Advisory Council (NDWAC) were finalized. NDWAC placed a great deal of focus on replacing lead service lines as the priority element in revising the LCR. AWWA has agreed and promoted this proactive movement among water systems. Competing requirements in the proposed rule could offset those efforts. Water systems have limited resources. Many are coping with an aging infrastructure. Heavy demands for corrosion control treatment re-evaluations and school/childcare lead programs, for example, will compete with a water system's proactive programs. The NDWAC discussed the value of incentives. The proposal does not provide incentives to promote proactive action by systems.

This concludes our formal testimony. AWWA and the water community are committed to working toward a day when the potential for lead in drinking water is removed from every household and every community. We look forward to working with Congress, EPA, our members and everyone with an interest in safe water as the new rule is finalized and implemented.

###

Mr. TONKO. Thank you, Mr. Estes-Smargiassi.

And we will now move to Commissioner Bobbitt, please, for 5 minutes with your opening statement, please.

STATEMENT OF CINDY BOBBITT

Ms. BOBBITT. Chairman Tonko, Ranking Member Shimkus, and distinguished members of the subcommittee, thank you for the opportunity to testify on this important issue. My name is Cindy Bobbitt and I am a county commissioner from Grant County, Oklahoma and honored to testify on behalf of the National Association of Counties.

Today, I would like to offer the county perspective for your consideration as you assess challenges and opportunities around eliminating lead contamination in our drinking water. First, while our responsibilities vary from state to state, county governments serve as both regulators and regulated entities when it comes to the Clean Water Act and work every day to ensure the health and safety of our residents. We operate jails, hospitals, 9-1-1 emergency systems, build roads and bridges, and run elections.

But one of the most important things we do is maintain and operate water systems to provide clean drinking water. We often do this through partnerships, especially in rural communities like mine. Grant County has a population of 4,500. We have eleven water systems and we are responsible to ensure water quality standards and meet the needs of all. This includes protecting our water systems and water quality during disasters and major flooding events when we have them. Counties across the country share our federal partners' concerns and are committed to do all we can to eliminate lead contamination in all of America's drinking water.

Second, due to limited local resources and mounding regulations, counties are challenged to make long-term budget investments. Regardless of size, fiscal constraints are the reality for most counties and we are mandated to provide a growing number of services while operating under greater state and federal restrictions on how we generate revenue. In fact, 45 states limit counties' ability to raise additional revenue.

According to the EPA, administering the proposed rule is estimated to cost local water systems between 130 and 270 million dollars annually and up to eight billion dollars over 30 years. There are between six and ten million lead service lines in our country and preliminary findings show that the average cost to replace a single line is $4,700. Using these figures, replacing all lead service lines would cost local water systems between 26 and 47 billion dollars, creating an enormous, unfunded mandate for local governments.

Counties support the goal of replacing all lead service lines in the U.S., but it is important that our federal partners recognize the growing number of federal and state requirements on local governments and understand the full picture of county public priorities. Communities like mine with low-income populations are often more at risk of lead exposure due to our older housing infrastructure. These counties are really limited in raising additional revenues.

Raising taxes in my county and placing financial burdens on our people who have a median income of $28,000 is not an answer to

pay for additional federal mandates, so counties are once again faced with tough choices. Fund our schools, hospitals, justice and emergency management systems, and pave our roads. Which of these public services should we cut to provide this? At the end of the day, it is not about replacing a red line or a blue line. It is about replacing hazardous water lines regardless of geographic location and social and economic conditions.

Third, counties need early, consistent, and meaningful engagement with our federal partners to help develop clear and practical legislation and regulations that we can implement at the local level. Water systems across the U.S. are rapidly reaching the end of their life spans. It will cost up to a trillion dollars by 2030 to upgrade the nation's drinking water infrastructure. We encourage Congress and our federal agency partners to continue meaningful consultation with states and local governments on this rule to reduce the risk of unfunded mandates to produce successful strategies for implementing federal policies.

Thank you again for the opportunity to testify and provide the county's perspective on this proposed rule. We stand ready to work with our federal partners to develop policies to ensure every American has access to clean water. I will be happy to answer any questions.

[The prepared statement of Ms. Bobbitt follows:]

Written Statement for the Record

The Honorable Cindy Bobbitt
Commissioner
Grant County, Oklahoma
On behalf of the National Association of Counties

For the Hearing
EPA's Lead and Copper Proposal: Failing to Protect Public Health

Before the Subcommittee on Environment and Climate Change
Committee on Energy and Commerce
U.S. House of Representatives

February 11, 2020
Washington, D.C.

Chairman Tonko, Ranking Member Shimkus and distinguished members of the subcommittee, thank you for holding today's hearing on reducing lead exposure in drinking water—and for the opportunity to testify on behalf of the National Association of Counties (NACo) and the nation's 3,069 counties we represent.

My name is Cindy Bobbitt and I am a Commissioner from Grant County, Oklahoma where I've served on the Board of Commissioners since 2004. Additionally, I am on the NACo Board of Directors and serve as the association's Central Region Representative, Vice-Chair of the Transportation Policy Committee and a member of the Rural Action Caucus.

In addition to my work as a county commissioner, my husband and I operate our family farm that was established in 1893, that my husband's great grandfather Bobbitt staked in the Land Run of 1893. We raise wheat, feed grains, alfalfa and have a cow/calf operation. At the age of nine, I started driving a tractor for my dad on the family farm and I learned first-hand about work and moral ethics.

I am honored to be only one of seven women who serve as a county commissioner in Oklahoma out of the 231 county commissioners in the state—and I am strongly passionate about my county's infrastructure needs, including water infrastructure.

Grant County is a very rural county located approximately 120 miles north of Oklahoma City and serves a population of approximately 4,500. Our local economy has largely been based on agriculture and our principal crops include wheat, corn, soybeans, feed grains and alfalfa. We also have natural resources like oil and gas and produce livestock like cattle, hogs and horses.

Counties are highly diverse, not only in my state of Oklahoma, but across the nation, and vary immensely in natural resources, social and political systems, cultural, economic and structural circumstances, public health and environmental responsibilities. Counties range in area from 26 square miles (Arlington County, Virginia) to 87,860 square miles (North Slope Borough, Alaska).

The population of counties varies from Loving County, Texas, with just under 100 residents to Los Angeles County, California, which is home to close to ten million people. Of the nation's 3,069 counties, approximately 70 percent are considered "rural," with populations less than 50,000, and 50 percent of these have populations below 25,000. At the same time, there are more than 120 major urban counties, which collectively provide essential services to more than 130 million people every day.

Many of counties' responsibilities are mandated by both the state and federal government. While county responsibilities differ widely, most states give their counties significant authorities. These authorities include construction and maintenance of roads, bridges and critical infrastructure, assessment of property taxes, record keeping, running elections, and overseeing jails, court systems and public hospitals. Counties are also responsible for child welfare, consumer protection, economic development, employment and workforce training, 911 and emergency management, land use planning and zoning.

Many counties also have the responsibility to provide water services and have the authority to own and operate drinking water systems.

Today's hearing addresses an important issue for county governments as we asses challenges and opportunities to reduce lead in our drinking water. **Accessibility to a reliable supply of clean water is vital to our nation, and counties stand ready to work with our federal partners to ensure every American has access to clean drinking water.**

As a county commissioner, I have seen firsthand the significant role local governments play in providing clean drinking water for residents and lowering lead contamination.

Today, I will discuss several key points for your consideration as the subcommittee assesses challenges and opportunities at the local level as we work to eliminate lead contamination in our drinking water:

1. **As regulators and regulated entities, county governments play a key role in providing clean drinking water and are committed to reducing lead exposure.**

2. **Due to limited local resources and mounting federal and state mandates, counties are challenged to make long-term budget investments.**

3. **Counties need clear, understandable and practicable federal policies to administer national water standards successfully.**

4. **Further federal investments and early, consistent and meaningful engagement with intergovernmental partners is vital in the development and implementation of effective drinking water policies, programs and regulations.**

First, as regulators and regulated entities, county governments play a key role in providing clean drinking water and are committed to reducing lead exposure.

As both regulators and regulated entities, counties are responsible for protecting local air, water and land resources through delegated authority under state and federal laws. We enact zoning and other land use ordinances to safeguard valuable natural resources and protect the safety of our citizens.

In the arena of the Clean Water Act (CWA), counties play a dual role as both co-regulators and regulated entities in protecting the environment and providing public water services for our residents and businesses. As regulators, counties are often responsible for controlling water pollution at the local level. We can enact rules on illicit discharges, remove septic tanks and adopt setbacks as part of land use plans. We are often responsible for water recharge areas, green infrastructure, water conservation programs and pesticide use for mosquito abatement. Counties also provide extensive outreach and education to residents and businesses on protecting water quality and reducing water pollution to prevent exposure from toxic chemicals, such as lead.

The U.S. Department of Homeland Security estimates that there are just over 153,000 public drinking water systems in the U.S. that provide potable water to almost 90 percent of the population (just under 300 million

people) and more than 16,000 wastewater treatment systems that service 75 percent of the population. Approximately 47 percent of community (drinking) water systems are locally government owned.

Clean drinking water is an important issue in my county. Covering over 1,000 square miles with a population of 4,500, it is vital that clean drinking water is readily accessible to everyone. As I mentioned, I live on the farmstead that was staked in the land run of 1893. Water-wells were dug but the water was briny, salty and not fit for man nor animal. Over time, cisterns to catch rainwater were developed for homes and man-made ponds for livestock. As families grew, so did the need for water, so people moved to where water was, generally to towns that had managed water systems.

In my county, there are total of 11 water systems. These include systems owned by local governments and private utility companies and rural water districts. These systems serve as few as 28 people and up to 1,172 people. Counties are responsible to partner and coordinate with these water systems to ensure water quality standards and needs are met.

For example, during major flooding events, our county works closely with municipalities and water systems to ensure the public has access to clean drinking water. In multiple instances, the county has supported local water systems through providing generators to ensure clean drinking water was maintained during and after emergencies and natural disasters.

Counties recognize the dangers of lead exposure and are committed to the U.S. Environmental Protection Agency's efforts to eliminate lead contamination in all of America's drinking water systems. We support the federal government's efforts to lower lead exposure to protect our residents, especially children who are most vulnerable. Counties stand ready to work side-by-side with our federal and state partners to ensure the health, well-being and safety of our citizens.

My county takes water quality seriously and we rely heavily on a strong, state and local intergovernmental relationship. Through coordinated efforts between the Oklahoma Department of Environmental Quality, county governments and local water systems, communities varying from small to large populations can routinely monitor and test for water contamination. This is vital because much of our housing infrastructure predates 1987 plumbing codes, increasing the likelihood of corroded pipes, which leads to lead exposure.

Regardless of whether a community is rural or urban, our residents rely on safe and reliable water systems. However, counties are facing a growing number of challenges resulting from aging infrastructure, increased federal and state requirements, and rising costs to meet infrastructure needs and environmental mandates.

Second, due to limited local resources and mounting federal and state mandates, counties are challenged to make long-term budget investments.

Regardless of size, fiscal constraints and tight budgets are the reality for most counties. The rapid increase in state and federal unfunded mandates adds another layer of fiscal strain. In many instances, counties are mandated to provide a growing number of services while operating under greater state and federal restrictions on how we generate revenue.

In fact, 45 states impose some type of limitation on county property taxes, affecting the main revenue source for counties. According to a 2016 NACo survey, 44 percent of counties reported reducing or eliminating services in their last fiscal year due to revenue constraints and increasing costs associated with providing mandated services.

In my state of Oklahoma, we face several challenges that limit us from meeting our water delivery goals. For example, the State of Oklahoma limits a sales tax option for counties to two percent. Grant County, through the vote of the people, has approved a 1.25 percent sales tax, with 1 percent being divided between 12 entities for rural fire departments, ambulance services, the sheriff's department and emergency services, with the other quarter percent for the Grant County fairgrounds improvement. None of these funds go to water infrastructure. Furthermore, ad valorem taxes—also known as property taxes—in Oklahoma legally cannot go to fund any water infrastructure. Instead these funds are dedicated to support schools, jails, courthouses and health departments, just to name a few.

In addition to these challenges, enforcing the EPA's proposed Lead and Copper Rule would place considerable fiscal strain on local governments, where budgets are already stretched thin. Counties support the goal of replacing all lead service lines in the U.S., but it's important that our federal partners recognize the growing number of mandates on local governments and understand the full picture of county public safety priorities.

According the EPA, administering the proposed rule is estimated to cost local water systems between $131 million and $270 million annually. Over 30 years – the expected timeline to replace all lead service lines in the U.S. – local waters systems could be on the hook for up to $8.1 billion. In reality, replacing all lead service lines could cost billions more.

EPA estimates there are between 6 to 10 million lead service lines in the country. Based on preliminary estimates, the average cost of replacing the line is $4,700, although these costs could range from $1,200 to $12,300 depending on the length of the line. Using these estimates, replacing all lead service lines would cost local water systems between $25.6 billion to $47 billion, creating an enormous unfunded mandate for local governments.

The estimated costs to administer the proposed rule would create budgetary imbalances that would require county governments to cut other critical local services like fire, law enforcement, emergency and education, or increases in local taxes and fees on constituents to make up the difference.

Furthermore, communities with low-income populations, such as mine, are more at risk of lead exposure, due to older housing infrastructure that use lead service lines. Counties with low-income populations, are already limited in raising additional revenues. This raises major concerns as a county commissioner on how we are going to pay for this while maintaining public services.

The median income in my county is $28,977 and $35,833 for household income. As I mentioned previously, the population of Grant County is 4,500, a small tax base to raise additional revenues. Without direct federal funding specified for implementing the proposed rule, counties like mine would experience significant financial challenges and be forced to either cut critical local services or raise local taxes or fees. This would place a substantially undue burden on underserved communities and reduce our quality of life.

It's not about replacing a red or blue service line, it's about replacing hazardous water lines regardless of geographic locations and socioeconomic conditions. While balancing other community needs, local governments with vulnerable populations need resources to protect the public while maintaining our quality of life.

Third, counties need clear, understandable and practicable federal policies to administer national water standards successfully.

Counties are often responsible for implementing programs established by the states and federal government. As previously mentioned, we function as co-regulators with the states and federal agencies, especially when it comes to environmental issues. Given these important intergovernmental roles and responsibilities, federal regulations and guidelines are more effective if they can be easily administered by counties, regardless of populations and budget size.

As the EPA moves forward with this rulemaking process, we offer several areas of comments, concerns and recommendations to make the proposed rule more effective, easily implementable and cost effective for local governments. Below are three concerns along with recommendations to improve the proposed rule and allow implementation success:

- Legal and liability concerns: The proposed rule requires water providers to replace a minimum of three percent of lead service lines above the Action Level of 15 ppm annually. Requiring water systems to replace lead service lines on private property raises liability and legal concerns. Counties recommend provisions within the proposed rule that limits this liability and prevent local governments and water providers from being subject to costly legal battles. Moreover, the proposed rule does not address how local governments or water providers should legally handle property owners that refuse to replace lead service lines or are unable to afford the cost of replacement. Counties request further guidance on this concern.

- Consumer notification concerns: The proposed policy requires water providers to notify consumers within 24 hours if water systems are at the Action Level. Counties agree with the EPA that consumer notices are necessary to protecting the public health, but we encourage the agency to clarify how the notices should be delivered and consider more flexible notification standards to allow counties to better address lead exposure. Typically, 24 hour notifications are usually limited to immediate health emergencies. While lead in water is a public health concern and people should be notified expeditiously, considering it an immediate public health emergency may cause unnecessary public distress. A proactive and balanced risk communication approach is necessary to properly address resident's concerns.

- Lead service line inventory concerns: The proposed rule requires all water service providers to prepare and update a comprehensive lead service line inventory within three years. Counties support the EPA's goal to collect a detailed inventory of all lead and copper lines, however, three years might be too short of a timeframe. Conducting an inventory of all lead service lines may prove extremely difficult to determine without costly excavations. This is especially true for small and mid-sized communities. Counties

recommend allowing additional flexibility for conducting a survey as well as adding additional time if requested by the water system.

Lastly, further federal investments and early, consistent and meaningful engagement with intergovernmental partners is vital in the development and implementation of effective drinking water policies, programs and regulations.

Our current water systems across the U.S. are rapidly reaching the end of their lifespans. To ensure that our local communities remain healthy, vibrant, safe and economically competitive, America's counties must be able to upgrade and modernize our water systems to meet existing water quality management requirements and further regulations as proposed under the Lead and Copper Rule.

According to the American Society of Engineers, the estimated amount needed to upgrade the nation's drinking water infrastructure is between $384.2 billion and $1 trillion by 2030. However, annual federal appropriations to meet federal standards, via clean water and drinking water state revolving funds, have increased modestly, with current levels at $2.77 billion for FY 2020. This lack of growth amidst increasing need has required state and local governments to increase our funding and financing substantially. In fact, 96 percent of all public spending on water and wastewater utilities ($105 million) in 2014 was by local and state governments, according to the University of North Carolina. In 2016 counties spent a total of $122 billion on building public infrastructure and maintain and operation public works. Despite facing further budget shortfalls, counties continue working to protect and improve the quality of local water systems.

Counties urges Congress to increase funding levels to existing federal programs that will support the successful implementation of the EPA's proposed Lead and Copper Rule and allow us to make further investments to our overall water infrastructure. Specifically, we request additional funding to the following programs:

- EPA Drinking Water State Revolving Loan Fund
- EPA Water Infrastructure Improvements for the Nation (WIIN) Act grant programs
- EPA Water Infrastructure Finance and Innovation Act (WIFIA) financing program
- HUD Community Development Block Grants
- USDA Rural Development Water and Waste Disposal Loan and Grant program

In addition to these existing programs, counties urge Congress to provide direct, flexible federal funding options to local governments that can be used specifically to implement the proposed rule. New competitive grant programs authorized and appropriated at the federal level would facilitate the ability of counties to provide safe, clean and reliable drinking water for all Americans.

Second, as county officials, we are the level of government closest to the people and directly accountable to our constituents. As a result, meaningful consultation with counties and local governments early and often in the legislative and rulemaking process is imperative to reduce the risk of unfunded mandates and produce more pragmatic and successful strategies for implementing federal policies, including any around clean drinking water.

For intergovernmental consultation to be truly meaningful, Congress and federal agencies must engage state and local governments as partners, who actively participate in the planning, development and implementation of federal rules. As with any potentially new policy, program or regulation, counties believe we should have a seat at the table as provisions that may impact our ability to serve our residents are crafted. We must have a robust federal-state-local partnership that preserves local decision-making as any legislation is promulgated around services that are a function of county government.

Conclusion

In conclusion, counties stand ready to work with our federal partners to develop policies that can help both improve the environment and protect the health and safety of our residents. Federal policies and programs developed with only the impact on the federal treasury in mind and do not consider the impact on state and local governments, jeopardizes the ability of local governments to fulfill our responsibilities.

Counties continue to serve as reliable partners in implementing federal regulations and policies to meet our shared goals and protect residents. We hope that federal agencies show an even greater willingness to partner with state and local governments on these issues moving forward.

Thank you again for the opportunity to testify on this important topic.

Mr. TONKO. Thank you very much, Commissioner.

And finally, Ms. Wu, you are recognized for 5 minutes, please, with your opening statement.

STATEMENT OF MAE WU

Ms. WU. Thank you, Chairman Tonko.

Mr. TONKO. You are welcome.

Ms. WU. Ranking Member Shimkus and members of the subcommittee, my name is Mae Wu. I am the senior director of Health and Food at the Natural Resources Defense Council. And as you have heard there is no safe level of lead and, in fact, over the past few years every state in the nation, with the exception of Hawaii has had at least one water system that has had levels in its water that has exceeded EPA's action level and so millions of Americans have been threatened with elevated levels of lead in their water.

About three years ago, while government officials were refusing to ensure that Flint residents had access to reliable sources of bottled water and properly installed filters, Danielle found out that her young son Theo had levels of lead in his blood that exceeded the CDC recommendations for children under the age of six. She found out also she had no lead paint in her home but she did have troubling levels of lead in her water, so even though it was expensive for her family, they switched to bottled water. So Theo has been diagnosed with attention deficit disorder and other health problems and his behavioral problems have caused him to be expelled from preschool, so as you can imagine, it has been a life-altering experience for this family.

And you might think that Theo is one of the young victims of Flint, but in fact, all of this happened in Newark. And the Flint babies who were raised on lead-contaminated drinking water have now started reaching school age and the city has found that the percentage of kids that have qualified for special education has doubled in this time.

So the Lead and Copper Rule and its implementation are broken. It has been broken for a long time, at least 20 years, when Washington, DC started struggling with its own lead in the drinking water crisis. And so, at this point, tweaks aren't going to get it done. We need a major overhaul of the Lead and Copper Rule. And so, NRDC will be submitting tomorrow detailed comments about the revisions, but I wanted to just highlight a few of the recommendations that we have today.

First, EPA should streamline this complicated and confusing Lead and Copper Rule. They need to set an enforceable standard for lead, like they do for most of the other drinking water contaminants. It shouldn't be a treatment technology or treatment technique that relies on corrosion control, but really just a maximum contaminant level for lead. Unfortunately, EPA has doubled down on this existing difficult-to-implement, difficult-to-enforce non-health-based action level and has further complicated matters with an unenforceable and non-health based trigger level, so that needs to change.

Second, recently, actually, NRDC received an internal memo from Region 5 of EPA that talked about a lot of the problems with the Lead and Copper Rule. And one of the things it mentions and

a lot of the things that you have heard today is that EPA's revisions have ignored the elephant in the room, which is no matter how well corrosion control is run, unless you remove all of the lead service lines, and that means including the part that runs on private property, you are going to continue to have exposure to lead.

And so, full lead service line replacements have to be required and they have to happen within ten years. We just can't wait any longer. And, unfortunately, under EPA's revisions, it could take 33 years or more if a system has triggered the requirement to even start replacing its lines. The other thing they need to do is ban the partials. These are partial replacements that are dangerous. They have actually been shown to show higher levels of lead than just leaving an undisturbed lead service line in place and they need to be banned and prohibited.

And the reason why partial lead service lines happen is oftentimes because the homeowners can't afford the thousands of dollars up front and on short notice that would be required to pay for those lead service line replacements or they are renters and their landlords refuse to pay for it. And so, the cost cannot be put on individual homeowners because, really, what we are doing is exacerbating the already disparate burdens that are put on moderate and low-income families. And it really is worth the cost because for every dollar that is invested in lead service line replacements you get ten dollars of benefits back.

And, finally, the tap water samples that are used in the Lead and Copper Rule have to reflect the highest levels of lead that are in the water. Data have shown that when you look at a series of sequential one-liter samples of water that actually it is the later sample, so when you are looking at the fifth liter or higher where you see the highest levels of lead.

And so, you can actually find that those liters will have action level exceedances when that first liter didn't exceed the action level, but EPA again relies on this less contaminated first draw of water and it ends up underestimating lead and showing maybe that things are fine when there actually is a problem.

So, thank you for this opportunity and I look forward to your questions.

[The prepared statement of Ms. Wu follows:]

TESTIMONY OF MAE WU

SENIOR DIRECTOR, HEALTH AND FOOD

NATURAL RESOURCES DEFENSE COUNCIL

BEFORE THE

SUBCOMMITTEE ON ENVIRONMENT AND CLIMATE CHANGE

COMMITTEE OF THE ENERGY AND COMMERCE

HEARING ENTITLED:

"EPA'S LEAD AND COPPER PROPOSAL: FAILING TO PROTECT PUBLIC HEALTH"

FEBRUARY 11, 2020

Good morning Chairman Tonko, Ranking Member Shimkus, and members of the subcommittee. I am Mae Wu, Senior Director for Health and Food at the Natural Resources Defense Council. I have served on the EPA's National Drinking Water Advisory Council and on the Federal Advisory Committee for the Total Coliform Rule and Distribution System Rule revision. I appreciate the opportunity to testify today.

Not long after Danielle, her husband, and young son Theo moved to Newark in 2016, Danielle learned that Theo had 6.6 micrograms per deciliter of lead in his blood. (The Centers for Disease Control and Prevention sets the recommended blood lead level limit for children under age six at 5 micrograms of lead per deciliter of blood. High lead levels in young children have been found to affect the development of their brains.) She soon learned that her drinking water tested at 9.77 parts per billion of lead. It is well known that if multiple tests are done of tap water, levels can vary significantly, so the lead contamination in their water may have been higher at other times.

The family then began drinking bottled water and stopped drinking the unfiltered tap water. When Theo's blood levels came down later, it confirmed that lead in the drinking water was a likely source of lead found in Theo's blood. Danielle felt guilty about bathing Theo in the water since he would sometimes swallow it. Young Theo has been diagnosed with autism, Attention Deficit Disorder, impulse control disorder, and gastrointestinal problems. His behavioral difficulties became so severe that he was expelled from his pre-school. As you might imagine, this has been a life-altering diagnosis for their young family, and Theo's lead exposure and elevated blood lead levels has been devastating to them. It has caused Danielle a lot of stress and concern for his well-being. They have since moved out of Newark because of the ongoing burden of protecting their children from lead.

Over in Michigan, kids who were babies at the height of the Flint crisis are reaching school-age. During this period, Flint has seen the percentage of students who qualify for special education services almost double.[1] The failures of the Lead and Copper Rule and of the city and state's failure to enforce the rules have placed an extra burden on already over-burdened teachers and communities to help these innocent children.

Before Danielle moved to Newark, and before Flint became poster child of the lead in drinking water crisis, Washington, D.C. residents were reeling from their own water crisis. Starting in 2000, Washington, D.C. authorities made changes to their water chemistry that caused massive amounts of lead to leach out of their pipes into the drinking water, with levels of lead in drinking water that were in some cases higher than those seen in Flint. It wasn't until 2004, however, when Washington D.C. residents learned that they were in the midst of a lead in drinking water crisis.[2]

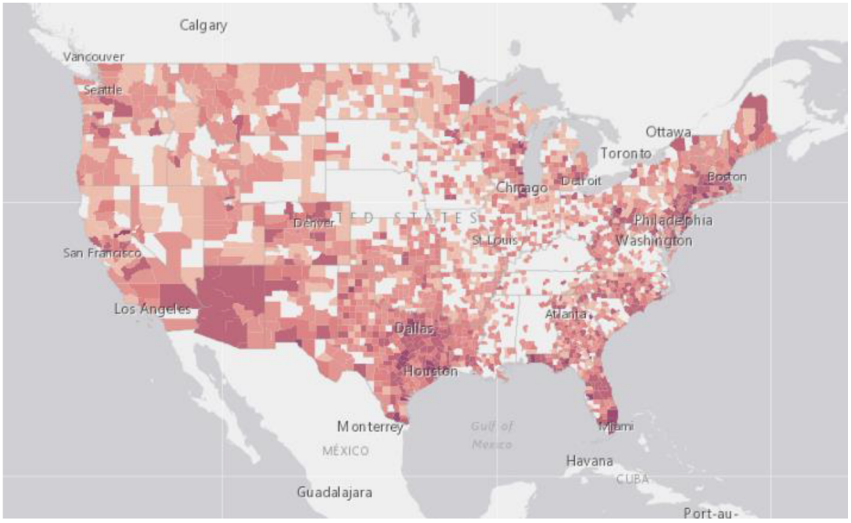
In the wake of the Washington, D.C. lead crisis, EPA embarked on a process to make long-term revisions to the Lead and Copper Rule that were needed to improve public health protection provided by the rule, and to address weaknesses revealed by the DC crisis and subsequent lead crises revealed in water systems nationwide. But no real improvements happened.

Ten years later in 2015, the Flint water crisis happened under similar conditions – officials decided to make a major water quality change without any evaluation of the potential impact on corrosion control and on people drinking the water. When the Lead and Copper Rule failed them,

Flint residents took matters into their own hands and brought their drinking water crisis to national attention. Despite well-documented evidence of lead contamination in the water, no one at the EPA, state, or water system level would take enforcement action to protect residents. Not until there was proof that children had already been poisoned.

But Flint, Washington, D.C., and Newark are not alone. NRDC's most recent analysis of EPA data finds that nearly 30 million people in the United States drank water from community water systems that violated the Lead and Copper Rule between January 2015 and March 2018.[3] (See Figure 1.)

Figure 1 Between January 1, 2015 to March 31, 2018, there were 13,991 violations of the Lead and Copper Rule by 8,339 community water systems in the United States. These systems served 29,659,654 people.



Furthermore, about 5.5 million people received water from systems that exceeded EPA's lead action level.[4] Under the Lead and Copper Rule, exceeding the lead action level does not by itself mean there has been a violation. By the time a water system receives a notice of violation as to

additional actions triggered by an action-level exceedance, people may have been exposed to elevated lead for years.

Of the systems with action level exceedances in 2015 to 2018, the top ten systems (based on size of population served) were found in Portland, Oregon; Pittsburgh, Pennsylvania; Providence, Rhode Island; Passiac Valley, New Jersey; Newark, New Jersey; Tualatin Valley, Oregon; Trenton, New Jersey; York, Pennsylvania; Jackson, Mississippi; and Green Bay, Wisconsin.[5] While these systems represent the largest populations affected by known lead contamination issues known at that time, the Lead and Copper Rule offers substantially less protection to water systems that serve fewer than 50,000 people. Moreover, because of inadequate monitoring and loopholes in the Lead and Copper Rule's scheme for monitoring lead contamination, other water systems with serious lead contamination issues almost certainly do not show up on EPA's list of problem systems.

Residents in Newark and Washington D.C., like Lisa, Susana, and Valerie, have taken it upon themselves to educate members of their community or translate information for their non-English speaking neighbors because warnings from officials are often only in English. They do it because they know information isn't getting to everyone and they don't trust the information they get from the city. They are left upset and terrified about the contamination problems.

It is clear: the Lead and Copper Rule and its implementation are seriously broken.

So now, twenty years after Washington, D.C. crisis began, and six years after Flint's began, EPA is proposing modifications to the Lead and Copper Rule. Unfortunately, rather than the major overhaul that this confusing and complicated rule needs, EPA simply has tweaked it at the margins and in some cases made it less protective of public health.

The Lead and Copper Rule

In 1991, EPA established a complex treatment technique rule with a focus on corrosion control treatment to reduce lead levels in tap water.[6] Under the Lead and Copper Rule, all large water systems (serving more than 50,000 people) must treat their water to optimize corrosion control or demonstrate that they don't need to do so because their water isn't corrosive, and they have no lead problems. The rule also generally requires water systems to control corrosion by adding

chemicals, since corrosive water can cause the release of lead from pipes and connectors (or fittings). Many systems use a corrosion inhibiter, such as orthophosphate, which coats the inside of the pipes with a thin film that can reduce the amount of lead that leaches into the water.

All community water systems also are required to test a specified number of drinking water taps in high-risk homes (with lead service lines that bring water from the water main under the street to a residence, or that are likely to have lead in their household plumbing or fixtures). The bigger the system, the more taps must be tested, but only a maximum of 100 samples are required whether the system service 100,000 or 5 million people. Then, if more than ten percent of the tested taps contain lead above an "action level" of 15 parts per billion (ppb), the water system must take measures to reduce lead levels. These measures include removing lead service lines (lead-containing pipes that bring water from the water main running down the street into our homes) over a specified time period and providing educational materials to consumers.

In 2014, the National Drinking Water Advisory Council established a Working Group to address these revisions. Between March 2014 and June 2015, the Working Group met and discussed a set of recommendations for revising the Lead and Copper Rule. In late February 2016, EPA issued a guidance intended to discourage some of the tricks some utilities have used to avoid finding lead problems.[7]

On November 13, 2019, EPA published proposed revisions to the Lead and Copper Rule.[8] The proposed revisions would create a few modest improvements in public health protection, but more importantly it decreases some of the protections provided by the current rule, such as by extending the time that lead service lines must be replaced.

NRDC will be submitting comments to EPA on its proposed revisions of the rule. My testimony today highlights some of the broader points of our comments. But more detailed discussion about each aspect of the revisions will be available in our comments once they are finalized and submitted to the Agency.

Set A Maximum Contaminant Level for Lead

The Lead and Copper Rule is a complicated and confusing rule. Unlike most other drinking water contaminants regulated through an enforceable standard called the "maximum contaminant

level," there is no enforceable standard for lead. Instead, lead is regulated through a treatment technique.

Among other requirements, the rule relies on an action level to trigger a cascade of actions by the utility to address lead. The action level isn't a health-based number. EPA has a health-based number, known as the maximum contaminant level goal, which is the amount of a contaminant at which no health risks are known or expected. The maximum contaminant level goal for lead is zero. Simply put, there is no safe level of lead. So the juxtaposition of these confusing patchworks of levels causes much confusion about the meaning of an action level exceedance.

A major improvement to the rule would be for EPA to revert to a maximum contaminant level for lead at the tap (as it did before 1991), rather than relying on a treatment technique. This change would substantially simplify implementation and enforcement. It would also track the Safe Drinking Water Act, which requires EPA to set a maximum contaminant level unless it is "not economically or technologically feasible to ascertain the level of the contaminant."[9] Since the Lead and Copper Rule requires water systems to ascertain the level of lead, a treatment technique should not be used. It is feasible to ascertain the level of lead in tap water. And setting a maximum contaminant level means lead would be treated with the same urgency as other drinking water contaminants.

NRDC recommends that EPA reestablish an enforceable maximum contaminant level for lead at the tap of 5 ppb. Canada recently established a 5 ppb standard,[10] and the World Health Organization recommends a 10 ppb standard, while urging that a lower level be adopted as feasible.[11] Moreover, the joint committee governing the American National Standards for drinking water treatment units recently lowered the maximum allowable concentration of lead in treated drinking water to 5 ppb.[12]

Unfortunately, in its proposed revisions to the rule, EPA has doubled down on this non-enforceable level and complicated matters by adding a "trigger level" to the existing "action level." This trigger level sets off a different set of actions, but at its most basic, the new trigger level of 10 ppb underscores that the action level of 15 ppb is too high for systems to begin taking action. Recall, that young Theo from Newark, with elevated lead in his blood, had amounts of lead tested in his water that fell below both levels. If EPA is set on having action levels, rather

than enforceable standards, it would be far simpler, more implementable, and more enforceable to reduce the action level to 5 ppb and not introduce this new trigger level.

Get The Lead Out

Lead is especially toxic to children; even at low levels previously thought to be safe, lead can cause serious, irreversible damage to the developing brains and nervous systems of babies and young children.[13] There are an estimated 6.5 to 10 million lead service lines serving five to twenty-two million Americans,[14] but we really don't know. Most service lines that contain lead were installed fifty or more years ago. Even in homes without lead service lines, most of our plumbing contains lead, in fittings and fixtures, lead solder, and galvanized steel. This creates a continuous risk of lead in drinking water.

The best time to remove a lead service line is before water treatment failure causes it to release high levels of lead into the water. The most effective way to prevent the most substantial lead contamination in drinking water is to proactively and fully remove and replace the lead pipes.

No matter how optimally a corrosion control system is run, there will always be lead contamination issues, if lead service lines are in the ground. The problem of lead service lines is enormous and exists nationwide. Therefore, a truly protective Lead and Copper Rule would focus on eliminating lead service lines. Unfortunately, neither the current Lead and Copper Rule, nor the proposed EPA revisions, focus on preventing lead contamination from this major source.

There are three important components to an effective replacement program:

1) Full replacement of all lead service lines across the country within ten years;

2) Prohibit partial lead service line replacements; and

3) The cost for the replacements cannot be charged to individual homeowners.

Full replacement of lead service lines within ten years.

Full replacement of all the lead services lines on a deadline should be the centerpiece of the Lead and Copper Rule revisions. If we had started this process in 1991, we would be done by now.

Until the entire lead service line – from the water main all the way to the customer's home or residential building, including on the homeowner's property – is gone, even with the best corrosion control, we will continue to see lead contamination in drinking water, and we will always be one error away from another catastrophic failure with permanent consequences.

However, rather than reformulate the rule to put critical lead service line replacements at the forefront of lead exposure prevention, EPA's proposed revisions go in the opposite direction.

Currently under the Lead and Copper Rule, a system that exceeds the action level must start replacing its lead service lines at seven percent each year, taking approximately fourteen years to replace all the lines. Now, EPA's proposed revisions would slow that replacement schedule down to three percent each year, allowing more than thirty-three years to complete lead service line replacements. Further, a water system can stop the replacement program once their lead levels fall below the lead action level. With the weak sampling requirements, a water system will rarely remain on a lead service line replacement program for thirty-three years.

This revision would continue to leave generations of children raised on contaminated water raising their own children on lead-contaminated water. All lead services lines must come out of the ground as soon as possible, and they must start coming out now. We should not have to wait only until corrosion control starts failing and people are exposed to tackle this source of lead.

Prohibit partial lead service line replacements

Partial lead service line replacements are problematic. The practice occurs most often where water utilities require homeowners to cover the cost of replacing the portion of the pipe that runs from the property line to the home. If residents do not replace the pipe – perhaps due to their inability to pay thousands of dollars on short notice, because a landlord refuses to pay to benefit their tenant, or as the result of ineffective utility education and outreach programs, then the utility will often replace only the portion of the pipe that runs from the water main in the street to the curb or property line. The new section, which is typically copper, is then reconnected to the remaining old lead pipe that runs to the house. Counter-intuitively, a partial lead service line can leach more lead than an undisturbed lead service line.

This practice of partial lead service lines must be prohibited. First, a partial replacement leaves lead pipes in the ground. Because lead pipes are a source of lead contaminated drinking water, failure to remove the entire pipe leaves the source of lead contamination in place. This pipe is more likely to contaminate the water with large amounts of lead after construction disturbs the pipes and shakes flakes of lead loose. Second, a chemical reaction called galvanic corrosion can occur when two types of metal (lead and copper) are connected, which can accelerate corrosion of the lead pipe. This further increases the risk of lead-contaminated drinking water.

At best, partial lead service line replacements waste money because they do not reduce levels of lead in drinking water. The EPA's Science Advisory Board noted that partial replacements "have not been shown to reliably reduce drinking water lead levels in the short term, ranging from days to months, and potentially even longer."[15] There are significant cost advantages to replacing the entire lead pipe when the construction crew is on site.

At worst, partial replacements can substantially increase lead levels for months—or longer. According to the Centers for Disease Control and Prevention, partial replacements "may be linked to increased incidence of high blood levels in children."[16] The EPA's Science Advisory Board noted that partial replacements are "frequently associated with short-term elevated drinking water lead levels for some period of time after replacement, suggesting the potential for harm, rather than benefit during that time period."[17] The Science Advisory Board found that, even while the lead levels might stabilize over time, they could remain at levels consistent with those prior to the partial replacement.[18]

Notably, the American Water Works Association prioritized the removal of existing partial lead pipes in its November 2017 lead pipe replacement guidance. "The [AWWA] standard continually recommends avoiding partial replacement, if possible. It can cause more problems than it solves. You're getting rid of some lead, but in the process, you're disturbing the system and may be stirring up more lead than if you had just left the whole thing alone."[19] Washington, D.C. recently banned partial lead service line replacements in almost all circumstances.

Utilities should stop this practice unless it's a temporary repair during a water main break or other emergency. A clear definition of emergency replacements during which temporary partial replacements are allowed must be developed. And if an emergency requires a temporary partial

replacement, it must be completed as a full replacement within 30 days of the partial. Dangerous partial lead service line replacements cannot be allowed to remain in place – potentially releasing lead into the drinking water.

The cost for the replacements cannot be charged to individual homeowners.

Individual homeowners should not bear a financial burden when it comes to these lead service line replacements. In places homeowners must pay to replace the portion of the lead service lines that run on private property, moderate to low income families – who cannot afford the upfront cost – often end up with dangerous partial lead service lines. In addition, renters – who cannot force landlords to pay for a lead service line replacement – are also be disadvantaged with dangerous partial replacements. The disproportionate burden on certain communities (as I will discuss in more detail later) will only become further exacerbated if individual homeowners are charged for the replacements. Given that the utility (and not the homeowner) has control over the entire lead service line, and that utilities often required, approved, and sometimes even installed the lead service line, the cost of the full lead service line replacement should not be placed on individual homeowners, but rather on the utilities as EPA had originally required in 1991.

Experts have estimated that it would cost $30 billion to replace all the lead service lines.[20] Compared to the purported $1 trillion price tag for an infrastructure package, spending three one-thousandth of that amount per year for the next ten years would protect children's brains across the country from lead.

Therefore, combining the full lead service line replacement requirement with an appropriation for lead service line replacement would be most efficient. Funding for lead service line replacement should be prioritized for water systems with a high ratio of lead service lines to population served living under the poverty level.

Overall, committing $22.9 billion over five years in the Drinking Water State Revolving Fund, the Indian Reservation Drinking Water Program, School and Child Care Program Lead Testing grants, Lead Drinking Fountain Replacement, Community Water System Risk and Resilience grants, and Public Water System Supervision grants to States, would bring much needed funds to this undertaking. At least tripling the appropriations to the Drinking Water State Revolving Fund

would provide more than $3 billion per year to these replacement projects and other high priority drinking water protections. But this clearly would not be sufficient in itself to address the full array of drinking water needs; a more robust funding approach along the lines of the Moving Forward Framework proposal for a $25.4 billion investment in drinking water infrastructure over the next five years would go a long way towards bridging the enormous current funding gap for this important public health priority.

More than ten years ago, under the American Recovery and Reinvestment Act, $2.829 billion were appropriated to the Drinking Water State Revolving Fund. Ten years later, it has dropped to $1.164 billion. Now is the time to reinvest in the fund. In addition, setting aside specific amounts to cover the cost of full lead service line replacements at no charge to homeowners would bring significant public health benefits. Grants should be prioritized particularly in low-income communities and provide significant new funding for public schools to deploy water filters, conduct mandatory testing, and remediate lead in their drinking water.

Lead Service Line Replacement Programs Are Already Underway

Even as the poster child of how dangerous a poorly-run system can be, Flint is now in its final phases of lead service line replacements.[21] The settlement of the lawsuit brought by NRDC together with local residents and groups required the state of Michigan to provide $97 million to fund the replacement of Flint's lead and galvanized steel service lines within three years. As of December 2019, the City of Flint has conducted a total of approximately 25,000 excavations at replacement eligible households. From those excavations, the City has identified and replaced roughly 9,500 lead or galvanized steel service lines, with the balance of the excavations uncovering copper service lines that did not need replacement. The City expects to complete excavations of the remaining approximately 4,000 service lines (and replace those made of lead or galvanized steel) over the next few months. NRDC, together with community partners, continues to closely monitor the City and State's compliance with the settlement.

Other cities also provide examples of the feasibility of requiring full lead service line replacements at no cost to homeowners in ten years. Lansing, Michigan embarked on a plan in 2004 to replace their lead service lines within ten years.[22] With a cost of approximately $44.5 million, the city spent on average $3.7 million per year on this capital project, with general

support from the community and ratepayers sharing in the cost. In the end, it took about twelve years for the city to replace 12,150 lead service lines.

The City of Newark has initiated a Lead Service Replacement Program to replace approximately 18,000 lead service lines over the next two and a half years.[23] Under this program, the full lead service line replacements are completed at no cost to the homeowner. To date, Newark reports that it has already replaced more than 6,000 lead service lines. Unable (and unwilling) to wait for federal and state money to help with the replacements, the city got a $120 million loan from Essex County (via a 30-year bond), which eliminated the need for homeowners to pay $1000 out of pocket for lead service line replacements.[24] The announcement of this program to replace all lead service lines at no cost is a welcome development, but of course proper implementation (for e.g., without partials) is key.

Pittsburgh, Pennsylvania, the second largest water system to exceed the lead action level in the U.S., has had lead contamination issues since 2016. A settlement with the water authority and a community client represented by NRDC and the Pennsylvania Utility Law Project requires the utility to replace at least 3,400 public-side lead service lines and 2,800 private-side lead service lines at no cost to the residents. Including other requirements, such as providing free filters and replacement cartridges to low income customers with lead service lines or lines of unknown material, the utility will spend about $50 million to address the lead problem through June 2020. The utility has also received a $65 million low interest loan to conduct additional lead service line replacements in conjunction with water main replacements.

Washington, D.C., still dealing with the aftermath of its lead crisis, is riddled with partial lead service lines as well as full lead service lines. There are roughly 90,000 lines with unknown materials, and D.C. Water estimates about 30,000 are full or partial lead service lines. After years of campaigning by local residents, the District recently prohibited new partial replacements in nearly all circumstances and requires landlords and home sellers to disclose the presence of a lead service line. D.C. Water has called for an aggressive ten-year program to replace lead service lines in the District. Without regulatory requirements, it took them sixteen years to finally commit to a lead service line replacement program that will actually begin to address the risk of lead service lines.

Therefore, we call on EPA to require that all lead service lines be fully replaced in ten years, that partial lead service line replacements be prohibited, and that the charges will not be placed on homeowners.

Other Necessary Improvements To The Lead And Copper Rule

In addition to this centerpiece to revisions of the Lead and Copper Rule, EPA should also incorporate other elements.

Complete, verified service line inventories.

The first step to undertaking an effective full replacement program must begin with a robust identification of all the service lines and the materials delivering water to homes and buildings. The final inventory identifying all unknown service lines must be complete two years after the initial inventory. It should be made publicly available so that everyone knows what material is used in the service line providing water to their home.

Better Sampling

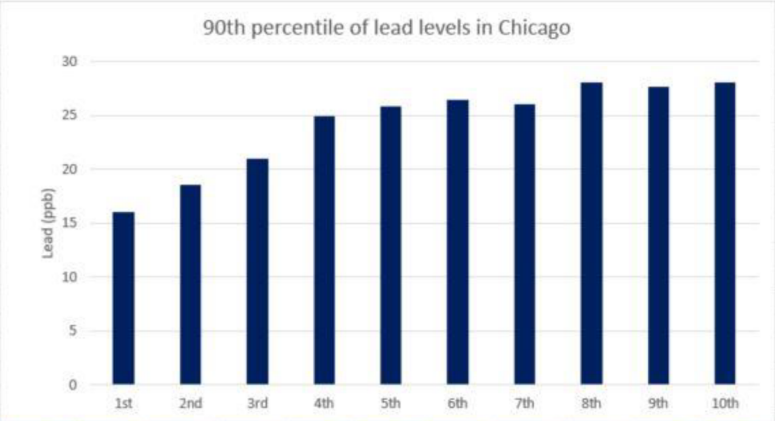
The Lead and Copper Rule relies on sampling water at the tap to track the levels of lead in the water. If the 90th percentile of the sampling results are above the lead action level of 15 ppb, the utility must take further action. But under this system, if the sampling protocol does not target the water with the highest risk of lead in water, then the whole premise of how the rule protects against lead contamination falls apart. And this is what is happening under the Lead and Copper Rule. The samples required for monitoring do not actually represent water from lead service lines, the largest source of lead in contact with drinking water.

Under the Lead and Copper Rule, the 90th percentile is calculated based on the first liter of water taken from the tap after it has sat in the home for at least six hours. But first liter samples reflect what is happening in the fixture and proximate building plumbing, not in the lead service line. These first liter samples are inadequate for identifying at-risk systems, communicating the risk of lead service lines, triggering public education and lead service line replacement programs, and measuring the effectiveness of corrosion control treatment.

In Chicago, sequential samples (i.e. samples taken from the first liter of water drawn, the second liter, continuing through the tenth liter) were taken in homes where the first liter contained lead above the action level. Based on NRDC's analysis of data taken from Chicago, the first liter samples consistently miss the highest levels of lead.

The graph below (Figure 2) shows the 90th percentile results for all the samples taken in Chicago. The lowest levels of lead are found in the first liter sample. The highest levels are captured in later liters – between the fifth and tenth liter. These later liters are more representative of the quality of water that sat in the lead service line – and more representative of the highest levels of lead in the water. Because this is a corrosion control treatment rule, we should be measuring the effectiveness of corrosion control in the highest risk water.

Figure 2 Chicago Drinking Water Sample Results by Liter (for homes initially testing over 15 ppb in the first list)

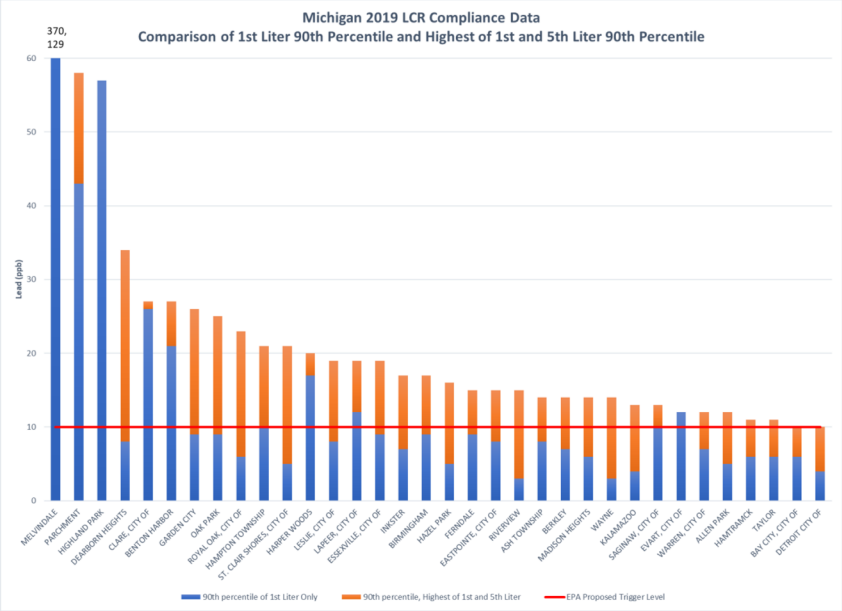


year	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
2019	13.5	18	18.9	24.1	22.2	24.4	24.4	26.8	26.2	27.8
2018	19.2	16.4	23.4	24.1	28.5	27.5	26.6	28.3	27.6	25.2
2017	16.8	20.4	29.5	35.9	36.5	35.1	34.5	34.4	32.5	29.5
2016	15.5	18.1	20.7	21	21.8	24.4	23.6	25.8	26.9	26

Therefore, to ensure that the sampling results represent what is coming out of the lead service line and the highest levels of lead in the water - and to reduce the lead exposure in water systems and homes that need it most, EPA must require the fifth and tenth liters in its compliance samples. Otherwise, the protective provisions included in EPA's proposal will only apply to a very small number of systems where first liter samples (from household plumbing) exceed the trigger and lead action level.

Results from Michigan show a similar pattern (see Figure 3). Of the 34 systems that exceeded the lead trigger level, only ten (29%) would have exceeded the lead trigger level based on first liter samples alone.

Figure 3 The 90th percentile data from Michigan water supplies that collected first and fifth liter sample data during compliance sampling in 2019 that meet or exceed EPA's proposed trigger level of 10 ppb for lead.



Unfortunately, there are unintended but significant incentives for water systems to monitor the lead levels in ways that fail to detect lead problems (such as using monitoring techniques that are less likely to find lead). These techniques are allowed by the current Lead and Copper Rule and in the recent revisions proposed by the EPA.

Corrosion Control Treatment

Because there is lead throughout household plumbing, corrosion control treatment will still be necessary to manage smaller magnitude sources of lead in drinking water even after lead service lines have been fully replaced. Corrosion control is complicated, dependent on water quality, history of treatment, and materials used in the distribution system. The Lead and Copper Rule must include robust requirements for identifying optimal corrosion control treatment that is consistent with the latest scientific research.

Protecting school children

In April, NRDC's analysis of New York State data showed that 82 percent of public schools reported one or more taps that tested above 15 ppb.[25] Furthermore, more than 56 percent of public schools tested above the state action level at 5 percent or more of their taps, and almost 2 percent of public schools found elevated levels for at least half of the taps tested. Most troubling, sixteen public schools exceeded the state action level at every outlet tested.

The EPA's proposed revisions attempt to address the concern with lead in drinking water at schools and child care facilities, but the proposed water sampling requirements are inadequate, misleading, and would waste money. They require such minimal monitoring that they will result in widespread false negatives giving parents, administrators, and teachers the false belief that they do not have a lead problem simply because the lead wasn't detected, not because they don't have a lead problem.

Unless there is regular monitoring of each site at which water can be consumed, lead contamination will be missed at some of the locations where children drink water.[26] Lead release is sporadic.[27] A single non-detect sample at a single tap does not guarantee that the water in that tap is always safe to drink. Repeat sampling frequently identifies elevated lead levels at taps that were not detected during previous sampling efforts.[28]

In the end, the minimal sampling requirements would cause schools and childcare facilities to miss many lead contamination problems. Furthermore, the lack of requirements to remediate detections of lead leaves school children no better off.

For these reasons, NRDC recommends one of two options to address lead in schools and child care facilities. EPA should propose a much more robust and ongoing monitoring program in schools and child care facilities, sampling every tap at least twice per year. Or, better yet, EPA should require certified filters to be installed before testing because we know that lead is prevalent in plumbing throughout schools and therefore in the unfiltered drinking water. The Agency has proposed such a point of use filter approach as an option for small water systems; it should be an option for protecting school children as well. It is important to note that such filtration works when filters are properly installed and maintained.

Going to the Source

We have learned from our experiences with Washington, D.C., Flint, Newark, and other water systems that a change in source water (as in Flint) or in water treatment (as in Washington, D.C. and Newark) can result in widespread lead contamination. They also in some cases have triggered other serious problems with simultaneous compliance with other rules such as violations of the Total Coliform Rule, the disinfection byproduct rules, and a Legionella outbreak. Therefore, requirements to study and test the changes before they are adopted are critical to preventing similar types of crises. Notifying the public that when these changes are contemplated and studied is an important component to protect residents.

Lax Safe Drinking Water Act Enforcement

Even with the most protective drinking water rules, the protections will not be realized without diligent enforcement by EPA or the states. However, violations of regulated contaminants standards rarely lead to enforcement actions either by EPA or the states.

States with primacy under the SDWA (all states except Wyoming) are supposed to carefully oversee drinking water systems to ensure that they comply with EPA requirements such as the Lead and Copper Rule. As part of this requirement, primacy states are to regularly report violations and certain other information to EPA. Under the Act, if EPA finds that a water system

is in violation in a state with primacy, EPA is to notify the water system and state of the violation. If the state fails to take enforcement action within thirty days, EPA is legally required to issue an administrative order or file an enforcement case in court against the violator. EPA and states often ignore these important mandates in the law.

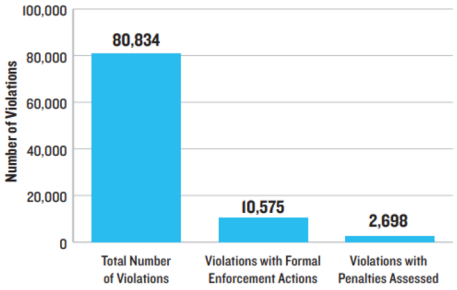
Additionally, EPA is authorized to immediately issue an administrative order or to bring a case in court if a contaminant "may present an imminent and substantial endangerment to the health of persons," even if no violation of the law is proven. Unlike some other laws, the Safe Drinking Water Act does not allow citizens to bring an action in such cases to protect their health from an imminent and substantial endangerment—a major shortcoming that should be rectified.

The Safe Drinking Water Act does authorize citizens to sue public water systems that have violated the requirements of the Act after providing sixty days advance notice to the violator, the state, and EPA. Unfortunately, this can mean substantial delays while there is an ongoing health threat. In Flint and Newark, NRDC brought such an action on behalf of local residents.

Flint is but one example where neither state authorities nor EPA took enforcement action until far too long after the problem began. But lack of enforcement in Flint was not anomalous. In fact, according to NRDC's May 2017 Threats on Tap[29] report analyzing EPA's enforcement data, states and the EPA took formal enforcement action against just 12 percent of the over 8,000 Lead and Copper Rule violations that occurred in 2015. Formal enforcement actions were taken against just one in seven health-based violations (14.2 percent). Most troubling, only about 1 in 20 violations (6.2 percent) returned to compliance within the calendar year. And for health-based violations, less than 1 in 12 (8.6 percent) returned to compliance within the calendar year. Non-health-based violations (e.g., monitoring and reporting violations) can mean that a water system isn't even collecting enough information to know whether there is a risk to public health. This lack of accountability sends a clear message to water suppliers that they can knowingly violate the Lead and Copper Rule, with state and federal complicity.

This is not just a problem with the Lead and Copper rule. Of all the drinking water violations in 2015, formal enforcement actions were only taken against 13 percent of them.[30] (See Figure 4.)

Figure 4 Formal Enforcement Actions For All Drinking Water Violations (2015 data)

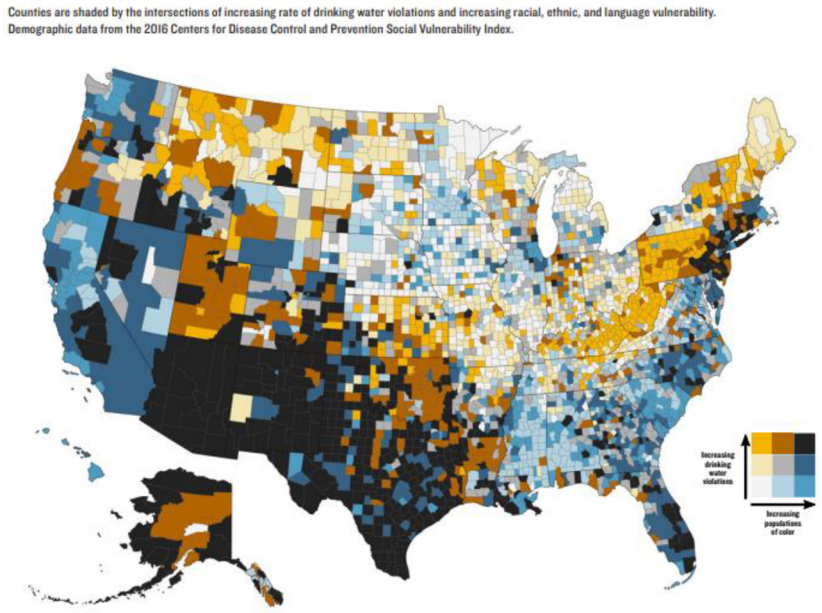


Violations of regulated contaminants standards rarely lead to enforcement actions either by EPA or the states.

Disproportionate Impacts

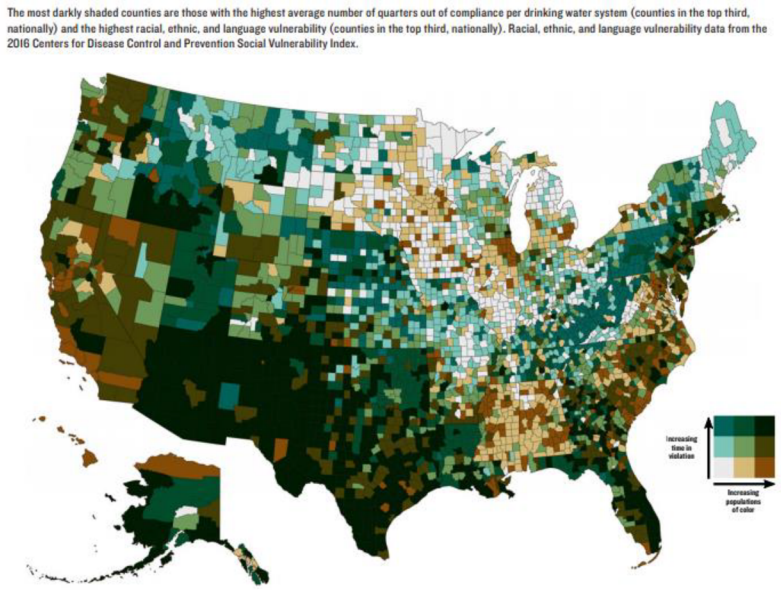
Communities of color all over this country often bear the burden of environmental contamination and the resulting health problems. In our recent report, Watered Down Justice, we found that the rate of drinking water violations are higher in communities of color, low-income communities, areas with more non-native English speakers, areas with more people living under crowded housing conditions, and areas with more people with sparse access to transportation.[31] (See Figure 5.)

Figure 5 Intersection of All Drinking Water Violations and Racial, Ethnic, and Language Vulnerability by County (June 1, 2016 to May 31, 2019)



Our analysis also revealed that race, ethnicity, and language had the strongest relationship to slow and inadequate enforcement of the Safe Drinking Water Act. (See Figure 6.) That means that water systems that serve the communities that are the most marginalized are more likely to be in violation of the law—and to stay in violation for longer periods of time.

Figure 6 Intersection of Length of Time Out Of Compliance and Race, Ethnic, and Language Variability by County (June 1, 2016 to May 31, 2019)



For communities already facing severe burdens due to racism, social conditions, and/or environmental and health hazards, the inability to turn on a tap and receive clean, safe water is particularly devastating—and unjust. These findings are consistent with the long-standing pattern of disproportionate and cumulative hazards in communities of color and low-income communities.

There are clear challenges to ensuring that every American gets safe drinking water. We don't want to create a two-tiered system where the wealthy get water that is clean and safe for their families, and the less well-to-do get second-class water that poses risks to their health.

Conclusion

The EPA's proposed revisions to the Lead and Copper Rule will not solve the nation's lead in drinking water woes. The rule needs a strong and complete overhaul, including a mandate that all lead service lines be fully replaced within ten years at utility expense. The rule must also be vigorously enforced. Congress also has an important role to play. We recommend $22.9 billion over five years to a variety of drinking water programs and grants, with targeted funding going to replacement of all lead service lines, especially supporting communities with a high percentage of low-income residents.

---

[1] Green, Erica. "Flint's Children Suffer in Class After Years of Drinking the Lead-Poisoned Water" *New York Times* November 6, 2019.

[2] Nakamura, David. "Water in D.C. Exceeds EPA Lead Limit." *Washington Post.* January 31, 2004. Available at https://www.washingtonpost.com/archive/politics/2004/01/31/water-in-dc-exceeds-epa-lead-limit/1e54ff9b-a393-4f0a-a2dd-7e8ceedd1e91/ last accessed February 7, 2020.

[3] Fedinick, Kristi Pullen. "What's in Your Water? An Updated Analysis" *NRDC Expert Blog* September 14, 2018. Available at https://www.nrdc.org/experts/kristi-pullen-fedinick/whats-your-water-updated-analysis last accessed February 6, 2020.

[4] *Id.*

[5] *Id.*

[6] See, e.g. Brian Cohen and Erik D. Olson, *Victorian Water Treatment Enters The 21st Century: Public Health Threats From Water Utilities' Ancient Treatment And Distribution Systems*, NRDC, 1994.

[7] Memorandum from Peter Grevatt to Water Division Directors. Re: Clarification of Recommended Tap Sampling Procedures for Purposes of the Lead and Copper Rule. *U.S. Environmental Protection Agency.* February 29, 2016. Available at https://www.epa.gov/sites/production/files/2016-02/documents/epa_lcr_sampling_memorandum_dated_february_29_2016_508.pdf last accessed February 6, 2020.

[8] U.S. Environmental Protection Agency. "National Primary Drinking Water Regulations: Proposed Lead and Copper Rule Revisions." 84 Fed. Reg. 61684 (November 13, 2019).

[9] National Drinking Water Regulations. 42 U.S.C. §300g-1(b)(7)(A).

[10] Health Canada. Guidelines for Canadian Drinking Water Quality: Guideline Technical Document – Lead. March 2019. Available at https://www.canada.ca/en/health-canada/services/publications/healthy-living/guidelines-canadian-drinking-water-quality-guideline-technical-document-lead/guidance-document.html#a1; last accessed February 6, 2020.

[11] World Health Organization. *Guidelines for Drinking-water Quality. Fourth edition incorporating the first addendum.* 2017. Available at https://apps.who.int/iris/bitstream/handle/10665/254637/9789241549950-eng.pdf;jsessionid=81AD99F39C6768ED4EF63F33BF2FEBD8?sequence=1; last accessed on February 7, 2020.

[12] "Drinking Water Treatment Units Must Now Meet Stricter Requirements for NSF/ANSI Lead Reduction Certification" *Water Online.* February 6, 2020. Available at https://www.wateronline.com/doc/drinking-water-treatment-units-must-now-meet-stricter-requirements-reduction-certification-0001, last accessed February 7, 2020.

[13] Advisory Committee on Childhood Lead Poisoning Prevention, "Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention," CDC, January 4, 2012, www.cdc.gov/nceh/lead/acclpp/final_document_030712.pdf.

[14] U.S. Environmental Protection Agency. Lead and Copper Rule Revisions White Paper. October 2016, available online at https://www.epa.gov/sites/production/files/2016-10/documents/508_lcr_revisions_white_paper_final_10.26.16.pdf, last accessed February 6, 2020.

[15] U.S. Environmental Protection Agency Science Advisory Board. "SAB Evaluation of the Effectiveness of Partial Lead Service Line Replacements." September 28, 2011. Available at https://www.epa.gov/sites/production/files/2015-09/documents/sab_evaluation_partial_lead_service_lines_epa-sab-11-015.pdf; last accessed February 6, 2020.

[16] Renner, Rebeca "Reaction to the Solution: Lead Exposure Following Partial Service Line Replacement" Environ Health Perspect. 2010 May; 118(5): A202–A208. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2866705/; last accessed February 6, 2020.

[17] Supra note 13.

[18] *Id.*

[19] Espinola, Ann "Lead service line replacement standard coming soon." *American Water Works Association.* August 2, 2017 quoting Paul Olson, AWWA senior manager of standards. Available at https://www.awwa.org/AWWA-Articles/lead-service-line-replacement-standard-coming-soon last accessed February 6, 2020.

[20] "Replacing all lead water pipes could cost $30 billion" *Water Technology.* March 11, 2016. Available at https://www.watertechonline.com/home/article/15549954/replacing-all-lead-water-pipes-could-cost-30-billion; last accessed February 7, 2020.

[21] "Service Line Replacement Program" *City of Flint, Michigan. Available at* https://www.cityofflint.com/fast-start/ last accessed February 6, 2020.

[22] Hamelink, Scott. Presentation on "Lansing Lead Service Line Replacement Program" undated. Available at http://gettheleadoutpgh.org/lead/wp-content/uploads/2018/05/Hamelink-presentation-PDF.pdf last accessed February 6, 2020.

[23] "Lead Service Line Replacement Program" *City of Newark, New Jersey.* Available at https://www.newarkleadserviceline.com/replacement last accessed February 6, 2020.

[24] Bonamo, Mark. "Essex County Bond Plan Eliminates Need for Newark Homeowners to Pay $1K For Lead Service Replacement Lines" *TAPintoNewark.* August 26, 2019. Available at https://www.tapinto.net/towns/newark/articles/essex-county-bond-plan-eliminates-need-for-newark-homeowners-to-pay-1k-for-lead-service-replacement-lines; last accessed February 6, 2020.

[25] Matthews, Joan. "School Drinking Water Gets an F for Lead" *NRDC Expert Blog* March 13, 2018 available at https://www.nrdc.org/experts/joan-leary-matthews/school-drinking-water-gets-f-lead <last accessed February 6, 2020.>

[26] Masters, Sheldon, Jeffrey Parks, Amrou Atassi, and Marc A. Edwards. 2016. "Inherent Variability in Lead and Copper Collected during Standardized Sampling." Environmental Monitoring and Assessment 188 (3): 1–15. https://doi.org/10.1007/s10661-016-5182-x.

[27] *Id.*

[28] Lambrinidou, Yanna, Simoni Triantafyllidou, and Marc Edwards. 2010. "Failing Our Children: Lead in U.S. School Drinking Water." NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy 20 (1): 25–47. https://doi.org/10.2190/NS.022010eov.

[29] Fedinick, Kristi Pullen, Mae Wu, Mekela Pandithratne, and Erik Olson. *Threats on Tap: Widespread Violations Highlight Need For Investment In Water Infrastructure And Protections*. NRDC. (May 2017) available at https://www.nrdc.org/sites/default/files/threats-on-tap-water-infrastructure-protections-appendices.pdf <last accessed February 6, 2020>

[30] Fedinick, Kristi Pullen, Mae Wu, Mekela Pandithratne, and Erik Olson. Appendices to *Threats on Tap: Widespread Violations Highlight Need For Investment In Water Infrastructure And Protections*. NRDC. (May 2017) available at https://www.nrdc.org/sites/default/files/threats-on-tap-water-infrastructure-protections-report.pdf <last accessed February 6, 2020>

[31] Fedinick, Kristi Pullen, Steve Taylor, and Michele Roberts. *Watered Down Justice.* NRDC (September 2019.) available at https://www.nrdc.org/sites/default/files/watered-down-justice-report.pdf; last accessed February 6, 2020.

Mr. TONKO. Thank you, Ms. Wu. And thank you to the entire panel for your opening statements and for your appearance here today. We are going to move to member questions. Before we do, we were asked to admit a news release from the Department of EPA that would be included in the official record. We will admit this press release to the record pursuant to the gentleman's request.

[The information appears at the conclusion of the hearing.]

Mr. TONKO. But I must point out inaccuracies in the document. In the release, the EPA claims that my colleagues and I deliberately chose to exclude them. That is simply not true. We shall have—we would have welcomed EPA's testimony here today. The release also suggests that other witnesses on the panel, those appearing here today, must have received more notice of the hearing date. That is also not true. No witnesses received more notice than the EPA. We greatly appreciate the efforts that our witnesses today have made to testify here and we will again acknowledge working with the EPA on what is a very serious issue.

So now to member questions and I will start by recognizing myself for 5 minutes. The area of safe drinking water, which obviously is a fundamental right and a fundamental duty of our federal government, is our focus here today. The public and many of my colleagues may look at the Safe Drinking Water Act and assume that it ensures drinking water that is, indeed, safe. This is a reasonable assumption but, unfortunately, one that is not entirely accurate.

I am referring to the fact that drinking water standards set under the Safe Drinking Water Act are not health-based standards, but are actually based on cost. The recent proposed revision to the Lead and Copper Rule is no exception. I would like to read a short quote from the proposed Rule, and I quote, "The EPA established the lead action level in 1991 based on feasibility and not based on impact on public health. The proposed trigger level was also not a health-based standard."

So, Dr. Hanna-Attisha, do you think that we should have a health-based standard for lead in drinking water?

Dr. HANNA-ATTISHA. Absolutely. That is an excellent question. The EPA has actually set something called the "maximum contaminant level goal" for lead and water, which recognizes that there is no safe level of lead and that is set at zero parts per billion. The FDA, which regulates bottled water, has a standard of lead in bottled water of five parts per billion.

The American Academy of Pediatrics recognizes no safe level of lead has recommended a maximum level of lead in schools and child care facilities and that water at one part per billion. We need to be moving towards a health-based standard that recognizes the well-known and undisputed science that there is no safe level of lead.

Mr. TONKO. Thank you so much, Doctor.

And, Ms. Gaddy, do you agree?

Ms. GADDY. Yes, most definitely. It is crucially important that this issue that a lot of our residents face in environmental justice communities, it is a health injustice and then there are cumulative impacts that we suffer from on a daily basis. And just because of the ZIP code that we reside in, there are other issues attached with

water issues, so we definitely need this to be a health-related concern with a sense of urgency.

Mr. TONKO. Thank you. And to anyone on the panel, what would a Lead and Copper Rule look like if it were based just on health protection instead of cost? Anyone?

Ms. Wu, I think you wanted to respond.

Ms. WU. Well, it would look like some of the things we have outlined, which is it would take away all the lead service lines that are the cause of the problem and it would ensure that people's homes, that the water that is coming into their homes is safe to drink.

Mr. TONKO. OK, anyone else? Doctor?

Dr. HANNA-ATTISHA. Sure, I would just reiterate that so in lead, the public health and pediatric and the medical community advocate something called "primary prevention," which is in public health means we are never supposed to expose a child to lead, so it would be putting in place the recommendations that eliminate that exposure. Eliminate lead from our service lines, maximize corrosion control so that lead never gets into our drinking water and then we never have to wait to find in our children.

Mr. TONKO. Do any of our reps from water organizations want to—yes, Ms. Licata?

Ms. LICATA. Yes. I really believe that it would firmly look at a more integrated approach. I think you have heard from the testimony today that an interdisciplinary approach among agencies as well the water providers is really necessary in order to address this problem. One of the comments that was made earlier is that the utility can't simply assume authority based on the rule. There are prohibitions against our addressing some of the private sectors, we can't force our way into schools, so we would really have to look at this in a more holistic manner and really integrate the approach.

Mr. TONKO. Thank you.

Feasibility is an important consideration in adopting regulations, of course, because a regulation that cannot be implemented will not improve public health. But we have seen across our environmental laws that protective regulations can drive innovation, making better technologies feasible for lead in drinking water. We have EPA saying that what is feasible in 2020 is no better than what was feasible in 1991.

Ms. Wu, do you agree with that or can we do better than 15 parts per billion?

Ms. WU. Yes. I do think we can do a lot better, and I think as you look at examples of the cities across the country who are starting to do full lead service lines replacements at no cost to the homeowners, it shows that it is feasible and it can be done and it should be done.

Mr. TONKO. Do you know what some of the other countries might do in regard to lead levels?

Ms. WU. Other countries?

Mr. TONKO. Yeah.

Ms. WU. I am not.

Mr. TONKO. OK.

Oh, Doctor?

Dr. HANNA-ATTISHA. My understanding is that the World Health Organization has an action level of ten parts per billion.

Mr. TONKO. OK. Thank you very much.

I will now recognize Mr. Shimkus, subcommittee ranking member, for 5 minutes to ask questions, please.

Mr. SHIMKUS. Thank you very much. I am going to go by Dr. Mona. And if the World Health Organization says ten parts per billion, why not zero? Why aren't they saying zero if everyone says there is no safe level?

Dr. HANNA-ATTISHA. I completely agree. It should be zero.

Mr. SHIMKUS. OK. There must be a reason.

Let me, I wanted to start with, point out those two young children back there in the second row. Can you introduce them, because I think they are related to you.

Dr. HANNA-ATTISHA. I have my daughter Nina who is an eighth grader in Michigan who is studying U.S. History, so we thought we would get a hands-on lesson. And my nephew Zachary who lives in northern Virginia and wanted to see his aunt testify.

Mr. SHIMKUS. Well, let's welcome them here.

[Applause.]

Dr. HANNA-ATTISHA. Thank you.

Mr. SHIMKUS. I am a former teacher, so this is like——

Dr. HANNA-ATTISHA. I also have a Flint kid with me, Jasmine, over here, who works with us at Michigan State University.

Mr. SHIMKUS. All right, Civics 101 right here.

Mr. TONKO. A Flint kid. That is OK.

Mr. SHIMKUS. So let me thank you for that.

Let me go to Mr. Estes-Smargiassi. I am a former Army Infantry officer and we have the KIS theory, Keep It Simple. This is very complex. Could you—you went over a lot of this debate and can you kind of explain why it is a difficult process, in Infantry language, and then maybe follow up with the practicality of an MCL for lead?

Mr. ESTES-SMARGIASSI. So, let me sort of start off with corrosion control and then talk about lead service lines. One of the things we worry about in any change in regulation is that any change in treatment, any change in source water, anything we do in the water system, we have to evaluate all the rest of the factors. In fact, a number of the situations where we have seen elevated lead it wasn't because, in some cases, it was, but in other cases, it was not because folks were negligent about thinking about lead. It is that they were very active about thinking about another contaminant, whether it be disinfection byproducts or giardia, or cryptosporidium, and those changes to fix one problem can cause another.

As much as we would like to think we fully understand corrosion in water, EPA's experts and academic experts frequently disagree with each other and frequently don't have a practical answer for whether a tweak in one thing will cause a deficit in something else and we worry about that.

Mr. SHIMKUS. And we have seen that too just on power utilities where we try to get a cleaner burning to kill the particulate matter but nitrous oxide goes up, so it is one event affects another and that is why I appreciate that. That is difficult.

So I was going to go back to Mr. Estes-Smargiassi, Ms. Tucker-Vogel, and Ms. Licata. Some of my colleagues have publicly dismissed this proposed rule. Given the challenges from your perspective, do you see the administration's proposal as generally addressing the right issues and, if not, at least suggesting a serious and workable proposal?

Let's go to Ms. Licata first.

Ms. LICATA. I think there are a lot to begin to work with in this rule and we would really look forward to working with the administration on it. Particularly, we like the part of the no partial replacements unless you have a significant emergency repair. We think that that makes great sense.

Mr. SHIMKUS. OK, let me go to Ms. Tucker-Vogel real quick; same question. Anything good, you know, about the rule?

Ms. TUCKER-VOGEL. In the proposed rule?

Mr. SHIMKUS. Right.

Ms. TUCKER-VOGEL. Yes. I think requiring the lead service line inventories is a good first step and I think, you know, it is fundamental to the rest of the rule. If you don't know where the lead is, you can't fix anything else.

Mr. SHIMKUS. OK, thank you. Let me go to Mr.——

Mr. Estes-Smargiassi?

Mr. ESTES-SMARGIASSI. Inventories, plans to remove them, and letting every homeowner know that they have a lead service line if they have one and encouraging them to replace it. Information is power.

Mr. SHIMKUS. Yes, time is short. So let me go—who has submitted formal comments for the rule yet? Raise your hand if you have submitted formal comments.

Is that a yeah? So you have not submitted them yet? Tonight?

And you have, Ms. Gaddy? OK.

Ms.—so some of you here are testifying, haven't submitted to the rule. NRDC is going to, I guess, so, and it is due, so if you are going to do it, you better get it in.

Is a rule better than, a revised rule better than no rule? In other words, you know when the last rule was written, or promulgated, 1991. I was here during the Obama administration, came in 2009, and left in 2017. Did they promulgate a new Lead and Copper Rule? The answer is no; they did not. So cut the administration a little slack for trying to do something versus nothing. And I yield back my time.

Mr. TONKO. The gentleman yields back. The Chair now recognizes Chairman Pallone for 5 minutes to ask questions, please.

The CHAIRMAN. Thank you, Mr. Chairman.

Many of you state in your testimony and I saw serious concerns about EPA's long overdue proposal for the Lead and Copper Rule, so I wanted to highlight a few of these concerns that we can work with EPA to address them in the final rule. And the first concern is that this proposal does not do enough to prevent lead contamination, so let me try to run through this quickly.

Dr. Hanna-Attisha, why is prevention so important when it comes to lead exposure?

Dr. HANNA-ATTISHA. Sure. That is a great question and it is really fundamental to why we are all here. Why is lead bad? It is like

we have mentioned, a potent, irreversible neurotoxin, so what that means it attacks the developing brains of children. It impacts cognition, lower IQ levels, it impacts behavior, causes things like developmental delays, attention problems, focusing problems, hearing loss, and growth problems; it has been linked to impulsivity and criminality.

We also now know it has multigenerational impacts. There is a recent book out on lead that called lead a multi-headed hydra because wherever you turn, there is like a new research study that says there is something bad, another bad thing.

Mr. PALLONE. When you say "multigenerational," you mean it can hand it down from one parent to their children?

Dr. HANNA-ATTISHA. Absolutely. Research from Detroit shows the epigenetic impact of lead. Grandmothers exposed to lead, you can see those DNA changes——

Mr. PALLONE. OK.

Dr. HANNA-ATTISHA [continue]. In their grandchildren. We also know that children exposed to lead as adults can manifest with high blood pressure, kidney disease, early dementia, gout, and have other life-altering consequences.

Mr. PALLONE. Sounds pretty bad. I mean, I obviously don't think this proposal does enough to remove lead service lines. What should we do to prevent exposure through drinking water?

Dr. HANNA-ATTISHA. I think once again the many things we have talked about, we should find where the lead is and we should get it out. We should get rid of our lead in our service lines. It is going to be very difficult to get rid of the lead in our home fixtures and faucets, but we can minimize that risk with better corrosion control treatment, with better public education; people can use filters if they choose, if they are concerned. Better testing, better transparency.

So like many of the things here, we need to—this rule should be based on the concept of primary prevention, public health, not on feasibility and what saves money.

Mr. PALLONE. Now let me ask Ms. Gaddy. Do you think a community can solve lead contamination without removing lead service lines?

Ms. GADDY. No. We must start first with removing all the lead service lines and making sure that individuals are informed that where they exist and then provide the necessary finances for them to be removed.

Mr. PALLONE. Now, of course, I am thinking of Newark and our state which is undertaking this aggressive replacement of all lead service lines, and I think we can see in coming years that that decisive action would offer robust protection for public health. Yet, this LCR proposal maintains a structure of the old rule where action is only required after a problem is found and I think we would have to do everything we can to prevent lead contamination, not just remedy it.

So let me ask Ms. Wu. When should lead service lines be replaced? Does it make sense to wait until monitoring shows that there are leaching and, you know, do you think that EPA should adopt a proactive lead service line replacement requirement instead of this reactive approach?

Ms. WU. Absolutely. I think we need to start pulling them out of the ground now. And as we have seen the monitoring and waiting for monitoring, as all the flaws in that mean that we might think there is no problem because it is not showing up in the liter that we are looking at, where actually you do have a big problem. So this wait and see is the worst way to do it. We have to be proactive about it.

Mr. PALLONE. I am going to run out of time, but I want to ask about this trigger level below the action level. The proposal takes a small step by introducing a trigger level below the action level, but it seems kind of confusing to me.

So let me go back to you, Ms. Wu. Do you think the EPA should require corrective action for lead levels below 15 parts per billion?

Ms. WU. Yes. I mean, as we know——

Mr. PALLONE. Basically, I am asking whether you think the trigger level is enough or should the action level be lower?

Ms. WU. No, it needs to be lower. It needs to go as low as possible. Five would be way better. Zero would be great.

Mr. PALLONE. All right.

Ms. WU. But yes, it needs to be lower.

Mr. PALLONE. Let me just ask in the 30 seconds, Dr. Hanna-Attisha, do you agree with what she said and, Ms. Gaddy, do you agree?

Dr. HANNA-ATTISHA. Yes.

Mr. PALLONE. Ms. Gaddy?

Ms. GADDY. Yes.

Mr. PALLONE. OK, so that is it. I mean, I think that we all agree that EPA should lower the action level and require proactive lead service line replacement. I don't think we can undo the effects of lead exposure, so we have to do everything we can to prevent it. And as costly as lead service line replacements are, the alternative is far more costly for impacted communities.

And I just want to thank you, you know, for your testimony. I yield back, Mr. Chair.

Mr. TONKO. The gentleman yields back. The Chair now recognizes Representative McKinley for 5 minutes, please.

Mr. MCKINLEY. Thank you, Mr. Chairman.

Several of you have come close but then you stopped. We have been doing research to try to find out how many homes were built that still exist since prior to 1986, because in 1986, we had the ban on lead pipes and solder and the like, lead solder in our homes. But I can't get a number of homes that are still out there that where families are at risk, and so if you can get that.

But, Ms. Wu, I thought you came close a little bit to it, too. Do we have a number? What are the metrics on the projection, because there would be tens of millions of homes? If we have about a hundred million homes out there, I am going to say maybe 40 or 50 of them; we could figure out that. That is what I am trying to find out. How many homes out there have exposure?

So what is the projection to remove the lead-based pipes, fixtures, and solder in a residential home? Does any of you have that number or is this just something we just whine about?

Ms. WU. Well.

Mr. MCKINLEY. I guess none of you—one of you just take a shot at this.

Mr. ESTES-SMARGIASSI. Yes. The best estimate we had for lead service lines is between six and ten million homes have lead service lines. That number obviously could be improved if we narrow up the range. In addition to that——

Mr. MCKINLEY. You are saying service lines that are coming into the house. I want to know how many are in the house that, physically, homes built prior to 1986 would have. We would have a lot of homes in there would not have copper necessarily in it.

Mr. ESTES-SMARGIASSI. Many tens of millions.

Mr. MCKINLEY. Yes, tens of millions.

Mr. ESTES-SMARGIASSI. Many tens of millions more.

Mr. MCKINLEY. Tens of millions. So I am trying to find out what is the projected cost? Is it five thousand dollars a house, ten thousand dollars a house? I don't know what that—I know what it would be for mine because I have had the estimate on it.

But I would like to know for—so, here is what I am going for. We give, and we have been talking about this for years. I am an engineer, a licensed engineer, and we have been dealing with this in homes and apartments all over in our project. Why aren't we offering a tax credit? Why aren't we offering a tax credit for people to be able to remove these, or grants?

Now one question came up, it was a question what are other countries doing? I believe it is Ireland, is offering grants to remove lead pipelines in homes, so in America, why aren't we doing this? Look, we give tax credits for residential energy tax credits that deals with high-efficiency boilers, furnaces, and solar panels. We would have historic preservation tax credits. We have tax credits for mortgages, state, and local income taxes. We have tax credits for home office deductions. But we don't offer one to remove lead-based pipe, which is far more dangerous to people.

Now, Ms. Wu, you said it was a 10:1 ratio. Maybe it is. I don't know what that is. That might be able to support, and give us some strength if we were to go for that to be able to promote something that it will pay for itself if we were to use a tax credit.

So I want to also want to engage you, because I think if we can get to that—and many of you referred to it as the elephant in the room. To me, the elephant in the room is the homeowner and his pipeline. You get him engaged, him or her, engaged in this debate by cleaning theirs up and then saying, but it is you, communities—I am sorry, Ms. Bobbitt— the counties to do it; I think we can get more pressure put on the counties and everyone to do this.

But if we put pressure on the counties to do it, then it is going to put pressure on, and they are going to resist it because, for whatever reason, they can't afford to do it in their homes. So I want to give them—if we offer all these tax credits for everything else, why in God's name aren't we doing the same thing for lead-based pipe in our homes, and we ought to be able to do that. So, is there any thoughts on that?

Ms. GADDY. Well, I just wanted to add, I know in the city of Newark the average cost is $7,000 to replace a lead service line. We have 18,000 lines that are being replaced that will cost about $126 million.

Mr. MCKINLEY. That is a service line. I am talking about inside the house, which is going to be more expensive. You might have to rip out some walls. You are going to have some problems in there. So, some other comments?

Dr. Hanna?

Dr. HANNA-ATTISHA. So, service lines were restricted in 1986. Most communities weren't actively putting them in, except for Chicago, which mandated using lead service lines to deliver drinking water. However, our home fixtures were allowed to have lead in them until 2014. So lead was allowed in brass fixtures until 2014. It is going to be very difficult to rip all of that out and that is why in addition to lead service line replacement, we need that optimal corrosion control and other preventive measures.

Mr. MCKINLEY. OK, my time has expired. But I didn't see any of you saying I like the idea of tax credits. Sorry. I yield back.

Mr. TONKO. Does anybody want to talk about that tax credit, just say yes or no before we go to our next——

Ms. BOBBITT. I think a tax credit would be very good.

Mr. TONKO. OK, thank you.

There you go, so we got one.

Mr. MCKINLEY. Thank you for your cooperation.

Mr. TONKO. So we have made Representative McKinley somewhat happy, so OK. The Chair now recognizes the vice chair of the full committee, Representative Yvette Clarke, for 5 minutes, please.

Ms. CLARKE. Thank you very much, Mr. Chairman, and I thank our ranking member, Mr. Shimkus, for convening this timely hearing on the EPA's recently proposed revisions to the Lead and Copper Rule. Thank you as well to all of our witnesses for being here today.

Brooklyn, New York, which is where I hail from, is very fortunate to have some of the cleanest drinking water in the nation, thanks in no small part to the work of our Department of Environmental Protection and our upstate partners. But even in Brooklyn, we are not exempt from this national crisis that has called our drinking water system into question, particularly in our public schools where drinking fountains have had to have been shut off to prevent our children from lead exposure. Much of our infrastructure is very old and many of our buildings were constructed during the time period when lead was used in service lines without even a second thought.

So I wanted to raise a couple of questions, but let me start by letting the committee know that I received an internal memo from my colleague, Congresswoman Diana DeGette, and it is a 2017, EPA memorandum that discusses lessons learned in implementing the Lead and Copper Rule in the older industrial cities of the upper Midwest, lessons that I am afraid that have gone unheeded by the EPA in drafting this new particular proposal. Copies of this memo was provided to the Democratic and Republican offices of this committee last night, and I ask that the memo be entered into the record.

Mr. TONKO. Without objection.

[The information appears at the conclusion of the hearing.]

Ms. CLARKE. According to the memo, sampling just the first liter of water to come out of the tap rather than the fifth or tenth liter, missed the peak lead values 100 percent of the time. So, Ms. Wu, could you elaborate on this and tell us whether this problem has been solved in this upcoming proposal?

Ms. WU. Yeah, unfortunately, it hasn't been solved and EPA continues to rely on the first liter. Whereas, you know, the studies have shown that the water that comes out from, say, the fifth liter and on is actually closer to the lead service line and more reflective of what is happening in the lead service lines.

Ms. CLARKE. OK. The memo points out that neither the states nor small or medium water systems have the expertise to establish optimal water quality parameters that will ensure lead levels are well controlled.

Ms. Wu, is this problem addressed in the EPA's proposal?

Ms. WU. No. That is also not addressed.

Ms. CLARKE. The memo points out that a lot of water systems don't know where their lead service lines are and thus may be missing high lead levels when they go out to sample.

Ms. Wu, is this problem addressed in the EPA's proposal?

Ms. WU. It is not fully or well addressed in the revisions.

Ms. CLARKE. So this memo ways even the best-centralized treatment used by a public water system may not prevent the release of lead particles, particles that can be up to 97 percent lead.

Ms. Wu, is this problem addressed in the EPA proposal?

Ms. WU. No. That problem is not fixed in the proposal.

Ms. CLARKE. The memo points out there may be elevated lead levels in homes even if the overall system has not had an action level exceedance. So, even though Chicago's water overall is above the action level, there may be more than 4,000 homes drinking water containing 15 parts per billion of lead, which is the action level, and one thousand homes drinking water with more than 100 parts per billion of lead.

Ms. Wu, is this problem addressed in the EPA's proposal?

Ms. WU. No. That problem has not been addressed.

Ms. CLARKE. So this report came out in 2017. None of this has been included in this upcoming proposal. These are things we already know.

So, Mr. Chairman, we have had a tragic history in this country with lead and drinking water. Unfortunately, it seems as though the EPA does not seem to have learned from that history. Mr. Chairman, I would like to again make sure that this put into the record, and I would like to thank all of our witnesses for being here and lending the expertise.

With that, Mr. Chairman, I yield back.

Mr. TONKO. The gentle lady yields back. The Chair now recognizes the ranking member of the full committee, Mr. Walden, for 5 minutes, please.

Mr. WALDEN. Thank you, Mr. Tonko, I appreciate that.

And again, thanks to the panel.

Mr. Estes-Smargiassi, do the proposed revisions to the Lead and Copper Rule create a more deliberative process regarding corrosion control and system management that currently exists under the Lead and Copper Rule?

Mr. ESTES-SMARGIASSI. The proposed rules add a fair amount of additional detail on how systems ought to think about this. They have focused on medium size and smaller systems rather than just large systems, so there is additional focus on corrosion control as one of the, if you will, the legs of the stool that we need here along with lead service line replacement and public education. It adds a lot of complexity which does concern us, but I think the thrust of encouraging corrosion control makes sense.

Mr. WALDEN. OK, let's see. Commissioner Bobbitt, according to your testimony, it appears that counties have many responsibilities and roles within your communities regarding public health protections. I think we all know that. Would you please explain what some of these are though?

Ms. BOBBITT. Yes. Thank you for that question. We are responsible for about anything that touches our counties, our people, so we take care of 9-1-1, roads and bridges; we run elections, we do so many things and it is important. We are also very smart and we work in partnership, and that is why it is real important for us is to work in partnership with our federal, state, and local governments, because as counties, we all need to be at the table to figure out what we need to do for our clean water.

Mr. WALDEN. Again, back to Mr. Estes-Smargiassi and Ms. Tucker-Vogel. What are your views as to what will help accelerate line replacement and will encourage replacements of customer-owned lines? I talked about some of this in my opening comments.

Mr. ESTES-SMARGIASSI. So one thing that will help accelerate it is knowledge, so the requirements for inventory and public education and notice to homeowners is going to make it more likely that folks who have a lead service line are encouraged to remove it. There has been a fair amount of conversation here about funding. That is probably the big gap in all of this. My numbers say if we are just thinking about lead service lines, we are talking about 30 to 80 billion dollars across the country.

Mr. WALDEN. Wow.

Mr. ESTES-SMARGIASSI. This proposal also adds in the galvanized lead service lines preceded by lead gooseneck. In my region, there is about twice as—that adds, doubles the number. So if we look at it that way here, we might be talking about something on the order of $160 billion to deal with this. The places where we have had real success have been where there has been external money applied.

Mr. WALDEN. Sure.

Mr. ESTES-SMARGIASSI. Flint did a great job.

Mr. WALDEN. Yes.

Mr. ESTES-SMARGIASSI. With a lot of money from this organization here.

Mr. WALDEN. Yes.

Mr. ESTES-SMARGIASSI. If somebody gave us a couple hundred million dollars, we would be able to move a lot faster in doing ours.

Mr. WALDEN. Mr. Tonko has the checkbook. Ask him. He is happy to do that, I am sure.

So you may have covered this. I was out of the room at the other hearing. But what do you tell the average homeowner? What is my responsibility as a homeowner? How do I know whether that service line coming in or not is something I should replace? Is it my

responsibility? At what point do I start, when the water gets to my house or there to the street? Who can take that on?

Ms. TUCKER-VOGEL. So, I think it varies from utility to utility.

Mr. WALDEN. OK.

Ms. TUCKER-VOGEL. And also from state to state. But in general terms, the responsibility for the service line from the meter to the foundation of the house typically lies with the homeowner.

Mr. WALDEN. Got it.

Ms. TUCKER-VOGEL. Now sometimes, the meter might be in the house, so then there again, it is just whatever the policy of the water utility might be at that point. But to go back to your question of how do we communicate with and educate people about what their materials are, the inventories are the first and fundamental part of that both on the utility-owned side of the meter and the privately-owned.

Mr. WALDEN. But how does a homeowner know? How do I know in my home?

Ms. TUCKER-VOGEL. Well, it is going to take an educational effort that has got to be part of the rule.

Mr. WALDEN. Is there a simple test? I mean if you are painting there, you can scrape some of the paint and you can, you know, do the lead test. I have done that. But you can't do that——

Ms. TUCKER-VOGEL. Well, keep in mind the lines are buried.

Mr. WALDEN. Right. No, I know.

Ms. TUCKER-VOGEL. So sometimes, depending on how the lines are connected to the meter, sometimes you can tell there at the meter set and you can do a little scratch test and see whether it is lead or not.

Mr. WALDEN. Oh, all right.

Ms. TUCKER-VOGEL. But there again, it is going to vary depending upon how it is constructed.

Mr. WALDEN. And on copper lines, I know they used to use lead solder, right? Is that an issue people should be worried about as well?

Ms. TUCKER-VOGEL. It could be. There again it depends. They don't use lead solder anymore.

Mr. WALDEN. Yes, good.

Ms. TUCKER-VOGEL. So as long their water is not really corrosive it is probably OK.

Mr. WALDEN. That is the issue——

Ms. TUCKER-VOGEL. I have lead solder on my copper pipes in my house, so it is, but, you know, they are old and my utility uses corrosion control.

Mr. WALDEN. Got it. OK, thank you. Thank you all. And thank you, Mr. Chairman. I appreciate it.

Mr. TONKO. You are welcome. The gentleman yields back. The Chair now recognizes Representative Blunt Rochester for 5 minutes, please.

Ms. BLUNT ROCHESTER. Thank you, Mr. Chairman, and thank you, Ranking Member and to the panel. I am sorry I have been running back and forth up and down the stairs. I am on at the same time in another hearing.

So I would love to, I might have to submit some questions for the record, but I want to first thank you and just express that yester-

day we know the President released his fiscal year 2021 budget. And a budget, it really a representation of your values and your priorities.

The proposed budget would lead people to believe that we don't value our environment as much as we do or our health, and based on the last three years, this is not really a surprise. The administration has rolled back or is in the process of rolling back nearly 100 safeguards for our air, water, and health. And for the 4th year in a row, the Trump administration has proposed deep, draconian cuts to EPA's overall budget, this year reducing it by nearly 27 percent.

Since EPA was created in 1970 under a Republican administration, our health and our environment are not partisan issues. It has made our air and our water cleaner, prevented millions of asthma attacks and hospitalizations and avoided hundreds of thousands of premature deaths. So when looking at this Lead and Copper Rule proposal, it goes against the very essence of what the EPA is supposed to do, protect our environment and protect our health.

And, unfortunately, when the EPA fails to do its jobs, those impacts fall disproportionately on the poor and communities of color. What happened in Flint is, sadly, just one example of what is happening all over this country, including the state of Delaware. We know how horrible lead is for our health, even at low-level exposures.

Children and pregnant women are especially vulnerable and this new rule fails to protect the millions of Americans who drink their water from systems with lead and copper pipes, and that is unacceptable. It also fails to require adequate procedures for notifying a community of a contamination which is a fundamental right and especially important for environmental justice communities.

Ms. Gaddy, in your testimony, you highlight that Newark, New Jersey had difficulty communicating health risks and technical information concerning lead levels to the public. We hear a lot about the concern for creating a panic if in revealing lead level exceedances too quickly. Do you think that the people impacted by contamination in Newark should have been notified sooner? And in your experience in Newark, does panic arise from too much information or too little?

Ms. GADDY. Yes. Well, thank you for that question. And I do think that too many of our residents were not informed of the situation early enough and then when information came out, it was too much to comprehend at one time so then there was a sense of panic. In order for individuals to fully engage and understand what is happening and how serious this is to their health, you had to first kind of explain what the problem was. It was 15,000 service lines at first, it wasn't everybody in the city.

So when you begin to say, well, only these groups of individuals can receive a filter or are in jeopardy, their health is jeopardized by a potential lead, so now the other 50,000 in that particular ward or 75 in another ward is like why not me? And so then it created this whole confusion. But there was a lack of transparency up front as well. I do believe that there were missteps along the way. There was a lack of communication between the administration and the health department.

Ms. BLUNT ROCHESTER. Right.

Ms. GADDY. Because this was a health issue that should have been addressed from the health department as well as with the water department and because there were disconnects along the way individuals didn't connect that this is something that is poisoning my family.

Ms. BLUNT ROCHESTER. Thank you. Thank you.

And I am going to shift to Dr. Hanna-Attisha. Following along those same lines, do you agree that it is important to inform residents? And also, what is the difference that a timely notice can make in exposure to lead to children and to the harm that could be done?

Dr. HANNA-ATTISHA. Absolutely. We definitely need more transparency, and more communication. After Flint happened, in a bipartisan manner, Congress passed the EPA notification bill, which says that if there is lead in the water, people should be informed of it. It is kind of crazy that we needed a bill for that to happen, but this is a step in the right direction. People need to know if there is a concern so that they can take the proper measures to protect themselves.

Ms. BLUNT ROCHESTER. And I am going to ask Dr. Wu, does this proposal ensure that EPA will notify people impacted by lead contamination as soon as possible?

Ms. WU. No, it could do a lot more to make sure they get notification in time.

Ms. BLUNT ROCHESTER. And in your testimony you highlight that sampling requirements are weak and that repeated sampling frequently identifies lead levels that were not identified in previous sampling efforts. You propose that sampling should be taken from every tap in schools and child care facilities twice a year. What is your recommendation for frequency of sampling done outside of schools and child care facilities?

Ms. WU. Well, for the frequent—first and foremost, the most important part is to take the samples that are from the liter that shows what is happening in the thing, or in the lead service line, right, and so that is most important. And then the frequency of sampling is, you know, more frequent is always going to be better.

Ms. BLUNT ROCHESTER. Thank you. My time has expired and I yield back.

Mr. TONKO. The gentlewoman yields back. The Chair now recognizes the gentleman from Missouri, Representative Long, for 5 minutes, please.

Mr. LONG. Thank you, Mr. Chairman.

Thank you all for being here on this important subject. And, Ms. Tucker-Vogel, unfunded and underfunded mandates have always been a concern for states and proposed revisions to the Lead and Copper Rule offer no additional funding for states' implementation of federal requirements. What impact would this rule have on the state finances for drinking water programs and enforcement?

Ms. TUCKER-VOGEL. Well, it will have a significant impact. I think if you look at the full testimony that we submitted and also our comments that as were submitted, with the Lead and Copper Rule you will find that the increase is significant, and without additional funding from EPA I am not sure how we will be able to

fully implement the rule. Also, replacement of the lead service lines both on the public and private sides, there will be additional funding required for that as well.

Mr. LONG. Assuming that the public water system's supervision grants are fully funded at $150 million per year, would states be able to fully implement the proposed rule as well as all of the other items that are required to do part of their primary enforcement responsibilities?

Ms. TUCKER-VOGEL. So I would like to reiterate that states will not be able to implement this rule at all if we don't have a functioning data management system, which we currently do not have either at the federal or state level. Our safe drinking water information system, otherwise known as SDWIS, currently does not have the capability for us to track all of the new requirements that are in the proposed regulations. So that is a significant issue for states.

Mr. LONG. OK, thank you.

And, Commissioner Bobbitt, according to your testimony, it appears that counties have many responsibilities and roles within your communities regarding the public health protections. And I know that Chairman Walden earlier, Ranking Member Walden on this committee, I guess, but Ranking Member Walden asked you a little bit about this. But with competing demands, how do you prioritize all the services in your community?

Ms. BOBBITT. Thank you for that question. That is a great question because it is a very difficult task. But like everybody else, we have to balance our budget the same as you do in your home and at your budget and the same as a federal government has to balance their budget and our state has to balance their budget, so do counties, so we have to prioritize. Obviously, we look at safety first and we are always very proactive about looking at what is impacting our environment. So we have to prioritize, but we do look at safety first.

Mr. LONG. OK, thank you.

And, Ms. Tucker-Vogel and Ms. Licata, both of you raised concerns about the proposed regulatory revisions regarding making public water systems responsible for testing drinking water at school and child care facilities, which we all want, of course. Ms. Licata, what technical coordination and/or funding challenges might this approach pose for water system operators?

Ms. LICATA. Yes, so we as a utility for New York City, are greatly interested in supporting the schools and daycare centers to the best of our abilities with testing and the knowledge of what may exist within their facilities and where they may have their lines. We think that there could be additional funding for those types of facilities. We do know that the Congress in 2016, through the WIIN Act created a grant program. There is about $45 million that may have been provided at this point, but we do need EPA to stand up a program that could administer the funding. We have heard it is a drop in the bucket, but the very next step is to stand up a program that would allow for potentially grants to be administered.

Mr. LONG. OK, thank you.

And, Ms. Tucker-Vogel, why should state education departments and child care licensing agencies be responsible for drinking water matters when they are in the schools?

Ms. TUCKER-VOGEL. So state education departments and schools are responsible for the safety of the children that are in their care, both in the schools and in child care facilities. I think it is important to note that drinking water operators at water utilities don't have the expertise that it takes to look at premise plumbing. So once you start looking at premise plumbing within large institutional buildings, it is a very different expertise that is required than what is required to operate a drinking water system. And I don't think our operators at this point have that level of expertise to address premise plumbing issues.

Mr. LONG. OK. And with that I yield back 5 seconds. Thank you all.

Mr. TONKO. Thank you. The gentleman yields back. The Chair now recognizes the gentleman from Florida, Mr. Soto, for 5 minutes, please.

Mr. SOTO. Thank you so much, Mr. Chairman. You know, getting lead out of our water is pretty fundamental. It has been a challenge for thousands of years for humanity. I was reading the other day that the fall of the Roman Empire was even contributed in part because there was lead in their pipes that drove people insane. And then we had lead in our piping until the 1920s in a lot of cities, but until the 1980s—I couldn't believe that. Until the 1980s and national plumbing codes, there was lead.

We know this is a hard issue. We have had issues like asbestos that we are working on and PFAS and even getting lead out of gasoline in the '70s and '80s, but we can't avoid it because it is hard. I worry about my own state, where 80 percent of the children with lead poisoning were not tested by the local health departments, according to Pediatrics medical journal. And then I just met with my Florida rural water folks last week and they are volunteering to help out schools and daycares because there is no state money to be able to test our many of thousands of schools in Florida.

So, first, I wanted to ask for everybody's response. We saw the President's budget this week, a 26 percent cut to EPA. Those 50 programs that are targeted for cuts are radon, clean water, and the lead program. So it would be great to hear what that would mean to each of your communities if we had a 26 percent cut to the existing lead programs that we already are funding in the 2020 budget.

And we will start from left to right with you, Ms. Hanna-Attisha.

Dr. HANNA-ATTISHA. So the lead programs, the safety net programs, all these programs that are critical for the health and development of our children and of our families, they are already underfunded. If you look at our lead program, the Childhood Lead Poisoning Prevention Program with the CDC, they got some of their funding restored with some of the Flint dollars that came in. But that is still not at what it needs to be to properly identify the children that are exposed, but really to focus our work on primary prevention not only getting the lead out of our homes, but getting the lead out of our plumbing.

We talk a lot about cost. The cost has come up many times today and we are not talking about the cost of doing nothing. We well

know the cost of inaction. There have been studies from the Pew and Robert Johnson Foundation and even studies in Michigan that tell us the burden of not eliminating lead exposure. It costs us about 80 billion dollars a year when we look at decreased economic productivity, special education costs, criminal justice costs, healthcare costs, and behavioral healthcare costs. That is the cost of continuing to kick the can and continuing not to eliminate these kinds of exposures.

Mr. SOTO. Sure.

Ms. Gaddy, what would a 26 percent cut to the lead program mean for places like Newark that you have been talking about today?

Ms. GADDY. Well, there would be a lot of services that residents would not receive and again, I concur with Dr. Hanna as well. Not only the lead in our drinking water, but lead paint chips, dust, all of those things and those programs need proper funding from EPA. It also means that individuals over their lifetime, children will be exposed to more illnesses based on the lack of safe and affordable drinking water, the lack of individual air issues that is also associated with it.

I mean, one in four children in Newark have asthma. We have cumulative impacts of just total, so many toxins, the air we breathe, the water we drink, the food we eat, so a 26 percent cut would hurt us tremendously in our community and the damages will be irreversible. So children will have a lifelong of health effects from an early age until they are adults.

Mr. SOTO. Sure.

Ms. Licata, what would it mean for New York City to have that kind of cut to the lead program?

Ms. LICATA. We would be very concerned about deep cuts to EPA, but I would, frankly, be most concerned about deep cuts to the SRF programs for the states because my utility relies greatly on that source of financing which really allows us to access the markets at a very good rate. And, frankly, I think with respect to budget cuts there, I think we are hearing today that we do need some out-of-the-box opportunities to address the costs associated with removing lead from homes, and I hope that we can talk about that some more.

Mr. SOTO. Sure.

Ms. Tucker-Vogel, what would it mean for Kansas if we had a 26 percent cut to the lead program for EPA?

Ms. TUCKER-VOGEL. So, well, first, I am here representing ASDWA, but the lead program is not in the drinking water program in the state of Kansas and I doubt that that is the case in most of the state drinking water programs, that that lead program located in another part of an agency.

So I would echo the concern though, about cuts to both the public water supply supervision grant and the SRF programs which do directly impact the state drinking water programs and allow us to work towards reducing lead in drinking water.

Mr. SOTO. Thanks. My time has expired.

Mr. TONKO. And perhaps the other witnesses can respond in writing to answer, acknowledge Representative Soto's question, which was very good. The gentleman yields back.

Next, the Chair will recognize the gentlewoman from Michigan, Representative Dingell, for 5 minutes, please.

Mrs. DINGELL. Thank you, Chairman Tonko.

And I am sorry to all the panel. There are two hearings that are equally important, especially for Michigan because it is autonomous vehicles downstairs, but we have all been bouncing up and down because we care deeply about both issues, but I thank the chairman for holding this hearing.

And as you have heard all morning and as you know, this really matters in Michigan. And I would reinforce again, it is on each one of us here in Congress and the government to ensure that no city in America ever experiences what Flint experienced. Again, we have witnessed it. I have seen the children. I am following the children.

It matters on the adults too, but as I talked about earlier when I introduced Dr. Mona, I will never forget those kids when I first—and the desperation of those parents. And it is really clear that government at all levels failed the people of Flint. Now we have a moral obligation to fix it, and I have felt that from the very day that I first went to Flint and the ACLU, before it ever became public, started talking to me about what happened. And that is why a strong, proactive, and clear federal Lead and Copper Rule is needed for the long term to protect Americans all across the country.

I am going to address my first set of questions to Dr. Mona. I call her Dr. Mona because the kids call her Dr. Mona, and I should maybe be more respectful, but I trust kids more than I trust adults some days. Sorry. But in your testimony, you stated that EPA's proposed revisions to the Lead and Copper Rule are minimalistic and insufficient, which I agree with. Given your expertise and your experience in Michigan, I want to direct a series of questions to you. First, can you describe for the committee why there is no safe level of lead?

Dr. HANNA-ATTISHA. Yeah, we talked about that briefly before. It is a neurotoxin. It impacts cognition and development and behavior and has life-altering, multigenerational, multisystem consequences. Very clear science, which we have known for hundreds of years back when the Romans used lead, now tells us there is no safe level.

Mrs. DINGELL. So having said that and we have talked a little about it and we keep dancing it, but we have got to stay on it. What do we do to protect our most vulnerable, which is our children and pregnant women?

Dr. HANNA-ATTISHA. Right.

Mrs. DINGELL. What is the most direct thing we do?

Dr. HANNA-ATTISHA. That is a great question and that is how this rule really should be focused on and that should be that focus on primary prevention, doing everything we can to not expose children. Not only does it make health sense and development sense, we also know it makes economic sense.

Mrs. DINGELL. So what makes lead in drinking water different than, say, lead from a lead pencil or from paint?

Dr. HANNA-ATTISHA. That is a great question and that is something that I had to learn as a pediatrician despite caring for hun-

dreds of children with lead poisoning both in Flint, and in Detroit prior. Lead is different. Lead in water is different than other traditional sources of lead. Lead paint and lead dust, kids are highest risk of exposure to those household sources when they are crawling and walking, usually when they are toddlers. They walk around, they crawl, they find a paint chip they put in their mouth and paint chips are actually sweet and so they continue to eat them.

Lead in water impacts a different age groups. It impacts the unborn, and has well-known maternal fetal impacts including miscarriage, fetal death, prematurity, and small birth weight, and it most impacts babies on formula. We have so many babies in Flint who are formula-fed. We have low breastfeeding rates and they were using this lead-tainted water to mix their formula, which is a powder.

So the age group of exposure is different than the other sources of lead, and also, unlike the other sources, lead in water is in a vehicle meant for us to ingest. Like, we are not meant to eat dust and paint, kids do it, but we are meant to drink water. It is a medical and public health necessity for us to consume water and when lead is in it, we can't see it, we can't taste it, and we don't know it is in there.

Mrs. DINGELL. So now let's take it to another step. So what is the difference between lead exposure in schools and in daycare versus exposure in homes, and what do we need to make sure the kids are getting safe drinking water in schools?

Dr. HANNA-ATTISHA. Sure. That is a great question. So lead in schools and child care facilities are a little bit different than lead in homes. Usually, there is not lead service lines to these bigger buildings, the lead is coming from fixtures and faucets. Lead in schools usually is increased because there are long periods of water non-use, for example, weekends, overnight, and breaks, which concentrate the exposure of lead so that first kid that comes in on a Monday morning and turns on the drinking faucet, they are going to get a gush of lead in their water. So that is what makes it a little different. And we have poorly invested in the infrastructure of our schools, and this is another reiteration reminder of why we need more capital investment in our schools to get them caught up.

Mrs. DINGELL. Thank you. I yield back, but I will have some questions for the record, Mr. Chairman. Thank you to all of you. Thank you.

Mr. TONKO. The gentlewoman yields back and the Chair now recognizes the gentleman from California, Dr. Ruiz. Representative Ruiz for 5 minutes, please.

Mr. RUIZ. Thank you very much, Mr. Chairman, for holding this hearing on such an incredibly important topic. Thank you all for being here and for your advocacies and your voice in this public health dilemma. The health and safety of our children is the most important aspect of keeping lead out of drinking water, the health and safety of our children.

OK, the health and safety of our children should be our objective, not some cost-benefit equation and feasibility and for an agency. Lead is a potent toxin, a known threat to public health with serious impacts on cognitive development in children and there is a broad consensus that no level of lead is safe. No level of lead is safe. As

a parent of twin 4-year-olds, would I consider a certain level safe for my children to drink? Would I accept a certain amount of lead for my children to drink if the medical community is saying no level of lead is safe to drink? I would definitely not.

I am a physician, so I am going to ask Dr. Hanna-Attisha; you are a pediatrician, correct? Can you tell us what health impacts you found in your patients during the Flint lead crisis? What led you to even test for this?

Dr. HANNA-ATTISHA. That is a great question, and it is part of the nuances of lead. So I shared kind of the consequences of lead exposure, but those don't present right away. Kids don't come into the clinic with those acute symptoms. I wish they did. I wish a kid who was exposed to lead had like purple glow-in-the-dark spots, but they don't, and in pediatrics, we call it a silent pediatric epidemic. It is pernicious. It is invisible.

We don't acutely see symptoms of exposure, which is why, unfortunately, we are then left to screen children at the ages of one and two because that is when they are most at risk for household lead exposure for lead in their blood, but when we do that it is too late. And when we do that, we are literally using our children as detectors of environmental contamination. We should be screening the water and their environment.

Mr. RUIZ. Is that a mandatory screening or is that your practice or is that a state mandate?

Dr. HANNA-ATTISHA. It is different in every state, but it is a Medicaid mandate that if a child is on Medicaid, they have to be screened at the ages of one and two. Some states still do universal screening, but it is based on risk.

Mr. RUIZ. OK, and so how do these patients on lead present? What are the symptoms of lead, acute lead toxicity?

Dr. HANNA-ATTISHA. So acute lead toxicity, which we rarely see anymore, this was something that was much more common when we had lead in gasoline and a lot of lead in our paint, are symptoms of seizures and tremors and acute neurological symptoms and often death. But now what we see is what we don't see. It is this kind of silent, invisible consequences and they present later on in life with problems focusing, problems paying attention, problems in school, learning disabilities, growth issues, and hearing issues, so these are the consequences of exposure. And when we do diagnose them it is often years after the exposure and which makes it then very difficult to do anything about it, but also very difficult to prove causation.

Mr. RUIZ. Are those reversible?

Dr. HANNA-ATTISHA. They are not.

Mr. RUIZ. OK. So they are permanent?

Dr. HANNA-ATTISHA. Yes. Lead is a permanent, irreversible neurotoxin, which is why we are never supposed to expose children to it. Not all children who are exposed will have consequences and it depends on a lot of other risk factors, including nutrition.

Mr. RUIZ. And so that is why prevention is so important——

Dr. HANNA-ATTISHA. Yes, prevention.

Mr. RUIZ [continue]. When it comes to lead and not reactionary policies of once you see there is a lot of lead then we are going to

act, after a child consumes the amount of lead for a certain period of time.

In my district, the Coachella Valley Water District does not have any lead service lines, and even so they work with schools and daycare facilities to proactively test for lead in their water pipes and drinking fountains to ensure the safety of children. I want to talk about the cumulative impacts. So as a pediatrician, can you tell us what happens to a child who is exposed to lead both through contaminated drinking water and through paint in their home?

Dr. HANNA-ATTISHA. Yeah. That is a great question. The burden of lead exposure does not fall equally on our nation's children as we have heard. It is a form of environmental injustice or environmental racism. Predominantly poor and minority children are exposed to lead just like many other contaminants, and it is not just lead in their water. It is also lead in their deteriorating homes. It is lead in the soil because of industrial legacy uses of lead. So there are cumulative exposures that are all synergistic and additive and that impact the child. This is one.

Mr. RUIZ. Synergistic and additive. Do you think it is important the EPA considers these cumulative impacts when setting action levels and requirements for lead in drinking water?

Dr. HANNA-ATTISHA. Absolutely. And I think the EPA should also take the opportunity to lower the standards for all sources of lead exposure, not just water.

Mr. RUIZ. OK. So I think it is clear that a drinking water standard that fails to protect low-income children or children of color is not good enough.

Ms. Gaddy, do you agree?

Ms. GADDY. Yes, I agree. And cumulative impacts are something that most individuals who live in certain ZIP codes suffer from that environmental degradation on a daily basis and it needs to be addressed.

Mr. RUIZ. So today is the anniversary on the executive order on environmental justice, and the steps laid out in that executive order are as important as ever and the example of lead exposure shows why. I have legislation that I have introduced to codify the executive order and I appreciate that the chairman of this committee and this subcommittee included many of these provisions in the Clean Future Act and also, it also looks at cumulative impacts.

So, Ms. Gaddy, do you support codifying the requirements of the environmental justice executive order?

Ms. GADDY. Yes. And I am going to be at that hearing. It started at 12:30 today. I am late, but I definitely support it.

Mr. RUIZ. Excellent. So I thank the witnesses for traveling to be here today and I thank the chairman for calling this important hearing and I look forward to working with all of you to move important environmental justice legislation forward.

Mr. TONKO. The gentleman yields back and the Chair now recognizes the gentleman from South Carolina, Representative Duncan, for 5 minutes, please.

Mr. DUNCAN. Thank you, Mr. Chairman. I yield as much time to the gentleman from Illinois as he needs.

Mr. SHIMKUS. I thank my colleague.

A couple of points that we need in clarification. My colleagues from Delaware and Florida mentioned the importance of a budget and that it does set priorities and you all answered appropriately. More money is better; less money is not. But it is instructive that as of yesterday, my Democratic colleagues have said on the House that they are not going to submit a budget. So that would be pretty disappointing too, don't you think, if there is not even a budget submitted by the legislative branch of the House?

I am not going to draw you into the politics of this, but you can see how that is, if you are going to throw a punch, you have got to be willing to take a punch and it is not—budgets are important. They are not going to submit one, so it is difficult for me to accept the premise of attacking an executive budget that at least has presented one.

Dr. Mona, appreciated the comments last time. You mentioned the unborn child. They are exponentially challenged by lead, would you say?

Dr. HANNA-ATTISHA. Yes.

Mr. SHIMKUS. And you would claim them to be a vulnerable population in themselves?

Dr. HANNA-ATTISHA. yes.

Mr. SHIMKUS. And should they be protected?

Dr. HANNA-ATTISHA. They should be protected with strong lead in water regulations.

Mr. SHIMKUS. Thank you very much and I appreciate that. It just—I am glad my colleague, Cathy McMorris Rodgers, is here because she offered a motion to recommit on the floor a couple of weeks ago. We were debating another exciting issue, which was PFAS, and she wanted to enact into the law a protection for the unborn children under the PFAS standard. It was rejected on the floor, but it is important. I appreciate that testimony.

Who of you here have people in your government entity that does not have water connected to any system?

Oh, Ms. Bobbitt, OK. So what do they do for water?

Ms. BOBBITT. They have water wells, and private water wells at their homes.

Mr. SHIMKUS. Private water, and are they tested?

Ms. BOBBITT. We work in partnership with the Oklahoma Water Resources Board and our health department and they are available to be tested——

Mr. SHIMKUS. Available, but they don't have to be tested.

Ms. BOBBITT. No, they are not mandated.

Mr. SHIMKUS. That is correct. So, but of course all the people in your district are rich, right? We wouldn't classify them as low income.

Ms. BOBBITT. Right, we have a median of $28,000. I don't know that——

Mr. SHIMKUS. I would say you have a lot of low-income people.

Ms. BOBBITT. Yes.

Mr. SHIMKUS. So not all low-income people live in metropolitan areas, do they?

Ms. BOBBITT. No.

Mr. SHIMKUS. So if you have to make a decision, and I do this all the time. I have a rural area, 33 counties. Driving north to

south would probably take you six hours, a lot of parts of rural America. If you have to make these tough decisions, as you highlighted earlier, right, you have got to make decisions of hospitals, EMT, all this other stuff. Is it more important for you to try to connect people on safe drinking water or rip out service lines that aren't above the lead limits?

What would be—if you are going to make a decision as to what you need to do to service your constituents and you had to prioritize, is it better to rip out these lines that aren't higher in lead or is it better to connect to these people who don't have safe drinking water?

Ms. BOBBITT. We would work in partnership. So, obviously, we are not going to go in there and mandate any lines be ripped out. We are going to work in partnership. We need to come to the table together to figure out what works best to serve everybody.

Mr. SHIMKUS. OK. Here is my—let me rephrase this question. You are given a limited pot of money and the government says, OK, this money is to rip out lines, service lines to homes that are maybe still even under ten parts per billion, or you could connect with the same money people who don't have connection in rural America. What do you think you would do?

Ms. BOBBITT. We would connect.

Mr. SHIMKUS. Absolutely. And we do have programs that help do that. Rural development, I work with them closely. And for you city dwellers, we have communities that aren't connected to water. And so when we address this issue of more money to do, and we want to get it safe but we want to make sure that we can still connect everybody so that then you have at least a baseline.

And that is what the rural people are going to be concerned about is that we are going to put in more rules, more regulations and they are not going to be able to fulfill the promise of safe drinking water to all Americans. My time has expired and I yield back.

Mr. DUNCAN. I yield back.

Mr. TONKO. And the gentleman from South Carolina yields back. The Chair now recognizes the gentlewoman from California, Representative Barragán, for 5 minutes, please.

Ms. BARRAGÁN. Thank you. I want to thank the Chair for holding this critically important hearing on the EPA Lead and Copper Rule proposal, which I believe falls short, very short of protecting public health from lead poisoning. And I want to thank the panelists for being here, all of you who have been working on this issue.

I don't quite understand why we debate the health and safety of our children and whether it reaches a certain level and it is bad enough now, we can do something about it, when we know the medical community is saying that lead, any amount of lead, is bad for their development and bad for their health. The fight for clean and affordable water is personal.

I happen to represent a district in south Los Angeles where there are only four districts poorer than mine. A couple of years ago, we had brown water coming out of the faucets in Compton. And I remember somebody saying, "Well, it is only impacting 500 people. Why do you care about this, Congresswoman?" I said one person who gets brown water is too many and we shouldn't be putting

these value sets on people and based on where they live and how many people it impacts. Everybody deserves clean water. Now, fortunately, the water did not test positive for lead, it was other issues that we had. And it just reminds me of sometimes the attitude when we should be saying that we are not going to put up with unhealthy or unsafe water for our kids and our vulnerable populations.

I remember being at an event about a year ago, maybe less than that and had a teacher come up to me and she was with a group of students, and said, "The lead in our school is testing just a tick under where action is required and we are worried about this." And it was pretty high and it felt so helpless to not be able to say anything on what could be done. But it is unacceptable and we are failing and need to do something about it, and so for communities of color and low-income communities, they are certainly bearing the brunt of this.

Ms. Gaddy, I want to start with you on the EPA's rule required, rather, the EPA's required environmental justice analysis of its Lead and Copper Rule finds that household-level service line replacements that depends on their ability to pay will leave low-income households with disproportionately higher health risks. Given that I represent a poor district, this is of my concern. There is also the issue of small water systems that can't afford service line replacement which was the case in my district with my water issue. It had to be taken over by the county. It was the first time that was ever done in the history of the state.

Can you please talk about this disparity and how Congress can work with water systems to ensure that small water systems and low-income households get the same full-service line replacements as wealthier households?

Ms. GADDY. Yes. I mean just for example, in Newark, originally the residents were supposed to pay a thousand dollars towards the replacement of the lead service line and that was a huge burden, so a lot of individuals was opting out of the program because now that is taking money away that they need to provide for their family. And then fortunately enough, our mayor and the city council was able to secure the proper funding.

We all agree, especially in EJ communities that water is a human right and that everyone deserves a right to safe, affordable, quality drinking water and EPA should be doing more to ensure that quality drinking water is afforded to everyone throughout this country. And for those individuals who have the smaller systems, it is not an either/or. If you don't have money, you shouldn't have to buy bottled water which we know is not regulated, right, and/or protected, and you shouldn't have to pay for a lead service line.

What you want is to be able to turn on the tap water and receive quality, safe drinking water that will help your family and that is not happening in EJ communities and communities of low-income people. So it is definitely something that is causing a disparity and it is a health injustice that we have to correct. And so, the money needs to be found today, and action needs to be taken today to ensure that all these individuals are protected and that that burden is not unfairly put on individuals who don't have the financial means to support the right to quality, safe drinking water.

Ms. BARRAGÁN. Great.

Ms. Wu, I want to—the NRDC's threat on taps report in 2017 talked about the enforcement and the challenges around enforcement. Can you speak to the enforcement challenges with the rule including from how environmental justice perspective and how we can do better?

Ms. WU. Yes, so we found that for the most part, there is a very low, low percentage of formal enforcements that are happening with drinking water violations in general. And we also did a report called "Watered Down Justice" that showed that there were violations happen more in minority communities and low-income communities. So the disproportionate burden is shown by the amount of violations and how long the violations stay in violation. So enforcement is a huge part of it and it is not happening in the communities that need it the most and so it is an important part of making sure that the Lead and Copper Rule, whatever it looks like, is actually properly implemented and enforced.

Ms. BARRAGÁN. Great. Thank you. I yield back.

Mr. TONKO. The gentlewoman yields back. The Chair now recognizes the gentlewoman from the state of Washington, Representative Rodgers, for 5 minutes, please.

Mrs. MCMORRIS RODGERS. Thank you, Mr. Chairman. I am here to yield to the gentleman from Illinois, Mr. Shimkus.

Mr. SHIMKUS. I thank my colleague for showing up and helping.

So let me go with this, Ms. Gaddy. I appreciate your statement. And you mentioned, I think, and you did it just recently too, about service lines being replaced under the state of New Jersey has got a plan to do that, correct? And you mentioned at no cost. I wanted to just flesh out, there is really no free lunch. You would agree with that, right? Someone is paying for this.

Ms. GADDY. Right.

Mr. SHIMKUS. So in New Jersey, who would be paying for the replacement of these lines in this grant program you are referring to?

Ms. GADDY. Well, the bill, the individuals, the homeowners and those who—yes.

Mr. SHIMKUS. But it is a grant program, so the state of New Jersey, if I am right, would offer money to the homeowner for the service line.

Ms. GADDY. Correct.

Mr. SHIMKUS. Because I don't know. I am just asking. I don't know the answer.

Ms. GADDY. Well, it is a variation.

Mr. SHIMKUS. OK.

Ms. GADDY. There are programs that the State came in——

Mr. SHIMKUS. So if the State is doing it, they are getting their money how? How would the State——

Ms. GADDY. Through taxes.

Mr. SHIMKUS. OK, thank you. So let me go to the, you know, Ms. Tucker-Vogel, Mr. Estes-Smargiassi, and let's talk about the payer in these issues, right? Who is paying for water? How is it paid for?

Ms. TUCKER-VOGEL. So the——

Mr. SHIMKUS. If you don't want to answer, I will just go to the next one. So I don't have much time, you have to answer quickly.

Ms. TUCKER-VOGEL. So the ratepayers.

Mr. SHIMKUS. The ratepayers pay.

Ms. TUCKER-VOGEL. Yes.

Mr. SHIMKUS. So who are the ratepayers?

Ms. TUCKER-VOGEL. So the water system customers, the utility customers.

Mr. SHIMKUS. So we are either going to have the taxpayers pay and the ratepayers pay. Someone is going to pay to do this.

Ms. TUCKER-VOGEL. Correct, and then the case of revolving loan funds, you know, the State provides those loans. But there again, they have to be paid back. They are not grants. And so, it is the ratepayers that are paying back those loans as well.

Mr. SHIMKUS. OK. Let me go to—I want to ask Ms. Licata a question. You mentioned earlier, way long ago, about service lines going into schools and that you could not force the schools to—can you talk about that real quick?

Ms. LICATA. Yeah. The EPA, neither the EPA or the DEP have the authority to force the schools to do the testing, right, so we would need Congress to grant EPA authority——

Mr. SHIMKUS. What about, do you have the force to be able to replace the school——

Ms. LICATA. No, we do not.

Mr. SHIMKUS. Do you have the force to be able to force a private homeowner to do this?

Ms. LICATA. No, we do not.

Mr. SHIMKUS. Do you have the force to able to force an apartment complex to replace all their lead lines in an apartment complex?

Ms. LICATA. No, we don't.

Mr. SHIMKUS. That is good. Thank you. And I want to finish with this. A lot of this revolves—and thank you again, Dr. Mona. I am going to use that too, because you helped identify this problem in Flint from day one, so you get all the credit for raising this issue to our attention. Ms. Dingell was right. It was a failure at all levels. I think the people evaluated this.

I just want to put this on the record so that we kind of know what really happened. And I have been on the chairman, or ranking member for nine years. My understanding of Flint is that there were horrible decisions and actions made by federal, state, and local officials. Flint happened because of money and politics. Flint wanted off Detroit water because they felt gouged on rates. The city council set an artificial political deadline that didn't meet engineering needs for water chemistry.

The State cut the city slack; because they were in receivership, they didn't go after enforcement and then tried to minimize it. EPA was aware of the high-level readings, but minimized their impact to avoid causing a panic. EPA also slow-walked a legal reading of the responses. That took several months. And the biggest problem was no one told the public and that is what you lived through this experience. So we have local, state, and EPA all failed the residents of Flint.

So I would—part of what you all do if you are a nongovernment organization, a public interest group, or you are a utility or with an association, we all have got to stand up to protect the residents of our communities and we can't let another level of government

entity gets in the way of protecting our constituents and our consumers. So I applaud you for being here and with that I will yield back to the gentle lady from Washington State.

Mrs. MCMORRIS RODGERS. I yield back.

Mr. TONKO. The gentlewoman yields back. The Chair now recognizes the gentleman from Texas, Representative Flores, for 5 minutes, please.

Mr. FLORES. Thank you, Mr. Chairman. I yield my time to Mr. Shimkus.

Mr. SHIMKUS. All right. I am almost done.

So let me go back to Mr. Estes-Smargiassi. Under the proposed rule, public water systems would need to access funds quickly to cover the costs of replacing its portion of a lead service line replacement with the 45-day schedule. Estimates of lead service lines vary, ranging from 2,500 to 5,500 per line, with some industries estimate at $8,700 per line. What budgeting and financing challenges would public water systems operators face to replace lead service lines within 45 days? And this is really part of that intro to the last set of questions.

Mr. ESTES-SMARGIASSI. So the proposed rule suggests that if a homeowner replaces their portion of the line that the water system needs to replace their portion within 45 days. Certainly, financing for some utilities that where this might be an unexpected expense could be an issue. More importantly, the timing itself could be an issue. For those of us who live in the North, we don't typically open up the streets anywhere between early in November and March because the folks who plow aren't really enthused about big potholes from patches in the street.

So need to have sort of—one of the things we ask for as I think about rules is practicality. We need to have rules that work, they work under all circumstances, and where the enforcement makes sense. I wouldn't want a water system to be in violation of the rule because they couldn't do something practical even though that was their intent. We would want to see coordination between the homeowner and the city.

Mr. SHIMKUS. So we are debating a proposed rule that has been proposed by the administration in October of last year and the deadline is tomorrow, don't forget. And it is better to be debating a proposed rule versus not talking about any rule that hasn't come down the pike in 20 years. So let me follow up with you, same panelist. Do you anticipate that the 45-day requirement would lead to a change in the frequency or types of customer requests for lead service line replacement?

Mr. ESTES-SMARGIASSI. What I think we are seeing from the rule will be that with inventories and letters that more people will be interested in this and there will be a demand in some cases for the homeowner to replace their piece of the line when the city is not currently ready. It is not necessarily efficient. Systems will need to figure out how to make this work if that is the rule because we want to satisfy our customers' demands.

If a customer wants to remove a lead service line, we are going to have to figure out how to manage that. But we would like to be able to create a system where if we are doing lead service lines in

a neighborhood, we get all of them done and we do it efficiently and with the least disruption to the streets and so on.

Mr. SHIMKUS. If the homeowner ultimately fails to replace their portion as intended, what might be the consequences for the homeowner and/or the public water operator?

Mr. ESTES-SMARGIASSI. So this has been the crux of the issue around lead service line replacement. Even if, and in fact, I can offer concrete examples. Even where a water system is prepared to pay for a hundred percent of the lead service line replacement all the way from the main to the person's home, we don't get a hundred percent participation. We have homeowners who aren't interested in having the city come and dig up their front yard or go down in their basement for whatever reason and pull that lead service line out.

So we are seeing, even in communities in my area where our funding enables the communities to put together a program that covers the whole cost that they are getting around 90 percent. They are not getting that last ten percent. Some homeowners just aren't interested. And we don't have the authority to be able to make them remove that last piece of pipe.

Mr. SHIMKUS. Yes, and let me ask with this. And I only have a minute left. So no one here at the panel is proposing forcing government trench-diggers to pull out lead pipes on private property, are they? Does anyone say we want to authorize the Federal Government to protect the individual who lives in this home that we are going to mobilize an eminent domain personal property to remove their lead pipe? Is anyone proposing that?

Ms. Wu?

No, thank you very much and I yield back my time.

Mr. TONKO. The gentleman yields back. Several documents have been requested to be entered into the record of this proceeding. Let me just list what we have that has been approved. A letter from the United States Conference of Mayors and the National League of Cities; a letter from National Rural Water Association; a letter from American Public Water Works Association to EPA; a letter from American Public Water Works Association to the Energy and Commerce Committee; a press release issued earlier today by EPA with acknowledgment of some inaccuracies.

And, finally, I would like to thank all of our witnesses for providing not only tremendous information, but I think establishing for us priorities. You know, that is what budgets are; they are priorities. We can either do a relief for those most wealthy and bloat our deficit or we can prioritize our children and their health.

I remind Members that pursuant to committee rules, they have ten business days to submit additional questions for the record to be answered by our witnesses. I would ask that each witness respond promptly to any such questions that you may receive. I believe a few of you didn't get to respond to Representative Soto, so if you could do that also. And at this time, the subcommittee is adjourned.

[Whereupon, at 12:51:10 p.m., the subcommittee was adjourned.]

AMERICAN PUBLIC WORKS ASSOCIATION

Your Comprehensive
Public Works Resource

www.apwa.net

1200 Main Street, Suite 1400
Kansas City, MO 64105-2100
816-472-6100 800-848-APWA
fax 816-472-1610

1275 K Street NW, Suite 750
Washington, DC 20005-4083
202-408-9541
fax 202-408-9542

February 11, 2020

The Honorable Paul Tonko
Chairman
Subcomm. on Environment and Climate Change
2369 Rayburn House Office Building
Washington, D.C. 20515

The Honorable John Shimkus
Ranking Member
Subcomm. on Environment and Climate Change
2217 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Tonko and Ranking Member Shimkus:

I am writing you today regarding your Subcommittee hearing entitled, "EPA's Lead and Copper Rule: Failing to Protect Public Health." My name is Dominick Longobardi, and I am a member of the Board of Directors for the American Public Works Association (APWA). I currently serve as the Deputy Comptroller for the Town of Hempstead, New York, where I have worked for nearly 30 years, and I am the elected Mayor of the Incorporated Village of Floral Park, New York. Additionally, I am a member of the Board of Directors the Water Authority of Western Nassau County, NY and I am involved in several professional organizations related to public works, including the Long Island Sanitation Officials Association.

I am writing to you in my capacity as a member of the Board of Directors of APWA; I am the Regional Director for APWA representing New York, New Jersey, Pennsylvania, and Delaware. APWA is an organization dedicated to providing public works infrastructure and services to millions of people in small, large, rural, and urban communities across our country. Working in the public interest, APWA's more than 30,000 members plan, design, build, operate, and maintain our nation's vast infrastructure assets, which are essential to our nation's economy and the quality of life we all enjoy.

I'd like to begin by saying that APWA and its members are supportive of the efforts made by EPA to update and revise the Lead and Copper Rule. The membership of APWA is committed to reducing lead contamination in our nation's drinking water. Moreover, our members will work to provide EPA information and expertise on how to best proceed in achieving our shared goal in all communities.

Your Comprehensive
Public Works Resource

www.apwa.net

1200 Main Street, Suite 1400
Kansas City, MO 64105-2100
816-472-6100 800-848-APWA
fax 816-472-1610

1275 K Street NW, Suite 750
Washington, DC 20005-4083
202-408-9541
fax 202-408-9542

APWA has been an active participant in the process of revising the Lead and Copper Rule. We provided comments to EPA in March of 2018, and many of the suggestions we offered were included in the final rule released by the Agency in October 2019. These recommendations included requiring communities to make a full inventory of lead service lines and requiring the replacement of the public portion of a lead service line when a customer requests replacement of the privately owned portion.

While EPA made many improvements to the Lead and Cooper Rule that will help communities protect public health, the Revised Lead and Copper Rule released by EPA in October of 2019 by itself does not fully meet the needs of communities trying to deal with replacing lead service lines in their drinking water infrastructure. In order to fully realize the benefits of the Revised Lead and Cooper Rule, substantial additional federal funding is required, as well as continued support for appropriate infrastructure financing tools.

At the October 25, 2019 regulatory briefing, EPA officials encouraged the use of existing federal resources in lead service line replacement, including the Drinking Water State Revolving Fund (DWSRF), the Water Infrastructure Finance and Innovation Act (WIFIA) program, and grant programs enacted under the Water Infrastructure Improvements for the Nation Act. These programs, in tandem with local water rates, appear to be the only funding sources EPA recommends using for lead service line replacement. Simply put, existing federal programs at current funding levels are not enough to meet the need. EPA already estimates that the existing need for investment in water infrastructure is nearly $744 billion over the next 20 years. These figures don't include the overall costs associated with the myriad water treatment techniques required to meet continually changing federal drinking water standards.

Replacement of lead service lines on a nationwide scale will exacerbate the funding problem. A conservative estimate of 6 million lead service lines replaced at an average cost of $4,700 each would total $28.2 billion. In a worst-case scenario, that cost would balloon to $123 billion. These figures also may not account for the full cost of permitting, municipal oversight, EPA oversight, reconstruction costs, prevailing wage laws, future compliance costs, and economic impact of the construction itself. Simply put, unless federal funding is increased, communities will need to raise water rates substantially to fund lead service line replacement.

AMERICAN PUBLIC WORKS ASSOCIATION

Your Comprehensive
Public Works Resource

www.apwa.net

1200 Main Street, Suite 1400
Kansas City, MO 64105-2100
816-472-6100 800-848-APWA
fax 816-472-1610

1275 K Street NW, Suite 750
Washington, DC 20005-4083
202-408-9541
fax 202-408-9542

I can provide you with an example from my experience. In October of 2018, the Town of Hempstead, where I am employed as deputy Comptroller, announced it would replace more than 500 lead service lines in the Point Lookout area of Hempstead. The replacement was funded through a $600,000 grant from the New York State Department of Health. The Town of Hempstead was taking proactive steps to deal with potential future lead contamination. Yet, replacing 500 lead service lines only scratched the surface of the problem. The Town of Hempstead has over 250,000 households, several which will likely require replacement of lead service lines due to the era in which they were constructed.

The perspective I would hope that you will take away with you today is that of the public works professional tasked with managing all their varied infrastructure assets. Public works professionals, I'll toss in Mayors as well here, are unable to look at their infrastructure in silos. Separating drinking water, wastewater, and stormwater from surface transportation, transit, sanitation, emergency management, and the multitude of other services offered is nearly impossible. Yes, there are revenues from water rates that go directly into investment in water infrastructure. But municipal budgets are already stretched thin, and the federal government supplies a small percentage of the funding water utilities currently receive. According to the Congressional Budget Office (CBO), just 4% of funding for water utilities is provided by the federal government; the remaining 96% comes from state and local sources.

Based on the input from APWA members, APWA submitted the following recommendations to EPA:

1) EPA should request from Congress, and Congress should provide, substantial increases in federal funding and financing programs for investment in water infrastructure. The funding levels EPA has requested in previous years for programs that are recommended for use in the replacement of lead service lines are not sufficient to meet the needs for a nationwide effort to replace those lines.

2) EPA should make replacement of lead service lines a top priority by realigning the goals of programs for funding and financing investment in water infrastructure. Calibrating the project selection criteria and processes for these programs to give extra weight to lead service line replacement projects would signal the Agency's emphasis of the issue. Additionally, EPA should work with state primacy agencies with jurisdiction over drinking water to ensure that states make the same realignment.

AMERICAN PUBLIC WORKS ASSOCIATION

Your Comprehensive
Public Works Resource

www.apwa.net

1200 Main Street, Suite 1400
Kansas City, MO 64105-2100
816-472-6100 800-848-APWA
fax 816-472-1610

1275 K Street NW, Suite 750
Washington, DC 20005-4083
202-408-9541
fax 202-408-9542

I am attaching APWA's full comments to EPA to this letter to be submitted to the record.

On behalf of public works professionals throughout the U.S., I thank you for the opportunity to comment and urge you to give serious consideration to the above comments. We are committed to working with Congress on our common goal of providing clean drinking water throughout our country. If you have any questions, please contact Sean Garcia in our Washington, D.C. office at sgarcia@apwa.net or at 202-218-6734.

Sincerely,

Dominick Longobardi
APWA Regional Director
Region II

AMERICAN PUBLIC WORKS ASSOCIATION

Your Comprehensive
Public Works Resource

www.apwa.net

1200 Main Street, Suite 1400
Kansas City, MO 64105-2100
816-472-6100 800-848-APWA
fax 816-472-1610

1275 K Street NW, Suite 750
Washington, DC 20005-4083
202-408-9541
fax 202-408-9542

February 10, 2020

Mr. David Ross, Assistant Administrator
Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Mail Code 4101M
Washington, DC 20460-0001

RE: National Primary Drinking Water Regulations: Proposed Lead and Copper Rule Revisions, Docket No. EPA-HQ-OW-2017-0300

Dear Mr. Ross:

The American Public Works Association (APWA) appreciates the opportunity to submit comments on the Environmental Protection Agency's (EPA) public comments for the proposed Lead and Copper Rule (LCR) revisions. APWA was grateful to participate in the regulatory briefing at EPA headquarters on October 25th of this year, and we look forward to continuing the conversation about revising the LCR.

APWA sought the input from our membership who are clean water practitioners throughout the U.S. Based on this input APWA would like to make the following key recommendations:

1) EPA should request from Congress, and Congress should provide, substantial increases in federal funding and financing programs for investment in water infrastructure. The funding levels EPA has requested in previous years for programs that are recommended for use in the replacement of lead service lines are not sufficient to meet the needs for a nationwide effort to replace those lines.
2) EPA should make replacement of lead service a top priority by realigning the goals of programs for funding and financing investment in water infrastructure. Calibrating the project selection criteria and processes for these programs to give extra weight to lead

Your Comprehensive
Public Works Resource

www.apwa.net

1200 Main Street, Suite 1400
Kansas City, MO 64105-2100
816-472-6100 800-848-APWA
fax 816-472-1610

1275 K Street NW, Suite 750
Washington, DC 20005-4083
202-408-9541
fax 202-408-9542

service line replacement projects would signal the Agency's emphasis on the issue. Additionally, EPA must work with state primacy agencies with jurisdiction over drinking water to ensure that states make the same realignment.

Background and Previous Comments

Protecting the nation's drinking water is essential to public health and the quality of life our citizens enjoy. APWA's over 30,000 members play a critical role in providing clean and safe water to communities large and small, urban and rural. Chief among their responsibilities are the planning, design, construction, operation, and maintenance of water supply systems of all sizes. Our members include public works professionals from cities, counties, and special districts, as well as their private sector partners. Our members take their responsibilities seriously, and they are committed to a partnership with federal, state, regional, and local partners in assuring a sustainable future for clean water.

As you know, recent events have made lead exposure in drinking water a key subject for communities across the nation. The membership of APWA is committed to reducing lead contamination in our nation's drinking water. Moreover, our members will work to provide EPA information and expertise on how to best proceed in achieving that goal in all communities, both large and small, rural and urban.

Our members were pleased to see that EPA took our previous comments from March of 2018 to heart and included our suggestions in these proposed revisions to the LCR. Specifically, APWA called for making a full inventory of lead service lines an Agency priority. The goal should be to allow water utilities to use the inventory to assist in replacement of those lines in their service area These proposed revisions have done so by requiring systems to prepare and update a publicly available inventory. By making such an inventory public, APWA is hopeful that property owners, upon finding lead service lines on their owned assets, will move quickly to remediate the problem and avoid devaluation of those assets. However, there is concern among APWA members that such a public inventory will lead to a surge in requests from customers to replace lead service lines, and that many communities will not be able to handle those requests without additional federal resources.

AMERICAN PUBLIC WORKS ASSOCIATION

Your Comprehensive
Public Works Resource

www.apwa.net

1200 Main Street, Suite 1400
Kansas City, MO 64105-2100
816-472-6100 800-848-APWA
fax 816-472-1610

1275 K Street NW, Suite 750
Washington, DC 20005-4083
202-408-9541
fax 202-408-9542

Additionally, our previous comments called for strengthening treatment requirements by requiring corrosion control treatment in systems with known lead service lines. EPA has recommended doing so by requiring such treatment based on tap sampling results.

The comments submitted by APWA in March of 2018 identified the problem of partial lead service line replacements and the significant evidence that a partial lead service line replacement could result in increased lead levels in homes. The proposed revisions to the LCR issued in October 2019 would require water systems to replace the publicly owned portion of the lead service line when a customer chooses to replace the private portion. Such a requirement would limit the number of partial lead service line replacements that are conducted around the country.

Finally, our comments called for better water sampling reliability to improve the efficacy of samples provided. The proposed revisions issued by EPA in October 2019 require water systems to follow new improved sampling procedures while also adjusting sampling sites to better target areas with elevated lead levels.

The Need for Additional Federal Funding and Financing

At the October 25th regulatory briefing, EPA officials encouraged the use of existing federal resources in lead service line replacement, including the Drinking Water State Revolving Fund (DWSRF), the Water Infrastructure Finance and Innovation Act (WIFIA) program, and grant programs enacted under the Water Infrastructure Improvements for the Nation Act. These programs, in tandem with local water rates, appear to be the only funding sources EPA recommends using for lead service line replacement. Simply put, existing federal programs at current funding levels are not enough to meet the need. EPA already estimates that the existing need for investment in water infrastructure is nearly $744 billion over the next 20 years.

Replacement of lead service lines on a nationwide scale would exacerbate the funding problem. A conservative estimate of 6 million lead service lines replaced at an average cost of $4,700 each would total $28.2 billion. In a worst-case scenario, that cost would balloon to $123 billion. These figures also may not account in full for permitting, municipal oversight, EPA oversight,

AMERICAN PUBLIC WORKS ASSOCIATION

Your Comprehensive
Public Works Resource

www.apwa.net

1200 Main Street, Suite 1400
Kansas City, MO 64105-2100
816-472-6100 800-848-APWA
fax 816-472-1610

1275 K Street NW, Suite 750
Washington, DC 20005-4083
202-408-9541
fax 202-408-9542

reconstruction costs, prevailing wage laws, future compliance costs, and economic impact of the construction itself. Unless those funding figures are increased, communities will need to raise water rates substantially to fund lead service line replacement.

Case Studies of Municipal Lead Service Line Replacement

One case study of a municipality trying to replace existing lead service lines is Eau Claire, Wisconsin. In 2016, the Wisconsin Department of Natural Resources (WDNR) established a two-year, $27.8 million grant program to help communities like Eau Claire. Thirty-five communities received funding through this program. Eau Claire received an allocation of $800,000, received from WDNR, to the task of reimbursing customers for replacing the 1,200 privately owned lines in the city. However, the $800,000 was only enough to fund reimbursements for 350 replacements. On a statewide level, the allocation of $11.8 million of that two-year grant program would only fund replacement of 4,000 lead service lines, leaving 172,000 in place throughout the state. Eau Claire is one of the few communities that can fund replacement of the publicly owned portion of lead service lines through water rates. Communities that are unable to do so will have to rely on state and federal funding.

Another example of a community that worked proactively to replace lead service lines is Grand Rapids, Michigan. With 24,000 lead service lines in use, the city found that it could replace all lead service lines over a 40-50-year timeline at a cost of $48 to $60 million. This timeline would have minimal impact on water rates with an increase of around 0.25%. However, the State of Michigan passed its own lead and copper rule in 2017, and the City changed its own policy regarding lead service lines in order to get ahead of the state rule. The City would now pay the entire cost of replacing such a line if there was a leak in the public portion of the line. To do so, and in a timelier manner (20 years), would cost $160 to $200 million, requiring significant increases in water rates, roughly 10-15%. The communities that would be most impacted by such rate increases, in Grand Rapids and nationally, are the very communities most likely to have lead service lines in use. Buildings constructed from the turn of the 20th century to the 1970's were likely built with lead service lines. These communities often mandated the use of lead pipes in building codes due to their durability. Additionally, these communities have often seen industries and residents leave, leading to lower employment rates and higher rates of poverty. As a result,

AMERICAN PUBLIC WORKS ASSOCIATION

Your Comprehensive
Public Works Resource

www.apwa.net

1200 Main Street, Suite 1400
Kansas City, MO 64105-2100
816-472-6100 800-848-APWA
fax 816-472-1610

1275 K Street NW, Suite 750
Washington, DC 20005-4083
202-408-9541
fax 202-408-9542

the communities are the least likely to be able to afford such rate increases. In order to protect these communities from unaffordable rate hikes a significant increase in federal investment will be needed.

National Inventory of Lead Service Lines

While APWA fully supports EPA requiring communities to create and regularly update a full inventory of lead service lines, we also recognize that doing so will require a substantial amount of investment. That money will most likely come out of existing local government budgets already being used to operate, maintain, and rehabilitate water infrastructure, as well as funding required treatment techniques. As such, communities will be using funding that would otherwise go to replacing the lead service lines simply to locate the lead service lines.

EPA Actions to Meet the Need for Investment in Water Infrastructure

It is clear from our examples that while APWA and its members fully support EPA, the regulations laid out in the proposed revisions to the LCR, must also be supported with substantially increased federal resources. Additionally, APWA urges the Agency to recalibrate those federal programs designed to fund lead service line replacement in order to ensure the most effective and efficient use of federal dollars.

APWA stands ready to assist the EPA in requesting substantial increases in federal funding from Congress. In legislation recently passed to fund the federal government, the DWSRF program was funded at $1.3 billion for Fiscal Year 2020, while the WIFIA program was funded at $50 million. These numbers are in addition to $20 million for programs to reduce lead in drinking water, $25 million for small and disadvantaged communities, and $25 million for lead testing in schools. These figures also represent substantial increases over the Agency request for FY20. In order to meet the potential need for $123 billion in funding needed to replace all lead service lines, the Agency must request additional dollars from Congressional appropriators and make the case for the absolute need for such funds.

Moreover, the Agency must reprioritize the goals of the programs listed previously in order to direct needed funding towards lead service line replacement. The Agency sets priorities for each

AMERICAN PUBLIC WORKS ASSOCIATION

Your Comprehensive
Public Works Resource

www.apwa.net

1200 Main Street, Suite 1400
Kansas City, MO 64105-2100
816-472-6100 800-848-APWA
fax 816-472-1610

1275 K Street NW, Suite 750
Washington, DC 20005-4083
202-408-9541
fax 202-408-9542

notice of funding availability for the WIFIA program and would be well served to make lead service line replacement the top priority for the next funding cycle. With the leveraging power the program boasts a Congressional appropriation of $50 million could meet the nearly $5.5 billion funding cap placed on such an appropriation. While this figure would only scratch the surface of the total need, it would be a significant initial investment. Additionally, the Agency could direct state primacy agencies that administer the DWSRF program to give additional weight to lead service line replacement projects in order to see that those are funded expeditiously.

On behalf of public works professionals throughout the U.S., we thank you for the opportunity to comment and urge you to give serious consideration to the above comments. We are committed to working with the Agency on our common goal of providing clean drinking water throughout our country. If you have any questions, please contact Sean Garcia in our Washington, D.C. office at sgarcia@apwa.net or at 202-218-6734.

Sincerely,

William E. (Bill) Spearman III, P.E.
President

Scott D. Grayson, CAE
Chief Executive Officer

NATIONAL RURAL WATER ASSOCIATION
NRWA America's Largest Utility Membership

TO: House Subcommittee on Environment & Climate Change
FROM: National Rural Water Association (Mike Keegan, keegan@ruralwater.org)
DATE: February 10, 2020
RE: Hearing on EPA's Lead and Copper Rule proposal

We appreciate the Committee's attention to small and rural community issues under the U.S. Environmental Protection Agency's (EPA) November 13, 2019, Lead and Copper Rule Revisions (LCRR). Our member utilities have the very important public responsibility of complying with all applicable EPA regulations and for supplying the public with safe drinking water and sanitation every second of every day.

Ninety-four percent of the 67,923 U.S. public drinking water systems regulated under the rule serve less than 10,000 persons (63,529). Over 27,000 of the "community water systems" regulated by the rule serve less than 500 persons (list by state[i]). Small and rural communities will have more difficulty complying with the new rule due to limited economies of scale and lack of technical expertise. It is important for EPA to recognize that small local water supplies are operated and governed by people whose families drink the water every day and people who are locally elected by their community. Some of the smallest communities rely on volunteers to operate their local drinking water supplies.

The LCRR will include more federal procedural and process requirements than any existing drinking water rule.

EPA Rule/Mandate *(Number of Federal Register Pages)*
Arsenic Rule *(91 pages)*
Chemical Rules *(27 pages)*
Lead and Copper Rule *(64 pages)*
Radionuclides Rule *(47 pages)*
Uranium Rule *(77 pages)*
Filter Backwash Recycling Rule *(20 pages)*
Ground Water Rule *(88 pages)*
Enhanced Surface Water Treatment Rule *(44 pages)*
Long Term 1 Surface Water Treatment Rule *(33 pages)*
Long Term 2 Surface Water Treatment Rule *(134 pages)*
Stage 1 Disinfection Byproducts Rule *(87 pages)*
Stage 2 Disinfection Byproducts Rule *(134 pages)*
Surface Water Treatment Rule *(57 pages)*
Total Coliform Rule *(26 pages)*
Public Notification Rules *(23 pages)*
Federal Operator Certification *(7 pages)*
Security Vulnerability Assessment *(27 pages)*

Current EPA reporting data shows 21,352 federal violations for "monitoring" under EPA's Revised Total Coliform Rule; 71,076 federal violations for "monitoring and reporting" with all EPA drinking water rules; 46,564 federal violations for "other" which is basically a violation for how the community distributes federally mandated public notices to its citizens; 4,864 violations for "reporting" under the Revised Total Coliform Rule and 8,522 federal violations for "treatment techniques" which are primarily under the Surface Water Treatment Rule, Ground Water Rule, Disinfection Byproducts Rule, and the Lead and Copper Rule. All of these violations are for errors

in completing the procedures or processes with the complex federal drinking water rules. None of these violations is for a finding of contamination.

EPA's LCRR proposal is based on a fundamentally flawed-premise that allows for the effects of a private homeowner's plumbing (i.e. a specific faucet) on the water passing through that fixture to trigger very burdensome and possibly unrelated and unnecessary requirements and effects on the entire community (i.e. treatment installation or adjustments, removal of underground water lines, corrosion control studies, unnecessarily alarming public notices, and unwarranted distrust in the public's water safety). This flawed-premise is compounded by the current rule's construction that prevents state certified operator (water sampling technicians) from conducting the in-home tap sampling, and instead relies on untrained and disinterested homeowners to conduct the very complex and prescriptive testing. This results in widespread erroneous testing that can cascade into a tumultuous chain of events as note above. The regulation as proposed fails to cure the original failure of the LCR (the relevance of an in-home tap sample result to water quality *in the water public system*). It tends to create a false positive condition concerning the entire community water system. The affected community, under the pressure to avoid further violation, must perform certain affirmative measures like; add chemicals to the drinking water supply, mandate the distribution of unnecessarily alarming notices to the public and places the community in violation of the federal regulatory structure when there was very possibly never a safety issue in the community's drinking water, but instead only in private homes.

In addition to the fundamentally flawed-premise of the relevance of in-home sampling conducted by unqualified and disinterested homeowners, the LCRR proposal includes a matrix of ***new*** prescriptive federal regulations including corrosion control studies, community-wide alarming public notices, find-and-fix mandates, pitcher filters use, lead service line inventories, etc. According to the American Water Works Association, *"These 35 new items of additional paperwork submittals required by the proposed LCRR, in addition to current paperwork requirements under the existing LCR. They represent substantial increases to the paperwork burden placed on water systems and state primacy agencies."*[ii] Again, these new requirements are mandated with the penalty of civil enforcement and public opprobrium without an initial clear finding of contamination in the local drinking water supply. These new mandates expand federal regulatory authority over locally governed utilities' practices for the prevention of contamination, public education, and operations & maintenance of the community water supply. The federal government should not usurp local governed utilities' policies for these operations without a clear and obvious finding of contamination or exceedence of a federal public health standard (a so-called maximum contaminant level - MCL).

To ensure the greatest possible public health protection, any new rule should be a shared responsibility, meaning locally governed water utilities and local populations should agree that the resulting policies are necessary, tailored to local conditions, and result in a commensurate public health benefit. This intergovernmental collaborative should be incorporated into the details of the rule in monitoring schemes, lead service line replacement plans, efficacy of corrosion control treatment, public education, remedies to high household tap samples, and the provision of pitcher filters to certain customers. In all these key rule elements, provisions should be included to ensure any uniform federal remedy does not usurp any solution that is preferable to the local citizens and more protective of public health.

Thank you for the opportunity to comment and participate.

---

[i] http://www.ruralwater.org/docs/lcrr%20data.htm
[ii] [ii]AWWA Comments, December 13, 2019

February 10, 2020

The Honorable Paul Tonko
Chair, Subcommittee on Environment
and Climate Change
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

The Honorable John Shimkus
Ranking Member, Subcommittee on
Environment and Climate Change
Energy and Commerce Committee
U.S. House of Representatives
Washington, DC 20515

Dear Congressman Tonko and Congressman Shimkus,

On behalf of The U.S. Conference of Mayors and the National League of Cities, we appreciate the opportunity to submit our joint draft comment letter to the U.S. Environmental Protection Agency (EPA) on the proposed Lead and Copper Rule Revisions. We submit this letter to you for the record as part of the Subcommittee on Environment and Climate Change of the Committee on Energy and Commerce hearing on February 11, 2020, *"EPA's Lead and Copper Proposal: Failing to Protect Public Health."*

We will submit the final version of our comment letter to EPA by the comment deadline of February 12, 2020.

Thank you for this opportunity. If you have any questions, please contact our staff: Judy Sheahan at USCM (jsheahan@usmayors.org) or Carolyn Berndt at NLC (Berndt@nlc.org).

Sincerely,

Tom Cochran
CEO and Executive Director
The U.S. Conference of Mayors

Clarence E. Anthony
CEO and Executive Director
National League of Cities

February XX, 2020

Mr. David Ross
Assistant Administrator
Office of Water
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

RE: National Primary Drinking Water Regulations: Proposed Lead and Copper Rule Revisions, Docket No. EPA–HQ–OW-2017-0300

Dear Assistant Administrator Ross:

On behalf of the nation's mayors, cities and counties, we appreciate the opportunity to submit comments on the U.S. Environmental Protection Agency's (EPA) proposed Lead and Copper Rule revisions, which aims to reduce lead exposure through drinking water.

Collectively, our organizations represent the nation's 3,069 counties, 19,000 cities and the mayors of the 1,400 largest cities throughout the United States. The health, well-being and safety of our citizens and communities are top priorities for us. Local governments serve as co-regulators in implementing and enforcing many federal laws with states, including Safe Drinking Water Act programs, and our members take these responsibilities seriously. Additionally, some cities and counties also operate schools whose infrastructure will be directly impacted by this federal regulation.

To that end, it is important that federal, state and local governments work together to craft reasonable and practicable rules and regulations. As partners in protecting our citizens' public health, it is essential that local governments have a clear understanding regarding our responsibilities in implementing this rule.

In general, our organizations support provisions in the 1996 Amendments to the Safe Drinking Water Act, which require that drinking water standards be based on sound science, public health protection and occurrence of contaminants in drinking water supplies at levels of public health concern to reduce risk while balancing costs. Additionally, in general, we believe the National Primary Drinking Water Regulation for lead, and any regulatory or legislative initiative addressing lead in drinking water, should balance these public health and environmental priorities. Any federal mandate on local governments should include additional federal financial resources, as well as offer municipal water systems flexibility in implementation and compliance options. Finally, our organizations support programs for public education regarding safe drinking water and innovative solutions that approach this problem beyond the traditional command and control.

EPA first promulgated the Lead and Copper Rule in 1991 to protect public health and reduce

exposure to lead in drinking water. Implementation of this rule over the last 30 years has resulted in major improvements in public health. The Centers for Disease Control and Prevention states that there is no safe blood level for young children and recommends that all sources of lead exposure for children should be controlled or eliminated. For example, infants who drink formula prepared with lead-contaminated tap water may be at higher risk of exposure because of the large volume of water they consume relative to their body size. Preserving our constituents' health is our members' number one priority and helping implement the Lead and Copper Rule is critically important to local governments.

Local governments fund the majority of water infrastructure investments.

Local governments fund 98% of all capital, operations, and maintenance investment in drinking water and wastewater infrastructure, primarily through user fees and bonds. The most recent U.S. Census data shows that, in 2017 alone, local governments spent over $125 billion on water and wastewater, and from 2000-2017, have spent over $1.7 trillion. During this same time period, the federal government appropriated approximately $2 billion each year for both the Clean Water and Safe Drinking Water State Revolving Loan Fund (SRF) programs, which provides grants to states who, in turn, provide local governments with loans that must be repaid. Even with this significant investment by local governments, many communities struggle to upgrade their drinking water systems. The proposed Lead and Copper Rule Revisions will further add to the water infrastructure needs gap and will create additional unfunded mandates on local governments.

If EPA moves forward with the proposed rule, new funding sources and financing mechanisms must be created to assist local governments, homeowners, schools, and daycare facilities comply and implement the rule, particularly with regard to replacing lead pipes. Current levels and types of financing and funding opportunities are not adequate to address lead pipe remediation in communities across the country and an influx of money is necessary to meet the costs of replacing the estimated six-ten million pipes that are currently in use.

We are pleased to learn that the State of Ohio and EPA has provided Avon Lake, Ohio a zero-interest loan through the Drinking Water SRF program to give low interest loans to homeowners to help them pay for the replacement of their lead pipe laterals with a payback mechanism included on their water bill. Current appropriations levels for the SRF programs, however, are inadequate to address lead pipe remediation along with other drinking water infrastructure needs and requirements.

Comments, Concerns and Recommendations on Proposed Rule

As EPA moves forward with this rulemaking process, we offer several areas of comments, concerns and recommendations for improving the proposed rule's implementability and effectiveness and reducing unnecessary costs on local governments. In general, we have the following overarching concerns:

- Legal concerns and liability issues - Several provisions in the proposed rule could open up local governments to legal challenges and financial liability. Any time a water provider

starts doing work on privately owned piping or fixtures, on private property, they potentially take on liability even if legally the liability can be mitigated with waivers or releases. Any additions to the proposed rule that can limit this liability and protect local governments and water providers should be considered. Moreover, the proposed rule does not address how local governments or water providers should legally handle customers that do not cooperate with the local government in removing lead service lines and/or finding and fixing plumbing fixtures, who can not afford to do so, or do not grant access to their property.

- Cost concerns - There are an estimated six-ten million lead pipes in the nation, including the lateral pipes to homes, schools, and businesses. On average, it costs approximately $4700 to replace a lateral from the main water line, resulting in a total estimated replacement cost of $27-$48 billion. The question remains as to who will end up paying for the replacement of all these pipes and how. If the federal government has deemed removing lead from drinking water as a top priority, we suggest creating a new funding source to help communities address this issue.
    - Community Costs: We are pleased that the proposed rule suggests a reasonable 3% change out of publicly-owned lead pipes per year as opposed to a more aggressive approach. However, as previously mentioned, local governments already spend approximately $125 billion a year on all their water and wastewater costs. Diverting money to replace 3% of a community's water pipes per year might make sense for some communities but not others depending on the public health circumstances in the community. Additionally, due to liability concerns, many utilities are likely to contract out the responsibility of homeowner replacement, further adding to the cost borne by local governments, which was not considered in EPA's cost analysis.

    - Homeowner Costs: We are concerned that the proposed rule's "find and fix" requirement will place a high cost burden on homeowners if they test above the designated lead level. The proposed rule does not address the questions of what happens if the homeowner is unwilling or unable to pay for the replacement of their pipes, and who will ultimately be responsible for the cost of replacement or even to determine if the problem is the pipes versus the lead solder in the water fixtures. Local elected officials will be hard-pressed to ignore citizens whose homes have tested positive for lead and will feel political pressure to resolve the problem and bear the financial responsibility. If the local government takes the responsibility to replace a homeowner's hookup pipe, it raises additional questions besides the lack of financial resources including: gaining permission for access to the property, future ownership and maintenance of that pipe, safety of public workers on the site, liability issues, and what happens if the public worker witnesses illegal activity, etc.

    - Other Drinking Water Priorities: While replacing lead pipes might be a public health priority, local governments are concerned about other drinking water

requirements that may have even a bigger public health impact and will also need to be addressed with urgency. For example, concerns have been raised regarding the removal of PFAS, PFOA, and perchlorate from drinking water. EPA should consider the limited financial resources available to local governments and address how lead pipe replacement should be prioritized along with current and future drinking water requirements and priorities.

- Notifications and risk communication management - We believe the proposed rule's requirement that notices must be made "no later than 24 hours after the water system learns of the tap monitoring results" is problematic. Traditionally, 24 hour notifications are usually issued when there is an immediate health emergency that requires immediate action to prevent exposure. While lead in water is a public health concern and people should be notified expeditiously, in most cases it will not rise to the level of a public health emergency as compared to other drinking water emergencies, and to suggest otherwise might cause undue public panic. We recommend taking a more moderate approach to risk communication.

- Impacts on small and mid-sized communities - While the proposed rule offers some flexibility for small communities (community water system serving 10,000 or fewer persons), it is not clear how EPA will ensure that these small system flexibilities will be available in every state, since many of the flexibilities rely on the state to grant. For example, it is not clear in the proposed rule if the states will accept lead service line replacement in lieu of corrosion control or if they will rely on triggers in the rule to require additional action by individual systems. Additionally, the costs for implementation, compliance and administration of the proposed rule are compounded for small and mid-sized communities, which are particularly limited in their financial and other resources.

- Need for clarity and flexibility - The proposed rule is very complex and there are many details that need further clarification. For example, the language in the preamble and the proposed rule text is often inconsistent. This lack of consistency and ambiguity will lead to confusion for local governments who are charged with implementing the rule. Additionally, it's critically important that the definitions are clear and understandable for local officials. Moreover, creating a trigger level for lead creates an additional regulatory level to the existing action level. Establishing two different regulatory levels, each with different regulatory requirements, could also cause public confusion and challenges for local governments around risk communication. Any opportunity to simplify the rule, clarify implementation requirements and provide flexibility for local governments will help achieve the best public health results with the limited financial resources that are available.

In addition to these overarching concerns, we offer these specific comments, concerns and recommendations for each of the six key issue areas.

Key Area 1: Identifying areas most impacted

The proposed rule requires communities to conduct a full inventory of all pipes and materials within three years. We are concerned that this timeline might be too short, particularly considering that it may prove extremely difficult to determine pipe material without costly excavations. This is especially true for small and mid-sized communities. We suggest allowing for additional flexibility for conducting the inventory such as allowing communities to request additional time.

Furthermore, we suggest that instead of a broad range, community-wide inventory, EPA should allow a community to prioritize areas where lead pipes are more likely to be found, based on factors such as the age and type of housing/building stock, the known diameter of the existing pipe, and if or when any local or state ordinance or laws banning lead pipes were implemented etc.

Under the proposed rule, pipes of "unknown material" are considered to be lead pipes. This provision could cause undue public concern and cause pipes to be replaced unnecessarily. As mentioned above, it may prove difficult to do an exact survey of pipe materials without costly excavations. We suggest that EPA allow a certain level of flexibility with this requirement as long as the community does a good faith effort to identify pipe materials.

Key Area 2: Strengthening treatment requirements

The proposed rule revises the requirements for corrosion control treatment based on tap sampling results. At the trigger level of 10 parts per billion (ppb), systems that currently treat for corrosion would be required to reoptimize their existing treatment. Systems that do not currently treat for corrosion would be required to conduct a corrosion control study so that the system is prepared to respond quickly when necessary. As part of this study, the proposed rule specifies that systems should evaluate an orthophosphate-based inhibitor as corrosion control treatment (instead of a phosphate-based inhibitor).

Concerns have been raised that adding too much orthophosphate might have an undue cost burden on wastewater facilities and an environmental impact on waterbodies. If drinking water system operators add too much orthophosphate at the front end, wastewater system operators will be responsible for removing it once it goes through the system. Oftentimes, these system operators are the same entity. This will add additional costs at both ends of the spectrum, which will likely be passed on to ratepayers. Proper corrosion control which does not cause lead to leach from the pipe should be an allowable approach to protect public health.

Key Area 3: Replacing lead service lines

The proposed rule maintains the maximum contaminant level goal of zero and action level of 15 ppb, but proposes a new trigger level of 10 ppb. Systems above the trigger level would be required to work with their state to set an annual goal for replacing lead service lines. Water systems above the action level would be required to fully replace a minimum of 3% of the number of known or "unknown" lead service lines annually.

It is our understanding that if a community never hits the public health trigger for pipe replacement of 10 ppb, then the local government is not required to develop a plan to replace the lead pipes. If this is correct, we strongly recommend that this is clearly stated in the final rule.

The proposed rule raises several questions about equity. First, the proposed rule requires local governments to replace the lead main water pipes for a homeowner within 90 days of when they replace their hookup pipes. We are concerned that this may not only be an unrealistic time frame, but an inefficient use of time and resources. It could result in replacement projects being scattered around a city, and therefore more expensive for the local government. It could also result in projects being clustered in areas where homeowners can afford the high cost of replacing hookups. Rather, local governments should be able to develop a master plan to replace lead service lines with priority given to the most vulnerable neighborhoods where it is most needed.

Second, according to the proposed rule, EPA will not consider partial service line replacement as part of the overall goal of 3% replacement per year. If uncooperative homeowners do not replace their hookup lines, this will impact a community's ability to meet their 3% obligation. A possible unintended consequence is that the utility, in order to meet their obligations, is likely to do replacement in places where people can afford the cost of replacing their hookup pipes. We do not believe this is good public policy and could cause inequity in lead pipe replacement. In order to address this issue, local governments may potentially take on the costs for homeowner hookup line replacement, at an additional cost to local governments.

Key Area 4: Increasing sampling reliability

The proposed rule changes the sampling requirements, adjusts the sampling sites and requires systems with higher levels of lead to sample more frequently. Specifically, the proposed rule, among other requirements, requires wide-mouth bottles for collection and prohibits flushing and cleaning or removing faucet aerators before sampling.

With these changes to the sampling, it will be harder to identify the source of the lead in the sample--whether from main water pipes, the hookups/laterals to the residence, or lead solder used with plumbing fixtures. This can be especially true for older homes. By not allowing for both pre- and post-flushing tests, it may be more difficult to pinpoint the source of the lead, which may result in unnecessary and expensive removal of pipes when the actual problem is the fixtures. Additional flexibility should be allowed in the testing to allow for better pinpointing of the problem and not causing undue costs to incur.

Key Area 5: Improving risk communication

The proposed rule requires local governments to notify customers of an action level exceedance within 24 hour, as well as require that systems make the lead service line

inventory publicly available and conduct regular outreach to homeowners with lead service lines.

As previously mentioned, we recommend taking a more moderate approach to risk communication so as not to cause undue public alarm and concern. We are concerned that the 24 hour notification time frame is unrealistic. Moreover, a 24 hour notification is usually reserved for acute public health emergencies. Effective risk communication may require longer than 24 hours to execute, as there may be various administrative issues to resolve, and several business days could elapse in some instances. The final rule should revise the notification requirements to encourage best efforts for rapid delivery, but not set a requirement.

Furthermore, while public information and transparency is important, informing customers of the existence of lead pipes can potentially raise undo public alarm if no lead is leaching due to proper corrosion control. Therefore, risk communication should be targeted to customers where there is a specific concern. We also recommend that EPA remove the provision related to customer notification of "service line of unknown material" with the assumption that it is a lead pipe. Lead service line notification will be politically challenging for local governments, and a requirement to notify customers when there is uncertainty will only make this process more challenging.

Key Area 6: Protecting children in schools

The proposed rule would require local governments to test schools and childcare facilities on an ongoing basis. In most states, the local government does not have direct authority over the school system. Additionally, since lead pipes were traditionally more expensive than alternatives, they tend to be smaller in diameter, making them ill-suited for use in a school building, which serves a large population and would therefore need a larger pipe. The primary concern with lead contamination in school buildings is from the fixtures.

Many communities have already undertaken efforts to sample for lead and replace fixtures when necessary. The proposed rule does not address newly constructed schools, which would not contain any fixtures with lead and therefore not need to be tested. Additionally, the lack of a sunset date for this provision is concerning.

For these reasons, we recommend that this provision be removed from the final rule. Testing for lead in schools and childcare facilities may be an effort that is better spearheaded by the U.S. Department of Education or the U.S. Department of Health and Human Services, which currently work with schools and childcare facilities and have the ability to incentivize such testing as part of a comprehensive effort to reduce the risk of lead. Alternatively, the provision should be changed to a voluntary testing effort that is led by the school system, with support from the water utility.

Conclusion

On behalf of the nation's cities, counties and mayors, thank you for considering the local government perspective on this important issue. As you move forward with the rulemaking process, we urge you to continue to consult with local governments to ensure that the rule is effective, implementable and cost efficient. If you have any questions, please contact us: Carolyn Berndt (NLC) at 202-626-3101 or Berndt@nlc.org; Judy Sheahan (USCM) at 202-861-6775 or jsheahan@usmayors.org; or Adam Pugh (NACo) at 202-942-4269 or apugh@naco.org.

○